

**AGENDA**  
**REGULAR MEETING OF THE AMES AREA**  
**METROPOLITAN PLANNING ORGANIZATION (AAMPO)**  
**TRANSPORTATION POLICY COMMITTEE AND**  
**REGULAR MEETING OF THE AMES CITY COUNCIL**  
**COUNCIL CHAMBERS - CITY HALL\***  
**SEPTEMBER 22, 2020**

**\*DUE TO THE COVID-19 PANDEMIC, THIS CITY COUNCIL MEETING WILL BE CONDUCTED AS AN ELECTRONIC MEETING. IF YOU WISH TO PROVIDE INPUT ON ANY ITEM, YOU MAY DO SO AS A VIDEO PARTICIPANT BY GOING TO:**

<https://zoom.us/j/826593023>

**OR BY TELEPHONE BY DIALING:** US:1-312-626-6799 or toll-free: 1-888-475-4499  
Zoom Meeting ID: 826 593 023

**YOU MAY VIEW THE MEETING ONLINE AT THE FOLLOWING SITES:**

<https://www.youtube.com/ameschannel12>

<https://www.cityofames.org/channel12>

**or watch the meeting live on Mediacom Channel 12**

**NOTICE TO THE PUBLIC:** The Mayor and City Council welcome comments from the public during discussion. If you wish to speak, please see the instructions listed above. The normal process on any particular agenda item is that the motion is placed on the floor, input is received from the audience, the Council is given an opportunity to comment on the issue or respond to the audience concerns, and the vote is taken. On ordinances, there is time provided for public input at the time of the first reading.

**AMES AREA METROPOLITAN PLANNING ORGANIZATION (AAMPO)**  
**TRANSPORTATION POLICY COMMITTEE MEETING**

**CALL TO ORDER:** 6:00 p.m.

1. Motion approving appointment of Public Works Director John Joiner to Statewide Urban Design Specifications (SUDAS) Board of Directors
2. Resolutions certifying projects in Iowa Clean Air Attainment Program grant application conform to MPO's regional transportation planning process
3. Motion approving FY 2017-2021 Safety Performance Targets established by the Iowa Department of Transportation in coordination with Iowa MPOs
4. Presentation of Draft 2045 Metropolitan Transportation Plan:
  - a. Resolution approving Draft Plan and setting date of public hearing for October 27, 2020, for approval of Plan

**POLICY COMMITTEE COMMENTS:**



## **ADJOURNMENT:**

### **REGULAR CITY COUNCIL MEETING\*\***

\*\*The Regular City Council Meeting will immediately follow the meeting of the Ames Area Metropolitan Planning Organization Transportation Policy Committee.

## **PROCLAMATIONS:**

1. Proclamation for “Watershed Awareness Month” - October 2020
2. Proclamation for “Fire Prevention Week” - October 4 - 10, 2020

**CONSENT AGENDA:** All items listed under the Consent Agenda will be enacted by one motion. There will be no separate discussion of these items unless a request is made prior to the time the Council members vote on the motion.

3. Motion approving payment of claims
4. Motion approving Minutes of Special Meeting of September 1, 2020, and Regular Meeting of September 8, 2020
5. Motion approving Report of Change Orders for period September 1 - 15, 2020
6. Motion setting the following Special City Council meeting dates/times:
  - a. January 19, 2021, at 5:15 p.m. for CIP Workshop
  - b. January 29, 2021, at 2:00 p.m. for Budget Overview
  - c. February 2, 3, and 4, 2021, at 5:15 p.m. for Budget Hearings
  - d. February 9, 2021, at 5:15 p.m. for Budget Wrap-Up
7. Motion approving Class E Liquor Ownership Change for Hy-Vee Food Store #1, 3800 W. Lincoln Way
8. Motion approving renewal of the following Beer Permits, Wine Permits, and Liquor Licenses:
  - a. Class E Liquor License with Class B Wine Permit, Class C Beer Permit (Carryout Beer), and Sunday Sales - Hy-Vee Food & Drugstore #2, 640 Lincoln Way
  - b. Class E Liquor License with Class B Wine Permit, Class C Beer Permit (Carryout Beer), and Sunday Sales - Hy-Vee Food Store #1, 3800 W. Lincoln Way
  - c. Class C Liquor License with Sunday Sales - Bullseye Restaurant Group LLC, 114 South Duff Avenue
  - d. Class E Liquor License with Class B Wine Permit, Class C Beer Permit (Carryout Beer), and Sunday Sales - CVS/pharmacy #10452, 2420 Lincoln Way, #104
  - e. Class C Beer Permit with Class B Wine Permit and Sunday Sales - Aldi Inc., #48, 108 South 5<sup>th</sup> Street
  - f. Class B Beer with Sunday Sales - Macubana, 116 Welch Avenue
  - g. Class B Liquor License with Catering, Outdoor Service and Sunday Sales - Hilton Garden Inn Ames, 1325 Dickinson Avenue
9. Motion approving request from ISU Athletics Marketing for fireworks displays from Jack Trice Stadium (northwest endzone) for ISU Home Football Games on the following dates:
  - a. October 3
  - b. October 10
  - c. November 7



- d. November 21
- e. December 5
- 10. Title VI Compliance:
  - a. Motion approving U. S. Department of Transportation Standard Title VI Assurances
  - b. Motion approving Title VI Non-Discrimination Agreement between Iowa Department of Transportation and City of Ames
- 11. Resolution approving FY 2019/20 Annual Street Finance Report
- 12. Resolution approving FEMA License/Use Agreement for temporary Disaster Recovery Center serving Ames and Story County
- 13. Resolution approving preliminary plans and specifications for District Geothermal Vertical Closed Loop at Baker Subdivision, setting October 14, 2020, as bid due date and October 27, 2020, as date of public hearing
- 14. Resolution approving contract and bond for Unit 8 Precipitator Roof Repair and Replacement
- 15. Resolution approving contract and bond for Unit 8 Crane Renovation
- 16. Resolution approving Change Order No. 1 with Electrical Engineering and Equipment Company, Windsor Heights, Iowa, for Motor Repair Contract for the Power Plant in the not-to-exceed amount of \$43,000
- 17. Resolution approving Plat of Survey for 4000 Cochrane Parkway and 600 Bellflower Drive
- 18. Resolution accepting completion of East Highway 30 Force Main Improvement Project

**PUBLIC FORUM:** This is a time set aside for comments from the public on topics of City business other than those listed on this agenda. Please understand that the Council will not take any action on your comments at this meeting due to requirements of the Open Meetings Law, but may do so at a future meeting. The Mayor and City Council welcome comments from the public; however, at no time is it appropriate to use profane, obscene, or slanderous language. The Mayor may limit each speaker to three minutes.

**PUBLIC WORKS:**

- 19. Presentation of Draft Airport Master Plan:
  - a. Resolution approving Draft Plan and setting date of public hearing for October 27, 2020

**PLANNING & HOUSING:**

- 20. Staff Report regarding East University Urban Revitalization Area
- 21. Resolution approving Remote Parking Agreement to provide the required six parking stalls at 708 Douglas Avenue for the existing four-unit apartment complex at 700 Douglas Avenue

**ELECTRIC:**

- 22. Energy Management Services:
  - a. Resolution approving Asset Management Agreement/Pipeline Services for Power Plant with Interstate Power & Light, Madison, Wisconsin, from October 1, 2020, through September 30, 2023, with two additional one-year renewals in an amount not to exceed \$18,000, to manage a) pipeline capacity under contract with Northern Natural Gas Company; b) natural gas supply from Macquarie, and c) scheduling/balancing natural gas and authorizing



purchase of additional natural gas, plus delivery, as needed, an amount not to exceed \$300,000

- b. Resolution approving North American Energy Standards Board Agreement with Interstate Power & Light (parent company)
- c. Resolution approving North American Energy Standards Board Special Provisions Agreement with Interstate Power & Light

**HEARINGS:**

- 23. Hearing on Amendments to Fiscal Year (FY) 2020/21 Adopted Budget for carry-overs from FY 2019/20:
  - a. Resolution amending FY 2020/21 Budget for carry-over amounts from FY 2019/20
- 24. Hearing on vacation of all easements over Outlot P, Sunset Ridge Subdivision, 5<sup>th</sup> Addition (5521 Allerton Drive):
  - a. Resolution vacating all easements
  - b. Resolution approving Final Plat for Sunset Ridge Subdivision, 10<sup>th</sup> Addition, with conditions
- 25. Hearing on 2018/19 Shared Use Path System Expansion (Trail Connection south of Lincoln Way)
  - a. Resolution approving final plans and specifications and awarding contract to Howrey Construction, Inc., of Rockwell City, Iowa, in the amount of \$264,834.60, contingent upon receipt of Iowa DOT concurrence

**ORDINANCES:**

- 26. Second passage of ordinance rezoning 2200 Oakwood Road from Agricultural (A) to Planned Residence Development (F-PRD)

**DISPOSITION OF COMMUNICATIONS TO COUNCIL:**

**COUNCIL COMMENTS:**

**ADJOURNMENT:**



**AMES AREA METROPOLITAN PLANNING ORGANIZATION (AAMPO)  
TRANSPORTATION POLICY COMMITTEE ACTION FORM**

**SUBJECT: SUDAS BOARD OF DIRECTORS REPRESENTATIVE APPOINTMENT**

**BACKGROUND:**

The Ames Area Metropolitan Planning Organization is allocated one member on the Statewide Urban Design and Specifications (SUDAS) Board of Directors, as is each metropolitan planning organization (MPO) in the state. A total of 37 members make up the Board of Directors. It is required that the individual serving on the board must be a registered professional engineer in Iowa. The City of Ames Public Works Director has served as the AAMPO representative on the Board of Directors since the inception of SUDAS in June of 2004.

**ALTERNATIVES:**

1. Approve the appointment of the City of Ames Public Works Director, John Joiner, as the AAMPO representative to the SUDAS Board of Directors.
2. Appoint another staff representative to the SUDAS Board of Directors.

**ADMINISTRATOR'S RECOMMENDED ACTION:**

The City of Ames Public Works Director has served ably as the Ames Area MPO appointed representative to the SUDAS Boards of Directors since SUDAS was established and incorporated in 2004.

It is recommended by the Administrator that the Ames Area MPO Transportation Policy Committee adopt Alternative No. 1, as noted above



**AMES AREA METROPOLITAN PLANNING ORGANIZATION  
TRANSPORTATION POLICY COMMITTEE ACTION FORM**

**SUBJECT:** FY 2022 IOWA'S CLEAN AIR ATTAINMENT PROGRAM (ICAAP)

**BACKGROUND:**

The Iowa's Clean Air Attainment Program (ICAAP) helps to fund transportation projects and programs that result in attaining or maintaining the national ambient air quality standards (NAAQS). The Ames Area MPO is in attainment of the NAAQS, however, ICAAP funds are available for projects in the area which result in reductions in vehicle emissions and traffic congestion.

The Ames Area MPO is to review all potential ICAAP applications within the area for the following three items: 1) completeness; 2) financial feasibility; 3) conformity with Ames Area MPO transportation planning processes and plans. If these three items criteria are met, the MPO is to adopt formal resolutions stating that the proposed projects conform to the regional transportation plan. These resolutions are needed by the project sponsors in order to submit their project to the Iowa Department of Transportation for consideration. Project sponsors are responsible for delivering their completed application to the Iowa DOT by the deadline of October 1, 2020.

The following projects have been submitted for the 2020 ICAAP grant cycle:

<b>Project Sponsor</b>	<b>Sponsor Priority</b>	<b>Project Name</b>	<b>ICAAP Request</b>	<b>Total Cost Project</b>
City of Ames	1	Ames Traffic Network – Phase 2 (Fiber Network & Adaptive Control)	\$1,400,000	\$1,750,000
CyRide	1	West Ames Changes (New Route: #12 Lilac; Added Frequency of Service: #1 Red, #7 Purple & #11 Cherry	\$320,372	\$400,466
CyRide	2	Cherry (Night Service)	\$33,544	\$41,930
CyRide	3	Lilac (Midday Service)	\$31,655	\$39,569
CyRide	4	Brown (Night Service)	\$29,984	\$37,481

Awards are made by the Iowa Transportation Commission in early 2021. Funds will become available in FY 2022, which begins on October 1, 2021.

**ALTERNATIVES:**

1. Certify that the projects shown in the Iowa Clean Air Attainment Program grant application conform to the MPO's regional transportation planning process.
2. Do not move forward with approving either of both grant applications.



**ADMINISTRATOR'S RECOMMENDED ACTION:**

The Ames Area MPO Transportation Technical Committee has reviewed the proposed grant applications and unanimously recommended approval. The work accomplished under this grant could lead to future ICAAP funding that will free up local funds to be reprioritized for other local regional projects.

Therefore, it is the recommendation of the Administrator that the Transportation Policy Committee adopt Alternative No. 1 as described above.





City of Ames

TRAFFIC SIGNAL COMMUNICATION NETWORK  
Second Phase – September 2020

IOWA CLEAN AIR ATTAINMENT PROGRAM



## A – INTRODUCTION

This grant application is for the deployment of the Second Phase of the Traffic Communication Network Master Plan for the City of Ames, utilizing the ITS Systems Engineering Process and the Ames Area Metropolitan Planning Organization (AAMPO) Regional Intelligent Transportation Systems (ITS) Architecture, to provide communication, coordination, and management of the traffic signals systems along a short segment of Dayton Avenue, continuing west on E Lincoln Way, south on S University Boulevard, and eastward on Airport Road. This project will continue the program for the City of Ames to improve their ability to monitor, manage, and change traffic signal timings along major arterials in real time to provide optimum traffic signal operations and promote efficient traffic flows. Detailed literature reviews and engineering evaluations have been completed by gbaSI for the City to provide technical information for this grant application.

The majority of transportation related air pollution and emissions occur when traffic is stopped, during initial acceleration after stopping, and during stop and go traffic operations. This Second Phase Deployment will offer opportunities to improve air quality by providing monitoring and management capabilities to City staff for the implementation of optimized signal coordination, reducing congestion, eliminating unnecessary vehicle stops, encouraging uniform traffic flows, and reducing the amount of time traffic waits at signals. This Second Phase Deployment will continue the expansion of the fiber optic communication backbone begun as Phase One of this program and will facilitate the expansion of the Advanced Traffic Management System (ATMS) to other corridors with future projects.

These improvements also fall in line with the City's existing EcoSmart strategy, which strives to reduce energy consumption and decrease the City's carbon footprint. This strategy involves several programs including Smart Ride, which focuses on efforts to reduce carbon emissions through increasing efficiency in transportation services both in city operations and in public services. The City of Ames has already moved to purchasing fuel-efficient vehicles including sub-compacts, hybrids, and an all-electric Zenn vehicle for fuel-efficient driving and carbon footprint reduction.

Another benefit of improving the City's overall Traffic Network and allowing them to remotely manage and monitor their network systems is providing more consistent, reliable, shorter travel times along a corridor for their existing and already thriving city-wide bus transit system (CyRide).



## B - BACKGROUND

The City of Ames has an on-going initiative to create a city-wide high speed fiber optic (FO) communication network that will link existing city traffic signals, school crossing signals and flashers, pedestrian crossings, and traffic data collection devices to allow remote monitoring, communication, and control. Additionally, this fiber network could provide communication to other public facilities, such as Police, Fire and Maintenance buildings, other city government building, schools, and libraries.

Planning, design, and implementation of a city-wide high speed fiber optic network would enable City to more efficiently and responsively manage the City's traffic network and to implement optimized signal coordination, reduce congestion, eliminate unnecessary vehicle stops, encourage uniform traffic flows, and reduce the amount of time traffic waits at signals.

Phase 2 of the Ames Traffic upgrade project will expand the communication backbone of the traffic network to enhance and improve the Traffic Department's ability to manage traffic flow and respond to events. This phase also affords upgrades to the traffic management devices and software that will provide the ability institute the latest in traffic management protocols and practices. This will result in improved traffic flow on a regular basis and the capacity to adjust traffic plans to match increased demands created by special events, incidents, or construction. Real time monitoring of traffic operations and improved management practices, such as traffic adaptive programs, will combine to ease congestion and provide management capabilities that will boost the capacity of the current roadways, ease congestion and the resulting air pollution, and reduce fuel consumption. The most noticeable improvement to the general public, will be the reduction in time spent driving to their destination or sitting in traffic. 20% of the intersections included in the Phase 2 Deployment were found to be below acceptable levels of operations per the Ames Mobility 2040 Final Report (Table 19 - Existing Conditions Intersection Capacity Utilization Analysis Results).

## PROJECT DETAILS

This Second Phase will provide a fiber optic connection from the Public Works Building to Dayton Avenue, then south on Dayton Avenue to E. Lincoln Way, then westward along E Lincoln Way to University Boulevard, then turning southward along University Boulevard to Airport Road, and finally back east on Airport Road to S. Duff Avenue. There will also be a short spur cable installed north on Grand Avenue between E. Lincoln Way and 6<sup>th</sup> Street. This fiber expansion project will provide the required communication network necessary to continue the expansion of the traffic network to improve the entire traffic operations for the city of Ames. The connection from the



Public Works Building to University Boulevard and Airport Road provides the circuits for communication and management protocol.

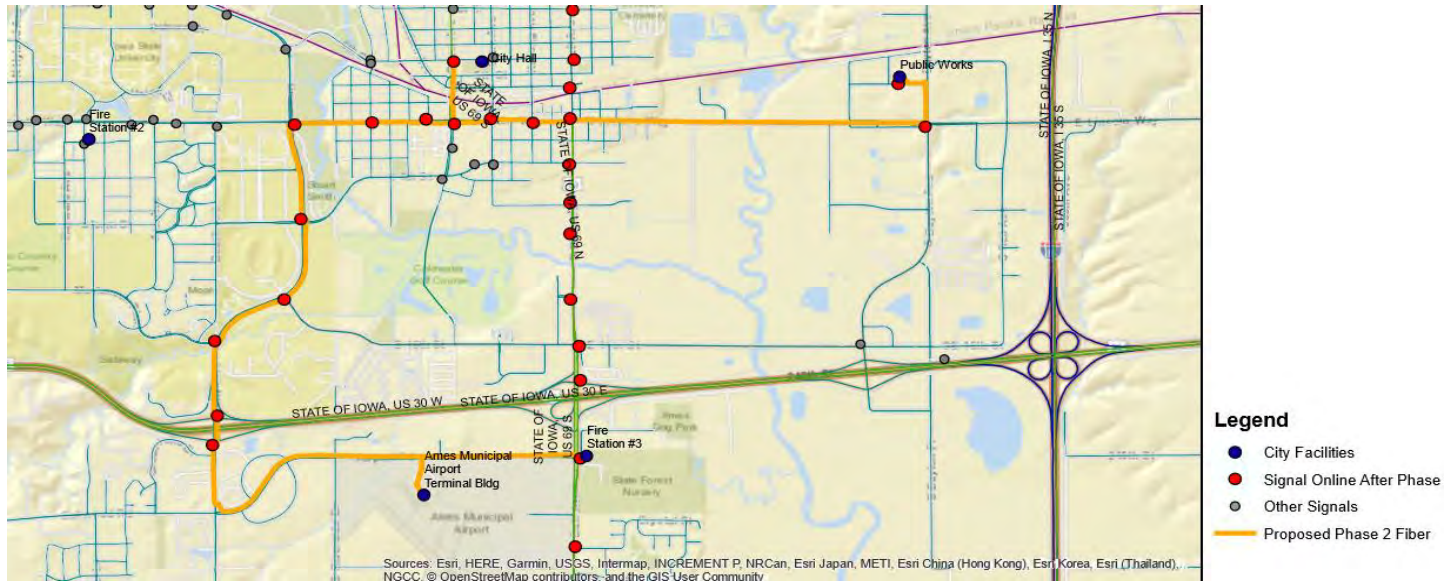
This phase expands the network begun in Phase 1 to include the eastern portion of Lincoln Way out to the University and then down to Airport Road. This connects 3 of the 4 primary corridors in the city into a redundant network that will allow modern network management and segmentation. This will allow for the advanced Traffic Adaptive traffic management program to interoperate the corridors and coordinate the traffic operations along the corridors to maximize traffic flow and reduce congestion. By coordinating the flow along the individual corridors with the adjoining corridors the Traffic Department will have the ability to further reduce congestion and pollution.

As this project encompasses the four corridors noted, there will be ancillary benefits to the city besides the improved traffic management ability. Here are a few examples of possible uses:

- The CCTV capacity can be shared with Police, Fire, Dispatch, and Emergency Services to allow for monitoring of the corridors.
- The dark fiber that is not used by the Traffic Department could be allocated for use by other city departments or governmental agencies. This could eliminate the need to use commercially available fiber and be subjected to future increased cost and limited availability as the demand for fiber increases.
- With the onset of “Smart City” and “Connected Vehicle” technology the dark fiber from this project could be valuable to both governmental entities (City, IDOT, ISU, County, USDA, as examples) and commercial interests.
- The ability to test “Connected Car” technology with a modern traffic system that includes Advanced Traffic Controller capacity could be of great value to Iowa State University in attracting research grants for their Engineering Department.
- The ability to monitor the areas around events (football and basketball games, concerts, and special events) would allow the timely implementation of traffic management measures to expedite the exit of the vehicles associated with these events.

In reality, with the availability of technology today and the explosion of technology that will soon be coming, one of the constant requirements will be a robust fiber optic network. In the vast majority of cases, regardless of the technology, it requires a high capacity communication medium. The fiber optic backbone that will begin with this project will be a big step in providing that solution for the City of Ames.





**Figure 1 - First Phase Fiber Routing  
(shown in Yellow)**

This Phase also encompasses improvements to the necessary traffic control devices on these corridors and connection to the Traffic Operations Center at the Public Works Building. This will give the City of Ames the capability of managing traffic flow on a “real time” basis through Traffic Adaptive Programs or by using the VPN function and communication capacities to monitor and adjust timing plans at the individual intersections to meet the traffic demands.

## SECOND PHASE DEPLOYMENT

The Second Phase Deployment of the Traffic Network Master Plan will create a management corridor along one of the busiest and most congested traffic corridors in the City of Ames while also providing the core fiber optic communication and traffic management components and software that will be the basis for future expansion of the traffic management system. This phase affords the ability to connect to the Lincoln Way Corridor which will provide a communication pathway to the University Boulevard Corridor and Airport Road.

This communication system will permit the Traffic Department to connect to individual intersections on a “real time” basis which will permit traffic monitoring and changes to the timing of the intersection, if necessary, from the central office location without traveling to the actual intersection. This will provide a much more efficient and accurate method of traffic management and will reduce stops and delays along the corridor. By being able to remotely monitor and adjust



the traffic timing plans the personnel from the Traffic Department will reduce the need to travel to the individual intersections which will save the City time and fuel.

The Second Phase Deployment communication network will allow the Traffic Department to continue to deploy Advanced Traffic Controllers (ATC), along project corridors and have access to the latest traffic management programs and systems. Advanced traffic management programs such as Traffic Adaptive Systems require fast robust communication abilities to function effectively as an exchange of detection information and platoon numbers are passed up and down the corridor. This exchange of detection information and platoon numbers provides the basis for the amount of time allotted to a direction of travel within the intersection and allows the Traffic Adaptive System to adjust traffic plans according to the demands of the traffic flow. Traffic Adaptive Systems operate on a “real time” basis and can provide an efficient and effective traffic management protocol that reduces delays and stops along the traffic corridor. The deployment of ATCs and a fiber optic communications network with connections to the Public Works Building and City Hall will facilitate the collection of data from the corridor on a live basis, video feed to Police and Fire Departments, and monitoring of traffic flow from areas where congestion or accidents could occur.

The Second Phase Deployment will expand the backbone of the full city-wide traffic management system.

## C – IMPLEMENTATION PLAN

The Ames Traffic Network Master Plan project is made up of several separate components and items that together create an integrated signal communication and coordinated traffic operations system. The key components of the system are:

- Fiber optic cable and conduit system along arterials
- Communication hardware and switches located within new signal cabinets
- Procurement of ATMS management software licenses (as needed) for arterial traffic signal control and CCTV system control



## AMES SECOND PHASE DEPLOYMENT

### Estimate of Project Implementation Costs – Total for Project - \$1,750,000 +/-

#### Item 1: Fiber Cost: \$925,000

144 strand Single Mode Fiber Optic Cable  
 Hand Holes and Conduit Installation  
 \$25 @ foot at approximately 36,000 ft.

#### Item 2: Fiber Terminations Cost at Cabinets: \$50,000

30 terminations per cabinet at 14 cabinets at \$45 @ termination - \$19,000  
 Miscellaneous patch cords and splice panels - \$28,000

#### Item 3: Traffic Cabinet and Controller Cost: \$450,000

Traffic Signal Cabinet with Controller at 14 cabinets at \$29,657 @ cabinet - \$416,000  
 Installation cost at 14 cabinets at \$2000 @ cabinet - \$28,000

#### Item 4: Network Switches Cost: \$45,000

1 Layer 3 Network Switches @ \$12,500  
 14 Layer 2 Network Switches @ \$2000 - \$28,000

#### Item 5: Traffic Operations Center Costs: \$105,000

Central Office Software (ATMS)/ for 14 intersections - \$28,000  
 Traffic Adaptive Modules and Intersection Implementation at \$4418 @ - \$62,000  
 One Year Maintenance and Support - \$14,500

#### Item 6: Consultant Costs: \$175,000

Infrastructure Design - \$100,000  
 Network Design and Programming - \$75,000

### Second Phase Deployment Cost Estimate

Items	Description	Quantity	Items	Cost	ICAAP Grant (80%)	City Contribution (20%)	Total Cost
1-6	Second Phase Deployment	1	6	\$1,750,000	\$1,400,000	\$350,000	\$1,750,000



## D - PROJECT TIMELINE

The Ames Second Phase Deployment will commence in the summer of 2021 upon award of a grant from the ICAAP program. It is anticipated that this Phase of deployment will be finalized in the Winter of 2021. Future ICAAP grant applications for fiber optic infrastructure, traffic signal upgrades, ATMS software, and TOC improvements are expected to be requested based upon the completion of the First Phase Deployment.

## PROJECT SUMMARY

The Second Phase Deployment of the Traffic Network Master Plan will create a management corridor along one of the busiest and most congested traffic corridors in the City of Ames while also providing the core fiber optic communication and traffic management components and software that will be the basis for future expansion of the traffic management system. This communication system will permit the Traffic Department to connect to individual intersections on a “real time” basis which will permit traffic monitoring and changes to the timing of the intersection, if necessary, from the central office location without traveling to the actual intersection. This will provide a much more efficient and accurate method of traffic management and will reduce stops and delays along the corridor.

## E - TRAFFIC SYSTEM OPERATION AND MANAGEMENT

The proposed Traffic Network Master Plan would outline and define the communication network that would become a critical component of a responsive and efficient traffic management system. The Second Phase Deployment will be the beginning of the process to create a city-wide traffic network and provides value as a stand-alone project because of the reduction in congestion and the accompanying fuel consumption and air pollution. This system would be supervised, maintained, and controlled by the Traffic Operations Department for the City of Ames. The additional capabilities provided by the network will allow the city personnel to upgrade their traffic management practices to include central office abilities. This will allow them to more effectively implement management practices in each of the corridors that will reduce congestion and delays. By allowing communication and control capacities to each intersection the efficiency of both the personnel and the intersection will be vastly improved. The ability of city personnel to monitor intersections from a central office location will save time and money and will more than offset the expenditure of funds from the Traffic Department Budget to match the ICAAP funding.



## F - INTEGRATION WITH AMES MOBILITY 2040

The concept of an efficient traffic control system that is connected to a communication network that allows for a more flexible and adaptive approach is a concept that is consistent with the goals put forth by the Ames Area Metropolitan Planning Organization in their Ames Mobility 2040 Long Range Transportation Plan. As noted in the minutes for the September 22, 2015 meeting of the AAMPO Transportation Policy Committee:

*Traffic Adaptive Signal Systems are included in the Ames Mobility 2040 Long Range Transportation Plan as a short term, high priority under the Roadway portion of the plan.*

This statement recognizes the importance of the need for a Traffic Adaptive System to help manage the traffic flow within the City of Ames. This Second Phase Deployment is the next step in reaching that goal by including the 14 intersections on the project corridors into the Traffic Adaptive signal system the fiber optic communications network.

The Lincoln Way intersections with Duff and Clark received unacceptable Level of Service ratings of D/E level in the Ames Mobility 2040 Final Report (Table 19 Existing Conditions Intersection Capacity Utilization Analysis Results). The ability to monitor, adjust, and improve the capabilities of the traffic control system provides a key component towards attaining a more efficient and responsive transportation system. That is the overall objective of the Ames Mobility 2040 Plan. This can be accomplished by reducing the congestion along the Lincoln Way, Grand Avenue, Duff Avenue, and University Boulevard through coordination based on communication. The capacity to communicate between the traffic control mechanisms at the intersections in those corridors and a central traffic management system will provide the city with control and management abilities that will optimize the intersections' capabilities to handle traffic demands more effectively. As a result, Ames will be able to mitigate some of the corresponding pollutants associated with vehicles dealing with congestion and delays.

The project also has 4 intersections that rank in the top 25 intersections for crash frequency according to the Ames Mobility 2040 Long Range Transportation Plan (Table 11 Intersection Crash Frequency 2009-2013). With an improved traffic flow and better usage of the existing roadway infrastructure provided by a Traffic Adaptive Traffic Management System the frequency of crashes would be expected to be reduced.



Location	City Ranking	Number of Crashes 2009-2013
3	59	Lincoln Way / Walnut
6	44	Lincoln Way/ Duff
11	39	Lincoln Way/ University
23	29	University / S 4 <sup>th</sup> St

## G - AIR QUALITY IMPROVEMENT

The Ames Traffic Network Master Plan defines the requirements and steps necessary to create an integrated traffic control system made up of traffic signals, ITS devices and systems, and other traffic management assets. This central control system will greatly enhance and expand the abilities of the City to quickly understand and respond to traffic operational and safety concerns. The Traffic Network Master Plan will improve the ability of the City of Ames to monitor, manage, and change traffic signal timings along in real time to provide optimum traffic signal operations and promote efficient traffic flows. As the next step in fulfilling the Ames Traffic Network Master Plan, this Phase Two Deployment project will begin the necessary improvements in the traffic and communications systems to facilitate the technology and innovations that will allow for the mitigation of air quality issues as they relate to traffic congestion.

Numerous studies and reports have been completed in the recent past which documents the benefits and effectiveness of advanced signal control systems and TOC management centers. Some studies have shown that delays can be reduced by up to 42% (1). Others noted reduced stops by between 18 – 29% (2). In Tysons Corner, Virginia, system enhancements and management activities decreased total annual emissions VO, CO, VOC, and NOx by 134,600 kilograms (3). A study using ITS Deployment Analysis Software (IDAS) was conducted by Eugene, Oregon to evaluate the potential benefits of a hypothetical adaptive signal control system along one corridor with 8 signalized intersections resulted in a 5:1 benefit-to-cost ratio (4).

In general, most studies have shown an 8-13% decrease in fuel consumption, a 7-14% decrease in emissions, 20-40% reduction in vehicle stops, 10-20% reduction in travel times, 10-15% increases in average speed, and a 20-40% decrease in average delay. While no detailed calculations for potential air quality improvement have been completed for the addition of a TOC and ATMS in Ames, it is inarguable that the implementation of traffic management technologies and procedures will significantly improve traffic operations and decrease vehicle emissions.



Below are the results of emissions calculations and summaries completed for Lincoln Way and the norther portion of University Boulevard. This shows the emission reductions that the evaluated project corridors could be expected to experience with the implementation of coordinated signal control of intersections on this route. With the addition of overall signal system management and control practices through the implantation of a citywide ATMS, additional savings will be recognized.

The analysis of the traffic signal operations along this corridor used SYNCHRO models that were developed using historic (2006) peak hour traffic volumes and signal timings provided by the City of Ames, along with the existing lane configurations at each intersection. Traffic volumes were updated to reflect 2020 traffic conditions. To determine the impacts of the traffic signal interconnection and coordination projects the following assumptions were used:

- Peak hour traffic volumes occur during six hours per weekday and for two hours on Saturdays and Sundays, for a total of 34 hours per week.
- The traffic volumes warrant coordination during 14 hours on weekdays and 10 hours on weekend days. During the other hours of the days, signals would operate more efficiently as free, non-coordinated intersections and no benefits would be expected from signal interconnection.

Analysis of the project corridors determined that the implementation of the managed and coordinated traffic signal system would immediately create a nearly 11% estimated decrease in VOC, CO, and NOx.



**Lincoln Way/University Boulevard Emission Reduction Summary** - total kilogram amounts and percent improvements expected per peak hour, per off-peak hour, per day, and per year.

**Table 2 – Project Corridors**

<i>Peak Hour Emissions</i>				
	No Build	Build	Delta	% Improvement
CO (kg)	36.25	32.31	-3.94	10.87%
NOx (kg)	7.05	6.29	-0.76	10.78%
VOC (kg)	8.40	7.49	-0.91	10.83%
<i>Off-peak Hour Emissions</i>				
	No Build	Build	Delta	% Improvement
CO (kg)	27.19	24.23	-2.96	10.87%
NOx (kg)	5.29	4.72	-0.57	10.78%
VOC (kg)	6.30	5.62	-0.68	10.83%
<i>Daily Emissions</i>				
	No Build	Build	Delta	% Improvement
CO (kg)	362.5	323.1	-39.4	10.87%
NOx (kg)	70.5	62.9	-7.6	10.78%
VOC (kg)	84	74.9	-9.1	10.83%
<i>Yearly Emissions</i>				
	No Build	Build	Delta	% Improvement
CO (kg)	132,313	117,932	-14,381	10.87%
NOx (kg)	25,733	22,959	-2,774	10.78%
VOC (kg)	30,660	27,339	-3,322	10.83%



## REFERENCES

1. *Gresham/Multnomah County Phase 3: Traffic Signal System Optimization*. November 2004, DKS Associate Transportation Solutions, and Siemens Intelligent Transportation Systems.
2. Greenough and Kelman, *ITS Technology Meeting Municipal Need – the Toronto Experience*, in 6<sup>th</sup> World Congress Conference on ITS, 1999, Toronto, Canada
3. White, J., *Traffic Signal Optimization for Tyson's Corner Network Volume I: Evaluation and Summary*, March 2000, Virginia, DOT
4. *Regional ITS Operation & Implementation Plan for the Eugene-Springfield Metropolitan Area*, November 2002, Oregon Department of Transportation, Prepared by DKS Associates.
5. *Ames Area MPO 2015-2040 Long Range Transportation Plan* September 2015, HDR, page 102,table 19



# **Iowa Department of Transportation Clean Air Attainment Funds Application**

## **West Ames Changes**

**New Route Expansion (#12 Lilac - Peak Only)  
Added Frequency (#1 Red, #11 Cherry, #7 Purple)**

**Submitted to:**

**IOWA DOT**

**By:**

**AMES TRANSIT AGENCY (CyRide)  
601 N. University Blvd.  
Ames, Iowa 50010**

**October 1, 2020**





## PROJECT APPLICATION IOWA CLEAN AIR ATTAINMENT PROGRAM (ICAAP)

### General Information:

Applicant Agency: Ames Transit Agency E-mail: barbara.neal@cyride.com  
Public Agency (required)  
 Contact Person (Name and Title): Barbara Neal, Transit Director  
601 N. University Blvd.  
 Complete Mailing Address: \_\_\_\_\_  
Ames IA 50010 515-239-5565  
City State ZIP Code Daytime Phone

If more than one agency or organization is involved in this project, please state the name, contact person, mailing address, and telephone number of the second agency. (Attach an additional page if more than two agencies are involved.)

Co-Applicant Agency: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Public Agency, Non-Profit Organization<sup>1</sup>, For-Profit Organization<sup>1</sup>, or Individual<sup>1</sup>  
 Contact Person (Name and Title): \_\_\_\_\_  
Street Address and/or Box Number  
 Complete Mailing Address: \_\_\_\_\_  
City State ZIP Code Daytime Phone

### Project Information:

Project Title<sup>2</sup>: West Ames Changes: (New Expansion Route #12 Lilac; Added Frequency (#1 Red, #11 Cherry,

Project Description (including length, if applicable):

In August 2018, CyRide redesigned and implemented new bus services traveling in west Ames area including a new #12 Lilac route and added frequency of service and changed route alignments to three existing routes (#1 Red, #11 Cherry & #7 Purple). West Ames residents demanded this higher frequency of service between west Ames and campus during the system redesign study completed in May 2017. This ICAAP request is for services on the four routes (one new route & 3 routes with additional frequency/days of service). This is the third year for an ICAAP request for these four services.

\*Project priority (1 = highest priority): 1 (a sponsor submitting multiple applications in this funding cycle must assign a numerical rank or priority to each application.)<sup>3</sup>

\*Assign the proposed project to one or more of the following categories (check one or more):

- |  |  |
|--|--|
| <input type="checkbox"/> Transportation-Related Project in the State Implementation Plan (SIP) | <input type="checkbox"/> Shared-Ride   |
| <input type="checkbox"/> Transportation Control Measure (TCM)                                  | <input type="checkbox"/> Bicycle or <input type="checkbox"/> Pedestrian Facility or Program (select one) |
| <input type="checkbox"/> Traffic Flow Improvement (Intersection, Signalization, Other)         | <input type="checkbox"/> Intermodal Freight  |
| <input type="checkbox"/> Planning and Project Development                                      | <input type="checkbox"/> Passenger   |
| <input type="checkbox"/> Travel Demand Management (TDM)  | <input type="checkbox"/> Alternative Fuels   |
| <input checked="" type="checkbox"/> Transit-Related Improvement                                | <input type="checkbox"/> Vehicle Inspection and Maintenance Program                                      |
|  | <input type="checkbox"/> Outreach Activity (Education, Advertising, or Technical Assistance)             |

\*Is the project consistent with the State Implementation Plan for air quality for non-attainment areas? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the MPO's local congestion management plan? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the ☒ MPO ☐ RPA ☐ Statewide Long-Range Transportation Plan? ☒ Yes ☐ No ☐ Not Applicable

Notes: <sup>1</sup>Requires public agency as co-sponsor of application.

<sup>2</sup>The term "project" means any ICAAP infrastructure or program proposal.

<sup>3</sup>The Iowa Department of Transportation will use the priority ratings to reflect the sponsor



**Project Costs (an Itemized breakdown must be included on an attached sheet):**

Total Cost: \$400,466.00  
Iowa Clean Air Attainment Program Fund Request: \$320,372.00  
Applicant Match: \$80,094.00

*Projects with a private for-profit co-applicant require a minimum 50 percent applicant match; all other projects require a minimum 20 percent applicant match.*

	List All Applicant Match Sources	Amount	Assured or Anticipated (Date Anticipated)
1.	CyRide Operating Budget	\$80,094.00	July 01, 2021
2.	Passenger Fares	\$1,717.00	October 01, 2021
3.			

Are any state funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

Are any other federal funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

**Estimated Project Development Schedule:**

Design:	Start Date: _____	Completion Date: _____
Land Acquisition:	Start Date: _____	Completion Date: _____
Construction:	Start Date: _____	Completion Date: _____

Has any part of this project been started? ☒ Yes ☐ No

If Yes, please explain:

CyRide began the first year of service in August 2018 with 100% local funding from CyRide. ICAAP funded these services for two federal fiscal years in beginning in October 2019 and again in October 2020. If this application is funded, this ICAAP expansion would fund the third year of services from October 2021 through September 2022.

How do you plan to measure the success of this project?

Four evaluation methods will be used: 1) Passenger Ridership 2) Customer Comments 3) Passengers per hour and 4) Total Emissions saved



## Required Documentation and Narrative Information

The following documents and narratives must be submitted with this application. In the upper right corner of each document or narrative write the corresponding letter shown below.

- ☒ A. A NARRATIVE assessing existing congestions/air quality conditions, outlining the concept of the proposed project, and providing adequate project justification. How will this project reduce congestion, reduce travel or single occupant vehicle usage, and/or improve air quality? Which transportation-related pollutant(s) are being addressed: carbon monoxide, ozone, or particulate matter (PM)?
- ☒ B. A DETAILED MAP identifying the location of the project and clearly differentiating the subject project from any past or future project phases.
- ☒ C. An ITEMIZED BREAKDOWN of the total project costs. This documentation does not need to be a detailed, line-item type of estimate. However, it must accomplish two objectives: First, it must show the method by which the cost estimate was prepared; and second, it must enable a reviewer to determine if the cost estimate is reasonable. The manner in which these objectives are achieved may vary widely depending on the type, scope, and complexity of the project. Absent a fully itemized list of costs, some general guidelines for possible methods of estimating each type of project cost are provided on Attachment A.
- ☒ D. A TIME SCHEDULE for the total project development.
- ☒ E. An OFFICIAL CERTIFICATION from the applicant's governing body (authority) that it shall:
  - (1) commit the necessary local matching funding for project implementation and
  - (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.
- ☒ F. An ADOPTED FORMAL RESOLUTION from the appropriate MPO or RPA declaring the sponsor's proposed project or program conforms to the MPO's or RPA's regional transportation planning process. (For MPOs, the project or program must be identified in the fiscally constrained transportation plan and, if applicable, the congestion management plan in TMAs.)
- ☒ G. CALCULATIONS for vehicle emission reductions and total project cost-effectiveness for the targeted pollutants. Project applicant must show through a quantitative analysis how many kilograms of pollutant will be reduced (CO, VOC, NOx, and, if applicable, PM). Project sponsor must calculate the cost-effectiveness of the project by: Dividing the total annualized project cost by the number of kilograms per year of pollutant reduced (\$ per kg). Applicant must also show all assumptions and source of data used to calculate the estimates. The applicant must use the most current vehicle emission factors developed by the Iowa DNR and consistent with the U.S. EPA's MOBILE 6.2 air quality model. These emission factors are periodically updated and may be obtained from the Iowa DOT's ICAAP website at: [https://iowadot.gov/systems\\_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP](https://iowadot.gov/systems_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP).
- ☒ H. Completed MINORITY IMPACT STATEMENT attached to application.

The award of ICAAP funds; any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; and the furnishing of materials for this project shall not involve direct or indirect interest of any state, county, or city official, elective or appointive. All of the above are prohibited by Iowa Code 314.2, 362.5, or 331.342. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of ICAAP funding and authorize a complete recovery of any funds previously disbursed.

### Certification

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating local authority. I understand the attached **official endorsement(s)** binds the participating local governments to assume responsibility for adequate maintenance of any new or improved facilities.

If ICAAP funding assistance is approved for the project described in this application, I understand that an executed contract between the applicant and the Iowa DOT is required before such funding assistance can be authorized for use in implementing the project.

Representing the Ames Transit Agency

(Name of Applicant's Governing Authority)



Signature

8-30-20

Date

Barbara Neal, Transit Director

August 26, 2020

Typed Name and Title  
(Governing Authority Official)

Date



# CyRide

## West Ames Routes Modifications

### New Route Expansion (#12 Lilac)

### Added Frequency (#1 Red, #11 Cherry, #7 Purple)

## Narrative

### Background

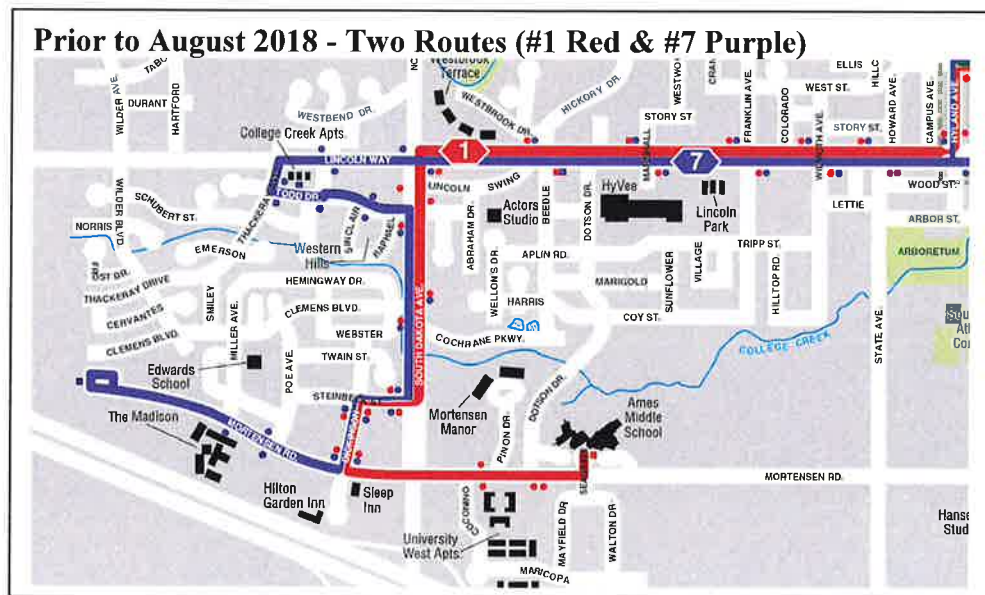
Ames Transit Agency (d.b.a CyRide) directly operates fixed route services that are open to the general public within the Ames community including Iowa State University (ISU). The amount of transit service in this small community, of approximately 65,000 is unusually high as a result of the intensive use by university students. To accommodate this high transit demand, CyRide operates 18 hours a day with service frequencies between 2 – 60 minutes. **However in the last six years, ISU enrollment has grown by 22% from 28,682 students to approximately 35,000! During this same timeframe, CyRide's ridership has grown by over 1.6 million passengers.**

High density apartment complexes were rapidly being built on-campus and off-campus, wherever there were ample room to build, but where CyRide's routes may provide limited or virtually no transit service. **The result of this growth was an overwhelming demand for student housing followed by an immediate reactionary demand for additional transit service wherever these apartment complexes were established.** In a community where riding transit is now part of the city's culture, the residents living in these high-density apartment complexes expect frequent and quality transit services to an even greater degree than they did six years ago.

Prior to August 2018, the #1 Red and #7 Purple routes, shown connecting with other routes traveling throughout the community accommodated all transit rides between west Ames and Iowa State University (ISU) campus with over 1.5 million riders annually on just these two routes.

**The #1 Red could be best described as the “workhorse of west Ames” providing transit service from 6:30am until 12:30am the following day and accommodated the majority of the west Ames residents.**

**The #7 Purple Route provided “minimal service with only six published trips” (3 morning/3 afternoon) during the peak hours and**

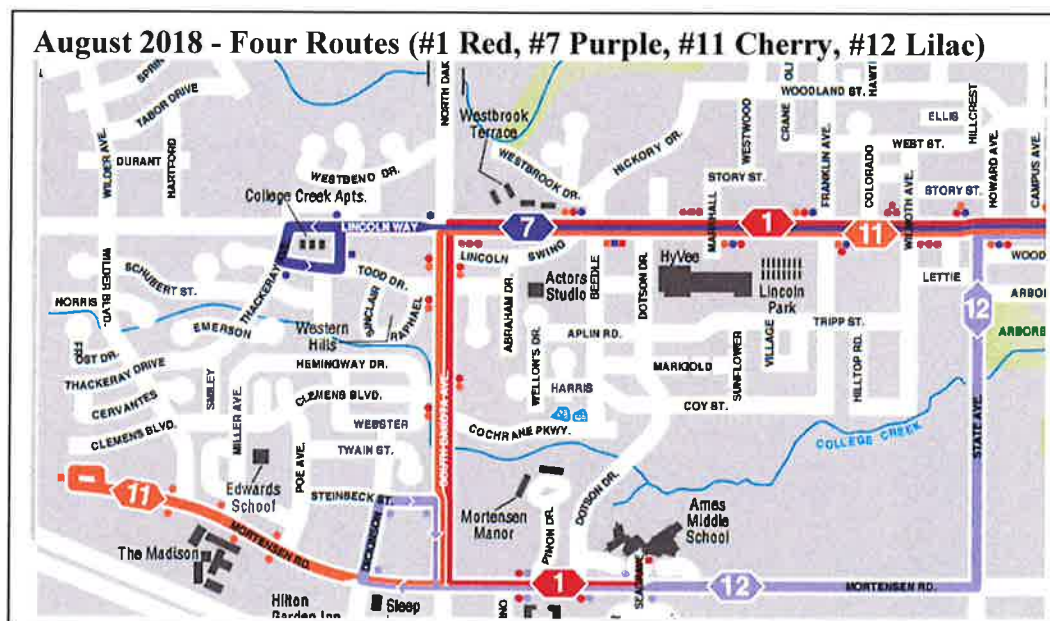




was utilized mainly to provide additional capacity for Red route riders between west Ames and university campus during the peak hours.

There were often capacity issues along the corridors for #1 Red and #7 Purple and CyRide deployed “extra” buses to the #1 Red Route to ensure every person desiring a ride along Mortensen, Dickenson, Steinbeck, South Dakota, and Lincoln Way received a ride to and from campus. The result was a platoon of buses from west Ames into campus for the start of ISU classes and then back again as classes dispersed throughout the day, with rushes for buses typically just before and after class. For highly desired class times, trips could operate with as many as 8 extra buses trailing a scheduled bus into campus to accommodate the demand for transit service along the corridors. The #1 Red route had grown to the point that passengers weren’t being accommodated along Lincoln Way due to being full by the time the bus reached Steinbeck. Lincoln Way passengers would watch as bus after bus went by with no capacity for any passengers. Additionally, new high-density apartment developments were being built along the west end of Mortensen and along Maricopa which compounded the reality of providing high level transit with virtually only one frequent bus route. A complete system redesign of transit routes in west Ames was needed to accommodate the demand and growth not only in far west Ames, but also along the west Lincoln Way corridor.

In May 2017, CyRide completed its first ever transit [system redesign study](https://www.cyrider.com/system-redesign) (<https://www.cyrider.com/system-redesign>) for their entire transit service and residents located in west Ames demanded additional transit service operating along Mortensen, Steinbeck, Dickenson, S. Dakota and Lincoln Way into campus. CyRide hired an outside consultant to provide expertise in how to operate a transit system originally developed for 4 million riders and adapt it for a system currently carrying over 6.1 million passengers. **CyRide essentially approved the redesign completed in the study in west Ames by offering 4 different bus routes along these modified corridors thereby breaking up the #1 Red's "workhorse duties" into four different high-frequency service routes (#1 Red, #7 Purple, #11 Cherry & #12 Lilac), which began in August 2018. (see routes below)**





## Project Description/Justification

### Grant Request

#### *New Route - #12 Lilac*

#### *Added Frequency #1 Red, #7 Purple & #11 Cherry (Rebranded 1A)*

The third year of ICAAP operational funding request below is for a new transit route for the **#12 Lilac** route implemented in west Ames during Iowa State University class days and for added frequency of service for the **#1 Red**, **#11 Cherry** and **#7 Purple** routes.

These services were initially implemented in August 2018 with ICAAP funding the second year of service in 2019-2020 and third year of service in 2020-2021. ICAAP guidelines allow transit agencies to fund three years of services within the first five years of service. The Board's initial approval for this additional service was in January 2018 for the FY2018 budget after the ICAAP's October 2017 grant application deadline. Therefore, CyRide's first year ICAAP request was requested and funded for the W. Ames routes for its second year of operation (2019-2020) and then another request for the third year of operation (2020-2021). This ICAAP request is for these services' fourth year of operation (3<sup>rd</sup> Year ICAAP) for a new route for the #12 Lilac and additional frequency for the #1 Red, #7 Purple and #11 Cherry routes for services beginning October 2021 through September 2022.

The information below describes CyRide's full request for the new #12 Lilac route and added frequency for #1 Red, #11 Cherry and #7 Purple.

### **Operating (#12 Lilac, #11 Cherry, #1 Red and #7 Purple)**

#### **New Route - #12 Lilac (ISU School Weekdays) – Year 1**

**CyRide proposes to provide a new #12 Lilac route, by operating a bus every 20 minutes during peak hours from 7:00-10:13 a.m. and 2:35–5:43 p.m. between Steinbeck-Dickenson-Mortensen into Iowa State University (ISU) campus. This route will operate only when Iowa State University holds school-year classes or approximately 160 weekdays out of the year.**

CyRide anticipates that this route will generate 900 daily riders on this new service given that it serves apartments in high-density areas along Mortensen, Steinbeck and Dickenson.

#### **#12 Lilac (Weekday Service) ISU Class Days and Finals Days Only**

<b>Mortensen / Dickinson</b>	<b>Student Services</b>	<b>Mortensen / Dickinson</b>
7:05	7:18	7:33
7:25	7:38	7:53
7:45	7:58	8:13
8:05	8:18	8:33
8:25	8:38	8:53
8:45	8:58	9:13
9:05	9:18	9:33
9:25	9:38	9:53
9:45	9:58	10:13
2:35	2:48	3:03
2:55	3:08	3:23
3:15	3:28	3:43
3:35	3:48	4:03
3:55	4:08	4:23
4:15	4:28	4:43
4:35	4:48	5:03
4:55	5:08	5:23
5:15	5:28	5:43



CyRide anticipates a healthy ridership over ISU class days as residents become more and more aware of the new route and how it serves them. (See Exhibit B – Lilac Route for route alignment details.)

The following information provides operation-specific data for this new route:

#12 Lilac Weekday (Peak Only)

Hours of Service: 11.4

Number of New Trips: 18

Avg. Passengers/Trip (Year 1): 50

Miles/Trip: 5.9

Miles: 106.2

Days of Operation/Year: 160 (ISU Class & Finals days only)

Ridership: 900 daily rides (50 pass/trip\* 18 trips)

This route will serve the following commercial, residential and University destinations as illustrated within Exhibit B:

- **#12 Lilac (New Route):** West Towne Pub, All Iowa Attack Basketball Fieldhouse, Ames-Fitness Center-West, Hilton Garden Inn Ames, Kum & Go, Sleep Inn & Suites, Hilton Garden Inn Ames, The Rose of Ames, The Waterford at Ames, West Village Apartments, Perfect Games, Westown Courts, Sukup Basketball Complex, University West Apartments, Ames Middle School, Southwest Athletic Complex, Dunkin Donuts, US Bank ATM, Ames Intermodal Facility, Collegiate United Methodist Church, ISU Campustown Businesses (86 total); <http://www.amescampustown.com/>, Student Services, Iowa State University west campus.

**Added Frequency - #11 Cherry (Rebranded 1A Red – Weekday Service During ISU Class Days Only) – Year 1**

**CyRide proposes to provide additional frequency of service to the #11 Cherry route beyond the service previously provided by the #1A Red.** The #11 Cherry now provides 7-minute service between west Ames and campus. The #11 Cherry serves west Mortensen area that the #7 Purple previously operated to (only 6 trips) but at a much higher frequency level and more total trips (52 total) throughout the morning, mid-day and afternoon. This request is only asking for the additional service added beyond previous trips provided by the #1A Red or 9 trips. (See Exhibit B – Cherry Route for route alignment details.)

The following information provides operation-specific data for this additional frequency ICAAP request:

#11 Cherry Weekday (Improved Service Frequency over 1A Red)

Hours of Service: 4.5

Number of Trips: 9

Avg. Passengers/Trip (Year 1): 50

Miles/Trip: 6.6

Miles: 59.4

Days of Operation/Year: 160 (ISU Class & Finals days only)



Ridership: 450 daily rides (50 pass/trip\* 9 trips)

This route will serve the following commercial, residential and university destinations as illustrated within Exhibit B:

- **#11 Cherry(Added Frequency):** Mortensen Heights, The Madison, Creative Spirits Ames, Café Milo, Haverkamp Properties Apartments, West Towne Pub, All Iowa Attack Basketball Fieldhouse, Ames-Fitness Center-West, Hilton Garden Inn Ames, Kum & Go, Sleep Inn & Suites, Hilton Garden Inn Ames, West Village Apartments, Perfect Games, Westown Courts, Sukup Basketball Complex, , Israel Family Hospice House, Christopher Gartner Park, Formative Years Growing and Learning, Kum & Go, Ames Woman's Club, Hickory Ridge Apartments, Hy-Vee Gas, Kwik Connection, Wells Fargo Bank, Hy-Vee West, Ames Driver's License Station, McFarland Express Care, McDonalds, Alpha Copies and Print Center, Szechuan House, Central Iowa Vapors, Erbert and Gerberts, Family Video, Uni-Mart, Papa John's, Pammell Grocery & Grill, First National Bank, Apen Ames, Community of Christ, Dunkin Donuts, US Bank ATM, Ames Intermodal Facility, Collegiate United Methodist Church, ISU Campustown Businesses (86 total); <http://www.amescampustown.com/>, Student Services, Iowa State University west campus.

#### **Added Frequency - #1 Red (Weekdays) – Year 1**

**CyRide proposes to provide additional frequency of service to the #1 Red route along its full alignment from Ames Middle school to North Grand Mall. This route will provide these added trips during the weekdays only or 255 weekdays out of the year.** (See Red Route in Exhibit B.) The #1 Red now consistently operates a bus every 15 minutes from 6am – 9pm. Prior to CyRide 2.0, the Red Route only provided 30-minute service before noon. CyRide anticipates that this route will generate 600 daily riders on this new service given that it serves apartments in high-density areas along Mortensen, Steinbeck and Dickenson. (See Exhibit B – Red Route for route alignment details.)

The following information provides operation-specific data for this additional frequency ICAAP request:

#### **#1 Red (Improved Frequency)**

Hours of Service: 15.5

Number of Trips: 12

Avg. Passengers/Trip (Year 1): 50

Miles/Trip: 14.625

Miles: 175.5

Days of Operation/Year: 255 (All weekdays)

Ridership: 600 daily rides (50 pass/trip\* 12 trips)

This route will serve the following commercial, residential and University destinations as illustrated within Exhibit B:



- **#1 Red (Added Frequency):** West Towne Pub, All Iowa Attack Basketball Fieldhouse, Ames-Fitness Center-West, Hilton Garden Inn Ames, Kum & Go, The Rose of Ames, The Waterford at Ames, West Village Apartments, Perfect Games, Westtown Courts, Sukup Basketball Complex, University West Apartments, Ames Middle School, Israel Family Hospice House, Christopher Gartner Park, Formative Years Growing and Learning, Kum & Go, Ames Woman's Club, Hickory Ridge Apartments, Hy-Vee Gas, Kwik Connection, Wells Fargo Bank, Hy-Vee West, Ames Driver's License Station, McFarland Express Care, McDonalds, Alpha Copies and Print Center, Szechuan House, Central Iowa Vapors, Erbert and Gerberts, Family Video, Uni-Mart, Papa John's, Pammell Grocery & Grill, First National Bank, Apen Ames, Community of Christ, Dunkin Donuts, US Bank ATM, Ames Intermodal Facility, Collegiate United Methodist Church, ISU Campustown Businesses (86 total); <http://www.amescampustown.com/>, Student Services, Iowa State University west campus.

#### **Added Frequency - #7 Purple (Weekdays) – Year 1**

**CyRide proposes to provide additional frequency of service to the #7 Purple route.** The #7 Purple now consistently operates a bus every 15 minutes from 7-10 AM (on ISU class days; 30 minutes on non-ISU class days) and every 30 minutes from 2:30-5:20pm. Prior to CyRide 2.0, the Purple route only operated 6 trips (3am/3pm). **For this ICAAP request, I prorated the average number of “additional” trips (9.7647 trips) throughout the year based on the days operated to provide an average daily trip.** CyRide anticipates that this route will generate 342 daily riders on these additional trips given that it serves apartments in high-density areas along Todd, Alcott and Lincoln Way. (See Exhibit B – Red Route for route alignment details.)

The following information provides operation-specific data for this additional frequency ICAAP request:

#### **#7 Purple (Improved Frequency)**

Hours of Service: 2.8

Number of Trips: 9.7647 (Avg. daily trips over 255 weekdays: 6 trips operate 95 days/year on non-ISU class days; 12 trips operate 160 days/year on ISU class days)

Avg. Passengers/Trip (Year 1): 35

Miles/Trip: 4.1

Miles: 40

Days of Operation/Year: 255

Ridership: 342 daily rides (35 pass/trip\* 9.7647 trips)

This route will serve the following commercial, residential and University destinations as illustrated within Exhibit B:

- **#7 Purple (Added Frequency):** College Creek Apartments, Kum & Go, Ames Woman's Club, Hickory Ridge Apartments, Hy-Vee Gas, Kwik Connection, Wells Fargo Bank, Hy-Vee West, Ames Driver's License Station, McFarland Express Care,



McDonalds, Alpha Copies and Print Center, Szechuan House, Central Iowa Vapors, Erbert and Gerberts, Family Video, Uni-Mart, Papa John's, Pammell Grocery & Grill, First National Bank, Apen Ames, Community of Christ, Dunkin Donuts, US Bank ATM, Ames Intermodal Facility, Collegiate United Methodist Church, ISU Campustown Businesses (86 total - <http://www.amescampustown.com/>), Student Services, Iowa State University west campus.

### Added Emissions Factors

The project emissions in Exhibit G are calculated based on the required Iowa DNR's current vehicle emission factors data posted on the Iowa DOT's ICAAP website

### Conclusion

The advantages of supporting this grant application can provide numerous benefits to the City of Ames/Iowa State University/Story County through:

- Increased transit service coverage
- Improved transit frequency of service
- Improved air quality with fewer single-occupant cars and technologically improved bus engines

While students are committed to paying for the improved services required to meet their higher transit demands, unanticipated financial increases in the double-digits would be needed to support this new frequency of service. Unanticipated ridership and financial increases occur when reliable enrollment numbers are not available until only a few weeks after the fall semester begins. ICAAP funding will allow student fees to increase more gradually, so that at the end of the three-year allowance, funding will be sufficient to continue these services into the future. For example, instead of a 12% immediate impact, an increase of 3-5% per year for three years will generate the funds to successfully continue these improvements long into the future.

Without funding for this service enhancement, CyRide may need to leave passengers at the bus stops as capacity on the buses is already at its maximum along these corridors. Additional frequency is needed on all four routes – the #1 Red, #7 Purple #11 Cherry and #12 Lilac to provide the service that is demanded to not leave residents at the bus stops. This demand cannot be accommodated with only one service and collectively, the four services are needed in tandem to handle demand in west Ames. CyRide estimates that approximately 300,000 new rides would be generated from these extra trips provided between west Ames and campus throughout a single year.

CyRide encourages the Iowa DOT to provide support for these routes for expanded days of service (third year request for ICAAP funding) along these high-density corridors.

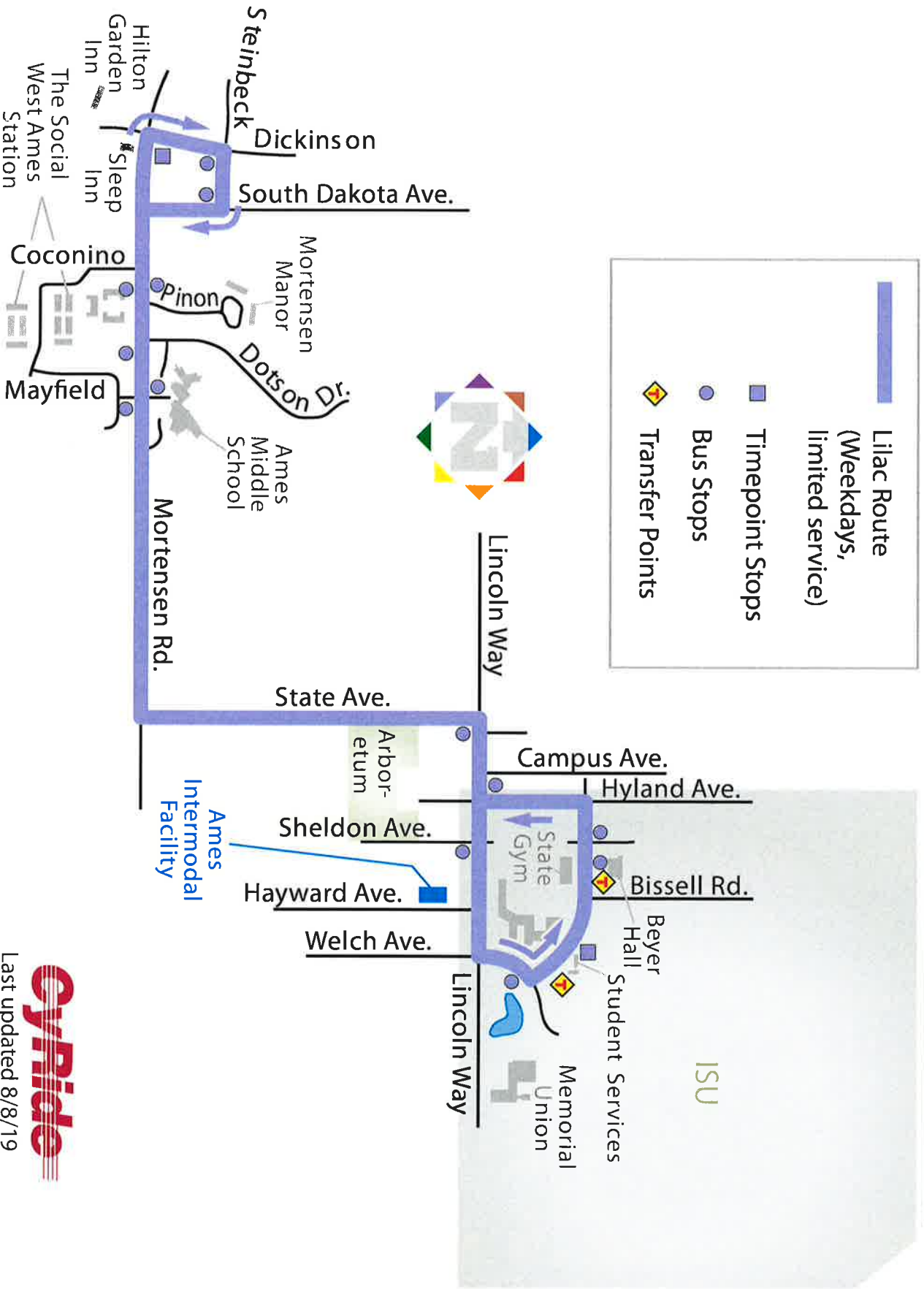


# LILAC ROUTE

## 12

Effective August 26, 2019

Exhibit B - Route Map









# CHERRY ROUTE

11

Effective August 19, 2019

Exhibit B - Route Map



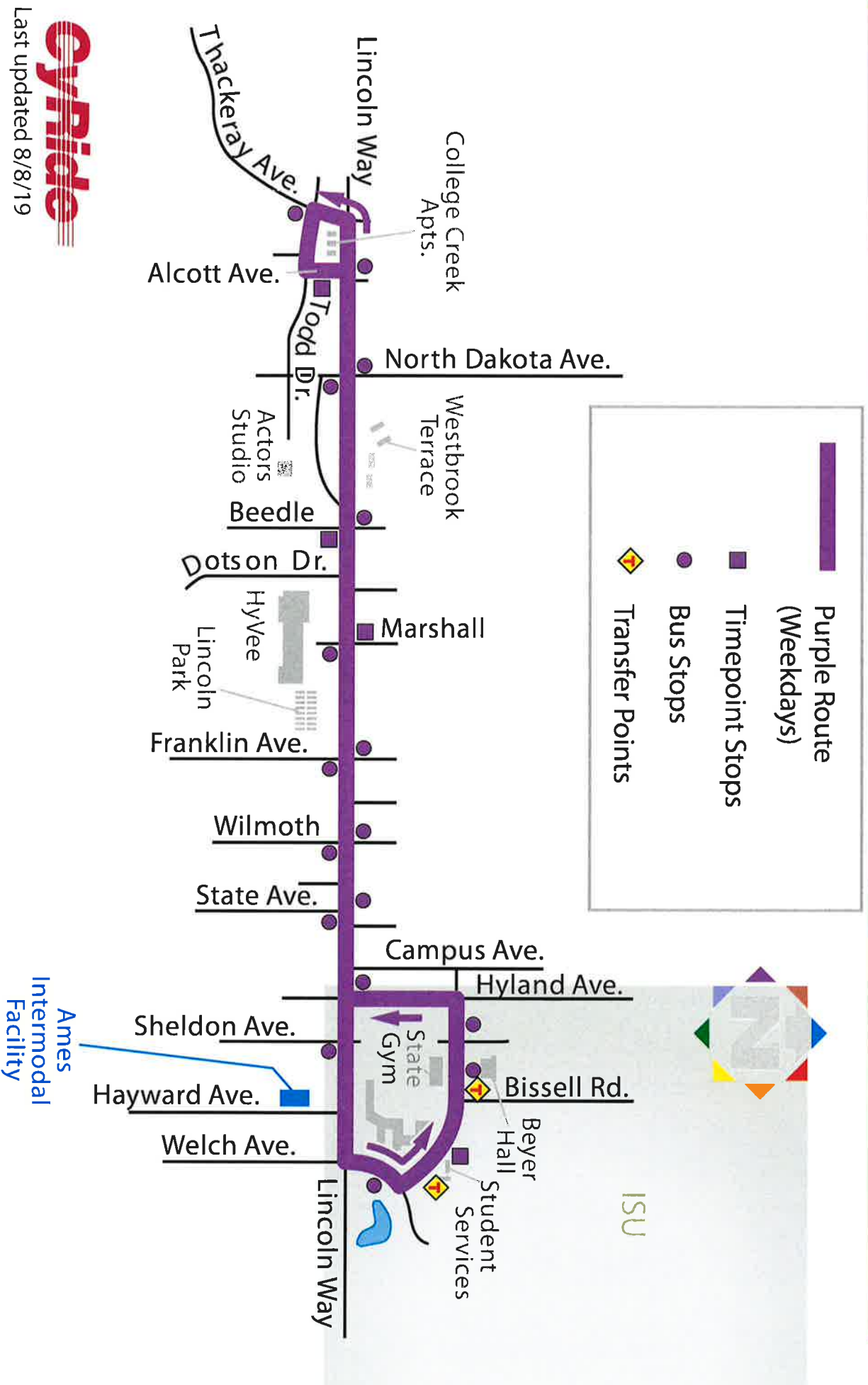


# PURPLE ROUTE

7

Effective August 19, 2019

Exhibit B - Route Map



Last updated 8/8/19



# CyRide

## New Route Expansion (#12 Lilac)

### Added Frequency (#1 Red, #11 Cherry, #7 Purple)

## Budget

This is the fourth year the service has been in operation, but the third year of requesting ICAAP funding as the initial year 1 was provided with 100% local funding due to timing issues under the application process. Therefore, CyRide is now requesting Year 1 funds as allowed by federal guidance and the Iowa DOT's ICAAP application handbook to spread three years of funding requests over a period of up to 5 years. CyRide is spreading it over 4 years.

<u>Activity</u>	<u>Cost</u>
-----------------	-------------

#### OPERATING:

#### #12 Lilac Weekday Route (PEAK HOUR – ISU School Days Only)

**YEAR 3 – (Request for service beginning October 2021); Service Began 10/1/2018-9/30/2019 (100% funded by CyRide); 2<sup>nd</sup> year ICAAP funded 10/1/2020-9/30/2021)**

Driver Wages – 11.4 hrs./day x 160 days x \$38.26/hr =	\$69,786
Consumables –5.9 miles/trip x 18 trips/day x 160 days x \$1.46/mile =	\$24,808
<b>SUBTOTAL</b>	<b>\$94,594</b>
Less Fares	
0.2 riders/trip x 18 trips x 160 days x *\$0.87 average resident fare =	(\$501)
49.8 riders/trip x 18 trips x 160 days x \$0.00 fare (Free ISU ID card) =	(\$0)
<b>YEAR 1 SUBTOTAL LILAC- Weekday Peak (less fares) =</b>	<b>\$94,093</b>

#### #1 Red Weekday Route (Added Frequency - All Days)

**YEAR 3 – (Request for service beginning October 2021); Service Began 10/1/2018-9/30/2019 (100% funded by CyRide);2<sup>nd</sup> year ICAAP funded 10/1/2020-9/30/2021)**

Driver Wages – 15.5 hrs./day x 255 days x \$38.26/hr =	\$151,222
Consumables –14.625 miles/trip x 12 trips/day x 255 days x \$1.46/mile =	\$65,338
<b>SUBTOTAL</b>	<b>\$216,560</b>
Less Fares	
0.2 riders/trip x 12 trips x 255 days x *\$0.87 average resident fare =	(\$532)
49.8 riders/trip x 12 trips x 160 days x \$0.00 fare (Free ISU ID card) =	(\$0)
<b>YEAR 1 SUBTOTAL RED (less fares) =</b>	<b>\$216,028</b>

#### #11 Cherry Weekday Route (Added Frequency- ISU School Days Only)

**YEAR 3 – (Request for service beginning October 2021); Service Began 10/1/2018-9/30/2019 (100% funded by CyRide);2<sup>nd</sup> year ICAAP funded 10/1/2020-9/30/2021)**

Driver Wages – 4.5 hrs./day x 160 days x \$38.26/hr =	\$27,547
Consumables –6.6 miles/trip x 9 trips/day x 160 days x \$1.46/mile =	\$13,875
<b>SUBTOTAL</b>	<b>\$41,422</b>
Less Fares	
0.2 riders/trip x 9 trips x 160 days x *\$0.87 average resident fare =	(\$251)



# Exhibit C – ITEMIZED BREAKDOWN

49.8 riders/trip x 9 trips x 160 days x \$0.00 fare (Free ISU ID card) = (\$0)  
**YEAR 1 SUBTOTAL CHERRY (less fares) = \$41,171**

## #7 Purple Weekday Route (Added Frequency)

**YEAR 3 – (Request for service beginning October 2021); Service Began 10/1/2018-9/30/2019 (100% funded by CyRide);2<sup>nd</sup> year ICAAP funded 10/1/2020-9/30/2021)**

### Added Frequency **ISU DAYS**

Driver Wages – 2.8 hrs./day x 160 days x \$38.26/hr = \$17,140

Consumables –4.1 miles/trip x 6 trips/day x 160 days x \$1.46/mile = \$5,747

### Added Frequency **ALL DAYS**

Driver Wages – 1.8 hrs./day x 255 days x \$38.26/hr = \$17,561

Consumables –4.1 miles/trip x 6 trips/day x 255 days x \$1.46/mile = \$9,159

Total Driver Wages – (\$17,140 + \$17,561) = \$34,701

Total Consumables –(\$5,747 + \$9,159) = \$14,906

SUBTOTAL \$49,607

### Less Fares

0.2 riders/trip x 9.7647 trips x 255 days x \*\$0.87 average resident fare = (\$433)

34.8 riders/trip x 9.7647 trips x 255 days x \$0.00 fare (Free ISU ID card) = (\$0)

**YEAR 1 SUBTOTAL PURPLE (less fares) = \$49,174**

**SUBTOTAL OPERATING 400,466**

**TOTAL COST \$400,466**

**ICAAP Share \$320,372**

**CyRide Share (assured) \$80,094**

### NOTES:

**\*\* Average Resident Fare** = Average Cash Deposits/Average Residents Boarding Paying Cash = \$4,040/4,738 = \$0.87  
 (See “Comparison of Cash/Deposits and Use of Tickets FY2019 Avg.” with calculations highlighted in yellow)  
 CyRide decreased its fares in May 2018 from \$1.25 to \$1.00 and its half fares from \$.60 to \$.50. Additionally, CyRide does not recommend utilizing FY2020 average fares due to no fares collected for portions of FY2020 due to COVID-19 and extremely low ridership within the year when fares resumed. Therefore, the FY2019 average fares are more representative for upcoming services in FY2021. CyRide’s full fare was increased to \$1.25 between January 2012 and May 2018.

**Please note: CyRide does not bill for indirect costs.**



**Comparison of Cash/Deposits and Use of Tickets  
Since May 2008**

Account # 550-1100-345.42-00  
Fixed Route Fares

From:	To:	Deposit	Cash Fares	Rides/ Day	Avg. Fare	Cash/ Day	RF Ticket	FF Ticket	RF Percent	FF Percent	RF/ Day	FF/ Day
7/6/18	7/24/2018	\$ 3,607.78	5,261	277	\$ 0.69	\$ 189.88	1801	441	80.3%	19.7%	94.8	23.2
7/25/18	8/7/18	\$ 3,029.41	3,956	283	\$ 0.77	\$ 216.39	1208	328	78.6%	21.4%	86.3	23.4
8/8/18	8/21/18	\$ 5,525.75	4,605	329	\$ 1.20	\$ 394.70	801	367	68.6%	31.4%	57.2	26.2
8/22/18	9/5/18	\$ 4,836.26	5,055	337	\$ 0.96	\$ 322.42	716	391	64.7%	35.3%	47.7	26.1
9/6/18	9/18/18	\$ 4,119.32	4,770	367	\$ 0.86	\$ 316.87	915	322	74.0%	26.0%	70.4	24.8
9/19/18	10/2/18	\$ 4,039.31	4,719	337	\$ 0.86	\$ 288.52	962	310	75.6%	24.4%	68.7	22.1
10/3/18	10/16/18	\$ 4,863.76	4,976	355	\$ 0.98	\$ 347.41	924	288	76.2%	23.8%	66.0	20.6
10/17/18	10/30/18	\$ 4,411.83	4,949	354	\$ 0.89	\$ 315.13	893	256	77.7%	22.3%	63.8	18.3
10/31/18	11/14/18	\$ 3,411.21	5,170	345	\$ 0.66	\$ 227.41	822	284	74.3%	25.7%	54.8	18.9
11/15/18	11/27/18	\$ 3,396.23	3,318	255	\$ 1.02	\$ 261.25	478	162	74.7%	25.3%	36.8	12.5
11/28/18	12/11/18	\$ 4,196.11	4,531	324	\$ 0.93	\$ 299.72	852	287	74.8%	25.2%	60.9	20.5
12/12/18	1/8/19	\$ 5,168.96	7,008	250	\$ 0.74	\$ 184.61	1054	336	75.8%	24.2%	37.6	12.0
1/9/19	1/22/19	\$ 4,119.89	4,218	301	\$ 0.98	\$ 294.28	590	284	67.5%	32.5%	42.1	20.3
1/23/19	2/5/19	\$ 3,898.84	3,925	280	\$ 0.99	\$ 278.49	509	314	61.8%	38.2%	36.4	22.4
2/6/19	2/19/19	\$ 4,240.94	4,737	338	\$ 0.90	\$ 302.92	687	371	64.9%	35.1%	49.1	26.5
2/20/19	3/5/19	\$ 4,382.58	4,793	342	\$ 0.91	\$ 313.04	624	376	62.4%	37.6%	44.6	26.9
3/6/19	3/19/19	\$ 4,211.23	4,579	327	\$ 0.92	\$ 300.80	647	203	76.1%	23.9%	46.2	14.5
3/20/19	4/2/19	\$ 3,438.35	4,948	353	\$ 0.69	\$ 245.60	1010	272	78.8%	21.2%	72.1	19.4
4/3/19	4/16/19	\$ 4,332.65	5,103	365	\$ 0.85	\$ 309.48	767	228	77.1%	22.9%	54.8	16.3
4/17/19	4/30/19	\$ 3,771.30	4,379	313	\$ 0.86	\$ 269.38	779	241	76.4%	23.6%	55.6	17.2
5/1/19	5/14/19	\$ 3,583.64	4,941	353	\$ 0.73	\$ 255.97	766	239	76.2%	23.8%	54.7	17.1
5/15/19	6/4/19	\$ 3,867.25	6,354	303	\$ 0.61	\$ 184.15	949	328	74.3%	25.7%	45.2	15.6
6/5/19	6/20/19	\$ 3,119.40	5,404	338	\$ 0.58	\$ 194.96	1134	279	80.3%	19.7%	70.9	17.4
6/21/19	7/2/19	\$ 5,110.24	3,496	291	\$ 1.46	\$ 425.85	992	249	79.9%	20.1%	82.7	20.8
7/3/19	7/17/19	\$ 3,576.47	4,090	273	\$ 0.87	\$ 238.43	872	244	78.1%	21.9%	58.1	16.3
7/18/19	7/30/19	\$ 2,791.00	3,894	300	\$ 0.72	\$ 214.69	1125	188	85.7%	14.3%	86.5	14.5
7/31/19	8/13/19	\$ 2,040.47	4,163	297	\$ 0.49	\$ 145.75	870	257	77.2%	22.8%	62.1	18.4
8/14/19	8/27/19	\$ 4,652.20	4,760	340	\$ 0.98	\$ 332.30	679	275	71.2%	28.8%	48.5	19.6
8/28/19	9/10/19	\$ 5,319.18	5,363	383	\$ 0.99	\$ 379.94	640	209	75.4%	24.6%	45.7	14.9
9/11/19	9/17/19	\$ 4,107.34	4,762	680	\$ 0.86	\$ 586.76	404	160	71.6%	28.4%	57.7	22.9
9/18/19	10/1/19	\$ 5,215.40	5,640	403	\$ 0.92	\$ 372.53	640	310	67.4%	32.6%	45.7	22.1
10/2/19	10/15/19	\$ 5,139.23	5,785	413	\$ 0.89	\$ 367.09	661	276	70.5%	29.5%	47.2	19.7
10/16/19	10/29/19	\$ 5,562.53	5,847	418	\$ 0.95	\$ 397.32	785	225	77.7%	22.3%	56.1	16.1
10/30/19	11/12/19	\$ 4,376.60	4,891	349	\$ 0.89	\$ 312.61	754	253	74.9%	25.1%	53.9	18.1
11/13/19	11/19/19	\$ 2,970.30	2,984	426	\$ 1.00	\$ 424.33	350	130	72.9%	27.1%	50.0	18.6
11/20/19	12/3/19	\$ 2,685.42	4,372	312	\$ 0.61	\$ 191.82	631	225	73.7%	26.3%	45.1	16.1
12/4/19	12/11/19	\$ 128.00	2,878	360	\$ 0.04	\$ 16.00	379	127	74.9%	25.1%	47.4	15.9
12/12/19	12/17/19	\$ 4,531.28	1,830	305	\$ 2.48	\$ 755.21	236	74	76.1%	23.9%	39.3	12.3
12/18/19	1/9/20	\$ 3,464.36	6,045	263	\$ 0.57	\$ 150.62	980	271	78.3%	21.7%	42.6	11.8
1/10/20	1/22/20	\$ 3,971.63	3,990	307	\$ 1.00	\$ 305.51	529	246	68.3%	31.7%	40.7	18.9
1/23/20	2/5/20	\$ 5,562.19	4,905	350	\$ 1.13	\$ 397.30	776	294	72.5%	27.5%	55.4	21.0
2/6/20	2/20/20	\$ 3,243.77	4,876	325	\$ 0.67	\$ 216.25	857	311	73.4%	26.6%	57.1	20.7
2/21/20	3/4/20	\$ 3,823.46	4,324	333	\$ 0.88	\$ 294.11	709	277	71.9%	28.1%	54.5	21.3
3/5/20	3/19/20	\$ 2,616.37	3,636	242	\$ 0.72	\$ 174.42	539	202	72.7%	27.3%	35.9	13.5
3/20/20	8/13/20	\$ 3,962.90	5,302	36	\$ 0.75	\$ 26.96	632	224	73.8%	26.2%	4.3	1.5
Avg. before 1/2012		\$ 3,763	4,398	486	\$ 0.86	\$ 399.60	508	245	67.5%	32.5%	54	27
Avg. after 1/2012		\$ 4,557	4,557	319	\$ 1.00	\$ 323.23	913	465	66.3%	33.7%	63	32
Average FY2014		\$ 5,176	4857	343	\$ 1.06	\$ 365.50	825	557	59.5%	40.5%	59	39
Average FY2015		\$ 4,501	4402	305	\$ 1.03	\$ 315.22	973	541	63.5%	36.5%	68	38
Average FY2016		\$ 4,089	3877	282	\$ 1.06	\$ 300.73	931	501	64.8%	35.2%	67	36
Average FY2017		\$ 4,464	4317	283	\$ 1.05	\$ 296.32	1085	564	63.6%	36.4%	70	37
Average FY2018		\$ 3,914	3796	270	\$ 1.04	\$ 283.48	997	454	67.8%	32.2%	68	32
Average FY2019		\$ 4,040	4738	319	\$ 0.87	\$ 276.63	880	292	74.4%	25.6%	59	20
Average FY2020		\$ 3,862	4545	344	\$ 0.89	\$ 307.73	634	229	73.4%	26.6%	47	17



**New Route Expansion (#12 Lilac)  
Added Frequency (#1 Red, #11 Cherry, #7 Purple)  
Schedule**

<b><u>Activity</u></b>	<b><u>Completion Date</u></b>
Service Begins (3rd year ICAAP*)	October 1, 2021
Service Ends (3rd year ICAAP*)	September 30, 2022

\* This is Year 3 request for ICAAP funding for new Lilac weekday peak hour service and added frequency for Red, Cherry, and Purple routes. The Iowa DOT previous funded Year-1 and Year-2 for the operation of W. Ames transit routes. This is the final year request for these services.



**CyRide**  
**New Route Expansion (#12 Lilac)**  
**Added Frequency (#1 Red, #11 Cherry, #7 Purple)**  
**Official Certification**

The Ames Transit Agency (CyRide) Board of Trustees certifies that it shall:

- (1) commit the necessary local matching funding for project implementation and
- (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.



Jacob Schrader, Ames Transit Agency President

8/26/2020

Date



**CyRide**  
**New Route Expansion (#12 Lilac)**  
**Added Frequency (#1 Red, #11 Cherry, #7 Purple)**  
**MPO Resolution**

The Ames Area Metropolitan Planning Organization (AAMPO) approved and endorsed this project on September 22, 2020 with a resolution approving this grant. The resolution is attached.

The ICAAP application form (Form 230017; page 3 of 6) requires that the project or program be identified in the fiscally constrained transportation plan (TIP) and requires the document to be submitted with the application. However, the ICAAP handbook has been revised to state that “Awarded projects” must be added to approved MPO TIP’s and STIP’s (See below).

*[https://iowadot.gov/systems\\_planning/pdf/ICAAP\\_Application\\_Handbook.pdf](https://iowadot.gov/systems_planning/pdf/ICAAP_Application_Handbook.pdf) (page 5):  
Awarded projects must be added to approved MPO or RPA transportation improvement programs (TIPs) and Iowa’s Statewide Transportation Improvement Program (STIP).*

If this ICAAP project has been formally approved by the Iowa DOT Commission (early January 2021), the funding will be amended and approved by the MPO in the AAMPO’s FY2021 Transportation Improvement Program in order to begin transferring the federal funding from FHWA to FTA and gain formal grant approval from the Federal Transit Administration.



**RESOLUTION NO. 16-675**

**RESOLUTION APPROVING IOWA CLEAN AIR ATTAINMENT PROGRAM GRANT  
(ICAAP) FOR #9 PLUM SERVICE EXPANSION FOR CYRIDE  
FOR THE CITY OF AMES**

WHEREAS, the Iowa Clean Air Attainment Program is established by the Iowa Department of Transportation; and,

WHEREAS, the Iowa Department of Transportation provides, on a competitive basis, funds for transportation projects with the highest potential for reducing transportation related air pollution and congestion; and,

WHEREAS, CyRide has prepared an application for ICAAP funding for service frequency expansion on route #9 Plum; and,

WHEREAS, it is anticipated that the project will not begin until the ICAAP funds are received after October 1, 2017; and,

WHEREAS, one of the grant requirements is for the Ames Area Metropolitan Planning Organization (MPO), by resolution, declaring the sponsor's proposed project or program conforms to the MPO's regional transportation planning process; and,

WHEREAS, for MPOs, the project or program must be identified in the fiscally-constrained transportation plan.

NOW, THEREFORE, BE IT RESOLVED by the Ames Area Metropolitan Planning Organization Transportation Policy Committee, that the project shown in the Iowa Clean Air Attainment Program grant application, which conforms to the MPO's regional transportation planning process, is hereby approved and certified.

ADOPTED THIS 22<sup>nd</sup> day of November, 2016.



Diane R. Voss, City Clerk



Ann H. Campbell, Mayor

Introduced by: Orazem

Seconded by: Corrieri

Voting aye: Beatty-Hansen, Betcher, Campbell, Corrieri, Gartin, Nelson, Orazem

Voting nay: None Absent: Clinton, Hollingshead, Popp, Staudt

Resolution declared adopted and signed by the Mayor this 22<sup>nd</sup> day of November, 2016.

Placeholder for update resolution



# New Route Expansion (#12 Lilac) Added Frequency (#1 Red, #11 Cherry, #7 Purple) Emissions Calculation

Calculation/Assumption	Factors	CO	VOC (HC)	NOx
<b>Net Project Cost (ALL FOUR ROUTES BELOW)</b>	<b>\$400,466</b>			
Lilac Net Operating Cost	\$94,093			
Red Net Operating Cost	\$216,028			
Cherry Net Operating Cost	\$41,171			
Purple Net Operating Cost	\$49,174			
Operating for One Year - \$400,466				
Number of Years In Project - Operating	1			
<b>#12 Lilac Route Service Assumptions</b>				
Number of days/Yr. in Project (ISU Classdays & Finals Days)	160			
Avg. Rd-Trip Commute (Miles*)	5.9			
# Daily Trips	18			
# Riders/Trip	50			
Number of Daily Miles for Lilac	106.2			
Total Estimated Avg. Daily Ridership (Lilac)	900	144,000		
Total Cars Taken From Roadway Weekdays (1.2/car)	750			
<b>#1 Red Route Service Assumptions</b>				
Number of days/Yr. in Project (ISU Classdays & Finals Days)	255			
Avg. Commute (Miles*)	7			
Daily Round Trip Bus Miles	14.625			
# Daily Trips	12			
# Riders/Trip	50			
Number of Daily Miles for Red Bus	175.5			
Total Estimated Avg. Daily Ridership (Red)	600	4,200		
Total Cars Taken From Roadway Weekdays (1.2/car)	500			
<b>#11 Cherry Route Service Assumptions</b>				
Number of days/Yr. in Project (ISU Classdays & Finals Days)	160			
Avg. Rd-Trip Commute (Miles*)	6.6			
# Daily Trips	9			
# Riders/Trip	50			
Number of Daily Miles for Cherry	59.4			
Total Estimated Avg. Daily Ridership (Cherry)	450	72,000		
Total Cars Taken From Roadway Weekdays (1.2/car)	375			
<b>#7 Purple Route Service Assumptions</b>				
Number of days/Yr. in Project	255			
Avg. Rd-Trip Commute (Miles*)	4.1			
# Daily Trips (6 trips operate 95 days/year on non ISU class days; 12 trips 160 days/yr on ISU class days)	9.7647			
# Riders/Trip	35			
Number of Daily Miles for Purple	40.0			
Total Estimated Avg. Daily Ridership (Purple)	342	87,150		
Total Cars Taken From Roadway Weekdays (1.2/car)	285			



# New Route Expansion (#12 Lilac) Added Frequency (#1 Red, #11 Cherry, #7 Purple) Emissions Calculation

Calculation/Assumption	Factors	CO	VOC (HC)	NO <sub>x</sub>
<b>Emission Reduction By Riders Taking LILAC</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length*		81.66	12.1717	6.0888
#12 Lilac: Gross Red. x 160 days x Cars From Roadway x 1 year		<u>9,798,720</u>	<u>1,460,604</u>	<u>730,656</u>
Total LDGV Emissions Reduced (#12 Lilac Route)		9,798,720	1,460,604	730,656
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV #12 Lilac Emissions x 106.2 miles/day x 160 days x 1 year		<u>94,204</u>	<u>15,548</u>	<u>172,911</u>
TOTAL (40' Bus) HDDV Emissions		94,204	15,548	172,911
<b>Net Reduction for LILAC ROUTE :</b>		<b>9,704,516</b>	<b>1,445,056</b>	<b>557,745</b>
<b>Cost Effectiveness for LILAC</b>		<b>\$ 9.70</b>	<b>\$ 65.11</b>	<b>\$ 168.70</b>
<b>Emission Reduction By Riders Taking RED</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length (7 miles/trip)		96.88	14.441	7.224
#1 Red: Gross Red. x 255 days x Cars From Roadway x 1 year		<u>12,352,200</u>	<u>1,841,228</u>	<u>921,060</u>
Total LDGV Emissions Reduced (#1 Red Route)		12,352,200	1,841,228	921,060
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV #1 Red Emissions x 14.625 miles/day x 255 days x 1 year		<u>20,676</u>	<u>3,412</u>	<u>37,950</u>
TOTAL (40' Bus) HDDV Emissions		20,676	3,412	37,950
<b>Net Reduction for RED ROUTE :</b>		<b>12,331,524</b>	<b>1,837,815</b>	<b>883,110</b>
<b>Cost Effectiveness for RED</b>		<b>\$ 17.52</b>	<b>\$ 117.55</b>	<b>\$ 244.62</b>
<b>Emission Reduction By Riders Taking LILAC</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length*		91.34	13.62	6.81
#11 Cherry: Gross Red. x 160 days x Cars From Roadway x 1 year		<u>5,480,640</u>	<u>816,948</u>	<u>408,672</u>
Total LDGV Emissions Reduced (#11 Cherry Route)		5,480,640	816,948	408,672
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV #11 Cherry Emissions x 59.4 miles/day x 160 days x 1 year		<u>52,690</u>	<u>8,696</u>	<u>96,713</u>
TOTAL (40' Bus) HDDV Emissions		52,690	8,696	96,713
<b>Net Reduction for CHERRY ROUTE :</b>		<b>5,427,950</b>	<b>808,252</b>	<b>311,959</b>
<b>Cost Effectiveness for CHERRY</b>		<b>\$ 7.59</b>	<b>\$ 50.94</b>	<b>\$ 131.98</b>
<b>Emission Reduction By Riders Taking PURPLE</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length*		56.74	8.4583	4.2312
#7 Purple Gross Red. x 255 days x Cars From Roadway x 1 year		<u>4,121,031</u>	<u>614,284</u>	<u>307,291</u>
Total LDGV Emissions Reduced (#7 Purple Route)		4,121,031	614,284	307,291
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV #7 Purple Emissions x 40 miles/day x 255 days x 1 year		<u>56,599</u>	<u>9,341</u>	<u>103,887</u>
TOTAL (40' Bus) HDDV Emissions		56,599	9,341	103,887
<b>Net Reduction for PURPLE ROUTE :</b>		<b>4,064,432</b>	<b>604,942</b>	<b>203,404</b>
<b>Cost Effectiveness for PURPLE</b>		<b>\$ 12.10</b>	<b>\$ 81.29</b>	<b>\$ 241.76</b>



**New Route Expansion (#12 Lilac)  
Added Frequency (#1 Red, #11 Cherry, #7 Purple)  
Emissions Calculation**

Calculation/Assumption	Factors	CO	VOC (HC)	NOx
Net Reduction for Project :		31,528,422	4,696,066	1,956,219
Total Reduction for Project - kg/project		31,528.4	4,696.1	1,956.2
Net Reduction Per Year:		31,528,422	4,696,066	1,956,219
Total Reduction Per Year - kg/year		31,528.4	4,696.1	1,956.2
Cost Effectivness:				
Total Project Cost		\$400,466		
One Yr. Project Total Cost= (\$400,466/1)		\$400,466		
CO		\$12.70		
VOC		\$85.28		
NOx		\$204.71		

\* Based on statistics, riders are riding the entire Lilac, Cherry and Purple routes to reach their destination



## Minority Impact Statement

Pursuant to 2008 Iowa Acts, HF 2393, Iowa Code 8.11, all grant applications submitted to the State of Iowa that are due beginning Jan. 1, 2009, shall include a Minority Impact Statement. This is the state's mechanism for requiring grant applications to consider the potential impact of the grant project's proposed programs or policies on minority groups.

**Please choose the statement(s) that pertains to this grant application. Complete all the information requested for the chosen statement(s). Submit additional pages as necessary.**

- ☒ The proposed grant project programs or policies could have a disproportionate or unique **positive** impact on minority persons.

Describe the positive impact expected from this project.

The City of Ames has an 10.24% Asian population and any new route expansion on high capacity corridors will certainly have a positive impact on this minority and LEP group living within the Ames community. Specifically, the routes in west Ames travels along the Mortensen, Steinbeck, Dickens, South Dakota and Lincoln Way corridors in west Ames which have developed into a high capacity corridors where a majority of university students reside in high residential apartment complexes. The residents living in these apartments along these corridors will be provided transportation directly to central ISU campus. While this service is designed to serve the general public, Ames residents of all races and genders living within the community will benefit from this grant application and service.

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Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☒ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

- ☐ The proposed grant project programs or policies could have a disproportionate or unique **negative** impact on minority persons.

Describe the negative impact expected from this project.

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Present the rationale for the existence of the proposed program or policy

---



Provide evidence of consultation with representatives of the minority groups impacted.

Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☐ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

☐ The proposed grant project programs or policies are **not expected to have** a disproportionate or unique impact on minority persons.

Present the rationale for determining no impact.

I hereby certify that the information on this form is complete and accurate, to the best of my knowledge.

Name Barbara Neal

Title Transit Director

#### Definitions

"Minority Persons," as defined in Iowa Code 8.11, means individuals who are women, persons with a disability, Blacks, Latinos, Asians or Pacific Islanders, American Indians, and Alaskan Native Americans.

"Disability," as defined in Iowa Code 15.102, subsection 7, paragraph "b," subparagraph (1):

b. As used in this subsection:

(1) "*Disability*" means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of the individual, a record of physical or mental impairment that substantially limits one or more of the major life activities of the individual, or being regarded as an individual with a physical or mental impairment that substantially limits one or more of the major life activities of the individual.

"*Disability*" does not include any of the following:

- (a) Homosexuality or bisexuality.
- (b) Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments or other sexual behavior disorders.
- (c) Compulsive gambling, kleptomania, or pyromania.
- (d) Psychoactive substance abuse disorders resulting from current illegal use of drugs.

"State Agency," as defined in Iowa Code 8.11, means a department, board, bureau, commission, or other agency or authority of the State of Iowa.



# **Iowa Department of Transportation Clean Air Attainment Funds Application**

**Added Night Trips  
(#11 Cherry - Night)**

**Submitted to:**

**IOWA DOT**

**By:**

**AMES TRANSIT AGENCY (CYRIDE)  
601 N. University Blvd.  
Ames, Iowa 50010**

**October 1, 2020**





## PROJECT APPLICATION IOWA CLEAN AIR ATTAINMENT PROGRAM (ICAAP)

**General Information:**

Applicant Agency: Ames Transit Agency E-mail: bneal@cyride.com  
Public Agency (required)  
 Contact Person (Name and Title): Barbara Neal, Transit Director  
601 N. University Blvd.  
 Complete Mailing Address: \_\_\_\_\_  
Ames IA 50010 515-239-5565  
City State ZIP Code Daytime Phone

If more than one agency or organization is involved in this project, please state the name, contact person, mailing address, and telephone number of the second agency. (Attach an additional page if more than two agencies are involved.)

Co-Applicant Agency: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Public Agency, Non-Profit Organization<sup>1</sup>, For-Profit Organization<sup>1</sup>, or Individual<sup>1</sup>  
 Contact Person (Name and Title): \_\_\_\_\_  
Street Address and/or Box Number  
 Complete Mailing Address: \_\_\_\_\_  
 \_\_\_\_\_  
City State ZIP Code Daytime Phone

**Project Information:**

Project Title<sup>2</sup>: #11 Cherry - Night

Project Description (including length, if applicable):

In August 2018, CyRide redesigned and implemented new bus services traveling in west Ames area including added frequency of trips on the #11 Cherry route that operated day service only. In August 2019, CyRide added night service trips to the #11 Cherry route due to additional demand from residents and to improve safety. ICAAP funded the night service from October 1, 2020 - September 30, 2021 (FFY2021). Therefore, this ICAAP request is for this night service trips for service for federal fiscal year 2022.

\*Project priority (1 = highest priority): 2 (a sponsor submitting multiple applications in this funding cycle must assign a numerical rank or priority to each application.)<sup>3</sup>

\*Assign the proposed project to one or more of the following categories (check one or more):

- |  |  |
|--|--|
| <input type="checkbox"/> Transportation-Related Project in the State Implementation Plan (SIP) | <input type="checkbox"/> Shared-Ride   |
| <input type="checkbox"/> Transportation Control Measure (TCM)                                  | <input type="checkbox"/> Bicycle or <input type="checkbox"/> Pedestrian Facility or Program (select one) |
| <input type="checkbox"/> Traffic Flow Improvement (Intersection, Signalization, Other)         | <input type="checkbox"/> Intermodal Freight  |
| <input type="checkbox"/> Planning and Project Development                                      | <input type="checkbox"/> Passenger   |
| <input type="checkbox"/> Travel Demand Management (TDM)  | <input type="checkbox"/> Alternative Fuels   |
| <input checked="" type="checkbox"/> Transit-Related Improvement                                | <input type="checkbox"/> Vehicle Inspection and Maintenance Program                                      |
|  | <input type="checkbox"/> Outreach Activity (Education, Advertising, or Technical Assistance)             |

\*Is the project consistent with the State Implementation Plan for air quality for non-attainment areas? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the MPO's local congestion management plan? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the ☒ MPO ☐ RPA ☐ Statewide Long-Range Transportation Plan? ☒ Yes ☐ No ☐ Not Applicable

Notes: <sup>1</sup>Requires public agency as co-sponsor of application.

<sup>2</sup>The term "project" means any ICAAP infrastructure or program proposal.

<sup>3</sup>The Iowa Department of Transportation will use the priority ratings to reflect the sponsor



**Project Costs (an Itemized breakdown must be included on an attached sheet):**

Total Cost: \$41,930.00  
Iowa Clean Air Attainment Program Fund Request: \$33,544.00  
Applicant Match: \$8,386.00

*Projects with a private for-profit co-applicant require a minimum 50 percent applicant match; all other projects require a minimum 20 percent applicant match.*

List All Applicant Match Sources	Amount	Assured or Anticipated (Date Anticipated)
1. CyRide Operating Budget	\$8,386.00	July 01, 2021
2. Passenger Fares	\$194.00	October 01, 2021
3.		

Are any state funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

Are any other federal funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

**Estimated Project Development Schedule:**

Design: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
Land Acquisition: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
Construction: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Has any part of this project been started? ☒ Yes ☐ No

If Yes, please explain:

CyRide began the first year of service in August 2019 with 100% local funding from CyRide. ICAAP funded year #2 from October 1, 2020 through September 30, 2021. If funded, this ICAAP expansion would fund the third year of services from October 2021 through September 2022.

How do you plan to measure the success of this project?

Four evaluation methods will be used: 1) Passenger Ridership 2) Customer Comments 3) Passengers per hour and 4) Total Emissions saved



## Required Documentation and Narrative Information

The following documents and narratives must be submitted with this application. In the upper right corner of each document or narrative write the corresponding letter shown below.

- ☒ A. A NARRATIVE assessing existing congestions/air quality conditions, outlining the concept of the proposed project, and providing adequate project justification. How will this project reduce congestion, reduce travel or single occupant vehicle usage, and/or improve air quality? Which transportation-related pollutant(s) are being addressed: carbon monoxide, ozone, or particulate matter (PM)?
- ☒ B. A DETAILED MAP identifying the location of the project and clearly differentiating the subject project from any past or future project phases.
- ☒ C. An ITEMIZED BREAKDOWN of the total project costs. This documentation does not need to be a detailed, line-item type of estimate. However, it must accomplish two objectives: First, it must show the method by which the cost estimate was prepared; and second, it must enable a reviewer to determine if the cost estimate is reasonable. The manner in which these objectives are achieved may vary widely depending on the type, scope, and complexity of the project. Absent a fully itemized list of costs, some general guidelines for possible methods of estimating each type of project cost are provided on Attachment A.
- ☒ D. A TIME SCHEDULE for the total project development.
- ☒ E. An OFFICIAL CERTIFICATION from the applicant's governing body (authority) that it shall:
  - (1) commit the necessary local matching funding for project implementation and
  - (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.
- ☒ F. An ADOPTED FORMAL RESOLUTION from the appropriate MPO or RPA declaring the sponsor's proposed project or program conforms to the MPO's or RPA's regional transportation planning process. (For MPOs, the project or program must be identified in the fiscally constrained transportation plan and, if applicable, the congestion management plan in TMAs.)
- ☒ G. CALCULATIONS for vehicle emission reductions and total project cost-effectiveness for the targeted pollutants. Project applicant must show through a quantitative analysis how many kilograms of pollutant will be reduced (CO, VOC, NOx, and, if applicable, PM). Project sponsor must calculate the cost-effectiveness of the project by: Dividing the total annualized project cost by the number of kilograms per year of pollutant reduced (\$ per kg). Applicant must also show all assumptions and source of data used to calculate the estimates. The applicant must use the most current vehicle emission factors developed by the Iowa DNR and consistent with the U.S. EPA's MOBILE 6.2 air quality model. These emission factors are periodically updated and may be obtained from the Iowa DOT's ICAAP website at: [https://iowadot.gov/systems\\_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP](https://iowadot.gov/systems_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP).
- ☒ H. Completed MINORITY IMPACT STATEMENT attached to application.

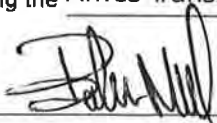
The award of ICAAP funds; any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; and the furnishing of materials for this project shall not involve direct or indirect interest of any state, county, or city official, elective or appointive. All of the above are prohibited by Iowa Code 314.2, 362.5, or 331.342. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of ICAAP funding and authorize a complete recovery of any funds previously disbursed.

### Certification

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating local authority. I understand the attached **official endorsement(s)** binds the participating local governments to assume responsibility for adequate maintenance of any new or improved facilities.

If ICAAP funding assistance is approved for the project described in this application, I understand that an executed contract between the applicant and the Iowa DOT is required before such funding assistance can be authorized for use in implementing the project.

Representing the Ames Transit Agency



Signature

(Name of Applicant's Governing Authority)

8-30-20

Date

Barbara Neal, Transit Director

Typed Name and Title  
(Governing Authority Official)

August 26, 2020

Date



# CyRide (#11 Cherry - Night) Added Trips

## Narrative

### Background

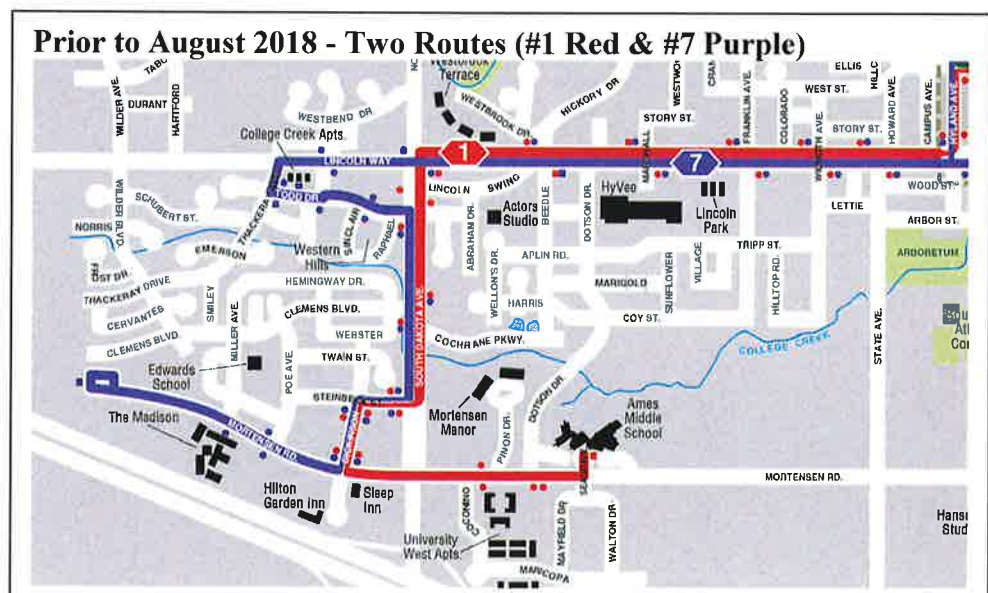
Ames Transit Agency (d.b.a CyRide) directly operates fixed route services that are open to the general public within the Ames community including Iowa State University (ISU). The amount of transit service in this small community, of approximately 65,000 is unusually high as a result of the intensive use by university students. To accommodate this high transit demand, CyRide operates 18 hours a day with service frequencies between 4 – 40 minutes. **However in the last six years, ISU enrollment has grown by 22% from 28,682 students to approximately 35,000! During this same timeframe, CyRide's ridership has grown by over 1.6 million passengers.**

High density apartment complexes are rapidly being built off-campus, but where CyRide's routes may provide limited or virtually no transit service. **The result of this growth has been an overwhelming demand for student housing followed by an immediate reactionary demand for additional transit service wherever these apartment complexes are established.** In a community where riding transit is now part of the city's culture, the residents living in these high-density apartment complexes expect frequent and quality transit services to an even greater degree than they did in past years.

Prior to August 2018, the #1 Red and #7 Purple routes, shown connecting with other routes traveling throughout the community accommodated all transit rides between west Ames and Iowa State University (ISU) campus with over 1.5 million riders annually on just these two routes.

**The #1 Red** could be best described as the **"workhorse of west Ames"** providing transit service from 6:30am until 12:30am the following day and accommodated the majority of the west Ames residents.

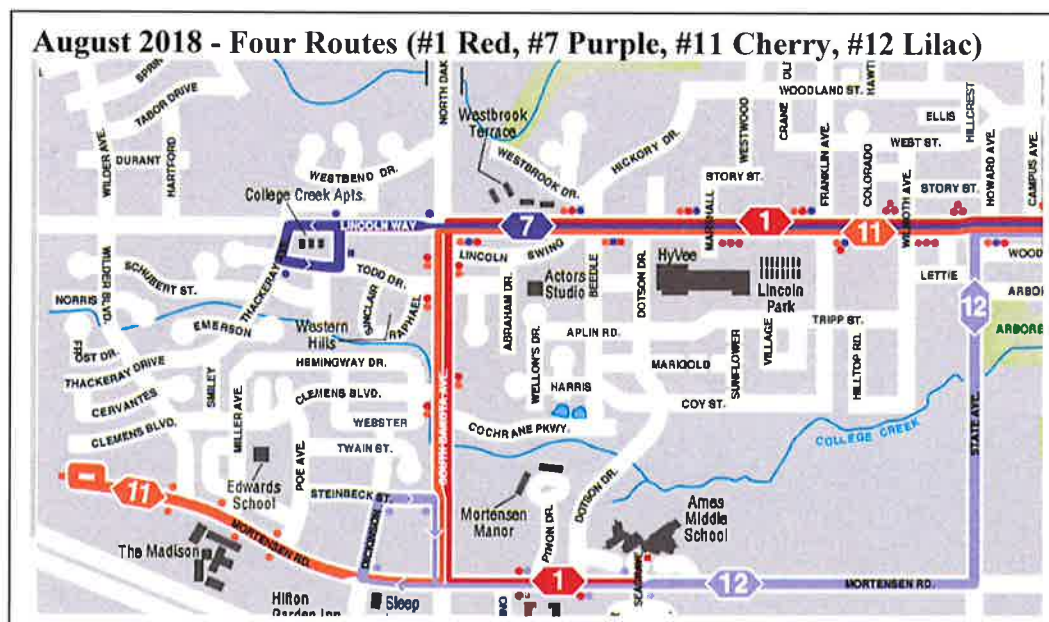
The **#7 Purple Route** provided "minimal service with only six published trips" (3 morning/3 afternoon) during the peak hours and





was utilized mainly to provide additional capacity for Red route riders between west Ames and university campus during the peak hours.

In May 2017, CyRide completed its first ever transit [system redesign study](https://www.cyrider.com/system-redesign) (<https://www.cyrider.com/system-redesign>) for their entire transit service and residents located in west Ames demanded additional transit service operating along Mortensen, Steinbeck, Dickenson, S. Dakota and Lincoln Way into campus. CyRide hired an outside consultant to provide expertise in how to operate a transit system originally developed for 4 million riders and adapt it for a system currently carrying over 6 million passengers. **CyRide essentially approved the redesign completed in the study in west Ames by offering 4 different bus routes along these modified corridors thereby breaking up the #1 Red's "workhorse duties" into four different high-frequency service routes (#1 Red, #7 Purple, #11 Cherry & #12 Lilac), which began in August 2018. (see routes below)**



Under the CyRide 2.0 service changes implemented in August 2018, the **#11 Cherry** route initially only offered service from 7:00am through 6:30pm. CyRide subsequently requested and received ICAAP funding to receive funding for the reimbursement for Cherry service for its second year of this routes operation that just began in August 2019. However due to overwhelming requests by the public, CyRide added night trips to this route that began in August 2019 funded at 100% with CyRide's local budget due to demand for these evening trips. Safety was also a factor in walking along Mortensen Rd. late at night in approving this service. ICAAP will fund the second year of service (ICAAP 1<sup>st</sup> year) from October 1, 2020 – September 30, 2021

Therefore, this second year ICAAP application request is for **#11 Cherry night trips** only for service beginning in October 2021, its third year of operation. Again, the first year, CyRide funded with 100% local budget.



## Project Description/Justification

### ***Grant Request*** ***Added Trips - #11 Cherry - Night***

The second year of ICAAP operational funding request below is for additional evening trips for the **#11 Cherry** route implemented in west Ames for Iowa State University class days only.

This service was initially implemented in August 2019 with 100% CyRide local funds and with ICAAP funding the second year of service in 2020-2021. ICAAP guidelines allow transit agencies to fund three years of services within the first five years of service. The Board's initial approval for this additional service was in January 2019 for the FY2019 budget after the ICAAP's October 2018 grant application deadline. Therefore, this ICAAP request is for evening **#11 Cherry's** third year of operation (2<sup>nd</sup> Year ICAAP) for service beginning October 2021 through September 2022.

The information below describes CyRide's full request for the operating of the **#11 Cherry – Night** service.

### **#11 Cherry - Night** **(ISU School Weekdays) – Year 2**

CyRide proposes to provide new evening trips, **as highlighted in yellow**, to the #11 Cherry route, by operating a bus every 40 minutes during the weekday evenings between 6:20 pm – 10:06 pm from Mortensen Turnaround into Iowa State University (ISU) campus. This route will operate only when Iowa State University holds school-year classes or approximately 160 weekdays out of the year.

CyRide anticipates that this route will generate 350 daily riders on this new evening service given that it serves apartments in high-density areas along Mortensen, Steinbeck and Dickenson.

CyRide anticipates a healthy ridership over ISU class days during the evenings as residents become more and more aware of the new trips and how they serve them. (See Exhibit B – Cherry Route for route alignment details.)

<b>#11 Cherry (Night Service)</b>				
<b>ISU Class Days and Finals Days Only</b>				
<b>Added Night trips shown below</b>				
<b>Mortensen Turnaround</b>	<b>Lincoln Way &amp; Beedle</b>	<b>Union Drive</b>	<b>Lincoln Way &amp; Marshall</b>	<b>Mortensen Turnaround</b>
<b>6:20</b>	<b>6:27</b>	<b>6:33</b>	<b>6:38</b>	<b>6:46</b>
<b>7:00</b>	<b>7:07</b>	<b>7:13</b>	<b>7:18</b>	<b>7:26</b>
<b>7:40</b>	<b>7:47</b>	<b>7:53</b>	<b>7:58</b>	<b>8:06</b>
<b>8:20</b>	<b>8:27</b>	<b>8:33</b>	<b>8:38</b>	<b>8:46</b>
<b>9:00</b>	<b>9:07</b>	<b>9:13</b>	<b>9:18</b>	<b>9:26</b>
<b>9:40</b>	<b>9:47</b>	<b>9:53</b>	<b>9:58</b>	<b>10:06</b>
<b>10:20</b>	<b>10:27</b>	<b>10:33</b>	<b>10:38</b>	<b>10:46</b>



The following information provides operation-specific data for these additional trips:

#11 Cherry Weekday (Night Trips)

Hours of Service: 4.5

Number of Trips: 7

Avg. Passengers/Trip (Year 1): 50

Miles/Trip: 6.6

Miles: 46.2

Days of Operation/Year: 160 (ISU Class & Finals days only)

Ridership: 350 daily rides (50 pass/trip \* 7 trips)

This route will serve the following commercial, residential and university destinations as illustrated within Exhibit B:

- **#11 Cherry(Added Frequency):** Mortensen Heights, The Madison, Creative Spirits Ames, Café Milo, Haverkamp Properties Apartments, West Towne Pub, All Iowa Attack Basketball Fieldhouse, Ames-Fitness Center-West, Hilton Garden Inn Ames, Kum & Go, Sleep Inn & Suites, Hilton Garden Inn Ames, West Village Apartments, Perfect Games, Westown Courts, Sukup Basketball Complex, , Israel Family Hospice House, Christopher Gartner Park, Formative Years Growing and Learning, Kum & Go, Ames Woman's Club, Hickory Ridge Apartments, Hy-Vee Gas, Kwik Connection, Wells Fargo Bank, Hy-Vee West, Ames Driver's License Station, McFarland Express Care, McDonalds, Alpha Copies and Print Center, Szechuan House, Central Iowa Vapors, Erbert and Gerberts, Family Video, Uni-Mart, Papa John's, Pammell Grocery & Grill, First National Bank, Apen Ames, Community of Christ, Dunkin Donuts, US Bank ATM, Ames Intermodal Facility, Collegiate United Methodist Church, ISU Campustown Businesses (86 total); <http://www.amescampustown.com/>, Student Services, Iowa State University west campus.

### Added Emissions Factors

The project emissions in Exhibit G are calculated based on the required Iowa DNR's current vehicle emission factors data posted on the Iowa DOT's ICAAP website

### Conclusion

The advantages of supporting this grant application can provide numerous benefits to the City of Ames/Iowa State University/Story County through:

- Increased transit service coverage
- Improved transit trips during the evening
- Improved air quality with fewer single-occupant cars and technologically improved bus engines

While students are committed to paying for the improved services required to meet their higher transit demands, unanticipated financial increases in the double-digits would be needed to support these new evening trips. Unanticipated ridership and financial increases occur when



reliable enrollment numbers are not available until only a few weeks after the fall semester begins. ICAAP funding will allow student fees to increase more gradually, so that at the end of the three-year allowance, funding will be sufficient to continue these services into the future.

Without funding for this service enhancement, CyRide would drop passengers along S. Dakota leaving residents with a long walk back to their homes. Additional evening trips were one of the most requested improvements during the initial implementation of service in 2018-2019. The evening service on Cherry should be added to work in tandem with #1 Red night service route to handle evening demand in this west Ames area. CyRide estimates that approximately 56,000 new rides would be generated from these extra trips provided between west Ames and campus throughout a single year.

CyRide encourages the Iowa DOT to provide support for this night route expansion (first year request for ICAAP funding) along these high-density corridors.

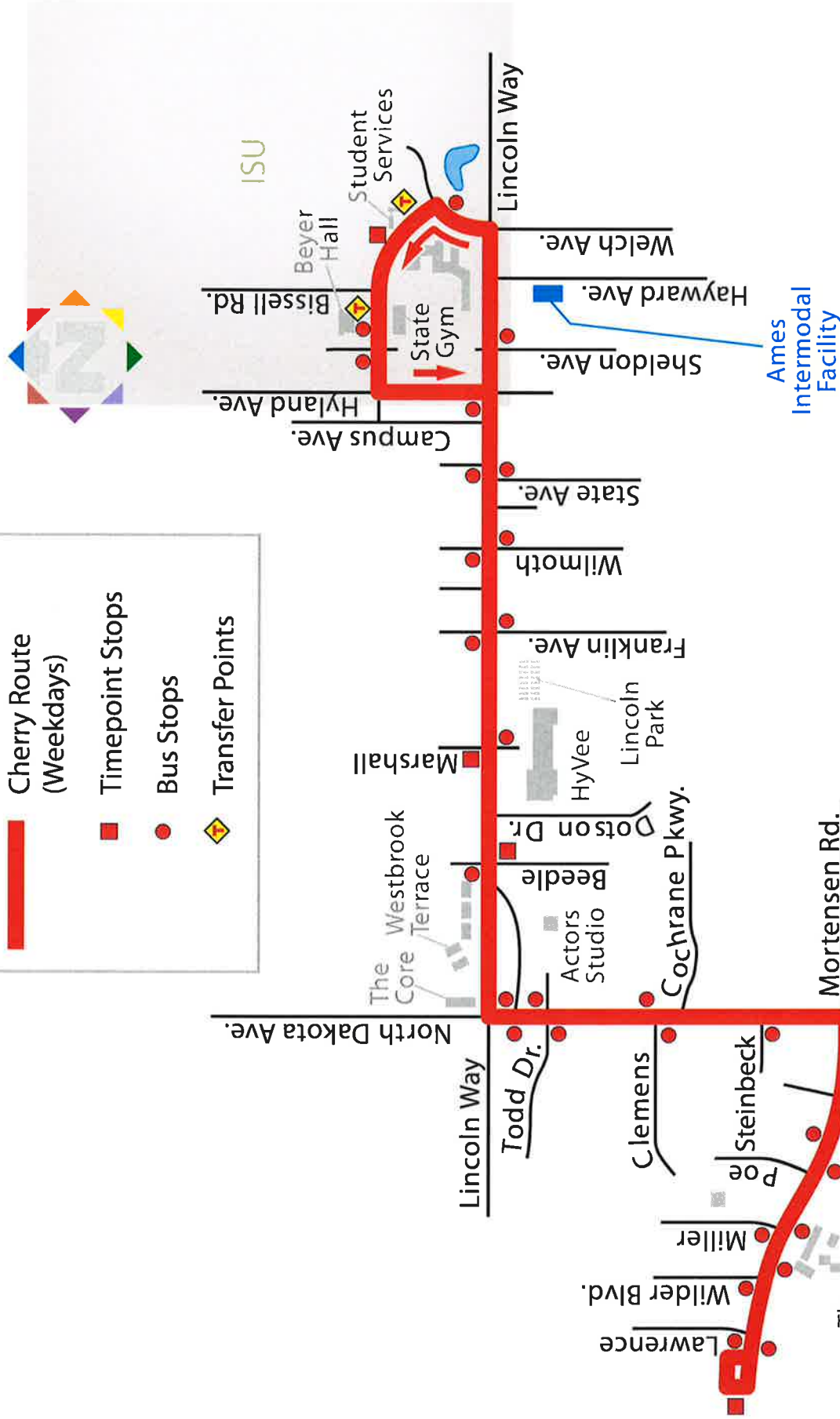
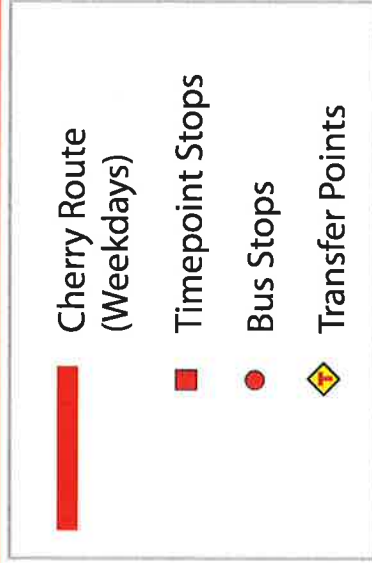


# CHERRY ROUTE

11

Effective August 19, 2019

Exhibit B - Route Map



**CyRide**

Last updated 8/8/19



# CyRide

## Added Trips (#11 Cherry - Night)

### Budget

ActivityCost**OPERATING:****#11 Cherry Weekday Route (NIGHT – ISU School Days Only)**

**YEAR 2 – (Request for service beginning October 2021); Service Began 8/2019 (100% funded by CyRide)**

**Costs calculated below by inflating first year costs by 3% for 2020 & another 3% for 2021.**

Driver Wages – <b>\$28,411 (Yr. 1*)</b> x 1.03 (Yr. 2) x 1.03 (Yr. 3) =	\$30,141
Consumables – <b>\$11,295 (Yr. 1*)</b> x 1.03 (Yr. 2) x 1.03 (Yr. 3) =	<u>\$11,983</u>
SUBTOTAL	\$42,124
Less Fares	
0.2 riders/trip x 7 trips x 160 days x **\$0.87 average resident fare =	(\$194)
49.8 riders/trip x 7 trips x 160 days x \$0.00 fare (Free ISU ID card) =	<u>(\$0)</u>
<b>YEAR 1 SUBTOTAL Cherry- Night (less fares) =</b>	<b>\$41,930</b>

<b>SUBTOTAL OPERATING</b>	<b>41,930</b>
<b>TOTAL COST</b>	<b>\$41,930</b>
<b>ICAAP Share</b>	<b><u>\$33,544</u></b>
<b>CyRide Share (assured)</b>	<b>\$8,386</b>

**NOTES:**

\* **Year 1 Cherry Night Costs: #11 Cherry Night – Added Trips (Began in 8/2019 via 100% local funding)**

Driver Wages – 4.5 hrs./day x 160 days x \$39.46/hr = \$28,411

Consumables – 6.6 miles/trip x 7 trips/day x 160 days x \$1.528/mile = \$11,295

\*\* **Average Resident Fare** = Average Cash Deposits/Average Residents Boarding Paying Cash = \$4,040/4,738 = \$0.87 (See “Comparison of Cash/Deposits and Use of Tickets FY2019 Avg.” with calculations highlighted in yellow)  
CyRide decreased its fares in May 2018 from \$1.25 to \$1.00 and its half fares from \$.60 to \$.50. Additionally, CyRide does not recommend utilizing FY2020 average fares due to no fares collected for portions of FY2020 due to COVID-19 and extremely low ridership within the year when fares resumed. Therefore, the FY2019 average fares are more representative for upcoming services in FY2021. CyRide’s full fare was increased to \$1.25 between January 2012 and May 2018.

**Please note: CyRide does not bill for indirect costs.**



**Comparison of Cash/Deposits and Use of Tickets  
Since May 2008**

Account # 550-1100-345.42-00  
Fixed Route Fares

From:	To:	Deposit	Cash Fares	Rides/ Day	Avg. Fare	Cash/ Day	RF Ticket	FF Ticket	RF Percent	FF Percent	RF/ Day	FF/ Day
7/6/18	7/24/2018	\$ 3,607.78	5,261	277	\$ 0.69	\$ 189.88	1801	441	80.3%	19.7%	94.8	23.2
7/25/18	8/7/18	\$ 3,029.41	3,956	283	\$ 0.77	\$ 216.39	1208	328	78.6%	21.4%	86.3	23.4
8/8/18	8/21/18	\$ 5,525.75	4,605	329	\$ 1.20	\$ 394.70	801	367	68.6%	31.4%	57.2	26.2
8/22/18	9/5/18	\$ 4,836.26	5,055	337	\$ 0.96	\$ 322.42	716	391	64.7%	35.3%	47.7	26.1
9/6/18	9/18/18	\$ 4,119.32	4,770	367	\$ 0.86	\$ 316.87	915	322	74.0%	26.0%	70.4	24.8
9/19/18	10/2/18	\$ 4,039.31	4,719	337	\$ 0.86	\$ 288.52	962	310	75.6%	24.4%	68.7	22.1
10/3/18	10/16/18	\$ 4,863.76	4,976	355	\$ 0.98	\$ 347.41	924	288	76.2%	23.8%	66.0	20.6
10/17/18	10/30/18	\$ 4,411.83	4,949	354	\$ 0.89	\$ 315.13	893	256	77.7%	22.3%	63.8	18.3
10/31/18	11/14/18	\$ 3,411.21	5,170	345	\$ 0.66	\$ 227.41	822	284	74.3%	25.7%	54.8	18.9
11/15/18	11/27/18	\$ 3,396.23	3,318	255	\$ 1.02	\$ 261.25	478	162	74.7%	25.3%	36.8	12.5
11/28/18	12/11/18	\$ 4,196.11	4,531	324	\$ 0.93	\$ 299.72	852	287	74.8%	25.2%	60.9	20.5
12/12/18	1/8/19	\$ 5,168.96	7,008	250	\$ 0.74	\$ 184.61	1054	336	75.8%	24.2%	37.6	12.0
1/9/19	1/22/19	\$ 4,119.89	4,218	301	\$ 0.98	\$ 294.28	590	284	67.5%	32.5%	42.1	20.3
1/23/19	2/5/19	\$ 3,898.84	3,925	280	\$ 0.99	\$ 278.49	509	314	61.8%	38.2%	36.4	22.4
2/6/19	2/19/19	\$ 4,240.94	4,737	338	\$ 0.90	\$ 302.92	687	371	64.9%	35.1%	49.1	26.5
2/20/19	3/5/19	\$ 4,382.58	4,793	342	\$ 0.91	\$ 313.04	624	376	62.4%	37.6%	44.6	26.9
3/6/19	3/19/19	\$ 4,211.23	4,579	327	\$ 0.92	\$ 300.80	647	203	76.1%	23.9%	46.2	14.5
3/20/19	4/2/19	\$ 3,438.35	4,948	353	\$ 0.69	\$ 245.60	1010	272	78.8%	21.2%	72.1	19.4
4/3/19	4/16/19	\$ 4,332.65	5,103	365	\$ 0.85	\$ 309.48	767	228	77.1%	22.9%	54.8	16.3
4/17/19	4/30/19	\$ 3,771.30	4,379	313	\$ 0.86	\$ 269.38	779	241	76.4%	23.6%	55.6	17.2
5/1/19	5/14/19	\$ 3,583.64	4,941	353	\$ 0.73	\$ 255.97	766	239	76.2%	23.8%	54.7	17.1
5/15/19	6/4/19	\$ 3,867.25	6,354	303	\$ 0.61	\$ 184.15	949	328	74.3%	25.7%	45.2	15.6
6/5/19	6/20/19	\$ 3,119.40	5,404	338	\$ 0.58	\$ 194.96	1134	279	80.3%	19.7%	70.9	17.4
6/21/19	7/2/19	\$ 5,110.24	3,496	291	\$ 1.46	\$ 425.85	992	249	79.9%	20.1%	82.7	20.8
7/3/19	7/17/19	\$ 3,576.47	4,090	273	\$ 0.87	\$ 238.43	872	244	78.1%	21.9%	58.1	16.3
7/18/19	7/30/19	\$ 2,791.00	3,894	300	\$ 0.72	\$ 214.69	1125	188	85.7%	14.3%	86.5	14.5
7/31/19	8/13/19	\$ 2,040.47	4,163	297	\$ 0.49	\$ 145.75	870	257	77.2%	22.8%	62.1	18.4
8/14/19	8/27/19	\$ 4,652.20	4,760	340	\$ 0.98	\$ 332.30	679	275	71.2%	28.8%	48.5	19.6
8/28/19	9/10/19	\$ 5,319.18	5,363	383	\$ 0.99	\$ 379.94	640	209	75.4%	24.6%	45.7	14.9
9/11/19	9/17/19	\$ 4,107.34	4,762	680	\$ 0.86	\$ 586.76	404	160	71.6%	28.4%	57.7	22.9
9/18/19	10/1/19	\$ 5,215.40	5,640	403	\$ 0.92	\$ 372.53	640	310	67.4%	32.6%	45.7	22.1
10/2/19	10/15/19	\$ 5,139.23	5,785	413	\$ 0.89	\$ 367.09	661	276	70.5%	29.5%	47.2	19.7
10/16/19	10/29/19	\$ 5,562.53	5,847	418	\$ 0.95	\$ 397.32	785	225	77.7%	22.3%	56.1	16.1
10/30/19	11/12/19	\$ 4,376.60	4,891	349	\$ 0.89	\$ 312.61	754	253	74.9%	25.1%	53.9	18.1
11/13/19	11/19/19	\$ 2,970.30	2,984	426	\$ 1.00	\$ 424.33	350	130	72.9%	27.1%	50.0	18.6
11/20/19	12/3/19	\$ 2,685.42	4,372	312	\$ 0.61	\$ 191.82	631	225	73.7%	26.3%	45.1	16.1
12/4/19	12/11/19	\$ 128.00	2,878	360	\$ 0.04	\$ 16.00	379	127	74.9%	25.1%	47.4	15.9
12/12/19	12/17/19	\$ 4,531.28	1,830	305	\$ 2.48	\$ 755.21	236	74	76.1%	23.9%	39.3	12.3
12/18/19	1/9/20	\$ 3,464.36	6,045	263	\$ 0.57	\$ 150.62	980	271	78.3%	21.7%	42.6	11.8
1/10/20	1/22/20	\$ 3,971.63	3,990	307	\$ 1.00	\$ 305.51	529	246	68.3%	31.7%	40.7	18.9
1/23/20	2/5/20	\$ 5,562.19	4,905	350	\$ 1.13	\$ 397.30	776	294	72.5%	27.5%	55.4	21.0
2/6/20	2/20/20	\$ 3,243.77	4,876	325	\$ 0.67	\$ 216.25	857	311	73.4%	26.6%	57.1	20.7
2/21/20	3/4/20	\$ 3,823.46	4,324	333	\$ 0.88	\$ 294.11	709	277	71.9%	28.1%	54.5	21.3
3/5/20	3/19/20	\$ 2,616.37	3,636	242	\$ 0.72	\$ 174.42	539	202	72.7%	27.3%	35.9	13.5
3/20/20	8/13/20	\$ 3,962.90	5,302	36	\$ 0.75	\$ 26.96	632	224	73.8%	26.2%	4.3	1.5
Avg. before 1/2012		\$ 3,763	4,398	486	\$ 0.86	\$ 399.60	508	245	67.5%	32.5%	54	27
Avg. after 1/2012		\$ 4,557	4,557	319	\$ 1.00	\$ 323.23	913	465	66.3%	33.7%	63	32
Average FY2014		\$ 5,176	4857	343	\$ 1.06	\$ 365.50	825	557	59.5%	40.5%	59	39
Average FY2015		\$ 4,501	4402	305	\$ 1.03	\$ 315.22	973	541	63.5%	36.5%	68	38
Average FY2016		\$ 4,089	3877	282	\$ 1.06	\$ 300.73	931	501	64.8%	35.2%	67	36
Average FY2017		\$ 4,464	4317	283	\$ 1.05	\$ 296.32	1085	564	63.6%	36.4%	70	37
Average FY2018		\$ 3,914	3796	270	\$ 1.04	\$ 283.48	997	454	67.8%	32.2%	68	32
Average FY2019		\$ 4,040	4738	319	\$ 0.87	\$ 276.63	880	292	74.4%	25.6%	59	20
Average FY2020		\$ 3,862	4545	344	\$ 0.89	\$ 307.73	634	229	73.4%	26.6%	47	17



**Added Trips**  
**(#11 Cherry - Night)**  
**Schedule**

**Activity**

**Completion Date**

Service Begins (2nd year ICAAP\*)

October 1, 2021

Service Ends (2nd year ICAAP\*)

September 30, 2022

\* This is Year 2 request for ICAAP funding for Cherry weekday night service.

\* If approved for Year 2 ICAAP funding, CyRide anticipates requesting one more year of ICAAP funding for this service.



**CyRide™**  
**Added Frequency (#11 Cherry - Night)**  
**Official Certification**

The Ames Transit Agency (CyRide) Board of Trustees certifies that it shall:

- (1) commit the necessary local matching funding for project implementation and
- (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.



Jacob Schrader, Ames Transit Agency President

8/26/2020

Date



**CyRide**  
**Added Trips (#11 Cherry - Night)**  
**MPO Resolution DRAFT**

The Ames Area Metropolitan Planning Organization (AAMPO) approved and endorsed this project on September 22, 2020 with a resolution approving this grant. The resolution is attached.

The ICAAP application form (Form 230017; page 3 or 6) requires that the project or program be identified in the fiscally constrained transportation plan (TIP) and requires the document to be submitted with the application. However, the ICAAP handbook has been revised to state that “Awarded projects” must be added to approved MPO TIP’s and STIP’s (See below).

*[https://iowadot.gov/systems\\_planning/pdf/ICAAP\\_Application\\_Handbook.pdf](https://iowadot.gov/systems_planning/pdf/ICAAP_Application_Handbook.pdf) (page 5):  
Awarded projects must be added to approved MPO or RPA transportation improvement programs (TIPs) and Iowa’s Statewide Transportation Improvement Program (STIP).*

Therefore, once this ICAAP project has been formally approved by the Iowa DOT Commission (early January 2021), the funding will be amended and approved by the MPO in the AAMPO’s FY2020 Transportation Improvement Program in order to begin transferring the federal funding from FHWA to FTA and gain formal grant approval from the Federal Transit Administration.



RESOLUTION NO. 16-675

RESOLUTION APPROVING IOWA CLEAN AIR ATTAINMENT PROGRAM GRANT  
(ICAAP) FOR #9 PLUM SERVICE EXPANSION FOR CYRIDE  
FOR THE CITY OF AMES

WHEREAS, the Iowa Clean Air Attainment Program is established by the Iowa Department of Transportation; and,

WHEREAS, the Iowa Department of Transportation provides, on a competitive basis, funds for transportation projects with the highest potential for reducing transportation related air pollution and congestion; and,

WHEREAS, CyRide has prepared an application for ICAAP funding for service frequency expansion on route #9 Plum; and,

WHEREAS, it is anticipated that the project will not begin until the ICAAP funds are received after October 1, 2017; and,

WHEREAS, one of the grant requirements is for the Ames Area Metropolitan Planning Organization (MPO), by resolution, declaring the sponsor's proposed project or program conforms to the MPO's regional transportation planning process; and,

WHEREAS, for MPOs, the project or program must be identified in the fiscally-constrained transportation plan.

NOW, THEREFORE, BE IT RESOLVED by the Ames Area Metropolitan Planning Organization Transportation Policy Committee, that the project shown in the Iowa Clean Air Attainment Program grant application, which conforms to the MPO's regional transportation planning process, is hereby approved and certified.

ADOPTED THIS 22<sup>nd</sup> day of November, 2016.



Diane R. Voss, City Clerk



Ann H. Campbell, Mayor

Introduced by: Orazem  
Seconded by: Corrieri  
Voting aye: Beatty-Hansen, Betcher, Campbell, Corrieri, Gartin, Nelson, Orazem  
Voting nay: None Absent: Clinton, Hollingshead, Popp, Staudt

Resolution declared adopted and signed by the Mayor this 22<sup>nd</sup> day of November, 2016.

Placeholder for updated resolution



## Added Trips (#11 Cherry - Night) Emissions Calculation

Calculation/Assumption	Factors	CO	VOC (HC)	NOx
<b>Net Project Cost</b>	<b>\$41,930</b>			
Cherry Night Net Operating Cost	\$41,930			
Operating for One Year - \$41,930				
Number of Years In Project - Operating	1			
<b>#11 Cherry Route Service Assumptions</b>				
Number of days/Yr. in Project (ISU Classdays & Finals Days)	160			
Avg. Rd-Trip Commute (Miles*)	6.6			
# Daily Trips	7			
# Riders/Trip	50			
Number of Daily Miles	46.2			
Total Estimated Avg. Daily Ridership	350			
Total Cars Taken From Roadway Weekdays (1.2/car)	292			
<b>Emission Reduction By Riders Taking LILAC</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length*		91.34	13.6158	6.8112
<b>#11 Cherry: Gross Red. x 160 days x Cars From Roadway x 1 year</b>		<u>4,262,720</u>	<u>635,404</u>	<u>317,856</u>
Total LDGV Emissions Reduced		4,262,720	635,404	317,856
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV Emissions x 46.2 miles/day x 160 days x 1 year		<u>40,981</u>	<u>6,764</u>	<u>75,221</u>
TOTAL (40' Bus) HDDV Emissions		40,981	6,764	75,221
<b>Net Reduction for Cherry Night:</b>		<b>4,221,739</b>	<b>628,640</b>	<b>242,635</b>
<b>Cost Effectiveness for Cherry Night</b>		<b>\$ 9.93</b>	<b>\$ 66.70</b>	<b>\$ 172.81</b>
<b>Net Reduction for Project :</b>		<b>4,221,739</b>	<b>628,640</b>	<b>242,635</b>
<b>Total Reduction for Project - kg/project</b>		<b>4,221.7</b>	<b>628.6</b>	<b>242.6</b>
<b>Net Reduction Per Year:</b>		<b>4,221,739</b>	<b>628,640</b>	<b>242,635</b>
<b>Total Reduction Per Year - kg/year</b>		<b>4,221.7</b>	<b>628.6</b>	<b>242.6</b>
<b>Cost Effectiveness:</b>				
<b>Total Project Cost</b>		<b>\$41,930</b>		
<b>One Yr. Project Total Cost= (\$41,930/1)</b>		<b>\$41,930</b>		
<b>CO</b>		<b>\$9.93</b>		
<b>VOC</b>		<b>\$66.70</b>		
<b>NOx</b>		<b>\$172.81</b>		

\* Based on statistics, riders are riding the entire Cherry routes to reach their destination



## Minority Impact Statement

Pursuant to 2008 Iowa Acts, HF 2393, Iowa Code 8.11, all grant applications submitted to the State of Iowa that are due beginning Jan. 1, 2009, shall include a Minority Impact Statement. This is the state's mechanism for requiring grant applications to consider the potential impact of the grant project's proposed programs or policies on minority groups.

**Please choose the statement(s) that pertains to this grant application. Complete all the information requested for the chosen statement(s). Submit additional pages as necessary.**

- ☒ The proposed grant project programs or policies could have a disproportionate or unique **positive** impact on minority persons.

Describe the positive impact expected from this project.

The City of Ames has an 10.24% Asian population and any new route expansion on high capacity corridors will certainly have a positive impact on this minority and limited-English proficient group living within the Ames community. Specifically, the routes in west Ames travels along the Mortensen, Steinbeck and Dickens corridors in west Ames which have developed into a high capacity corridors where a majority of university students reside in high residential apartment complexes. The residents living in these apartments along these corridors will be provided transportation directly to central ISU campus. While this service is designed to serve the general public, Ames residents of all races and genders living within the community will benefit from this grant application and service.

Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☒ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

- ☐ The proposed grant project programs or policies could have a disproportionate or unique **negative** impact on minority persons.

Describe the negative impact expected from this project.

Present the rationale for the existence of the proposed program or policy



Provide evidence of consultation with representatives of the minority groups impacted.

Indicate which groups are impacted.

☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☐ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

☐ The proposed grant project programs or policies are **not expected to have** a disproportionate or unique impact on minority persons.

Present the rationale for determining no impact.

I hereby certify that the information on this form is complete and accurate, to the best of my knowledge.

Name Barbara Neal

Title Transit Director

#### Definitions

"Minority Persons," as defined in Iowa Code 8.11, means individuals who are women, persons with a disability, Blacks, Latinos, Asians or Pacific Islanders, American Indians, and Alaskan Native Americans.

"Disability," as defined in Iowa Code 15.102, subsection 7, paragraph "b," subparagraph (1):

b. As used in this subsection:

(1) "*Disability*" means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of the individual, a record of physical or mental impairment that substantially limits one or more of the major life activities of the individual, or being regarded as an individual with a physical or mental impairment that substantially limits one or more of the major life activities of the individual.

"*Disability*" does not include any of the following:

- (a) Homosexuality or bisexuality.
- (b) Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments or other sexual behavior disorders.
- (c) Compulsive gambling, kleptomania, or pyromania.
- (d) Psychoactive substance abuse disorders resulting from current illegal use of drugs.

"State Agency," as defined in Iowa Code 8.11, means a department, board, bureau, commission, or other agency or authority of the State of Iowa.



# **Iowa Department of Transportation Clean Air Attainment Funds Application**

**Added Midday Trips**  
**#12 Lilac - Midday**

**Submitted to:**

**IOWA DOT**

**By:**

**AMES TRANSIT AGENCY (CYRIDE)  
601 N. University Blvd.  
Ames, Iowa 50010**

**October 1, 2020**





## PROJECT APPLICATION IOWA CLEAN AIR ATTAINMENT PROGRAM (ICAAP)

**General Information:**

Applicant Agency: Ames Transit Agency Public Agency (required) E-mail: bneal@cyride.com

Contact Person (Name and Title): Barbara Neal, Transit Director  
601 N. University Blvd.

Complete Mailing Address: \_\_\_\_\_

Ames IA 50010 515-239-5565

City State ZIP Code Daytime Phone

If more than one agency or organization is involved in this project, please state the name, contact person, mailing address, and telephone number of the second agency. (Attach an additional page if more than two agencies are involved.)

Co-Applicant Agency: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Public Agency, Non-Profit Organization<sup>1</sup>, For-Profit Organization<sup>1</sup>, or Individual<sup>1</sup>

Contact Person (Name and Title): \_\_\_\_\_  
Street Address and/or Box Number

Complete Mailing Address: \_\_\_\_\_

\_\_\_\_\_

City State ZIP Code Daytime Phone

**Project Information:**

Project Title<sup>2</sup>: #12 Lilac - Mid-day

Project Description (including length, if applicable):

In August 2018, CyRide redesigned and implemented new bus services traveling in west Ames area including a new #12 Lilac route that operated peak hour service only. In August 2019, CyRide added midday trips to the #12 Lilac route due to additional demand from residents. ICAAP funding (year 1 request) supported the second year of services from October 2020 - September 2021. Therefore, this ICAAP request (year 2 request) is for the #12 Lilac mid-day service to support operations beginning in October 2021 through September 2022.

\*Project priority (1 = highest priority): 3 (a sponsor submitting multiple applications in this funding cycle must assign a numerical rank or priority to each application.)<sup>3</sup>

\*Assign the proposed project to one or more of the following categories (check one or more):

- |  |  |
|--|--|
| <input type="checkbox"/> Transportation-Related Project in the State Implementation Plan (SIP) | <input type="checkbox"/> Shared-Ride   |
| <input type="checkbox"/> Transportation Control Measure (TCM)                                  | <input type="checkbox"/> Bicycle or <input type="checkbox"/> Pedestrian Facility or Program (select one) |
| <input type="checkbox"/> Traffic Flow Improvement (Intersection, Signalization, Other)         | <input type="checkbox"/> Intermodal Freight  |
| <input type="checkbox"/> Planning and Project Development                                      | <input type="checkbox"/> Passenger   |
| <input type="checkbox"/> Travel Demand Management (TDM)  | <input type="checkbox"/> Alternative Fuels   |
| <input checked="" type="checkbox"/> Transit-Related Improvement                                | <input type="checkbox"/> Vehicle Inspection and Maintenance Program                                      |
|  | <input type="checkbox"/> Outreach Activity (Education, Advertising, or Technical Assistance)             |

\*Is the project consistent with the State Implementation Plan for air quality for non-attainment areas? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the MPO's local congestion management plan? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the ☒ MPO ☐ RPA ☐ Statewide Long-Range Transportation Plan? ☒ Yes ☐ No ☐ Not Applicable

Notes: <sup>1</sup>Requires public agency as co-sponsor of application.

<sup>2</sup>The term "project" means any ICAAP infrastructure or program proposal.

<sup>3</sup>The Iowa Department of Transportation will use the priority ratings to reflect the sponsor



**Project Costs (an Itemized breakdown must be included on an attached sheet):**

Total Cost: \$39,569.00  
Iowa Clean Air Attainment Program Fund Request: \$31,655.00  
Applicant Match: \$7,914.00

*Projects with a private for-profit co-applicant require a minimum 50 percent applicant match; all other projects require a minimum 20 percent applicant match.*

List All Applicant Match Sources	Amount	Assured or Anticipated (Date Anticipated)
1. CyRide Operating Budget	\$7,914.00	July 01, 2021
2. Passenger Fares	\$194.00	October 01, 2021
3.		

Are any state funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

Are any other federal funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

**Estimated Project Development Schedule:**

Design: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
Land Acquisition: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
Construction: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Has any part of this project been started? ☒ Yes ☐ No

If Yes, please explain:

CyRide began the first year of service in August 2019 with 100% local funding from CyRide. ICAAP funded year #2 from October 1, 2020 through September 30, 2021. If funded, this ICAAP expansion would fund the third year of services from October 2021 through September 2022.

How do you plan to measure the success of this project?

Four evaluation methods will be used: 1) Passenger Ridership 2) Customer Comments 3) Passengers per hour and 4) Total Emissions saved



## Required Documentation and Narrative Information

The following documents and narratives must be submitted with this application. In the upper right corner of each document or narrative write the corresponding letter shown below.

- ☒ A. A NARRATIVE assessing existing congestions/air quality conditions, outlining the concept of the proposed project, and providing adequate project justification. How will this project reduce congestion, reduce travel or single occupant vehicle usage, and/or improve air quality? Which transportation-related pollutant(s) are being addressed: carbon monoxide, ozone, or particulate matter (PM)?
- ☒ B. A DETAILED MAP identifying the location of the project and clearly differentiating the subject project from any past or future project phases.
- ☒ C. An ITEMIZED BREAKDOWN of the total project costs. This documentation does not need to be a detailed, line-item type of estimate. However, it must accomplish two objectives: First, it must show the method by which the cost estimate was prepared; and second, it must enable a reviewer to determine if the cost estimate is reasonable. The manner in which these objectives are achieved may vary widely depending on the type, scope, and complexity of the project. Absent a fully itemized list of costs, some general guidelines for possible methods of estimating each type of project cost are provided on Attachment A.
- ☒ D. A TIME SCHEDULE for the total project development.
- ☒ E. An OFFICIAL CERTIFICATION from the applicant's governing body (authority) that it shall:
  - (1) commit the necessary local matching funding for project implementation and
  - (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.
- ☒ F. An ADOPTED FORMAL RESOLUTION from the appropriate MPO or RPA declaring the sponsor's proposed project or program conforms to the MPO's or RPA's regional transportation planning process. (For MPOs, the project or program must be identified in the fiscally constrained transportation plan and, if applicable, the congestion management plan in TMAs.)
- ☒ G. CALCULATIONS for vehicle emission reductions and total project cost-effectiveness for the targeted pollutants. Project applicant must show through a quantitative analysis how many kilograms of pollutant will be reduced (CO, VOC, NOx, and, if applicable, PM). Project sponsor must calculate the cost-effectiveness of the project by: Dividing the total annualized project cost by the number of kilograms per year of pollutant reduced (\$ per kg). Applicant must also show all assumptions and source of data used to calculate the estimates. The applicant must use the most current vehicle emission factors developed by the Iowa DNR and consistent with the U.S. EPA's MOBILE 6.2 air quality model. These emission factors are periodically updated and may be obtained from the Iowa DOT's ICAAP website at: [https://iowadot.gov/systems\\_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP](https://iowadot.gov/systems_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP).
- ☒ H. Completed MINORITY IMPACT STATEMENT attached to application.

The award of ICAAP funds; any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; and the furnishing of materials for this project shall not involve direct or indirect interest of any state, county, or city official, elective or appointive. All of the above are prohibited by Iowa Code 314.2, 362.5, or 331.342. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of ICAAP funding and authorize a complete recovery of any funds previously disbursed.

### Certification

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating local authority. I understand the attached **official endorsement(s)** binds the participating local governments to assume responsibility for adequate maintenance of any new or improved facilities.

If ICAAP funding assistance is approved for the project described in this application, I understand that an executed contract between the applicant and the Iowa DOT is required before such funding assistance can be authorized for use in implementing the project.

Representing the Ames Transit Agency

(Name of Applicant's Governing Authority)



Signature



Date

Barbara Neal, Transit Director

August 26, 2020

Typed Name and Title  
(Governing Authority Official)

Date



# CyRide

## #12 Lilac- Midday

### Added Trips

## Narrative

### Background

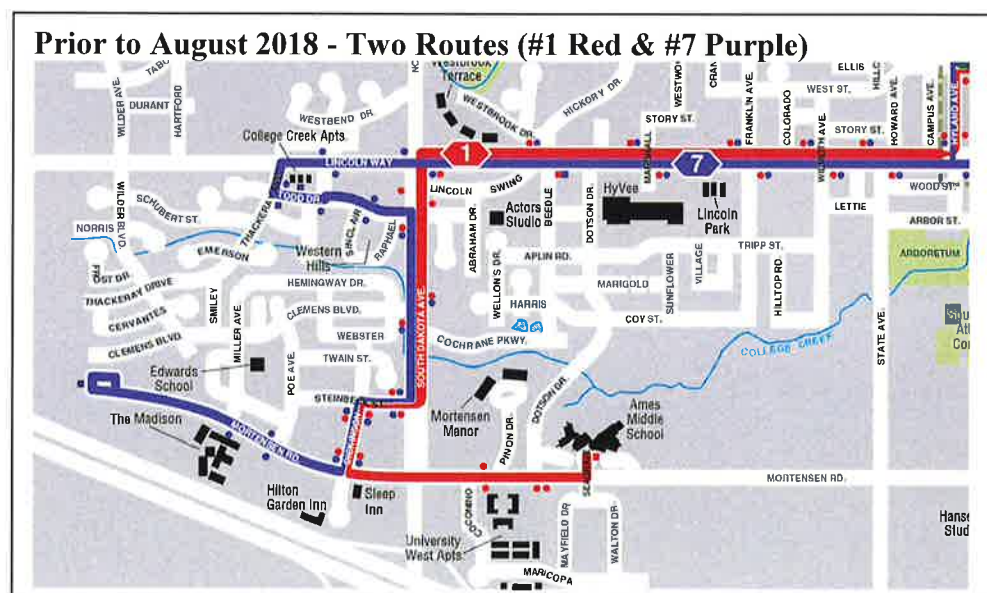
Ames Transit Agency (d.b.a CyRide) directly operates fixed route services that are open to the general public within the Ames community including Iowa State University (ISU). The amount of transit service in this small community, of approximately 65,000 is unusually high as a result of the intensive use by university students. To accommodate this high transit demand, CyRide operates 18 hours a day with service frequencies between 4 – 40 minutes. **However in the last six years, ISU enrollment has grown by 22% from 28,682 students to approximately 35,000! During this same timeframe, CyRide's ridership has grown by over 1.6 million passengers.**

High density apartment complexes are rapidly being built off-campus, but where CyRide's routes may provide limited or virtually no transit service. **The result of this growth has been an overwhelming demand for student housing followed by an immediate reactionary demand for additional transit service wherever these apartment complexes are established.** In a community where riding transit is now part of the city's culture, the residents living in these high-density apartment complexes expect frequent and quality transit services to an even greater degree than they did in past years.

Prior to August 2018, the #1 Red and #7 Purple routes, shown connecting with other routes traveling throughout the community accommodated all transit rides between west Ames and Iowa State University (ISU) campus with over 1.5 million riders annually on just these two routes.

**The #1 Red** could be best described as the **"workhorse of west Ames"** providing transit service from 6:30am until 12:30am the following day and accommodated the majority of the west Ames residents.

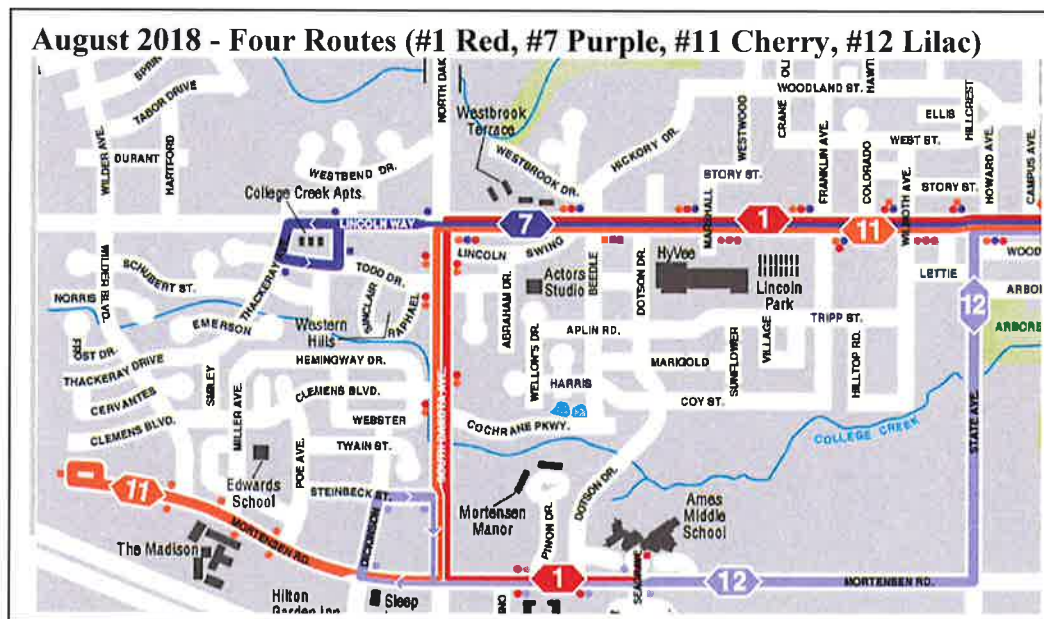
The **#7 Purple Route** provided "minimal service with only six published trips" (3 morning/3 afternoon) during the peak hours and





was utilized mainly to provide additional capacity for Red route riders between west Ames and university campus during the peak hours.

In May 2017, CyRide completed its first ever transit [system redesign study](https://www.cyrider.com/system-redesign) (<https://www.cyrider.com/system-redesign>) for their entire transit service and residents located in west Ames demanded additional transit service operating along Mortensen, Steinbeck, Dickenson, S. Dakota and Lincoln Way into campus. CyRide hired an outside consultant to provide expertise in how to operate a transit system originally developed for 4 million riders and adapt it for a system currently carrying over 6 million passengers. **CyRide essentially approved the redesign completed in the study in west Ames by offering 4 different bus routes along these modified corridors thereby breaking up the #1 Red's "workhorse duties" into four different high-frequency service routes (#1 Red, #7 Purple, #11 Cherry & #12 Lilac), which began in August 2018. (see routes below)**



Under the CyRide 2.0 service changes implemented in August 2018, the #12 Lilac route initially only offered peak hour service between the hours of 7:05am – 10:13am AND afternoon service from 2:35pm – 5:23pm. CyRide subsequently requested and received ICAAP funding to receive funding for the reimbursement for Lilac – peak hour reimbursement. CyRide is requesting the third and final year of this peak-hour service within another application. CyRide added mid-day trips to the #12 Lilac route that began in August 2019 funded at 100% with CyRide's local budget due to demand for these trips and overcrowding on #11 Cherry. Last year, CyRide requested and received ICAAP funding (Year #1) for the #12 Lilac mid-day second year of service (October 1, 2020 – September 30, 2020).

Therefore, this ICAAP application request is for new #12 Lilac mid-day trips for service beginning in October 2021.



## Project Description/Justification

### ***Grant Request*** ***Added Trips - #12 Lilac- Midday***

The funding request below is for additional midday trips for the **#12 Lilac** route implemented in west Ames during Iowa State University class days. These services were initially implemented in August 2019 with 100% CyRide local funds and then a second year with ICAAP funding for federal fiscal year 2021. ICAAP guidelines allow transit agencies to fund three years of services within the first five years of service. The Board's initial approval for this additional service was in January 2019 for the FY2019 budget after the ICAAP's October 2018 grant application deadline.

This ICAAP request is for midday Lilac's third year of operation (2nd Year ICAAP) for service beginning October 2021 through September 2022.

The information below describes CyRide's full request for the operating of the #12 Lilac – Midday service.

#### **#12 Lilac – Midday (ISU School Weekdays) – Year 1**

**CyRide proposes to provide new mid-day trips, as highlighted in yellow, to the #12 Lilac route, by operating a bus every 40 minutes during the weekday between 10:05am – 2:33pm from Steinbeck-Dickenson-Mortensen into Iowa State University (ISU) campus. This route will operate only when Iowa State University holds school-year classes or approximately 160 weekdays out of the year.**

CyRide anticipates that this route will generate 350 daily riders on this new service given that it serves apartments in high-density areas along Mortensen, Steinbeck and Dickenson.

CyRide anticipates a healthy ridership over ISU class days as residents become more and more aware of the new route and how it serves them. (See Exhibit B – Lilac Route for route alignment details.)

<b>#12 Lilac (Weekday Service)</b> <b>ISU Class Days and Finals Days Only</b> <b>Added Mid-day Trips</b>		
<b>Mortensen / Dickinson</b>	<b>Student Services</b>	<b>Mortensen / Dickinson</b>
7:05	7:18	7:33
7:25	7:38	7:53
7:45	7:58	8:13
8:05	8:18	8:33
8:25	8:38	8:53
8:45	8:58	9:13
9:05	9:18	9:33
9:25	9:38	9:53
9:45	9:58	10:13
10:05	10:18	10:33
10:45	10:58	11:13
11:25	11:38	11:53
12:05	12:18	12:33
12:45	12:58	1:13
1:25	1:38	1:53
2:05	2:18	2:33
2:35	2:48	3:03
2:55	3:08	3:23
3:15	3:28	3:43
3:35	3:48	4:03
3:55	4:08	4:23
4:15	4:28	4:43
4:35	4:48	5:03
4:55	5:08	5:23
5:15	5:28	5:43



The following information provides operation-specific data for this new route:

**#12 Lilac Weekday (Peak Only)**

Hours of Service: 4.5

Number of New Trips: 7

Avg. Passengers/Trip (Year 1): 50

Miles/Trip: 5.3

Miles: 37.1

Days of Operation/Year: 160 (ISU Class & Finals days only)

Ridership: 350 daily rides (50 pass/trip\* 7 trips)

This route will serve the following commercial, residential and University destinations as illustrated within Exhibit B:

- **#12 Lilac (New Route):** West Towne Pub, All Iowa Attack Basketball Fieldhouse, Ames-Fitness Center-West, Hilton Garden Inn Ames, Kum & Go, Sleep Inn & Suites, Hilton Garden Inn Ames, The Rose of Ames, The Waterford at Ames, West Village Apartments, Perfect Games, Westown Courts, Sukup Basketball Complex, University West Apartments, Ames Middle School, Southwest Athletic Complex, Dunkin Donuts, US Bank ATM, Ames Intermodal Facility, Collegiate United Methodist Church, ISU Campustown Businesses (86 total); <http://www.amescampustown.com/>, Student Services, Iowa State University west campus.

### Added Emissions Factors

The project emissions in Exhibit G are calculated based on the required Iowa DNR's current vehicle emission factors data posted on the Iowa DOT's ICAAP website

## Conclusion

The advantages of supporting this grant application can provide numerous benefits to the City of Ames/Iowa State University/Story County through:

- Increased transit service coverage
- Improved transit trips during the midday
- Improved air quality with fewer single-occupant cars and technologically improved bus engines

While students are committed to paying for the improved services required to meet their higher transit demands, unanticipated financial increases in the double-digits would be needed to support these new midday trips. Unanticipated ridership and financial increases occur when reliable enrollment numbers are not available until only a few weeks after the fall semester begins. ICAAP funding will allow student fees to increase more gradually, so that at the end of the three-year allowance, funding will be sufficient to continue these services into the future.

Without funding for this service enhancement, CyRide may need to leave passengers at the bus stops as capacity on the buses is already at its maximum along these corridors. Additional mid-



day trips were one of the most requested improvements during the initial implementation of service in 2018-2019. The mid-day service on Lilac should be added to work in tandem with #1 Red and #11 Cherry routes to handle mid-day demand in this area. CyRide estimates that approximately 56,000 new rides would be generated from these extra trips provided between west Ames and campus throughout a single year.

CyRide encourages the Iowa DOT to provide support for this mid-day route expansion (second year request for ICAAP funding) along these high-density corridors.

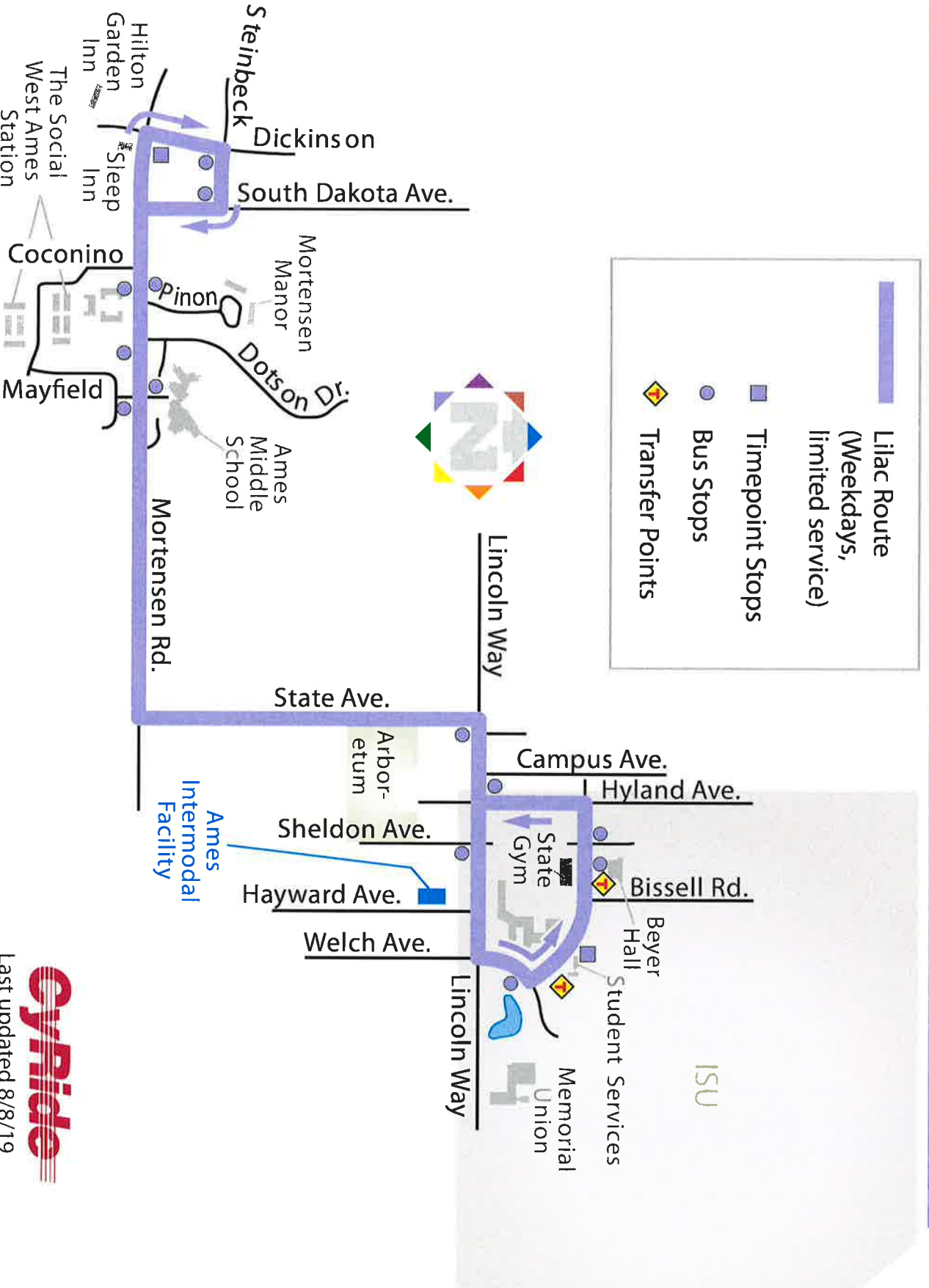


# LILAC ROUTE

## 12

Effective August 26, 2019

Exhibit B - Route Map





# CyRide Added Trips (#12 Lilac - Midday) Budget

ActivityCost**OPERATING:**

#12 Lilac Weekday Route (MID-DAY – ISU School Days Only)

YEAR 2 – (Request for service beginning October 2021);

Service Began 10/1/2019-9/30/2020 (100% funded by CyRide)

Costs calculated below by inflating first year costs by 3% and then another 3% for second year.

Driver Wages – \$28,411 (Yr. 1\*) x 1.03 (Yr. 2) x 1.03 (Yr. 3) = \$30,141

Consumables – \$9,070 (Yr. 1\*) x 1.03 (Yr. 2) x 1.03 (Yr. 3) = \$9,622

SUBTOTAL \$39,763

Less Fares

0.2 riders/trip x 7 trips x 160 days x \*\*\$0.87 average resident fare = (\$194)

49.8 riders/trip x 7 trips x 160 days x \$0.00 fare (Free ISU ID card) = (\$0)

YEAR 1 SUBTOTAL LILAC- Midday (less fares) = \$39,569

<b>SUBTOTAL OPERATING</b>	<b>39,569</b>
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<b>TOTAL COST</b>	<b>\$39,569</b>
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<b>ICAAP Share</b>	<b><u>\$31,655</u></b>
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<b>CyRide Share (assured)</b>	<b>\$7,914</b>
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**NOTES:**

\* Year 1 LILAC Costs: #12 Lilac Midday-Additional Mid-day Trips (Began in 8/2019 via 100% local funding)

Driver Wages – 4.5 hrs./day x 160 days x \$39.46/hr = \$28,411

Consumables – 5.3 miles/trip x 7 trips/day x 160 days x \$1.528/mile = \$9,070

\*\* Average Resident Fare = Average Cash Deposits/Average Residents Boarding Paying Cash = \$4,040/4,738 = \$0.87  
 (See “Comparison of Cash/Deposits and Use of Tickets FY2019 Avg.” with calculations highlighted in yellow)  
 CyRide decreased its fares in May 2018 from \$1.25 to \$1.00 and its half fares from \$.60 to \$.50. Additionally, CyRide does not recommend utilizing FY2020 average fares due to no fares collected for portions of FY2020 due to COVID-19 and extremely low ridership within the year when fares resumed. Therefore, the FY2019 average fares are more representative for upcoming services in FY2021. CyRide’s full fare was increased to \$1.25 between January 2012 and May 2018.

Please note: CyRide does not bill for indirect costs.



**Comparison of Cash/Deposits and Use of Tickets  
Since May 2008**

Account # 550-1100-345.42-00  
Fixed Route Fares

From:	To:	Deposit	Cash Fares	Rides/ Day	Avg. Fare	Cash/ Day	RF Ticket	FF Ticket	RF Percent	FF Percent	RF/ Day	FF/ Day
7/6/18	7/24/2018	\$ 3,607.78	5,261	277	\$ 0.69	\$ 189.88	1801	441	80.3%	19.7%	94.8	23.2
7/25/18	8/7/18	\$ 3,029.41	3,956	283	\$ 0.77	\$ 216.39	1208	328	78.6%	21.4%	86.3	23.4
8/8/18	8/21/18	\$ 5,525.75	4,605	329	\$ 1.20	\$ 394.70	801	367	68.6%	31.4%	57.2	26.2
8/22/18	9/5/18	\$ 4,836.26	5,055	337	\$ 0.96	\$ 322.42	716	391	64.7%	35.3%	47.7	26.1
9/6/18	9/18/18	\$ 4,119.32	4,770	367	\$ 0.86	\$ 316.87	915	322	74.0%	26.0%	70.4	24.8
9/19/18	10/2/18	\$ 4,039.31	4,719	337	\$ 0.86	\$ 288.52	962	310	75.6%	24.4%	68.7	22.1
10/3/18	10/16/18	\$ 4,863.76	4,976	355	\$ 0.98	\$ 347.41	924	288	76.2%	23.8%	66.0	20.6
10/17/18	10/30/18	\$ 4,411.83	4,949	354	\$ 0.89	\$ 315.13	893	256	77.7%	22.3%	63.8	18.3
10/31/18	11/14/18	\$ 3,411.21	5,170	345	\$ 0.66	\$ 227.41	822	284	74.3%	25.7%	54.8	18.9
11/15/18	11/27/18	\$ 3,396.23	3,318	255	\$ 1.02	\$ 261.25	478	162	74.7%	25.3%	36.8	12.5
11/28/18	12/11/18	\$ 4,196.11	4,531	324	\$ 0.93	\$ 299.72	852	287	74.8%	25.2%	60.9	20.5
12/12/18	1/8/19	\$ 5,168.96	7,008	250	\$ 0.74	\$ 184.61	1054	336	75.8%	24.2%	37.6	12.0
1/9/19	1/22/19	\$ 4,119.89	4,218	301	\$ 0.98	\$ 294.28	590	284	67.5%	32.5%	42.1	20.3
1/23/19	2/5/19	\$ 3,898.84	3,925	280	\$ 0.99	\$ 278.49	509	314	61.8%	38.2%	36.4	22.4
2/6/19	2/19/19	\$ 4,240.94	4,737	338	\$ 0.90	\$ 302.92	687	371	64.9%	35.1%	49.1	26.5
2/20/19	3/5/19	\$ 4,382.58	4,793	342	\$ 0.91	\$ 313.04	624	376	62.4%	37.6%	44.6	26.9
3/6/19	3/19/19	\$ 4,211.23	4,579	327	\$ 0.92	\$ 300.80	647	203	76.1%	23.9%	46.2	14.5
3/20/19	4/2/19	\$ 3,438.35	4,948	353	\$ 0.69	\$ 245.60	1010	272	78.8%	21.2%	72.1	19.4
4/3/19	4/16/19	\$ 4,332.65	5,103	365	\$ 0.85	\$ 309.48	767	228	77.1%	22.9%	54.8	16.3
4/17/19	4/30/19	\$ 3,771.30	4,379	313	\$ 0.86	\$ 269.38	779	241	76.4%	23.6%	55.6	17.2
5/1/19	5/14/19	\$ 3,583.64	4,941	353	\$ 0.73	\$ 255.97	766	239	76.2%	23.8%	54.7	17.1
5/15/19	6/4/19	\$ 3,867.25	6,354	303	\$ 0.61	\$ 184.15	949	328	74.3%	25.7%	45.2	15.6
6/5/19	6/20/19	\$ 3,119.40	5,404	338	\$ 0.58	\$ 194.96	1134	279	80.3%	19.7%	70.9	17.4
6/21/19	7/2/19	\$ 5,110.24	3,496	291	\$ 1.46	\$ 425.85	992	249	79.9%	20.1%	82.7	20.8
7/3/19	7/17/19	\$ 3,576.47	4,090	273	\$ 0.87	\$ 238.43	872	244	78.1%	21.9%	58.1	16.3
7/18/19	7/30/19	\$ 2,791.00	3,894	300	\$ 0.72	\$ 214.69	1125	188	85.7%	14.3%	86.5	14.5
7/31/19	8/13/19	\$ 2,040.47	4,163	297	\$ 0.49	\$ 145.75	870	257	77.2%	22.8%	62.1	18.4
8/14/19	8/27/19	\$ 4,652.20	4,760	340	\$ 0.98	\$ 332.30	679	275	71.2%	28.8%	48.5	19.6
8/28/19	9/10/19	\$ 5,319.18	5,363	383	\$ 0.99	\$ 379.94	640	209	75.4%	24.6%	45.7	14.9
9/11/19	9/17/19	\$ 4,107.34	4,762	680	\$ 0.86	\$ 586.76	404	160	71.6%	28.4%	57.7	22.9
9/18/19	10/1/19	\$ 5,215.40	5,640	403	\$ 0.92	\$ 372.53	640	310	67.4%	32.6%	45.7	22.1
10/2/19	10/15/19	\$ 5,139.23	5,785	413	\$ 0.89	\$ 367.09	661	276	70.5%	29.5%	47.2	19.7
10/16/19	10/29/19	\$ 5,562.53	5,847	418	\$ 0.95	\$ 397.32	785	225	77.7%	22.3%	56.1	16.1
10/30/19	11/12/19	\$ 4,376.60	4,891	349	\$ 0.89	\$ 312.61	754	253	74.9%	25.1%	53.9	18.1
11/13/19	11/19/19	\$ 2,970.30	2,984	426	\$ 1.00	\$ 424.33	350	130	72.9%	27.1%	50.0	18.6
11/20/19	12/3/19	\$ 2,685.42	4,372	312	\$ 0.61	\$ 191.82	631	225	73.7%	26.3%	45.1	16.1
12/4/19	12/11/19	\$ 128.00	2,878	360	\$ 0.04	\$ 16.00	379	127	74.9%	25.1%	47.4	15.9
12/12/19	12/17/19	\$ 4,531.28	1,830	305	\$ 2.48	\$ 755.21	236	74	76.1%	23.9%	39.3	12.3
12/18/19	1/9/20	\$ 3,464.36	6,045	263	\$ 0.57	\$ 150.62	980	271	78.3%	21.7%	42.6	11.8
1/10/20	1/22/20	\$ 3,971.63	3,990	307	\$ 1.00	\$ 305.51	529	246	68.3%	31.7%	40.7	18.9
1/23/20	2/5/20	\$ 5,562.19	4,905	350	\$ 1.13	\$ 397.30	776	294	72.5%	27.5%	55.4	21.0
2/6/20	2/20/20	\$ 3,243.77	4,876	325	\$ 0.67	\$ 216.25	857	311	73.4%	26.6%	57.1	20.7
2/21/20	3/4/20	\$ 3,823.46	4,324	333	\$ 0.88	\$ 294.11	709	277	71.9%	28.1%	54.5	21.3
3/5/20	3/19/20	\$ 2,616.37	3,636	242	\$ 0.72	\$ 174.42	539	202	72.7%	27.3%	35.9	13.5
3/20/20	8/13/20	\$ 3,962.90	5,302	36	\$ 0.75	\$ 26.96	632	224	73.8%	26.2%	4.3	1.5
Avg. before 1/2012		\$ 3,763	4,398	486	\$ 0.86	\$ 399.60	508	245	67.5%	32.5%	54	27
Avg. after 1/2012		\$ 4,557	4,557	319	\$ 1.00	\$ 323.23	913	465	66.3%	33.7%	63	32
Average FY2014		\$ 5,176	4857	343	\$ 1.06	\$ 365.50	825	557	59.5%	40.5%	59	39
Average FY2015		\$ 4,501	4402	305	\$ 1.03	\$ 315.22	973	541	63.5%	36.5%	68	38
Average FY2016		\$ 4,089	3877	282	\$ 1.06	\$ 300.73	931	501	64.8%	35.2%	67	36
Average FY2017		\$ 4,464	4317	283	\$ 1.05	\$ 296.32	1085	564	63.6%	36.4%	70	37
Average FY2018		\$ 3,914	3796	270	\$ 1.04	\$ 283.48	997	454	67.8%	32.2%	68	32
Average FY2019		\$ 4,040	4738	319	\$ 0.87	\$ 276.63	880	292	74.4%	25.6%	59	20
Average FY2020		\$ 3,862	4545	344	\$ 0.89	\$ 307.73	634	229	73.4%	26.6%	47	17



**Added Trips**  
**(#12 Lilac - Midday)**  
**Schedule**

<b><u>Activity</u></b>	<b><u>Completion Date</u></b>
Service Begins (2nd year ICAAP*)	October 1, 2021
Service Ends (2nd year ICAAP*)	September 30, 2022

\* This is Year 2 request for ICAAP funding for Lilac weekday mid-day service.

\* If approved for Year 2 ICAAP funding, CyRide anticipates requesting one more year of ICAAP funding for this service.



**CyRide**  
**Added Frequency (#12 Lilac - Midday)**  
**Official Certification**

The Ames Transit Agency (CyRide) Board of Trustees certifies that it shall:

- (1) commit the necessary local matching funding for project implementation and
- (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.

  
\_\_\_\_\_  
Jacob Schrader, Ames Transit Agency President

8/26/2020  
Date



**CyRide**  
**Added Trips (#12 Lilac - Midday)**  
**MPO Resolution DRAFT**

The Ames Area Metropolitan Planning Organization (AAMPO) approved and endorsed this project on September 22, 2020 with a resolution approving this grant. The resolution is attached.

The ICAAP application form (Form 230017; page 3 or 6) requires that the project or program be identified in the fiscally constrained transportation plan (TIP) and requires the document to be submitted with the application. However, the ICAAP handbook has been revised to state that “Awarded projects” must be added to approved MPO TIP’s and STIP’s (See below).

*[https://iowadot.gov/systems\\_planning/pdf/ICAAP\\_Application\\_Handbook.pdf](https://iowadot.gov/systems_planning/pdf/ICAAP_Application_Handbook.pdf) (page 5):  
Awarded projects must be added to approved MPO or RPA transportation improvement programs (TIPs) and Iowa’s Statewide Transportation Improvement Program (STIP).*

Therefore, once this ICAAP project has been formally approved by the Iowa DOT Commission (early January 2021), the funding will be amended and approved by the MPO in the AAMPO’s FY2020 Transportation Improvement Program in order to begin transferring the federal funding from FHWA to FTA and gain formal grant approval from the Federal Transit Administration.



**RESOLUTION NO. 16-675**

**RESOLUTION APPROVING IOWA CLEAN AIR ATTAINMENT PROGRAM GRANT  
(ICAAP) FOR #9 PLUM SERVICE EXPANSION FOR CYRIDE  
FOR THE CITY OF AMES**

WHEREAS, the Iowa Clean Air Attainment Program is established by the Iowa Department of Transportation; and,

WHEREAS, the Iowa Department of Transportation provides, on a competitive basis, funds for transportation projects with the highest potential for reducing transportation related air pollution and congestion; and,

WHEREAS, CyRide has prepared an application for ICAAP funding for service frequency expansion on route #9 Plum; and,

WHEREAS, it is anticipated that the project will not begin until the ICAAP funds are received after October 1, 2017; and,

WHEREAS, one of the grant requirements is for the Ames Area Metropolitan Planning Organization (MPO), by resolution, declaring the sponsor's proposed project or program conforms to the MPO's regional transportation planning process; and,

WHEREAS, for MPOs, the project or program must be identified in the fiscally-constrained transportation plan.

NOW, THEREFORE, BE IT RESOLVED by the Ames Area Metropolitan Planning Organization Transportation Policy Committee, that the project shown in the Iowa Clean Air Attainment Program grant application, which conforms to the MPO's regional transportation planning process, is hereby approved and certified.

ADOPTED THIS 22<sup>nd</sup> day of November, 2016.

  
Diane R. Voss, City Clerk

  
Ann H. Campbell, Mayor

Introduced by: Orazem  
Seconded by: Corrieri  
Voting aye: Beatty-Hansen, Betcher, Campbell, Corrieri, Gartin, Nelson, Orazem  
Voting nay: None Absent: Clinton, Hollingshead, Popp, Staudt

Resolution declared adopted and signed by the Mayor this 22<sup>nd</sup> day of November, 2016.

Placeholder for updated resolution



## Added Trips (#12 Lilac - Midday) Emissions Calculation

Calculation/Assumption	Factors	CO	VOC (HC)	NOx
<b>Net Project Cost</b>	<b>\$39,569</b>			
Lilac Midday Net Operating Cost	\$39,569			
Operating for One Year - \$39,569				
Number of Years In Project - Operating	1			
<b>#12 Lilac Midday Route Service Assumptions</b>				
Number of days/Yr. in Project (ISU Classdays & Finals Days)	160			
Avg. Rd-Trip Commute (Miles*)	5.3			
# Daily Trips	7			
# Riders/Trip	50			
Number of Daily Miles for Lilac	37.1			
Total Estimated Avg. Daily Ridership	350			
Total Cars Taken From Roadway Weekdays (1.2/car)	292			
<b>Emission Reduction By Riders Taking LILAC - Midday</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length*		73.35	10.9339	5.4696
<b>#12 Lilac Midday: Gross Red. x 160 days x Cars From Roadway x 1 year</b>		<u>3,423,093</u>	<u>510,249</u>	<u>255,248</u>
Total LDGV Emissions Reduced (#12 Lilac Route)		3,423,093	510,249	255,248
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV #12 Lilac Emissions x 37.1 miles/day x 160 days x 1 year		<u>32,909</u>	<u>5,431</u>	<u>60,405</u>
TOTAL (40' Bus) HDDV Emissions		32,909	5,431	60,405
<b>Net Reduction for LILAC Midday ROUTE :</b>		<b>3,390,184</b>	<b>504,817</b>	<b>194,843</b>
<b>Cost Effectiveness for LILAC - Midday</b>		<b>\$ 11.67</b>	<b>\$ 78.38</b>	<b>\$ 203.08</b>
<b>Net Reduction for Project :</b>		<b>3,390,184</b>	<b>504,817</b>	<b>194,843</b>
<b>Total Reduction for Project - kg/project</b>		<b>3,390.2</b>	<b>504.8</b>	<b>194.8</b>
<b>Net Reduction Per Year:</b>		<b>3,390,184</b>	<b>504,817</b>	<b>194,843</b>
<b>Total Reduction Per Year - kg/year</b>		<b>3,390.2</b>	<b>504.8</b>	<b>194.8</b>
<b>Cost Effectiveness:</b>				
<b>Total Project Cost</b>		<b>\$39,569</b>		
<b>One Yr. Project Total Cost= (\$39,569/1)</b>		<b>\$39,569</b>		
<b>CO</b>		<b>\$11.67</b>		
<b>VOC</b>		<b>\$78.38</b>		
<b>NOx</b>		<b>\$203.08</b>		

\* Based on statistics, riders are riding the entire Lilac Mid-day route to reach their destination



## Minority Impact Statement

Pursuant to 2008 Iowa Acts, HF 2393, Iowa Code 8.11, all grant applications submitted to the State of Iowa that are due beginning Jan. 1, 2009, shall include a Minority Impact Statement. This is the state's mechanism for requiring grant applications to consider the potential impact of the grant project's proposed programs or policies on minority groups.

**Please choose the statement(s) that pertains to this grant application. Complete all the information requested for the chosen statement(s). Submit additional pages as necessary.**

- ☒ The proposed grant project programs or policies could have a disproportionate or unique **positive** impact on minority persons.

Describe the positive impact expected from this project.

The City of Ames has an 10.24% Asian population and any new route expansion on high capacity corridors will certainly have a positive impact on this minority and limited-English proficient group living within the Ames community. Specifically, the routes in west Ames travels along the Mortensen, Steinbeck and Dickens corridors in west Ames which have developed into a high capacity corridors where a majority of university students reside in high residential apartment complexes. The residents living in these apartments along these corridors will be provided transportation directly to central ISU campus. While this service is designed to serve the general public, Ames residents of all races and genders living within the community will benefit from this grant application and service.

Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☒ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

- ☐ The proposed grant project programs or policies could have a disproportionate or unique **negative** impact on minority persons.

Describe the negative impact expected from this project.

Present the rationale for the existence of the proposed program or policy



Provide evidence of consultation with representatives of the minority groups impacted.

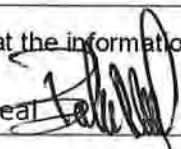
Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☐ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

☐ The proposed grant project programs or policies are **not expected to have** a disproportionate or unique impact on minority persons.

Present the rationale for determining no impact.

I hereby certify that the information on this form is complete and accurate, to the best of my knowledge.

Name Barbara Neal 

Title Transit Director

#### Definitions

"Minority Persons," as defined in Iowa Code 8.11, means individuals who are women, persons with a disability, Blacks, Latinos, Asians or Pacific Islanders, American Indians, and Alaskan Native Americans.

"Disability," as defined in Iowa Code 15.102, subsection 7, paragraph "b," subparagraph (1):

b. As used in this subsection:

(1) "*Disability*" means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of the individual, a record of physical or mental impairment that substantially limits one or more of the major life activities of the individual, or being regarded as an individual with a physical or mental impairment that substantially limits one or more of the major life activities of the individual.

"*Disability*" does not include any of the following:

- (a) Homosexuality or bisexuality.
- (b) Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments or other sexual behavior disorders.
- (c) Compulsive gambling, kleptomania, or pyromania.
- (d) Psychoactive substance abuse disorders resulting from current illegal use of drugs.

"State Agency," as defined in Iowa Code 8.11, means a department, board, bureau, commission, or other agency or authority of the State of Iowa.



# **Iowa Department of Transportation Clean Air Attainment Funds Application**

**Added Night Trips  
(#6 Brown - Night)**

**Submitted to:**

**IOWA DOT**

**By:**

**AMES TRANSIT AGENCY (CYRIDE)  
601 N. University Blvd.  
Ames, Iowa 50010**

**October 1, 2020**





## PROJECT APPLICATION IOWA CLEAN AIR ATTAINMENT PROGRAM (ICAAP)

### General Information:

Applicant Agency: Ames Transit Agency E-mail: bneal@cyride.com  
Public Agency (required)  
 Contact Person (Name and Title): Barbara Neal, Transit Director  
601 N. University Blvd.  
 Complete Mailing Address: \_\_\_\_\_  
Ames IA 50010 515-239-5565  
City State ZIP Code Daytime Phone

If more than one agency or organization is involved in this project, please state the name, contact person, mailing address, and telephone number of the second agency. (Attach an additional page if more than two agencies are involved.)

Co-Applicant Agency: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Public Agency, Non-Profit Organization<sup>1</sup>, For-Profit Organization<sup>1</sup>, or Individual<sup>1</sup>  
 Contact Person (Name and Title): \_\_\_\_\_  
 \_\_\_\_\_  
Street Address and/or Box Number  
 Complete Mailing Address: \_\_\_\_\_  
 \_\_\_\_\_  
City State ZIP Code Daytime Phone

### Project Information:

Project Title<sup>2</sup>: #6 Brown - Night

Project Description (including length, if applicable):

In August 2018, CyRide redesigned its bus services throughout Ames area which included adding service until 8:00pm on the #6 Brown route. However, the community desired even later trips along this route due to evening university evening classes and meetings. As a result, CyRide added additional night service trips in August 2019 to the #6 Brown route due to additional demand from residents between North Grand Mall and Towers residence halls (partial segment of the full route). Therefore, this ICAAP request is for these additional night service trips for service beginning in October 2021 for this portion of the route.

\*Project priority (1 = highest priority): 4 (a sponsor submitting multiple applications in this funding cycle must assign a numerical rank or priority to each application.)<sup>3</sup>

\*Assign the proposed project to one or more of the following categories (check one or more):

- |  |  |
|--|--|
| <input type="checkbox"/> Transportation-Related Project in the State Implementation Plan (SIP) | <input type="checkbox"/> Shared-Ride   |
| <input type="checkbox"/> Transportation Control Measure (TCM)                                  | <input type="checkbox"/> Bicycle or <input type="checkbox"/> Pedestrian Facility or Program (select one) |
| <input type="checkbox"/> Traffic Flow Improvement (Intersection, Signalization, Other)         | <input type="checkbox"/> Intermodal Freight  |
| <input type="checkbox"/> Planning and Project Development                                      | <input type="checkbox"/> Passenger   |
| <input type="checkbox"/> Travel Demand Management (TDM)  | <input type="checkbox"/> Alternative Fuels   |
| <input checked="" type="checkbox"/> Transit-Related Improvement                                | <input type="checkbox"/> Vehicle Inspection and Maintenance Program                                      |
|  | <input type="checkbox"/> Outreach Activity (Education, Advertising, or Technical Assistance)             |

\*Is the project consistent with the State Implementation Plan for air quality for non-attainment areas? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the MPO's local congestion management plan? ☐ Yes ☐ No ☒ Not Applicable

\*Is the project consistent with the ☒ MPO ☐ RPA ☐ Statewide Long-Range Transportation Plan? ☒ Yes ☐ No ☐ Not Applicable

Notes: <sup>1</sup>Requires public agency as co-sponsor of application.

<sup>2</sup>The term "project" means any ICAAP infrastructure or program proposal.

<sup>3</sup>The Iowa Department of Transportation will use the priority ratings to reflect the sponsor.



**Project Costs (an itemized breakdown must be included on an attached sheet):**

Total Cost: \$37,481.00  
Iowa Clean Air Attainment Program Fund Request: \$29,984.00  
Applicant Match: \$7,497.00

*Projects with a private for-profit co-applicant require a minimum 50 percent applicant match; all other projects require a minimum 20 percent applicant match.*

List All Applicant Match Sources	Amount	Assured or Anticipated (Date Anticipated)
1. CyRide Operating Budget	\$7,497.00	July 01, 2021
2. Estimated Fares (cost above is 'Net	\$111.00	October 01, 2021
3.		

Are any state funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

Are any other federal funds involved in this project? ☐ Yes ☒ No

If Yes, please explain the source and conditions:

**Estimated Project Development Schedule:**

Design: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
Land Acquisition: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
Construction: Start Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Has any part of this project been started? ☒ Yes ☐ No

If Yes, please explain:

CyRide began the first year of service in August 2019 with 100% local funding from CyRide. A previous ICAAP request (Year 1 of ICAAP request) funded year two of services from October 1, 2020 through September 30, 2021. If funded, this ICAAP expansion (Year 2 of ICAAP request) would fund the third year of services from October 2021 through September 2022.

How do you plan to measure the success of this project?

Four evaluation methods will be used: 1) Passenger Ridership 2) Customer Comments 3) Passengers per hour and 4) Total Emissions saved



## Required Documentation and Narrative Information

The following documents and narratives must be submitted with this application. In the upper right corner of each document or narrative write the corresponding letter shown below.

- ☒ A. A NARRATIVE assessing existing congestions/air quality conditions, outlining the concept of the proposed project, and providing adequate project justification. How will this project reduce congestion, reduce travel or single occupant vehicle usage, and/or improve air quality? Which transportation-related pollutant(s) are being addressed: carbon monoxide, ozone, or particulate matter (PM)?
- ☒ B. A DETAILED MAP identifying the location of the project and clearly differentiating the subject project from any past or future project phases.
- ☒ C. An ITEMIZED BREAKDOWN of the total project costs. This documentation does not need to be a detailed, line-item type of estimate. However, it must accomplish two objectives: First, it must show the method by which the cost estimate was prepared; and second, it must enable a reviewer to determine if the cost estimate is reasonable. The manner in which these objectives are achieved may vary widely depending on the type, scope, and complexity of the project. Absent a fully itemized list of costs, some general guidelines for possible methods of estimating each type of project cost are provided on Attachment A.
- ☒ D. A TIME SCHEDULE for the total project development.
- ☒ E. An OFFICIAL CERTIFICATION from the applicant's governing body (authority) that it shall:
  - (1) commit the necessary local matching funding for project implementation and
  - (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.
- ☒ F. An ADOPTED FORMAL RESOLUTION from the appropriate MPO or RPA declaring the sponsor's proposed project or program conforms to the MPO's or RPA's regional transportation planning process. (For MPOs, the project or program must be identified in the fiscally constrained transportation plan and, if applicable, the congestion management plan in TMAs.)
- ☒ G. CALCULATIONS for vehicle emission reductions and total project cost-effectiveness for the targeted pollutants. Project applicant must show through a quantitative analysis how many kilograms of pollutant will be reduced (CO, VOC, NOx, and, if applicable, PM). Project sponsor must calculate the cost-effectiveness of the project by: Dividing the total annualized project cost by the number of kilograms per year of pollutant reduced (\$ per kg). Applicant must also show all assumptions and source of data used to calculate the estimates. The applicant must use the most current vehicle emission factors developed by the Iowa DNR and consistent with the U.S. EPA's MOBILE 6.2 air quality model. These emission factors are periodically updated and may be obtained from the Iowa DOT's ICAAP website at: [https://iowadot.gov/systems\\_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP](https://iowadot.gov/systems_planning/Grant-Programs/Iowa-Clean-Air-Attainment-Program-ICAAP).
- ☒ H. Completed MINORITY IMPACT STATEMENT attached to application.

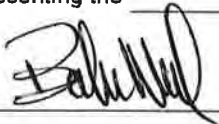
The award of ICAAP funds; any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; and the furnishing of materials for this project shall not involve direct or indirect interest of any state, county, or city official, elective or appointive. All of the above are prohibited by Iowa Code 314.2, 362.5, or 331.342. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of ICAAP funding and authorize a complete recovery of any funds previously disbursed.

### Certification

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating local authority. I understand the attached **official endorsement(s)** binds the participating local governments to assume responsibility for adequate maintenance of any new or improved facilities.

If ICAAP funding assistance is approved for the project described in this application, I understand that an executed contract between the applicant and the Iowa DOT is required before such funding assistance can be authorized for use in implementing the project.

Representing the Ames Transit Agency



(Name of Applicant's Governing Authority)

Signature

8-30-20

Date

Barbara Neal, Transit Director

August 26, 2020

Typed Name and Title  
(Governing Authority Official)

Date



# **CyRide** **(#6 Brown - Night)** **Added Trips**

## **Narrative**

### **Background**

Ames Transit Agency (d.b.a CyRide) directly operates fixed route services that are open to the general public within the Ames community including Iowa State University (ISU). The amount of transit service in this small community, of approximately 65,000 is unusually high as a result of the intensive use by university students. To accommodate this high transit demand, CyRide operates 18 hours a day with service frequencies between 4 – 40 minutes. **However in the last six years, ISU enrollment has grown by 22% from 28,682 students to approximately 35,000! During this same timeframe, CyRide's ridership has grown by over 1.6 million passengers.**

In May 2017, CyRide completed its first ever [system redesign study](https://www.cyrider.com/system-redesign) (<https://www.cyrider.com/system-redesign>) and residents along the #6 Brown route demanded later evening transit service along these corridors through the public input process. As a result of the entire service modifications, CyRide offered later evening service until 8:00 p.m. on the entire #6 Brown route to the ISU Research Park. This allowed employees to work in this area later at night as well as served major apartment complexes in the University Blvd. corridor. However, Iowa State University had expanded its evening classes as late as 10:00 pm and the campus Library remained open until midnight. Thus, there remained gaps in service and residents were still complaining that they couldn't travel via bus back home in the evening from campus.

Due to overwhelming requests by the public, CyRide added additional night trips to this route, between Towers – Campus – North Grand Mall - that began in August 2019 funded at 100% with CyRide's local budget due to demand for these evening trips until 10:00 p.m. While the service does not serve the ISU Research Park area, the limited English proficient community is served that live along Stange and Bloomington north of campus.

Therefore, this ICAAP application request is only for **#6 Brown night trips** between Towers and North Grand Mall beginning in October 2021.



## Project Description/Justification

***Grant Request***  
***Added Trips - #6 Brown - Night***

The funding request below is for additional evening trips for the **#6 Brown** route implemented between Towers residence halls – ISU campus - North Grand Mall during Iowa State University class days. This service was initially implemented in August 2019 with 100% CyRide local funds. ICAAP guidelines allow transit agencies to fund three years of services within the first five years of service. The Board’s initial approval for this additional service was in January 2019 for the FY2019 budget after the ICAAP’s October 2018 grant application deadline. ICAAP funded this service for its second year of operation between October 2020 through September 2021.

This ICAAP request is for **evening #6 Brown’s** third year of operation (2<sup>nd</sup> Year ICAAP) for service beginning October 2021 through September 2022.

The information below describes CyRide’s full request for the operating of the **#6 Brown – Night** service.

**#6 Brown – Night**  
**(ISU School Weekdays) – Year 1**

**CyRide proposes to provide new evening trips for the #6 Brown route, by operating a bus every 30 minutes during the weekday evenings between 8:00 pm – 10:30 pm operating between Towers residence halls – Iowa State University (ISU) campus – North Grand Mall. (This route will not travel the route segment between Towers and the ISU Research Park after 8:00 p.m.) Additionally, this route will operate only when Iowa State University holds school-year classes or approximately 160 weekdays out of the year.**

Below are the additional trips that were added for Brown North and Brown South services.

<b>#6 Brown South (Night Service)</b> <b>ISU Class Days and Finals Days Only</b> <b>(Added Night trips shown below)</b>					
<b>North Grand Mall</b>	<b>Aspen &amp; Stange</b>	<b>Kildee Hall</b>	<b>Friley Hall</b>	<b>Lynn &amp; Knapp</b>	<b>Towers Turnaround</b>
8:00	8:08	8:15	8:20	8:22	8:25
8:30	8:38	8:45	8:50	8:52	8:55
9:00	9:08	9:15	9:20	9:22	9:25
9:30	9:38	9:45	9:50	9:52	9:55

<b>#6 Brown North (Night Service)</b> <b>ISU Class Days and Finals Days Only</b> <b>(Added Night trips shown below)</b>					
<b>Towers Turnaround</b>	<b>Lynn &amp; Knapp</b>	<b>Student Services</b>	<b>Bessey Hall</b>	<b>Aspen &amp; Stange</b>	<b>North Grand Mall</b>
8:30	8:32	8:34	8:39	8:45	8:53
9:00	9:02	9:04	9:09	9:15	9:23
9:30	9:32	9:34	9:39	9:45	+
10:00	10:02	10:04	10:09	10:15	+



CyRide anticipates that this route will generate 180 daily riders on this added evening service given that it serves apartments and university housing in high-density areas along Bloomington, Stange, and Welch. Specifically, there is a large limited English proficient group living in the Schilletter Village and University Village university housing complexes along Stange. This has a high concentration of Mandarin Chinese speaking residents that would benefit from additional service on the #6 Brown route. Specifically, they noted that evening connections to the Walmart and North Grand Mall areas were essential for their shopping needs.

CyRide anticipates a healthy ridership over ISU class days during the evenings as residents become more and more aware of the new trips and how they serve them. (See Exhibit B – Brown Route for route alignment details.)

The following information provides operation-specific data for these additional trips:

**#6 Brown Weekday (Night Trips)**

Hours of Service: 3.8

Number of Trips: 4

Avg. Passengers/Trip (Year 1): 45

Miles/Trip: 11.7

Miles: 46.8

Days of Operation/Year: 160 (ISU Class & Finals days only)

Ridership: 180 daily rides (45 pass/trip \* 4 trips)

This route will serve the following commercial, residential and university destinations as illustrated within Exhibit B:

- **#6 Brown (Added Night Trips):** Towers Residence Halls, Welch Road apartments, ISU Campustown Businesses (86 total); <http://www.amescampustown.com/>, Greek Housing, Memorial Union, ISU Campus (Student Services, Union Drive Association, Kildee/Bessey Halls), Fredrickson Court (high residential housing), University Village (high residential housing), Schilletter Village (high residential housing, Ames Fitness Center North, Somerset Veterinary Hospital, Wallaby's Bar & Grille, El Azteca, Mainstream Living, Dentistry at Somerset, Brick City Grill, Fareway Grocery, Somerset Village (high residential housing), WalMart, JCPenney, Kohl's, TJ Maxx, North Grand Mall (<https://northgrandmall.com/>) businesses.

**Added Emissions Factors**

The project emissions in Exhibit G are calculated based on the required Iowa DNR's current vehicle emission factors data posted on the Iowa DOT's ICAAP website



## Conclusion

The advantages of supporting this grant application can provide numerous benefits to the City of Ames/Iowa State University/Story County through:

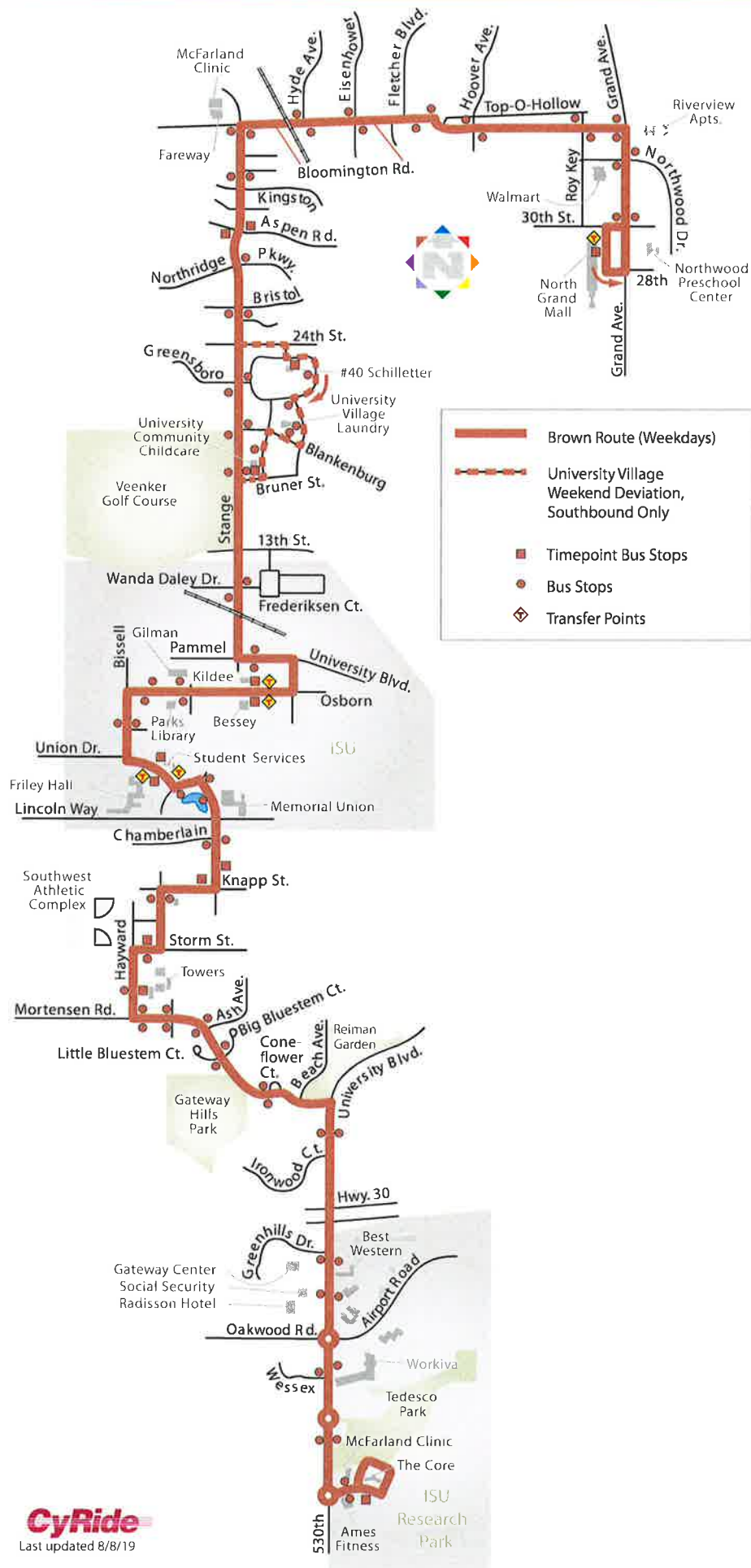
- Increased transit service coverage
- Improved transit trips during the evening
- Improved air quality with fewer single-occupant cars and technologically improved bus engines

While students are committed to paying for the improved services required to meet their higher transit demands, unanticipated financial increases in the double-digits would be needed to support these new evening trips. Unanticipated ridership and financial increases occur when reliable enrollment numbers are not available until only a few weeks after the fall semester begins. ICAAP funding will allow student fees to increase more gradually, so that at the end of the three-year allowance, funding will be sufficient to continue these services into the future.

Without funding for this service enhancement, passengers would either need to walk home after evening classes or find a ride from a friend. Additional evening trips were one of the most requested improvements during the initial implementation of service in 2018-2019. The evening service on Brown should be added to allow later evening services to these areas of the LEP community. CyRide estimates that approximately 28,800 new rides would be generated from these extra trips provided along the Brown route corridors throughout a single year.

CyRide encourages the Iowa DOT to provide support for this night route expansion (second year request for ICAAP funding) along these high-density corridors and LEP community living in Schilleter/University Villages.







# CyRide

## Added Trips (#6 Brown - Night)

### Budget

ActivityCost**OPERATING:****#6 Brown Weekday Route (NIGHT – ISU School Days Only)**

**YEAR 2– (Request for service beginning October 2021); Service Began 8/2019 (100% funded by CyRide)**

**Costs calculated below by inflating first year costs by 3% for 2020 and another 3% for 2021.**

Driver Wages – <b>\$23,992 (Yr. 1*)</b> x 1.03 (Yr. 2) x 1.03 (Yr. 3) =	\$25,453
Consumables – <b>\$11,442 (Yr. 1*)</b> x 1.03 (Yr. 2) x 1.03 (Yr. 3) =	<u>\$12,139</u>
<b>SUBTOTAL</b>	<b>\$37,592</b>

## Less Fares

0.2 riders/trip x 4 trips x 160 days x \*\*\$0.87 average resident fare = (\$111)

49.8 riders/trip x 4 trips x 160 days x \$0.00 fare (Free ISU ID card) = (\$0)

**YEAR 1 SUBTOTAL Brown - Night (less fares) = \$37,481**

<b>SUBTOTAL OPERATING</b>	<b>37,481</b>
<b>TOTAL COST</b>	<b>\$37,481</b>
<b>ICAAP Share</b>	<b><u>\$29,984</u></b>
<b>CyRide Share (assured)</b>	<b><u>\$7,497</u></b>

**NOTES:**

\* **Year 1 Brown Night Costs: #6 Brown Night – Added Trips (Began in 8/2019 via 100% local funding)**

Driver Wages – 3.8 hrs./day x 160 days x \$39.46/hr = \$23,992

Consumables – 11.7 miles/trip x 4 trips/day x 160 days x \$1.528/mile = \$11,442

\*\* **Average Resident Fare** = Average Cash Deposits/Average Residents Boarding Paying Cash = \$4,040/4,738 = \$0.87  
 (See “Comparison of Cash/Deposits and Use of Tickets FY2019 Avg.” with calculations highlighted in yellow)  
 CyRide decreased its fares in May 2018 from \$1.25 to \$1.00 and its half fares from \$.60 to \$.50. Additionally, CyRide cannot utilize FY2020 average fares due to no fares collected for portions of FY2020 due to COVID-19 and lower ridership thereafter. Therefore, the FY2019 average fares are more representative for upcoming services in FY2021. CyRide’s full fare was increased to \$1.25 between January 2012 and May 2018.

**Please note: CyRide does not bill for indirect costs.**



**Comparison of Cash/Deposits and Use of Tickets  
FY2019**

Account # 550-1100-345 42-00  
Fixed Route Fares

From:	To:	Deposit	Cash Fares	Rides/ Day	Avg. Fare	Cash/ Day	RF Ticket	FF Ticket	RF Percent	FF Percent	RF/ Day	FF/ Day
7/6/18	7/24/2018	\$ 3,607.78	5,261	277	\$ 0.69	\$ 189.88	1801	441	80.3%	19.7%	94.8	23.2
7/25/18	8/7/18	\$ 3,029.41	3,956	283	\$ 0.77	\$ 216.39	1208	328	78.6%	21.4%	86.3	23.4
8/8/18	8/21/18	\$ 5,525.75	4,605	329	\$ 1.20	\$ 394.70	801	367	68.6%	31.4%	57.2	26.2
8/22/18	9/5/18	\$ 4,836.26	5,055	337	\$ 0.96	\$ 322.42	716	391	64.7%	35.3%	47.7	26.1
9/6/18	9/18/18	\$ 4,119.32	4,770	367	\$ 0.86	\$ 316.87	915	322	74.0%	26.0%	70.4	24.8
9/19/18	10/2/18	\$ 4,039.31	4,719	337	\$ 0.86	\$ 288.52	962	310	75.6%	24.4%	68.7	22.1
10/3/18	10/16/18	\$ 4,863.76	4,976	355	\$ 0.98	\$ 347.41	924	288	76.2%	23.8%	66.0	20.6
10/17/18	10/30/18	\$ 4,411.83	4,949	354	\$ 0.89	\$ 315.13	893	256	77.7%	22.3%	63.8	18.3
10/31/18	11/14/18	\$ 3,411.21	5,170	345	\$ 0.66	\$ 227.41	822	284	74.3%	25.7%	54.8	18.9
11/15/18	11/27/18	\$ 3,396.23	3,318	255	\$ 1.02	\$ 261.25	478	162	74.7%	25.3%	36.8	12.5
11/28/18	12/11/18	\$ 4,196.11	4,531	324	\$ 0.93	\$ 299.72	852	287	74.8%	25.2%	60.9	20.5
12/12/18	1/8/19	\$ 5,168.96	7,008	250	\$ 0.74	\$ 184.61	1054	336	75.8%	24.2%	37.6	12.0
1/9/19	1/22/19	\$ 4,119.89	4,218	301	\$ 0.98	\$ 294.28	590	284	67.5%	32.5%	42.1	20.3
1/23/19	2/5/19	\$ 3,898.84	3,925	280	\$ 0.99	\$ 278.49	509	314	61.8%	38.2%	36.4	22.4
2/6/19	2/19/19	\$ 4,240.94	4,737	338	\$ 0.90	\$ 302.92	687	371	64.9%	35.1%	49.1	26.5
2/20/19	3/5/19	\$ 4,382.58	4,793	342	\$ 0.91	\$ 313.04	624	376	62.4%	37.6%	44.6	26.9
3/6/19	3/19/19	\$ 4,211.23	4,579	327	\$ 0.92	\$ 300.80	647	203	76.1%	23.9%	46.2	14.5
3/20/19	4/2/19	\$ 3,438.35	4,948	353	\$ 0.69	\$ 245.60	1010	272	78.8%	21.2%	72.1	19.4
4/3/19	4/16/19	\$ 4,332.65	5,103	365	\$ 0.85	\$ 309.48	767	228	77.1%	22.9%	54.8	16.3
4/17/19	4/30/19	\$ 3,771.30	4,379	313	\$ 0.86	\$ 269.38	779	241	76.4%	23.6%	55.6	17.2
5/1/19	5/14/19	\$ 3,583.64	4,941	353	\$ 0.73	\$ 255.97	766	239	76.2%	23.8%	54.7	17.1
5/15/19	6/4/19	\$ 3,867.25	6,354	303	\$ 0.61	\$ 184.15	949	328	74.3%	25.7%	45.2	15.6
6/5/19	6/20/19	\$ 3,119.40	5,404	338	\$ 0.58	\$ 194.96	1134	279	80.3%	19.7%	70.9	17.4
6/21/19	7/2/19	\$ 5,110.24	3,496	291	\$ 1.46	\$ 425.85	992	249	79.9%	20.1%	82.7	20.8
7/3/19	7/17/19	\$ 3,576.47	4,090	273	\$ 0.87	\$ 238.43	872	244	78.1%	21.9%	58.1	16.3
7/18/19	7/30/19	\$ 2,791.00	3,894	300	\$ 0.72	\$ 214.69	1125	188	85.7%	14.3%	86.5	14.5
7/31/19	8/13/19	\$ 2,040.47	4,163	297	\$ 0.49	\$ 145.75	870	257	77.2%	22.8%	62.1	18.4
8/14/19												
1/1/00												
<b>Avg. before 1/2012</b>		\$ 3,763	4,398	486	\$ 0.86	\$ 399.60	508	245	67.5%	32.5%	54	27
<b>Avg. after 1/2012</b>		\$ 4,626	4,569	318	\$ 1.01	\$ 324.64	944	489	65.9%	34.1%	65	34
<b>Average FY2014</b>		\$ 5,176	4857	343	\$ 1.06	\$ 365.50	825	557	59.5%	40.5%	59	39
<b>Average FY2015</b>		\$ 4,501	4402	305	\$ 1.03	\$ 315.22	973	541	63.5%	36.5%	68	38
<b>Average FY2016</b>		\$ 4,089	3877	282	\$ 1.06	\$ 300.73	931	501	64.8%	35.2%	67	36
<b>Average FY2017</b>		\$ 4,464	4317	283	\$ 1.05	\$ 296.32	1085	564	63.6%	36.4%	70	37
<b>Average FY2018</b>		\$ 3,914	3796	270	\$ 1.04	\$ 283.48	997	454	67.8%	32.2%	68	32
<b>Average FY2019</b>		\$ 4,040	4738	319	\$ 0.87	\$ 276.63	880	292	74.4%	25.6%	59	20



**Added Trips**  
**(#6 Brown - Night)**  
**Schedule**

<b><u>Activity</u></b>	<b><u>Completion Date</u></b>
Service Begins (1st year ICAAP*)	October 1, 2021
Service Ends (1st year ICAAP*)	September 30, 2022

\* This is Year 2 request for ICAAP funding for Brown weekday night service.

\* If approved for Year 2 ICAAP funding, CyRide anticipates requesting one more additional year of ICAAP funding for this service.



**CyRide**  
**Added Frequency (#6 Brown - Night)**  
**Official Certification**

The Ames Transit Agency (CyRide) Board of Trustees certifies that it shall:

- (1) commit the necessary local matching funding for project implementation and
- (2) upon project completion, be responsible for adequately maintaining and operating the project for public use during the project's useful life.

  
\_\_\_\_\_  
Jacob Schrader, Ames Transit Agency President

8/26/2020  
\_\_\_\_\_  
Date



**CyRide**  
**Added Trips (#6 Brown - Night)**  
**MPO Resolution DRAFT**

The Ames Area Metropolitan Planning Organization (AAMPO) approved and endorsed this project on September 22, 2020 with a resolution approving this grant. The resolution is attached.

The ICAAP application form (Form 230017; page 3 or 6) requires that the project or program be identified in the fiscally constrained transportation plan (TIP) and requires the document to be submitted with the application. However, the ICAAP handbook has been revised to state that “Awarded projects” must be added to approved MPO TIP’s and STIP’s (See below).

*[https://iowadot.gov/systems\\_planning/pdf/ICAAP\\_Application\\_Handbook.pdf](https://iowadot.gov/systems_planning/pdf/ICAAP_Application_Handbook.pdf) (page 5):  
Awarded projects must be added to approved MPO or RPA transportation improvement programs (TIPs) and Iowa’s Statewide Transportation Improvement Program (STIP).*

Therefore, once this ICAAP project has been formally approved by the Iowa DOT Commission (early January 2021), the funding will be amended and approved by the MPO in the AAMPO’s FY2020 Transportation Improvement Program in order to begin transferring the federal funding from FHWA to FTA and gain formal grant approval from the Federal Transit Administration.



RESOLUTION NO. 16-675

RESOLUTION APPROVING IOWA CLEAN AIR ATTAINMENT PROGRAM GRANT  
(ICAAP) FOR #9 PLUM SERVICE EXPANSION FOR CYRIDE  
FOR THE CITY OF AMES

WHEREAS, the Iowa Clean Air Attainment Program is established by the Iowa Department of Transportation; and,

WHEREAS, the Iowa Department of Transportation provides, on a competitive basis, funds for transportation projects with the highest potential for reducing transportation related air pollution and congestion; and,

WHEREAS, CyRide has prepared an application for ICAAP funding for service frequency expansion on route #9 Plum; and,

WHEREAS, it is anticipated that the project will not begin until the ICAAP funds are received after October 1, 2017; and,

WHEREAS, one of the grant requirements is for the Ames Area Metropolitan Planning Organization (MPO), by resolution, declaring the sponsor's proposed project or program conforms to the MPO's regional transportation planning process; and,

WHEREAS, for MPOs, the project or program must be identified in the fiscally-constrained transportation plan.

NOW, THEREFORE, BE IT RESOLVED by the Ames Area Metropolitan Planning Organization Transportation Policy Committee, that the project shown in the Iowa Clean Air Attainment Program grant application, which conforms to the MPO's regional transportation planning process, is hereby approved and certified.

ADOPTED THIS 22<sup>nd</sup> day of November, 2016.



Diane R. Voss, City Clerk



Ann H. Campbell, Mayor

Introduced by: Orazem  
Seconded by: Corrieri  
Voting aye: Beatty-Hansen, Betcher, Campbell, Corrieri, Gartin, Nelson, Orazem  
Voting nay: None Absent: Clinton, Hollingshead, Popp, Staudt

Resolution declared adopted and signed by the Mayor this 22<sup>nd</sup> day of November, 2016.

Placeholder for updated resolution



## Added Trips (#6 Brown- Night Emissions Calculation

Calculation/Assumption	Factors	CO	VOC (HC)	NOx
<b>Net Project Cost</b>	<b>\$37,481</b>			
Brown Night Net Operating Cost	\$37,481			
Operating for One Year - \$40,703				
Number of Years In Project - Operating	1			
<b>#6 Brown Route Service Assumptions</b>				
Number of days/Yr. in Project (ISU Classdays & Finals Days)	160			
Avg. Rd-Trip Commute (Miles*)	11.7			
# Daily Trips	4			
# Riders/Trip	45			
Number of Daily Miles	46.8			
Total Estimated Avg. Daily Ridership	180			
Total Cars Taken From Roadway Weekdays (1.2/car)	150			
<b>Emission Reduction By Riders Taking LILAC</b>				
Emission Factor (30 mph) - LDGV		13.84	2.063	1.032
Emission Factor x Avg. Commute Length*		161.93	24.1371	12.0744
<b>#6 Brown: Gross Red. x 160 days x Cars From Roadway x 1 year</b>		<u>3,886,272</u>	<u>579,290</u>	<u>289,786</u>
Total LDGV Emissions Reduced		3,886,272	579,290	289,786
<b>Emission Increase For Standard Buses:</b>				
Emission Factor (10 mph) - HDDV		5.544	0.915	10.176
(40' Bus) HDDV Emissions x 46.8 miles/day x 160 days x 1 year		<u>41,513</u>	<u>6,852</u>	<u>76,198</u>
TOTAL (40' Bus) HDDV Emissions		41,513	6,852	76,198
<b>Net Reduction for Brown Night:</b>		<b>3,844,759</b>	<b>572,439</b>	<b>213,588</b>
<b>Cost Effectiveness for Brown Night</b>		<b>\$ 9.75</b>	<b>\$ 65.48</b>	<b>\$ 175.48</b>
<b>Net Reduction for Project :</b>		<b>3,844,759</b>	<b>572,439</b>	<b>213,588</b>
<b>Total Reduction for Project - kg/project</b>		<b>3,844.8</b>	<b>572.4</b>	<b>213.6</b>
<b>Net Reduction Per Year:</b>		<b>3,844,759</b>	<b>572,439</b>	<b>213,588</b>
<b>Total Reduction Per Year - kg/year</b>		<b>3,844.8</b>	<b>572.4</b>	<b>213.6</b>
<b>Cost Effectiveness:</b>				
<b>Total Project Cost</b>		<b>\$37,481</b>		
<b>One Yr. Project Total Cost= (\$37,481/1)</b>		<b>\$37,481</b>		
<b>CO</b>		<b>\$9.75</b>		
<b>VOC</b>		<b>\$65.48</b>		
<b>NOx</b>		<b>\$175.48</b>		

\* Based on statistics, riders are riding the entire Brown route to reach their destination



## Minority Impact Statement

Pursuant to 2008 Iowa Acts, HF 2393, Iowa Code 8.11, all grant applications submitted to the State of Iowa that are due beginning Jan. 1, 2009, shall include a Minority Impact Statement. This is the state's mechanism for requiring grant applications to consider the potential impact of the grant project's proposed programs or policies on minority groups.

**Please choose the statement(s) that pertains to this grant application. Complete all the information requested for the chosen statement(s). Submit additional pages as necessary.**

- ☒ The proposed grant project programs or policies could have a disproportionate or unique **positive** impact on minority persons.

Describe the positive impact expected from this project.

The City of Ames has an 10.24% Asian population and any new route expansion on high capacity corridors will certainly have a positive impact on this minority and LEP group living within the Ames community. Specifically, the Brown route directly serves limited English proficient community living along Stange Road in Schilleter/University Villages. The residents living in these areas will be provided transportation directly to central ISU campus, campustown and shopping area along the route later in the evening providing a positive impact on this transit dependent population. While this service is designed to serve the general public, Ames residents of all races and genders living within the community will benefit from this grant application and service.

Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☒ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

- ☐ The proposed grant project programs or policies could have a disproportionate or unique **negative** impact on minority persons.

Describe the negative impact expected from this project.

Present the rationale for the existence of the proposed program or policy.



Provide evidence of consultation with representatives of the minority groups impacted.

Indicate which groups are impacted.

- ☐ Women    ☐ Persons with a disability    ☐ Blacks    ☐ Latinos    ☐ Asians  
☐ Pacific Islanders    ☐ American Indians    ☐ Alaskan Native Americans    ☐ Other \_\_\_\_\_

☐ The proposed grant project programs or policies are **not expected to have** a disproportionate or unique impact on minority persons.

Present the rationale for determining no impact.

I hereby certify that the information on this form is complete and accurate, to the best of my knowledge.

Name Barbara Neal



Title Transit Director

#### Definitions

"Minority Persons," as defined in Iowa Code 8.11, means individuals who are women, persons with a disability, Blacks, Latinos, Asians or Pacific Islanders, American Indians, and Alaskan Native Americans.

"Disability," as defined in Iowa Code 15.102, subsection 7, paragraph "b," subparagraph (1):

b. As used in this subsection:

(1) "*Disability*" means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of the individual, a record of physical or mental impairment that substantially limits one or more of the major life activities of the individual, or being regarded as an individual with a physical or mental impairment that substantially limits one or more of the major life activities of the individual.

"*Disability*" does not include any of the following:

- (a) Homosexuality or bisexuality.
- (b) Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments or other sexual behavior disorders.
- (c) Compulsive gambling, kleptomania, or pyromania.
- (d) Psychoactive substance abuse disorders resulting from current illegal use of drugs.

"State Agency," as defined in Iowa Code 8.11, means a department, board, bureau, commission, or other agency or authority of the State of Iowa.



**AMES AREA METROPOLITAN PLANNING ORGANIZATION  
TRANSPORTATION POLICY COMMITTEE ACTION FORM**

**SUBJECT: SAFETY PERFORMANCE TARGETS 2017 – 2021**

**BACKGROUND:**

As required by the FAST Act, the Iowa Department of Transportation was required to establish safety measures for five metrics. The Iowa Department of Transportation has submitted the State Highway Safety Improvement Program (HSIP) annual report to the Federal Highway Administration which is deemed submitted as of August 31, 2020. The report included the State's 2017-2021 safety targets for the performance measures established in 23 § 490.207 as follows:

Performance Measure	Five Year Rolling Averages	
	2015-2019 Baseline	2017-2021 Target
Number of Fatalities	342.0	336.8
Fatality Rate*	1.019	0.983
Number of Serious Injuries	1,420.0	1,370.8
Serious Injury Rate*	4.230	4.002
Non-Motorized Fatalities and Serious Injuries	132.6	131.0

*\*Rates are per 100 million vehicle miles traveled (VMT)*

**Like the process last year, the Ames Area MPO is required within 180 days of the State's submission of the safety performance measures (by February 27, 2021), to adopt safety performance targets.**

The performance measures apply to all public roadways within the Ames Area MPO, regardless of classification or ownership. Upon approving safety measures, the Ames Area MPO will be required to reflect the performance measures and targets in all Long-Range Transportation Plans and Transportation Improvement Programs. Upon adoption, this update will be reflected in the final Forward 2045 Long-Range Transportation Plan.

**ALTERNATIVES:**

1. Approve supporting the safety performance targets established by the Iowa Department of Transportation in coordination with Iowa MPOs
2. Direct staff to make quantifiable modifications to the safety performance targets.

**ADMINISTRATOR'S RECOMMENDATION:**

The Ames Area MPO participates in coordination meetings with the Iowa Department of Transportation and other Iowa MPO's so that these performance measures are developed in a coordinated manner.

Therefore, it is recommended by the Administrator that the Transportation Policy Committee adopt Alternative No. 1, as noted above.



ITEM # MPO 4

DATE: 09-22-20

**AMES AREA METROPOLITAN PLANNING ORGANIZATION (AAMPO)  
TRANSPORTATION POLICY COMMITTEE ACTION FORM**

**SUBJECT:** DRAFT 2045 Metropolitan Transportation Plan “Forward 45”

**BACKGROUND:**

On July 14, 2020, the Ames Area MPO Policy Committee was given a presentation on the progress of the 2045 Metropolitan Transportation Plan (MTP). At that meeting, the MPO’s consultant, HDR, went through the public input process for the plan, the “universe of alternatives” list of potential projects, and the performance measures (scoring criteria) for the plan.

On September 8, 2020, the Ames Area MPO Policy Committee was given a presentation from HDR that went through utilizing the performance measures and the scoring the “universe of alternatives” list of potential projects for prioritization. An overview of the estimated budget for funding federally aided transportation improvements over the 25-year planning period of was discussed (known as fiscal constraint). The Policy Committee had the opportunity to comment and give direction for any desired changes to the projects.

Following a 30-day public comment period, the Policy Committee will be presented with the Final 2045 MTP for approval on October 27, 2020. A formal presentation is not planned at that time unless substantive changes are needed based on the public comments received.

**ALTERNATIVES:**

1. Approve the Draft 2045 Metropolitan Transportation Plan and set October 27, 2020, as the date for the public hearing.
2. Modify the Draft 2045 Metropolitan Transportation Plan and set October 27, 2020, as the date for the public hearing.

**ADMINISTRATOR’S RECOMMENDED ACTION:**

The current draft of the 2045 Metropolitan Transportation Plan is a result of previous and ongoing coordination between AAMPO, local agencies, HDR, the Iowa Department of Transportation, and prior public feedback. Therefore, the Administrator recommends that the Transportation Policy Committee adopt Alternative No. 1 as described above.



# Ames Area MPO Policy Committee

## Draft Plan Presentation

09/22/20





# Presentation Agenda

- Draft Plan Structure
- Public Input Summary
- Fiscally Constrained Plan
- Illustrative/Developer-Driven Projects
- Next Steps
- Questions



# Draft Plan Structure

- **Chapter 1:** Introduction and Goals
- **Chapter 2:** Regional Trends
- **Chapter 3:** Existing System Performance
- **Chapter 4:** Future Trends & Needs
- **Chapter 5:** Financial Plan
- **Chapter 6:** Alternatives Development and Evaluation
- **Chapter 7:** Fiscally Constrained Plan











# Chapter 1: Introduction & Goals

- **Introduction**

- Ames Area MPO
- Metropolitan Transportation Plan
- Related Planning Efforts

- **Goals & Objectives**

- Forward 2045 Goals & Objectives
- Federal Planning Factors

Goal Area	Description
 <b>Accessible</b>	The ease of connecting people to goods and services in the Ames area, as well as providing choices for different modes of transportation (i.e. car, bike, bus, etc.)
 <b>Safe</b>	Reducing the risk of harm to users of the Ames transportation system
 <b>Sustainable</b>	Reducing or eliminating negative environmental impacts from the Ames transportation system and promoting financially sustainable investments
 <b>Efficient &amp; Reliable</b>	Provide for the efficient and reliable movement of people, service, and goods
 <b>Placemaking</b>	Integrating the transportation system with land use to create well-designed places and complete communities
 <b>Preservation</b>	Maintain the existing transportation system in a state of good repair



# Chapter 2: Regional Trends

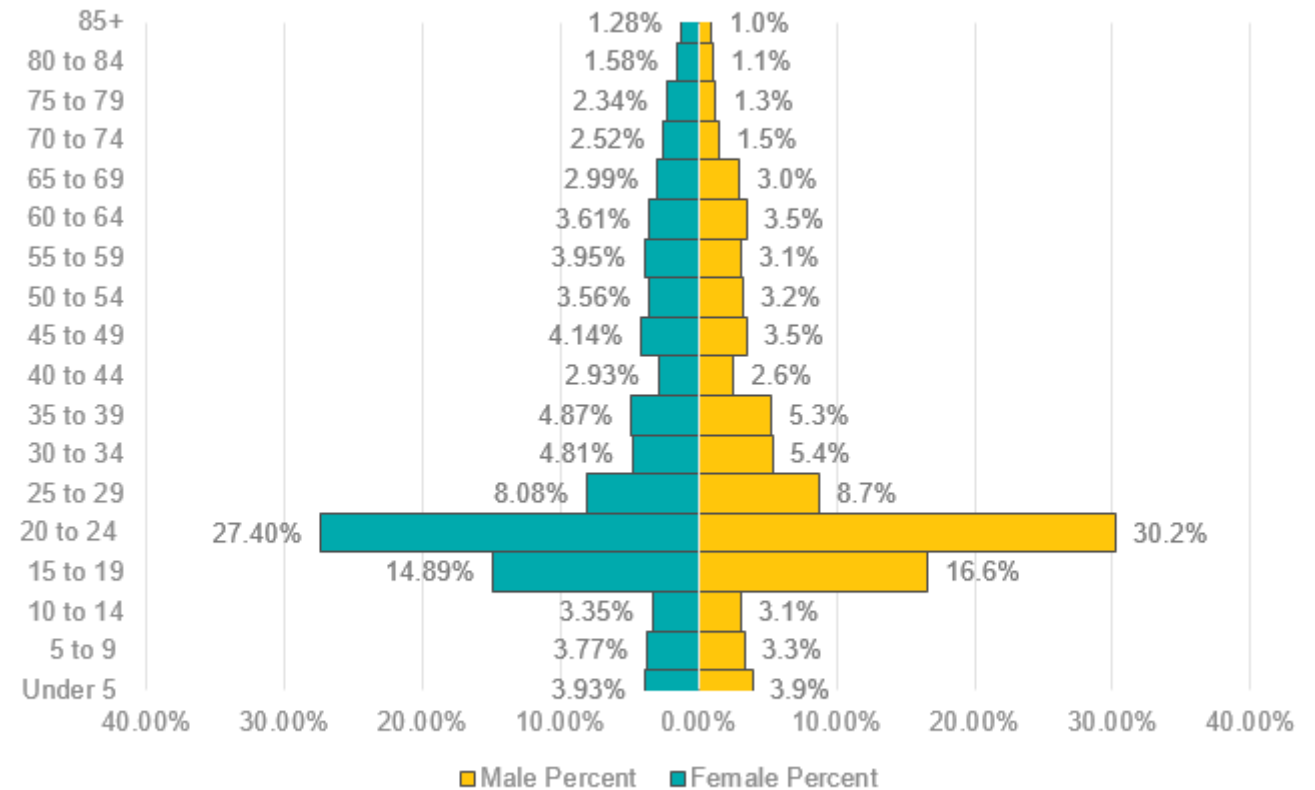
- **Historical Regional Trends**

- Population Growth
- Employment Growth

- **Current Demographics**

- Population & Employment Data
- Socioeconomic Conditions & Transportation Planning
- Inner-City Commute Patterns

**Figure 2-2. Population Pyramid, Ames Urbanized Area**

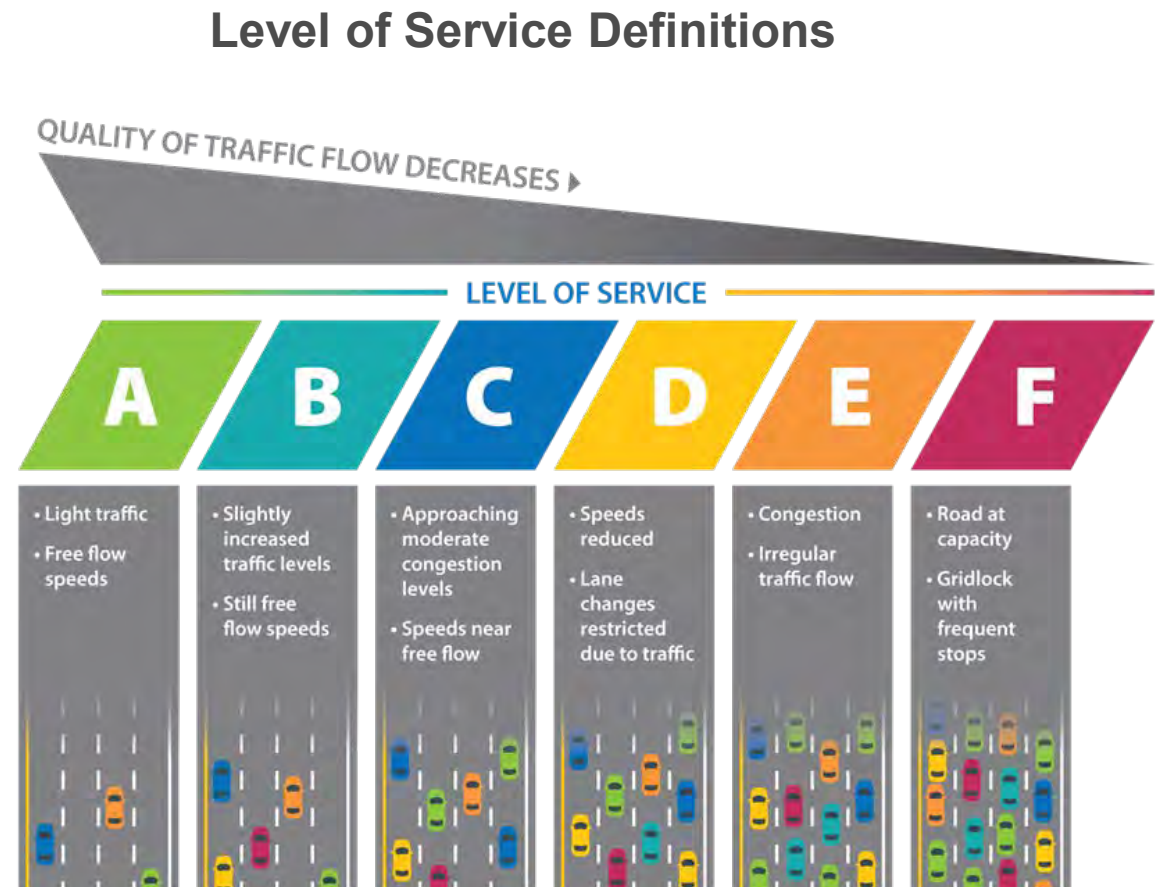


Source: ACS 2013-2017 5-Year Estimates



# Chapter 3: Existing System Performance

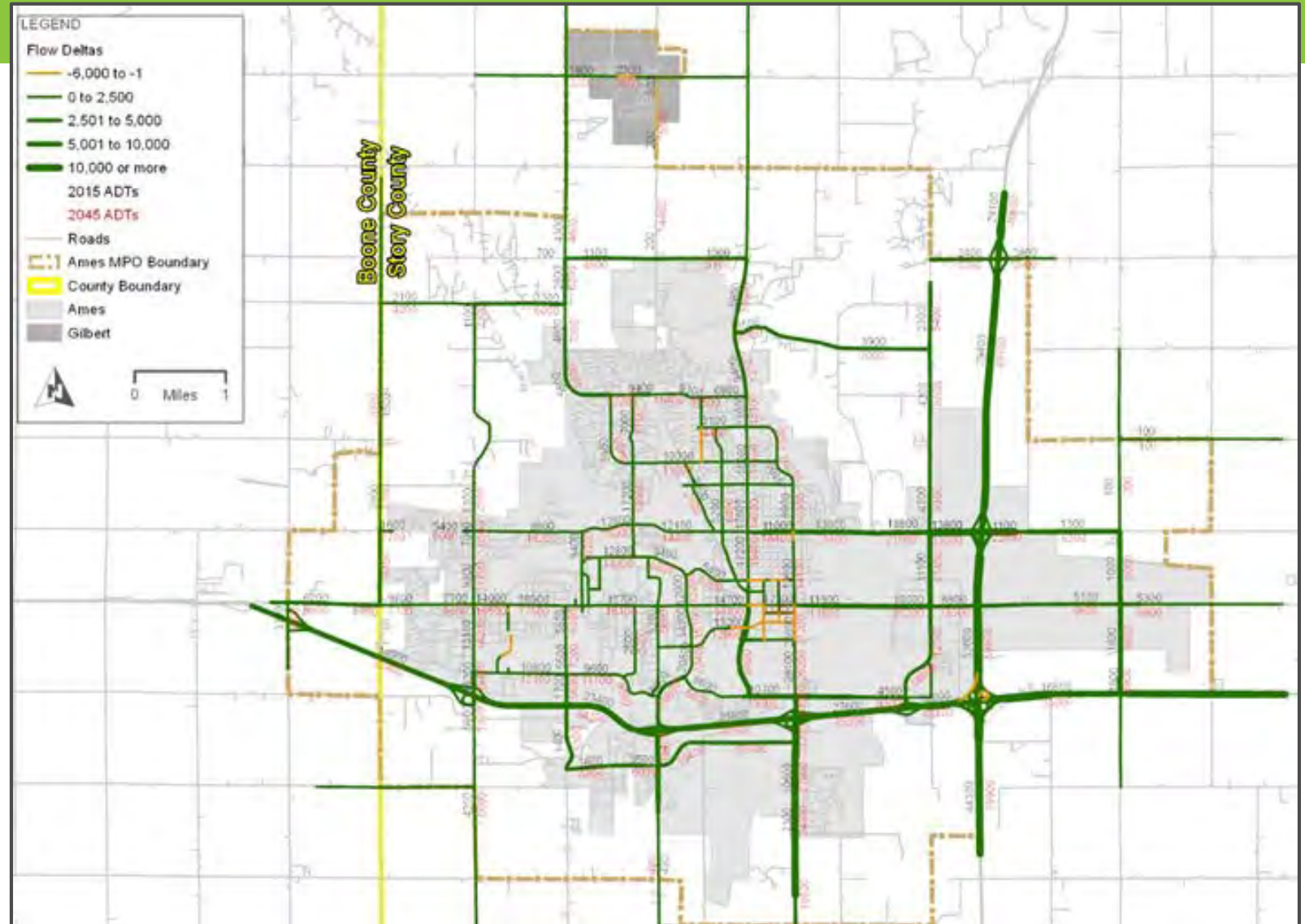
- Roadway System Conditions
- Bicycle/Pedestrian
- Transit
- Freight
- Existing Regional Connections
- System Performance and Targets





# Chapter 4: Future Trends & Needs

- Future System Performance
- Travel Demand Model
- Future Multi-Modal Opportunities
- Emerging Trends & Technology

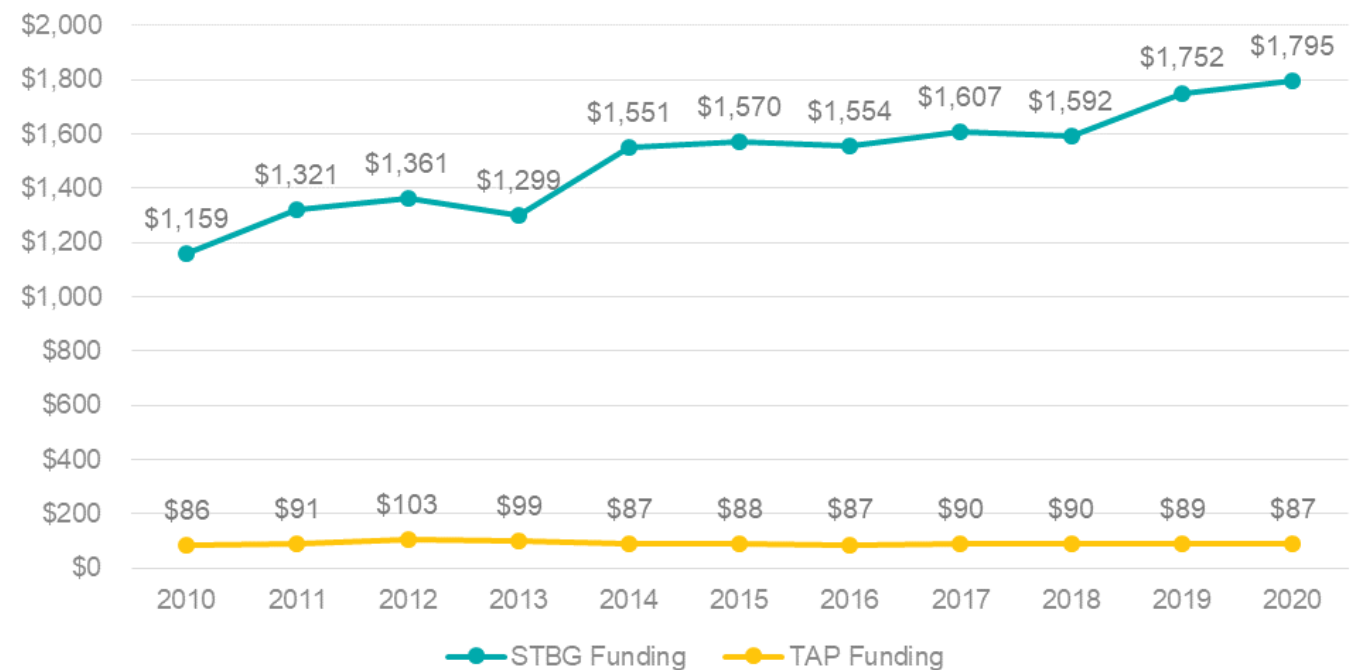




# Chapter 5: Financial Plan

- Time Frames
- Federal, State, and Local Funding Programs
- MPO Historical Funding Levels
- Future Funding Forecasts
- System Preservation and Improvement Spending

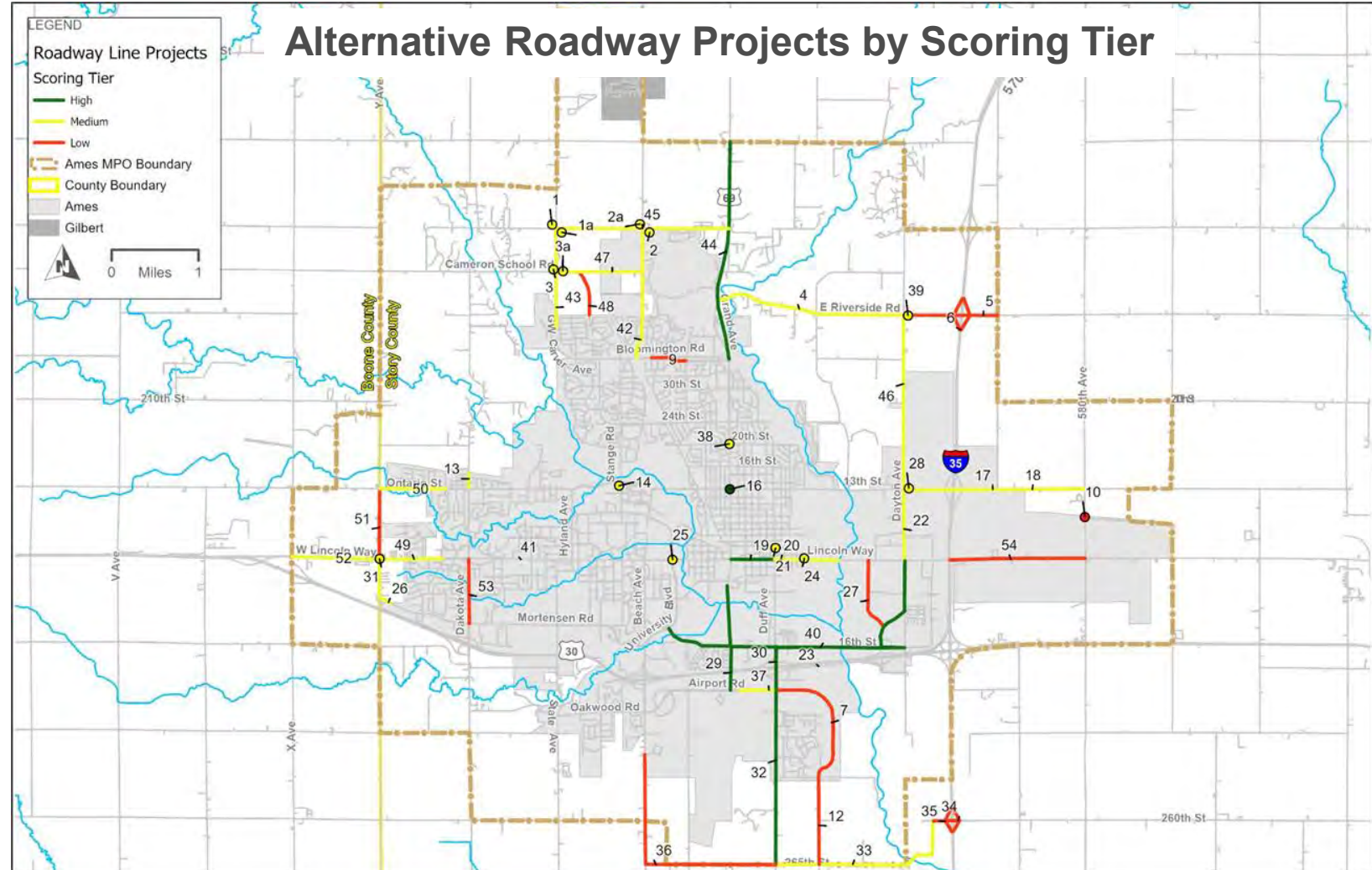
Historical STBG and TAP Funding Levels (\$ 1000's) for the Ames Area MPO





# Chapter 6: Alternatives Development & Evaluation

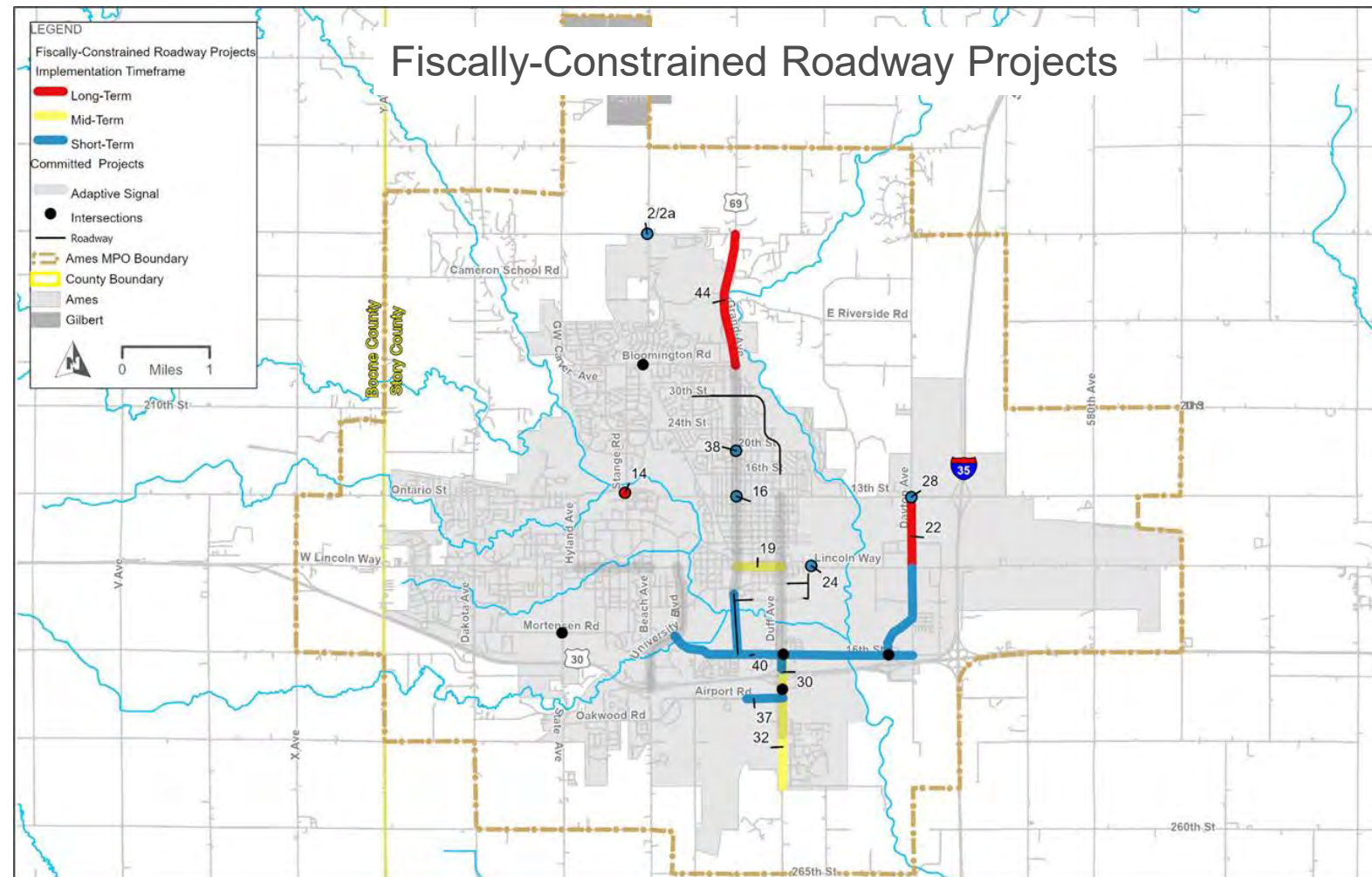
- **Strategy Development and Prioritization Process**
- **Potential Alternatives**
- **Alternatives Scoring Results**
- **Emerging Trends & Technologies**





# Chapter 7: Fiscally Constrained Plan

- **2020-2045 Fiscally-Constrained Plan**
  - Illustrative Projects
  - Developer-Driven Projects
  - Potential Iowa DOT Projects
- **Future Planned System Performance**
- **Regional Policy & Strategies**



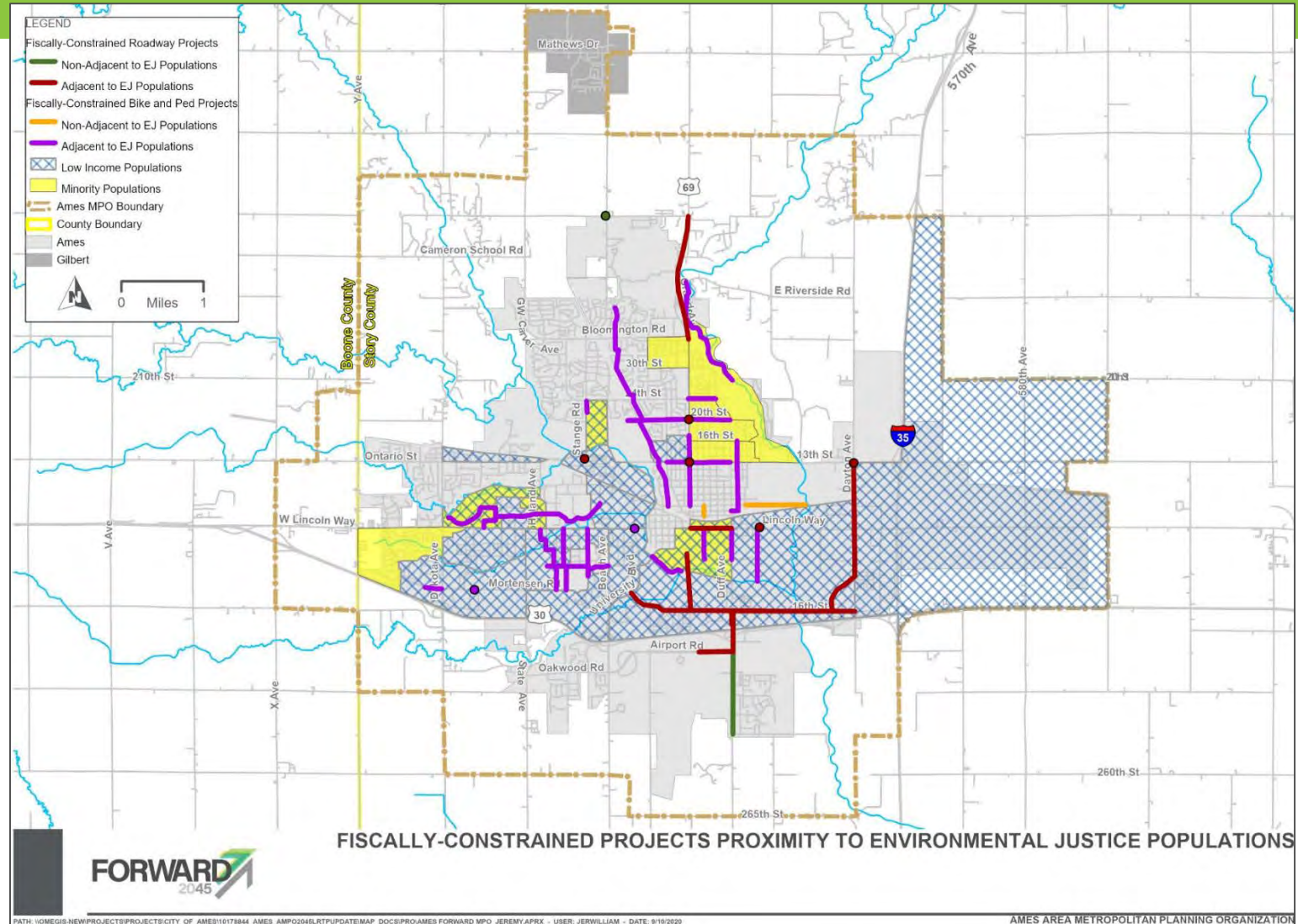


# Chapter 8: Environmental Mitigation

- **Environmental Analysis**

- Physical Environmental Constraints
- Human Environmental Constraints

- **Environmental Justice Assessment**





# Chapter 9: MTP Engagement

- Public and Stakeholder Engagement
- Website
- Social Media & Email
- Statistically Valid Travel Survey
- In-Person and Online Events
- Transportation Policy Committee Meetings





# Chapter 10: FAST Act Compliance

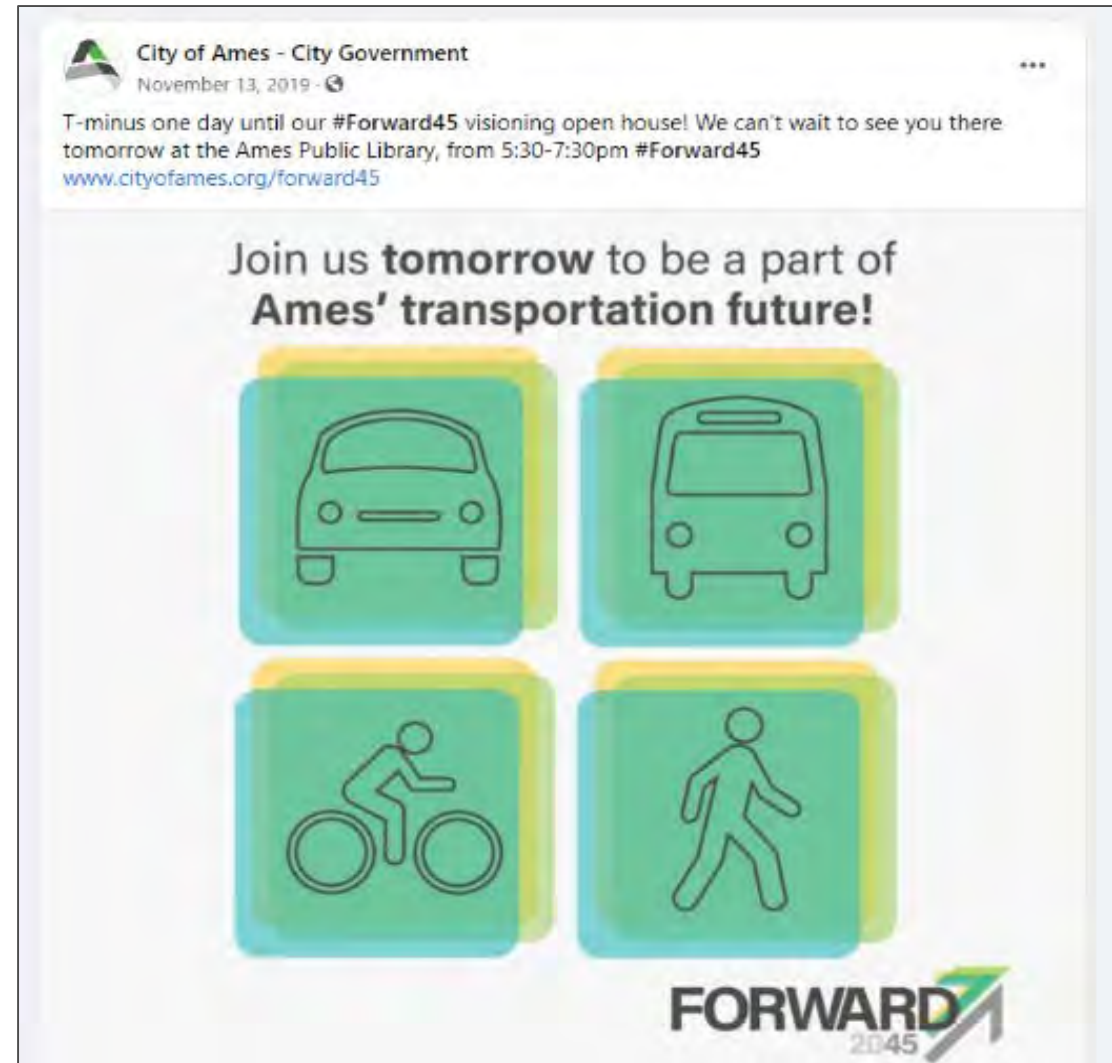
- National Planning Factors
- System Performance Measures
- Summary of Conformance with Requirements

National Planning Factor	Forward 2045 Planning Element		
	Plan Goals and Objectives	System Performance Measures	Project Scoring Metrics
Economic Vitality	▲		▲
Safety	▲	▲	▲
Security	▲		▲
Accessibility and Mobility for People and Freight	▲		▲
Environment, Energy Conservation, Quality of Life and Economic Development	▲	▲	▲
System Integration and Connectivity for People and Freight	▲		▲
Efficient Operation and Management	▲	▲	▲
Preserve the Existing Transportation System	▲	▲	▲
System Resiliency and Reliability; Reduce or Mitigate Stormwater Impacts	▲	▲	▲
Enhance Travel and Tourism	▲		▲



# Public Input Summary

- Website
- Social Media & Email
- Statistically Valid Travel Survey
- In-Person and Online Events
- Transportation Policy Committee Meetings
- Comprehensive Plan Coordination





# Website

- **Two Videos**
  - Overview of MTP
  - Overview of Goal Areas
- **Project Schedule**
- **Links to Open House & Online Meeting Materials**



A screenshot of the City of Ames website. The header features the City of Ames logo, social media icons for Facebook, Twitter, Instagram, and YouTube, and links for "Contact" and "Select Language". A navigation menu includes "HOME", "ABOUT AMES", "GOVERNMENT", "DOING BUSINESS", "LIVING", "VISITING", and "I WANT TO...". A search bar with a "GO" button is also present. On the left, a sidebar menu for "AAMPO" lists various transportation planning topics. The main content area displays a video player for "FORWARD 2045: Metropolitan Transportation Plan". The video player shows a progress bar at 1:54 and includes standard video controls. Below the video player, the title "Forward 2045: Metropolitan Transportation Plan" is followed by a paragraph explaining that the Ames Area Metropolitan Planning Organization (AAMPO) is updating its regional Metropolitan Transportation Plan, known as Forward 2045. The text describes it as a community-driven process that establishes a vision for the future of transportation in the Ames metropolitan area. A final paragraph states that Forward 2045 will result in a 25-year prioritized and financially constrained plan that will define how the metropolitan area will manage and operate its multi-modal transportation system, including transit, highway, bicycles, and pedestrians. The AAMPO is committed to implementing a holistic planning process that fosters wider regional inclusion and prosperity, higher standards of living, and connections for people throughout the community.



# Social Media & Email

- Promote Awareness & Input Opportunities
- Facebook & Twitter
- Press Releases
- Direct Mail



### Ames Area MPO Seeking YOUR Input on Area Transportation Alternatives and Improvements!

As a precautionary measure, instead of an in-person open house, the Ames Area Metropolitan Planning Organization (AAMPO) is hosting a virtual public meeting for the Metropolitan Transportation Plan (MTP), known as Forward 2045.

This virtual meeting is your opportunity to learn about the vision and goals for Forward 2045 and review, comment and provide ideas (big or small!) on potential alternatives and strategies within the Ames transportation system.

[Visit our Virtual Meeting Now! >>](#)

The virtual meeting is available now, through April 14, 2020 at: [amesgisweb.city.ames.ia.us/forward45](http://amesgisweb.city.ames.ia.us/forward45)

#### About Forward 2045

Forward 2045 will result in a 25-year prioritized and financially constrained plan that will define how the metropolitan area will manage and operate our multi-modal transportation system, which includes transit, highway, bicycles, and pedestrians. The AAMPO is committed to implementing a holistic planning process that fosters wider regional inclusion and prosperity, higher standards of living, and connections for people throughout the community.



# Statistically Valid Travel Survey

- **Purpose:**

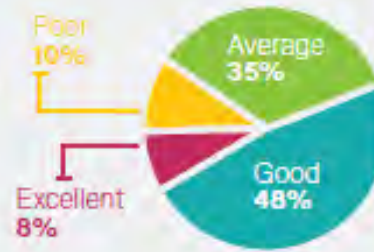
- Perceptions on Transportation Issues
- Methods of Transportation Used
- Concerns Regarding Traffic Safety

- **Method:**

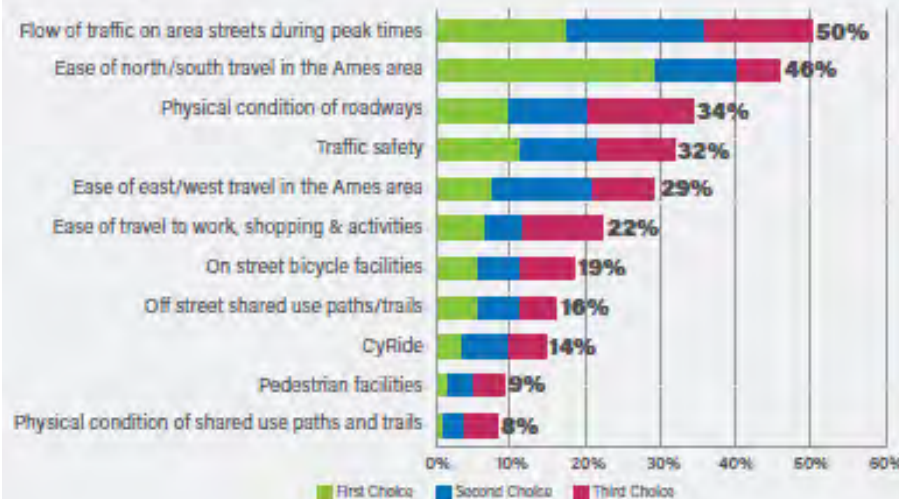
- Random Sample of Residents
- 404 Surveys Completed
- +/- 4.8% at the 95% Level of Confidence

## The Current Ames Transportation System Overall

Would you rate the transportation system in the Ames area as excellent, good, average, or poor?



### Most important transportation issues:



## Key sentiment across multiple modes:



### ROADWAYS

- 30% of respondents are dissatisfied with the physical condition of roadways.



### BICYCLE FACILITIES

- 19% of respondents feel safe or very safe on major streets without bike lanes.
- 42% of respondents feel safe or very safe on streets with an on-street bike lane.
- 79% of respondents feel safe or very safe on shared use paths or trails.



### PEDESTRIAN FACILITIES

- 74% of respondents feel safe or very safe walking or using a wheelchair on shared-use paths or trails where they live.



### TRANSIT

- 76% of respondents rate the availability of public transit in Ames good or excellent.



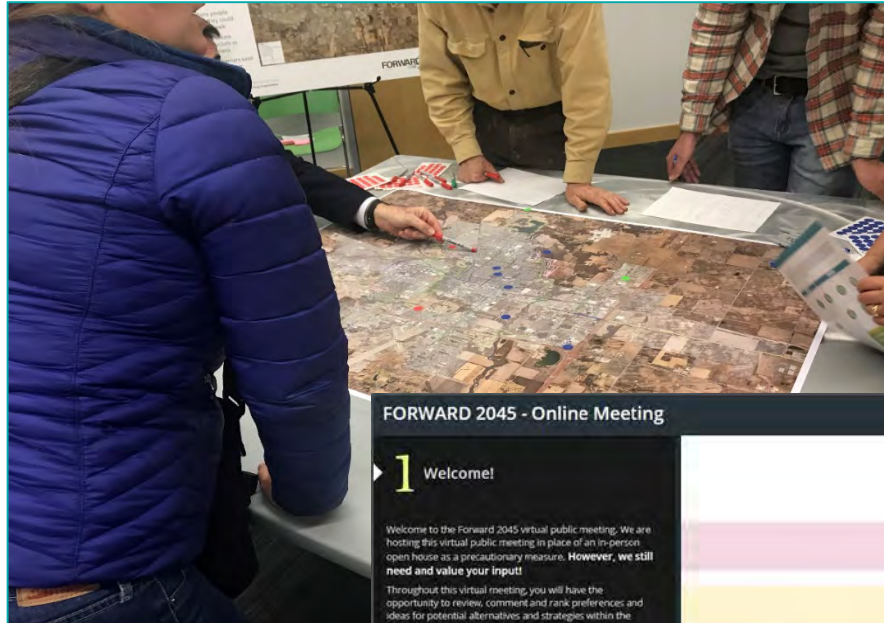
# In-Person and Online Events

- **Visioning**

- Open House
  - 11/14/2019
  - 40 Attendees
- Online Open House
  - 11/5/2019 – 11/27/2019
  - 91 Visits

- **Alternatives & Strategies**

- Virtual Open House
  - 3/31/2020 – 4/14/2020
  - 443 Visits
  - >200 Unique Comments



## FORWARD 2045 - Online Meeting

### 1 Welcome!

Welcome to the Forward 2045 virtual public meeting. We are hosting this virtual public meeting in place of an in-person open house as a precautionary measure. However, we still need and value your input!

Throughout this virtual meeting, you will have the opportunity to review, comment and rank preferences and ideas for potential alternatives and strategies within the Ames transportation system.

Begin by clicking on each number in this bar on the left to navigate through each page of the virtual meeting.

### 2 Forward 2045 Overview

### 3 Visioning Open House Results

### 4 Let's Get Started!

### 5 Roadway Analysis Results





# Transportation Policy Committee

## ***Past Meetings:***

- **July 14, 2020**
  - Issues/Visioning Process
  - Vision, Goals, & Objectives Development
  - Performance Based Planning Approach
  - Alternatives Development
- **September 8, 2020**
  - Alternative Evaluation
  - Draft Fiscally Constrained Plan

## ***Current Meeting:***

- **September 22, 2020**
  - Present draft Metropolitan Transportation Plan

## ***Future Meeting:***

- **October 27, 2020**
  - Adopt Metropolitan Transportation Plan



# Comprehensive Plan Coordination

## *Ames Plan 2040*

- In-progress Comprehensive Plan

LIVE.  
GROW.  
BELONG.

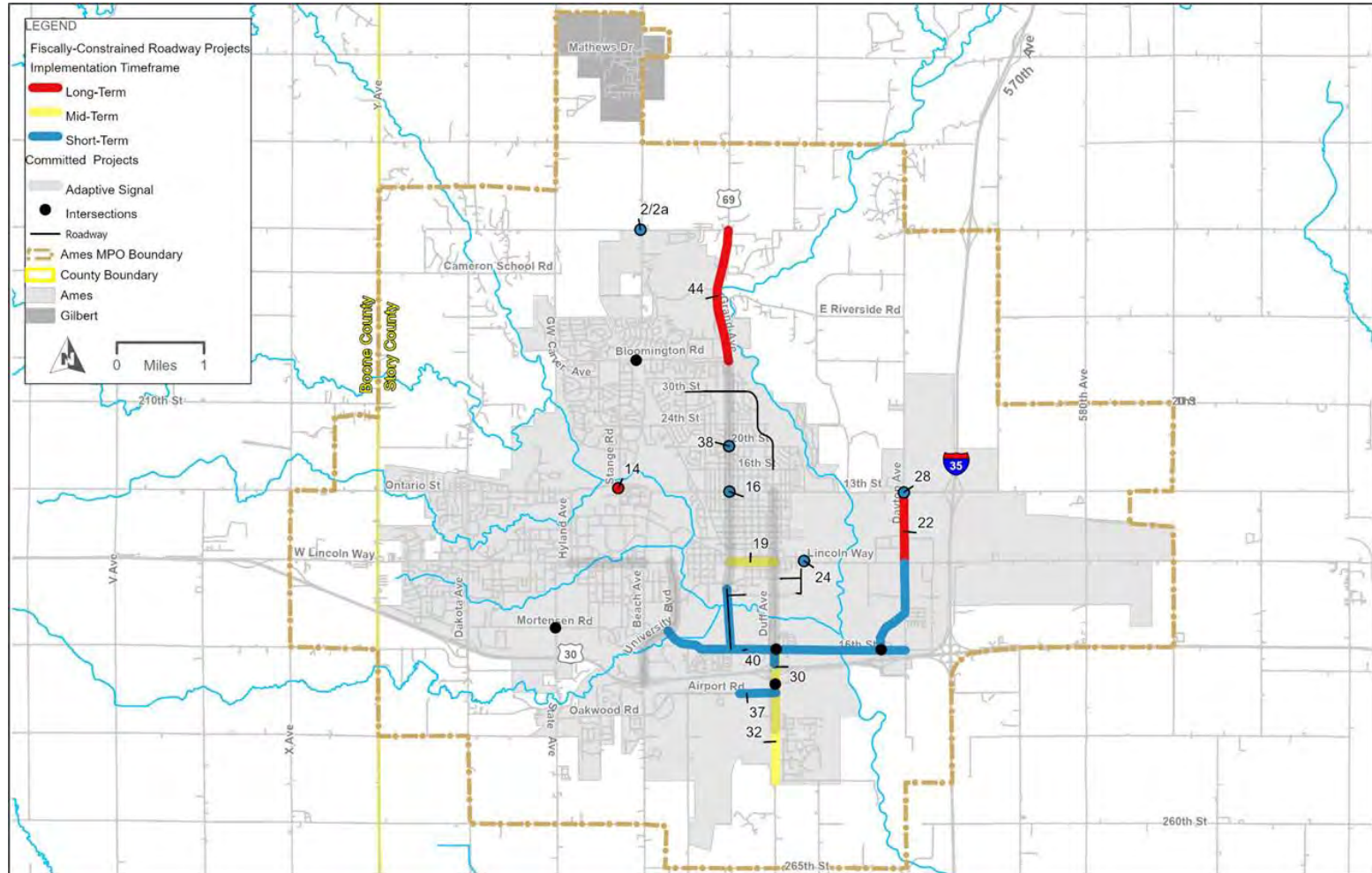




# Fiscally Constrained Plan

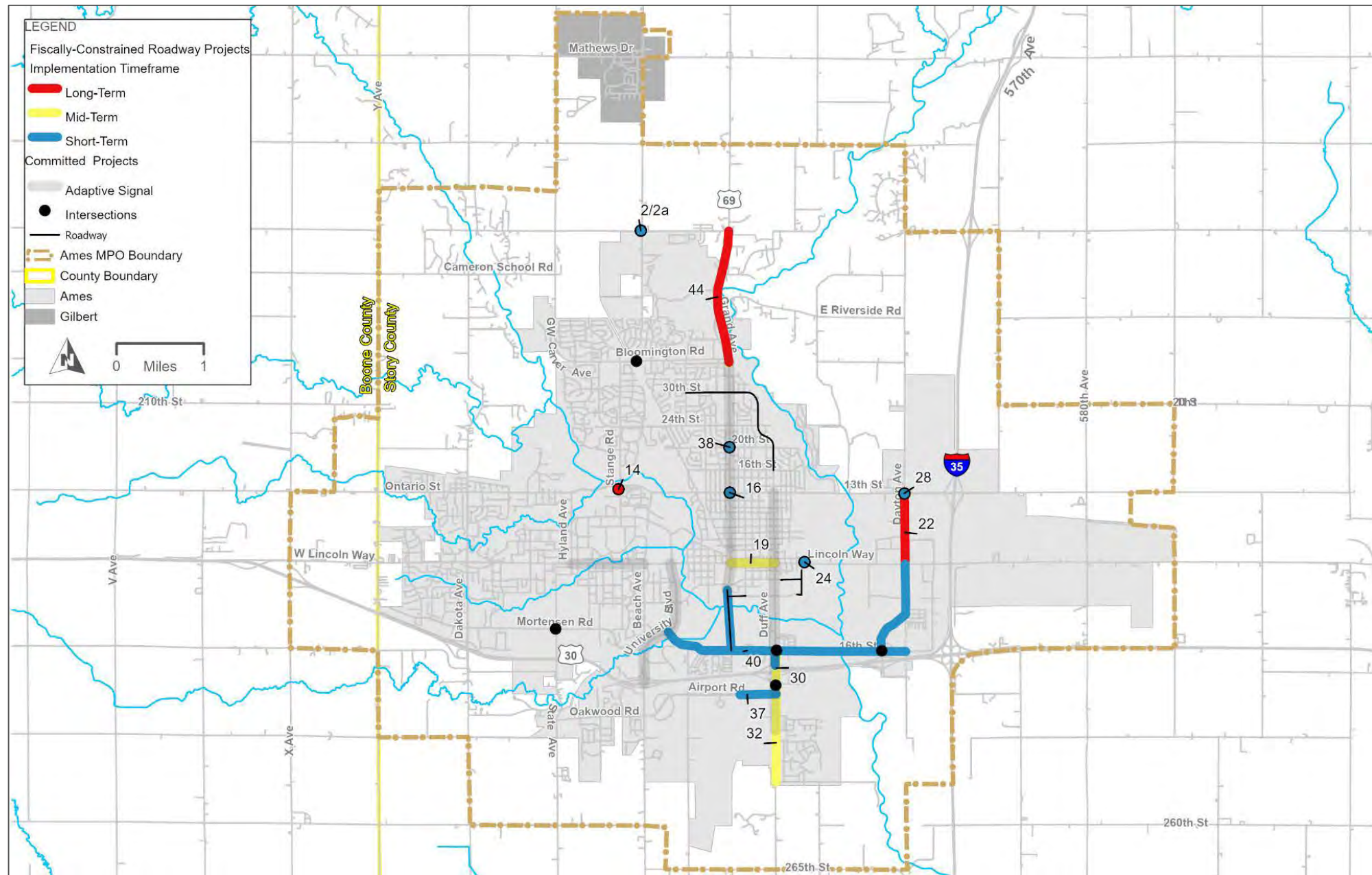
- Roadway
- Bicycle/Pedestrian
- Transit
- Regional Policy Options & Strategies

## Fiscally-Constrained Roadway Projects





# Roadway



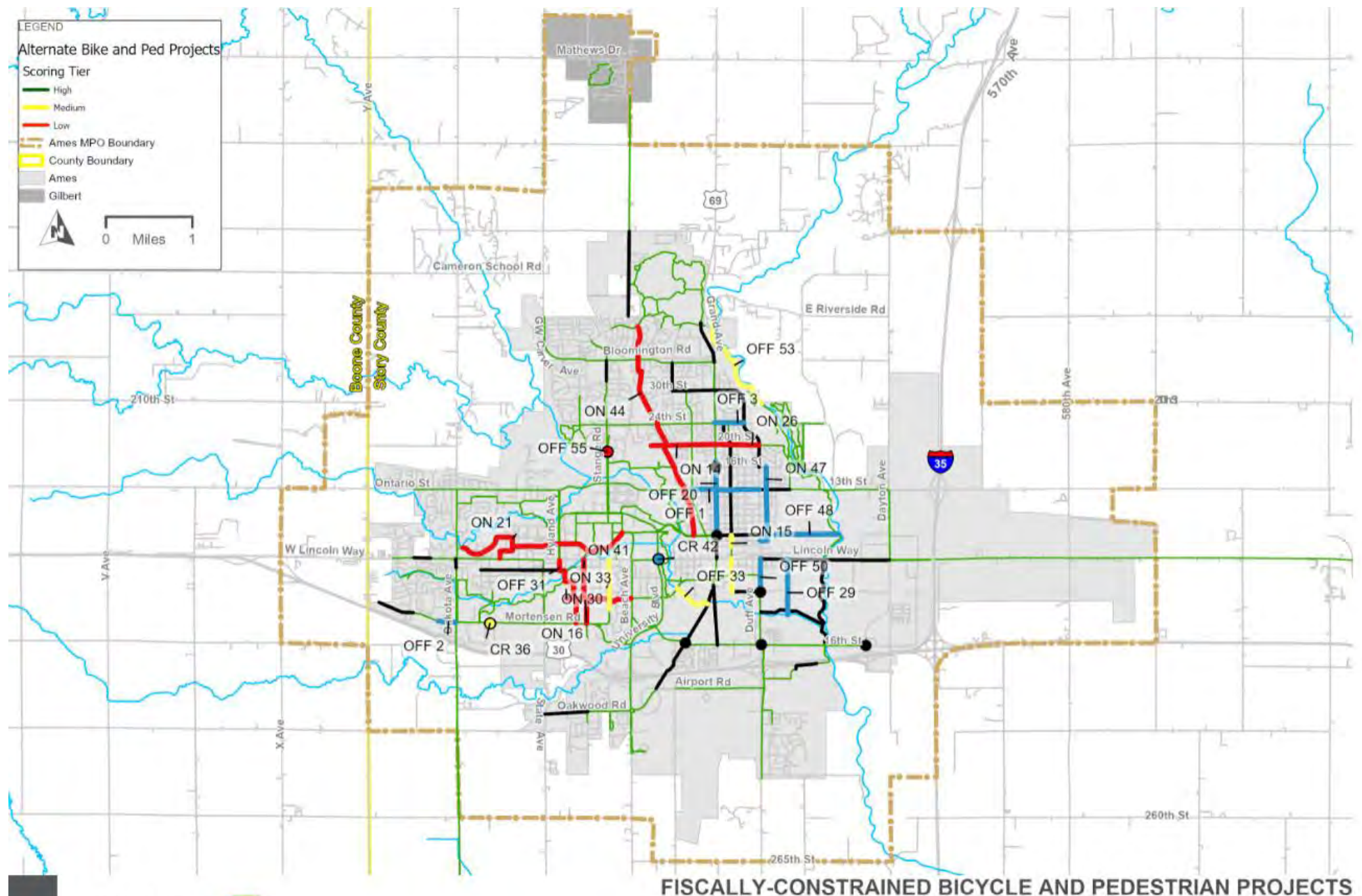


# Roadway Plan

Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share	Potential Non-Local Funding Sources	Potential Sponsor(s)
Short-Term (2025-2029)	40	16th Street, Grand Avenue, and Dayton Avenue Traffic Signals	\$1,130,000	\$1,440,000	\$724,752	\$715,248	ICAAP	City of Ames
	37	Airport Rd from Duff Ave to Sam's Club - Improve Roadway Access	\$800,000	\$1,020,000	\$513,366	\$506,634	STBG Swap	City of Ames
	16	13th St & Grand Ave - Left Turn Lanes (All Approaches)	\$3,000,000	\$3,820,000	\$1,922,606	\$1,897,394	STBG Swap	City of Ames
	2 OR 2A	Hyde Ave/Grant Ave & W 190th St	\$2,000,000	\$2,540,000	\$1,278,382	\$1,261,618	STBG Swap	Story County / City of Ames
	28	13th Street & Dayton Ave - Add turn lane(s)	\$2,000,000	\$2,540,000	\$1,278,382	\$1,261,618	STBG Swap	City of Ames
	24	Cherry – Lincoln Way Intersection Improvements	\$1,200,000	\$1,530,000	\$770,049	\$759,951	STBG Swap	City of Ames
	38	Grand Ave & 20th St - Left Turn Lanes	\$1,600,000	\$2,040,000	\$1,026,732	\$1,013,268	STBG Swap	City of Ames
Time Frame Total			\$11,730,000	\$14,930,000	\$7,514,269	\$7,415,731		
Mid-Term (2030-2037)	30	Duff Ave from S 16th Street to Airport Rd - Widen to 6 Lanes/Reconstruct Interchange	\$10,000,000	\$15,910,000	\$8,007,503	\$7,902,497	STBG / NHPP / ICAAP	City of Ames / Iowa DOT
	19	Lincoln Way from Gilchrist St to Duff Ave - Road Diet from 4 Lanes to 3 Lanes	\$1,750,000	\$2,780,000	\$1,399,174	\$1,380,826	STBG Swap	City of Ames
	32a	Duff Ave from Airport Rd to Ken Maril - Widen to 5 Lanes	\$8,010,000	\$12,740,000	\$6,412,042	\$6,327,958	ICAAP	City of Ames
Time Frame Total			\$19,760,000	\$31,430,000	\$15,818,719	\$15,611,281		
Long-Term (2038-2045)	44a	Grand Ave from Bloomington Rd to 190th St - Widen to 5 Lanes	\$10,400,000	\$21,790,000	\$10,966,907	\$10,823,093	ICAAP / NHPP	City of Ames / Iowa DOT
	22	Dayton Ave from 13th St to Lincoln Way - Widen to 5 Lanes	\$3,200,000	\$6,700,000	\$3,372,110	\$3,327,890	STBG Swap	Story County / City of Ames
	14	13th St & Stange Road - N/S Left Turn Lanes	\$2,490,000	\$5,220,000	\$2,627,226	\$2,592,774	Local	City of Ames
Time Frame Total			\$16,090,000	\$33,710,000	\$16,966,243	\$16,743,757		
Grand Total			\$47,580,000	\$80,070,000	\$40,299,231	\$39,770,769		



# Bicycle/ Pedestrian





# Bicycle / Pedestrian Plan

Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share	Potential Funding Sources	Potential Sponsor(s)
Short-Term (2025-2029)	CR 42	Intersection of Lincoln Way / University - Protected intersection. Roadway project 25	\$750,000	\$950,000	\$0	\$950,000	TAP / Local	City of Ames
	OFF 1	East 13th sidepath, Northwestern Ave to Duff Ave	\$560,000	\$710,000	\$87,330	\$622,670	TAP / Local	City of Ames
	OFF 2	West Mortensen Side Path, fill in gap west of South Dakota	\$410,000	\$520,000	\$63,960	\$456,040	TAP / Local	City of Ames
	OFF 3	24th St Sidepath Grand to Duff	\$250,000	\$320,000	\$39,360	\$280,640	TAP / Local	City of Ames
	OFF 20	Grand Ave Side Path between 6th and 16th Street	\$650,000	\$830,000	\$102,090	\$727,910	TAP / Local	City of Ames
	OFF 29	Cherry Street Connection to Squaw Creek	\$490,000	\$620,000	\$76,260	\$543,740	TAP / Local	City of Ames
	OFF 48	East 6th St to Skunk River Connection	\$550,000	\$700,000	\$86,100	\$613,900	TAP / Local	City of Ames
	OFF 50	South Duff Sidepath	\$290,000	\$370,000	\$45,510	\$324,490	TAP / Local	City of Ames
	ON 15	Clark / Walnut Bike Route, South 3rd to S 5th Street	\$90,000	\$110,000	\$13,530	\$96,470	TAP / Local	City of Ames
	ON 47	Carroll Ave Bike Route	\$150,000	\$190,000	\$116,466	\$73,534	TAP / Local	City of Ames
Time Frame Total			<b>\$4,190,000</b>	<b>\$5,320,000</b>	<b>\$630,606</b>	<b>\$4,689,394</b>		
Mid-Term (2030-2037)	OFF 53	Skunk River trail connection	\$2,990,000	\$4,760,000	\$585,480	\$4,174,520	TAP / Local	City of Ames
	OFF 33	Squaw Creek Trail from Grand Avenue Extension to 4th Street	\$2,200,000	\$3,500,000	\$430,500	\$3,069,500	TAP / Local	City of Ames
	ON 30	Ash Ave Bike Route, current bike lane end to Lincoln Way	\$80,000	\$130,000	\$15,990	\$114,010	TAP / Local	City of Ames
	CR	Various Pedestrian Crossing Projects	\$1,700,000	\$2,700,000	\$0	\$2,700,000	TAP / Local	City of Ames
Time Frame Total			<b>\$6,970,000</b>	<b>\$11,090,000</b>	<b>\$1,031,970</b>	<b>\$10,058,030</b>		



# Bicycle / Pedestrian Plan

Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share	Potential Funding Sources	Potential Sponsor(s)
Long-Term (2038-2045)	OFF 31	Hyland-Hayward South Campus Trail Connection	\$1,850,000	\$3,880,000	\$477,240	\$3,402,760	TAP / Local	City of Ames
	OFF 55	Stange Rd Pedestrian Crossing	\$110,000	\$230,000	\$28,290	\$201,710	TAP / Local	City of Ames
	ON 14	20th St Bike Route, Ames High to Grand	\$150,000	\$310,000	\$38,130	\$271,870	TAP / Local	City of Ames
	ON 16	Welch On-Street Bike Treatment, Mortensen to Union Drive	\$90,000	\$190,000	\$23,370	\$166,630	TAP / Local	City of Ames
	ON 21	Bike Route north of Lincoln Way between North Dakota and Iowa State Campus	\$350,000	\$730,000	\$89,790	\$640,210	TAP / Local	City of Ames
	ON 26	20th Street Bike Route, Grand to Duff	\$70,000	\$150,000	\$18,450	\$131,550	TAP / Local	City of Ames
	ON 33	Cessna St Bike Route	\$110,000	\$230,000	\$28,290	\$201,710	TAP / Local	City of Ames
	ON 41	Welch Ave Pedestrian Mall (Lincoln to Hunt)	\$130,000	\$270,000	\$33,210	\$236,790	TAP / Local	City of Ames
	ON 44	Eisenhower Ave/Hayes Ave/Ridgewood Ave from Harrison Rd to 6th St - Bike Route	\$380,000	\$800,000	\$98,400	\$701,600	TAP / Local	City of Ames
	CR	Various Pedestrian Crossing Projects	\$2,400,000	\$5,030,000	\$0	\$5,030,000	TAP / Local	City of Ames
Time Frame Total			\$5,640,000	\$11,820,000	\$835,170	\$10,984,830		
Grand Total			\$16,800,000	\$28,230,000	\$2,497,746	\$25,732,254		



# Transit Plan

Time Frame	Project ID	Project Description	Cost (YOE \$)
Short-Term (2025-2029)	1	Vehicle Replacement/Expansion - 3 buses per year	\$9,200,000
	2	Building Improvements and Expansion	\$3,880,000
	8	Light Duty Vehicles	\$660,000
	9	Articulated Bus Expansion/Replacement	\$4,930,000
	10	Install Benches & Shelters	\$200,000
	Total		\$18,870,000
Mid-Term (2030-2037)	1	Vehicle Replacement/Expansion - 3 buses per year	\$17,860,000
	2	Building Improvements and Expansion	\$7,540,000
	8	Light Duty Vehicles	\$1,280,000
	9	Articulated Bus Expansion/Replacement	\$9,570,000
	10	Install Benches & Shelters	\$380,000
	Total		\$36,630,000
Long-Term (2038-2045)	1	Vehicle Replacement/Expansion - 3 buses per year	\$22,620,000
	2	Building Improvements and Expansion	\$9,550,000
	8	Light Duty Vehicles	\$1,620,000
	9	Articulated Bus Expansion/Replacement	\$12,130,000
	10	Install Benches & Shelters	\$480,000
	Total		\$46,400,000
Grand Total			\$101,900,000

Note: All Projects are Rolling Stock and Facilities / Stations Improvements



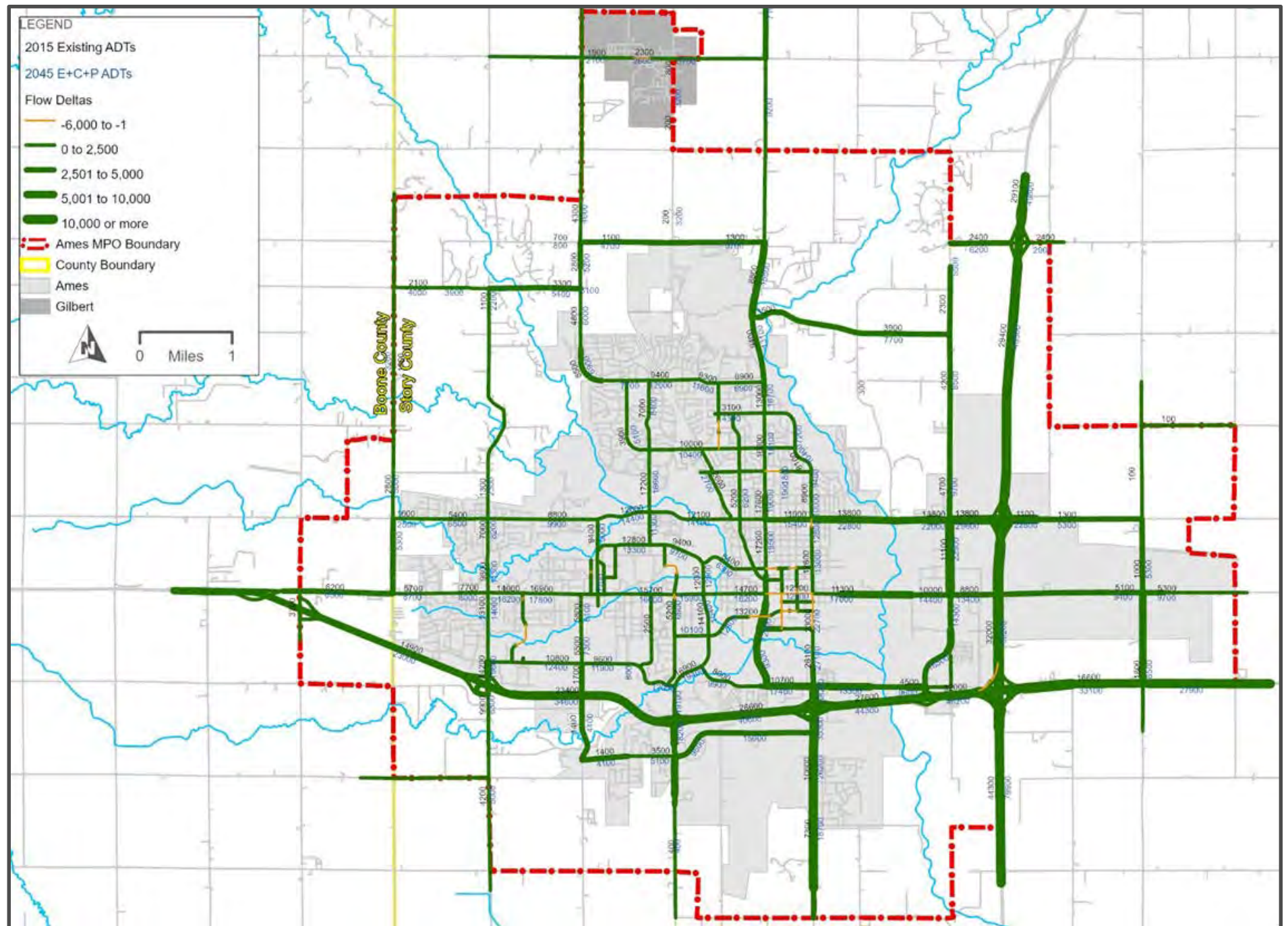
# Future Planned Performance

Performance Measure (Annual)	2015	2045 E+C	2045 E+C+P	2015-2045 E+C change	2015-2045 E+C+P change
Vehicle Miles Traveled (VMT)	468,226,535	714,556,026	713,740,563	52.6%	52.4%
Vehicle Hours Traveled (VHT)	11,836,478	20,602,681	19,921,382	74.1%	68.3%
Trips	154,187,813	202,555,211	202,555,211	31.4%	31.4%
Average Trip Length (miles)	3.04	3.53	3.52	16.2%	16.0%
Average Trip Speed (mph)	39.6	34.7	35.8	-12.5%	-9.4%

- Existing plus Committed Network (E+C)
- Existing plus Committed plus Planned Network (E+C+P)

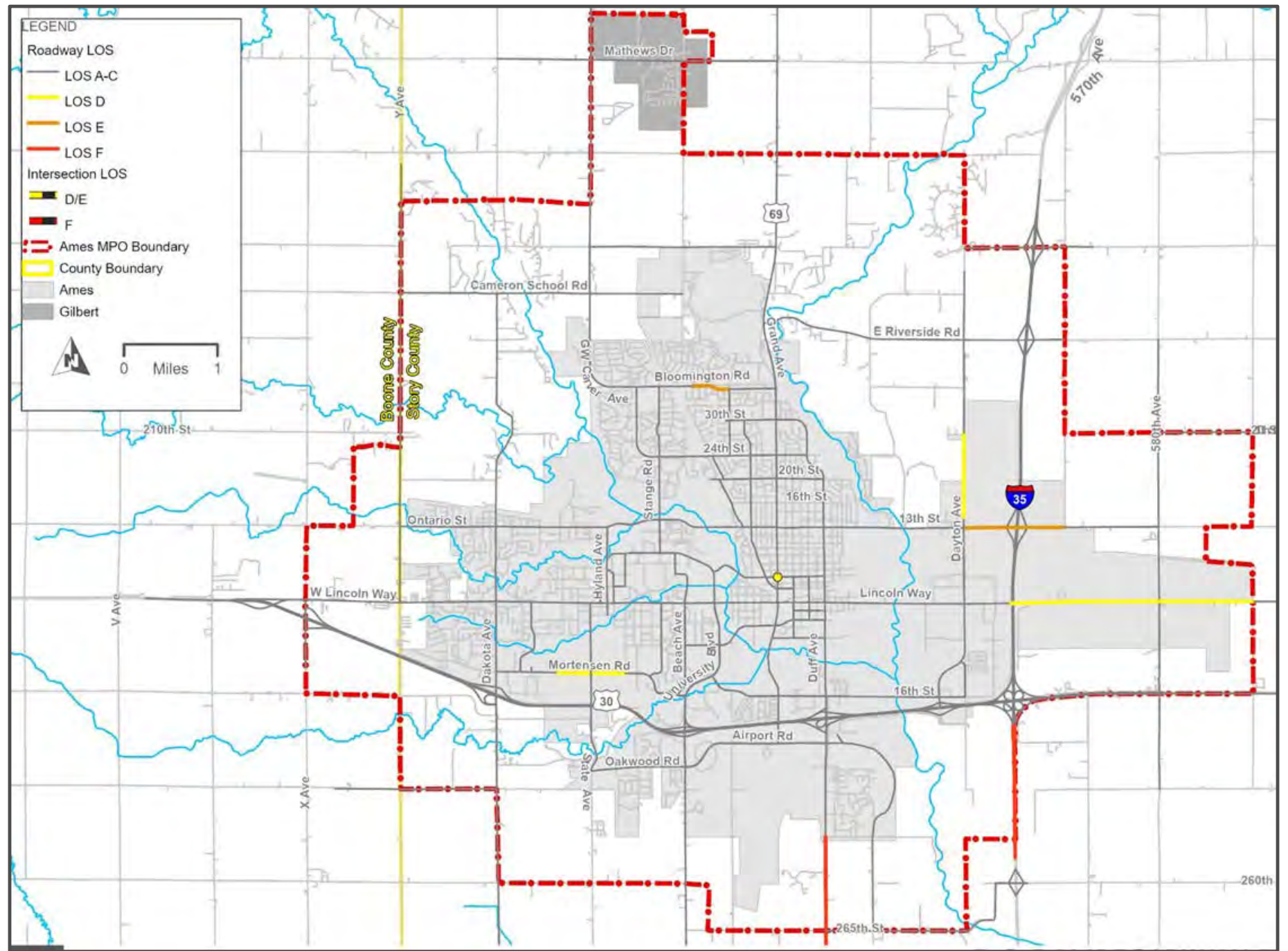


# Existing and 2045 E+C+P ADTs





# 2045 E+C+P Roadway Level of Service





# Illustrative, Developer-Driven and Potential Iowa DOT Projects



# Illustrative Roadway Projects

MTP ID	Project Description	Project Cost
1	520th Ave & W 190th St - Roundabout	\$1,500,000
4	E Riverside Rd to from Grand Ave to N Dayton Ave - Widen to 3 Lanes	\$12,920,000
5	E Riverside Rd from N Dayton Ave to 570th Ave - Add New 3-Lane Road & I-35 Overpass	\$7,950,000
6	E Riverside Rd & I-35 - New Interchange (remove 190th St/I-35 Interchange)	\$15,000,000
9	Bloomington Rd from Hyde Ave to Hoover Ave - Widen to 4 Lanes	\$3,210,000
10	580th St and UPPR Grade Separation	\$2,830,000
11	Duff Ave & 16th/20th/24th St Roundabout/Traffic Circle	\$1,500,000
13	N Dakota from Ontario St to UPRR - Widen to 3 Lanes	\$840,000
17	13th St from Dayton Ave to 570th Ave - Widen to 6 Lanes/Reconstruct Interchange to 4 lane Diverging Diamond Interchange	\$11,880,000
21	Duff Ave and UPPR grade separation	\$22,000,000
29	Grand Ave from S 16th Street to Airport Rd - New Road w/ Traffic Signal @ Airport Road	\$13,500,000
33	265th St from Duff Ave to Skunk River - Pave to 3 Lanes	\$5,500,000
34	265th St from Skunk River to I-35 - Pave to 2 Lanes	\$2,800,000
35	265th St & I-35 - New Interchange	\$15,000,000
36	265th from University Ave to Duff Ave & University Ave from 265th to Collaboration PI - Pave to 3 Lanes	\$9,660,000
45	190th St from 520th Ave to Grand Ave - Widen to 3 Lanes / Grade Separation w UPRR	\$11,310,000
53	South Dakota Avenue from Lincoln Way to Mortensen Road - Widen to 5 lanes	\$6,000,000
1a	520th Ave & W 190th St - Traffic Signal & Turn Lanes	\$1,400,000



# Illustrative Transit Projects

MTP ID	Project Description	Project Type	Notes
1	Lincoln & Beach - Add Transit Signal Priority	Transit Signal Priority	Projects 1 and 2 tied to committed project C6 - Lincoln Way from Beach Ave to Hyland Ave traffic signal project. Funding would be coordinated with City of Ames Public Works.
2	Lincoln & Welch - Add Transit Signal Priority	Transit Signal Priority	
3	Stange & Bruner - Add New Signal	New Signal	Project funding would be coordinated with City of Ames Public Works
4	Stange & Blankenburg - Add Pedestrian Crossing	Pedestrian Crossing	Project funding would be coordinated with City of Ames Public Works
5	South Dakota & Steinbeck - Add Pedestrian Crossing	Pedestrian Crossing	Project funding would be coordinated with City of Ames Public Works
6	Ames Intermodal Facility Improvements	Facilities	Facility is new in 2012, but some improvements like lot resurfacing are anticipated by 2045. Assume some cost sharing with City.
7	Iowa State Center (ISC) - Implement Transit-Oriented Development in Conjunction with Redevelopment	Transit Oriented Development	Project funding would be coordinated with ISU. CyRide participation not certain, and impacts to service will vary according to redevelopment project plans.
8	South 16th Street - Add Innovative Transit Service Zone	Service	Additional vehicle in East Ames on weekdays 7am-7pm (year-round)
9	North Ames (Somerset/Northridge/Valley View) - Add Innovative Transit Service Zone	Service	Weekdays 7am-7pm (year-round)
10	Applied Sciences - Add Innovative Transit Service Zone	Service	Weekdays 7am-7pm (school year only)
11	Stange Road from Bloomington to University - Corridor Service Improvements	Service	Daily 20-minute service (school year only)
12	University Blvd from ISU/ISC to ISU Research Park - Corridor Service Improvements	Service	Daily 20-minute service (school year only)
13	South Duff from Lincoln to Crystal - Corridor Service Improvements	Service	Daily 20/30-minute service (year-round with reduced summer/break schedule)
14	Airport Road from South Duff to University - Corridor Service Improvements	Service	Weekdays 7am-7pm (year-round)
15	Ames to Ankeny and Des Moines Intercity/Commuter Service	Service	Would likely not be funded by CyRide
16	Amtrak Thruway from Ames to Osceola Intercity/Commuter Service	Service	Two trips per day; would likely not be funded by CyRide



# Illustrative Transit Projects (Continued)

MTP ID	Project Description	Project Type	Notes
17	ISU to College of Veterinary Medicine - Corridor Service Improvements	Service	Weekdays 7am-7pm (school year only)
18	Additional Vehicle Replacement/Expansion	Rolling Stock	Vehicle replacement beyond levels in constrained plan.
19	Additional Battery Electric Buses	Rolling Stock	
20	Additional Battery Electric Bus Charging Infrastructure	Facilities	
21	Facility Expansion/Modifications	Facilities	
22	Automatic Passenger Counters (APCs) for Full Fleet to Collect Stop-Level Ridership Data	Technology	Eleven vehicles have APCs now; install APCs on 69 remaining vehicles in peak fleet (total of 80 large vehicles)
23	Automatic Vehicle Location (AVL) Technology Upgrades - Future Technology	Technology	
24	Real-Time Passenger Information System - Information to Customers on Vehicle Location and Passenger Loads	Technology	
25	On-Demand Trip Booking App for East Ames Service Extension (EASE) and Moonlight Express	Technology	
26	Electronic Farebox System	Fares	RFID/QR reader to validate passes; assumed installation on 80 vehicles
27	Provide Free Fares for Youth (18 and Under)	Fares	
28	Regional Commuter Study (North Ames, Nevada, Gilbert, Boone, etc.)	Planning	Planning funds would be requested from Ames MPO
29	Late-Night Service Effectiveness Study	Planning	Planning funds would be requested from Ames MPO
30	Install Benches & Shelters	Passenger Amenities	Benches and shelters beyond levels in constrained plan.
31	Add Passenger Information at Bus Stops	Passenger Amenities	
32	Add LED Signage and Real-Time Passenger Information at Major Bus Stops	Passenger Amenities	Would be installed in high-demand and transfer stops
33	Transit and Bicycle Integration - Roadway Improvement Projects	Multimodal Integration	Transit islands and other infrastructure improvements when road diets are implemented. Project funding coordinated with City of Ames.



# Developer-Driven Roadway Projects

MTP ID	Project Description	Cost
12	550th Ave from 265th to Ken Maril Rd - Pave 2 Lanes	\$5,600,000
18	13th St from 570th Ave to 580th Ave - Widen to 4 Lanes	\$8,040,000
26	Y St from Lincoln Way to Mortensen Rd including Mortensen Rd Extension to Y St - Pave 3 Lanes	\$3,200,000
27	<u>Freel</u> Dr from Lincoln Way to Dayton Ave - Add New Road	\$4,500,000
32	Duff Ave from Airport Rd to 265th St - Widen to 5 Lanes	\$16,020,000
43	George Washington Carver from Weston Dr to 190th St - Widen to 3 Lanes	\$5,650,000
46	Dayton Ave from 13th St to Riverside Rd - Widen to 3 Lanes	\$9,870,000
47	Cameron School Rd from George Washington Carver to Grant Ave - Pave to 3 Lanes / Grade Separation w/ UPRR	\$6,330,000
48	Stange Rd Extension North to Cameron School Rd - Pave 3 Lanes	\$2,700,000
49	Lincoln Way from <u>Thackery</u> Rd to Y Ave - Widen to 4 Lanes	\$5,800,000
51	Y Ave from Lincoln Way to Ontario St - Widen to 3 Lanes	\$4,070,000
52	Lincoln Way from Y Ave to X Ave - Widen to 4 Lane	\$8,070,000
54	Lincoln Way from I-35 to 580th Ave - Widen to 3 Lanes	\$8,200,000

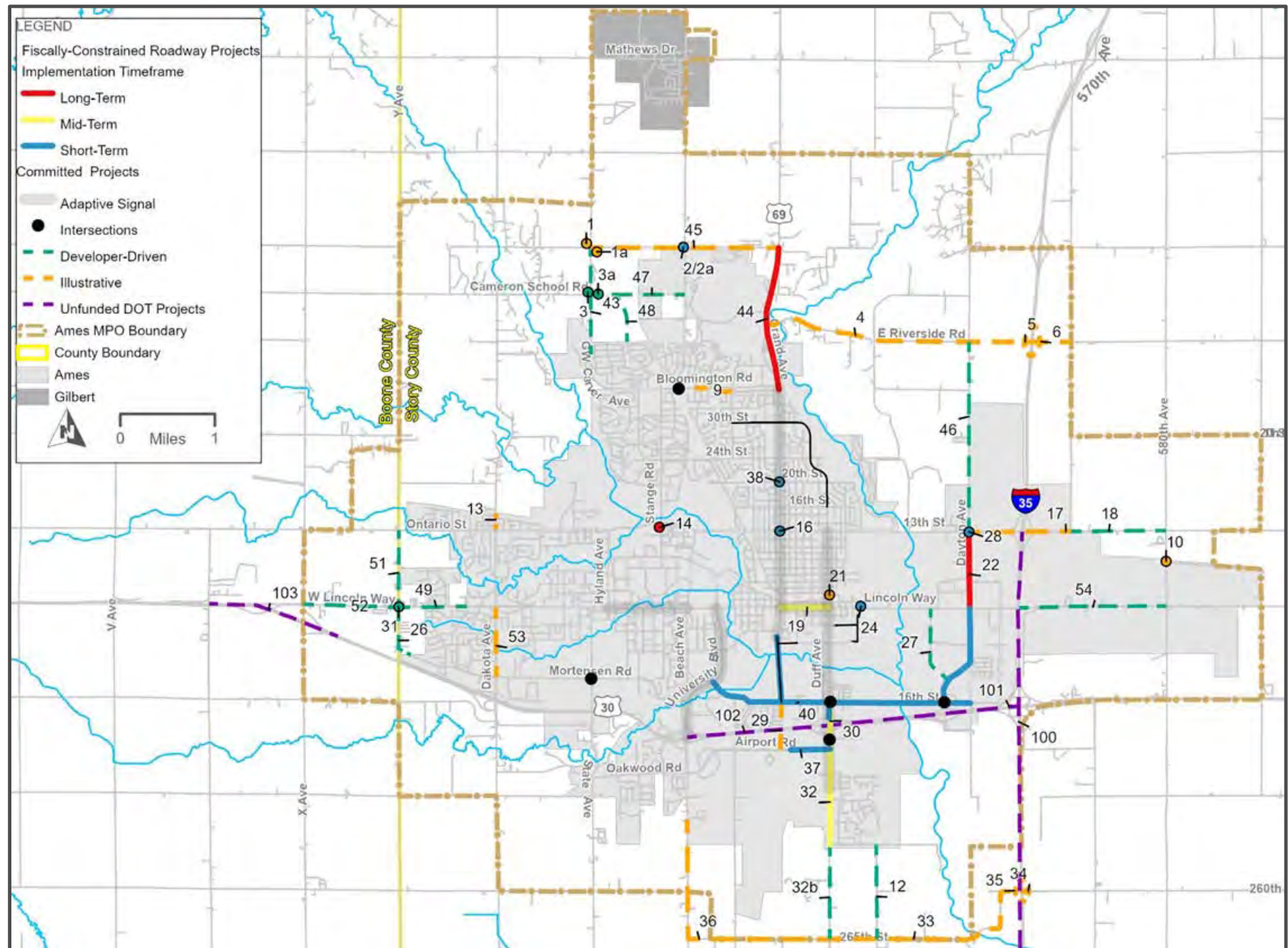


# Unfunded Iowa DOT Roadway Projects

MTP ID	Project Description
100	I-35 Widening-From 13th St south to MPO Boundary
101	US 30 Widening-From I-35 to Duff Ave
102	US 30 Widening-From Duff Ave to University Ave
103	US 30-X Ave / W Ave interchange reconstruction and reconfiguration



# Fiscally Constrained and Alternative Roadway Projects





# Next Steps:

- ***Public Comment Period***
  - 9/23/2020 to 10/22/2020
- ***Transportation Policy Committee***
  - 10/27/2020
  - Adopt Final MTP





Questions?





# Forward 2045 Metropolitan Transportation Plan

Ames Area Metropolitan  
Planning Organization

SEPTEMBER 2020





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## Chapter 1 Introduction and Goals

### Introduction

#### Ames Area Metropolitan Planning Organization

The Ames Area Metropolitan Planning Organization (AAMPO) is a federally-mandated organization that is responsible for the expenditures for transportation projects and programs that are based on a comprehensive, cooperative, and continuing planning process. AAMPO was designated as the MPO of the Ames urbanized area in 2003, when the population exceeded 50,000. Since its designation, the MPO has expanded its boundary to include the City of Gilbert. The current MPO planning area, shown in **Figure 1-1**, was approved in 2012.

In addition to the Cities of Ames and Gilbert, there are seven other member jurisdictions comprising AAMPO:

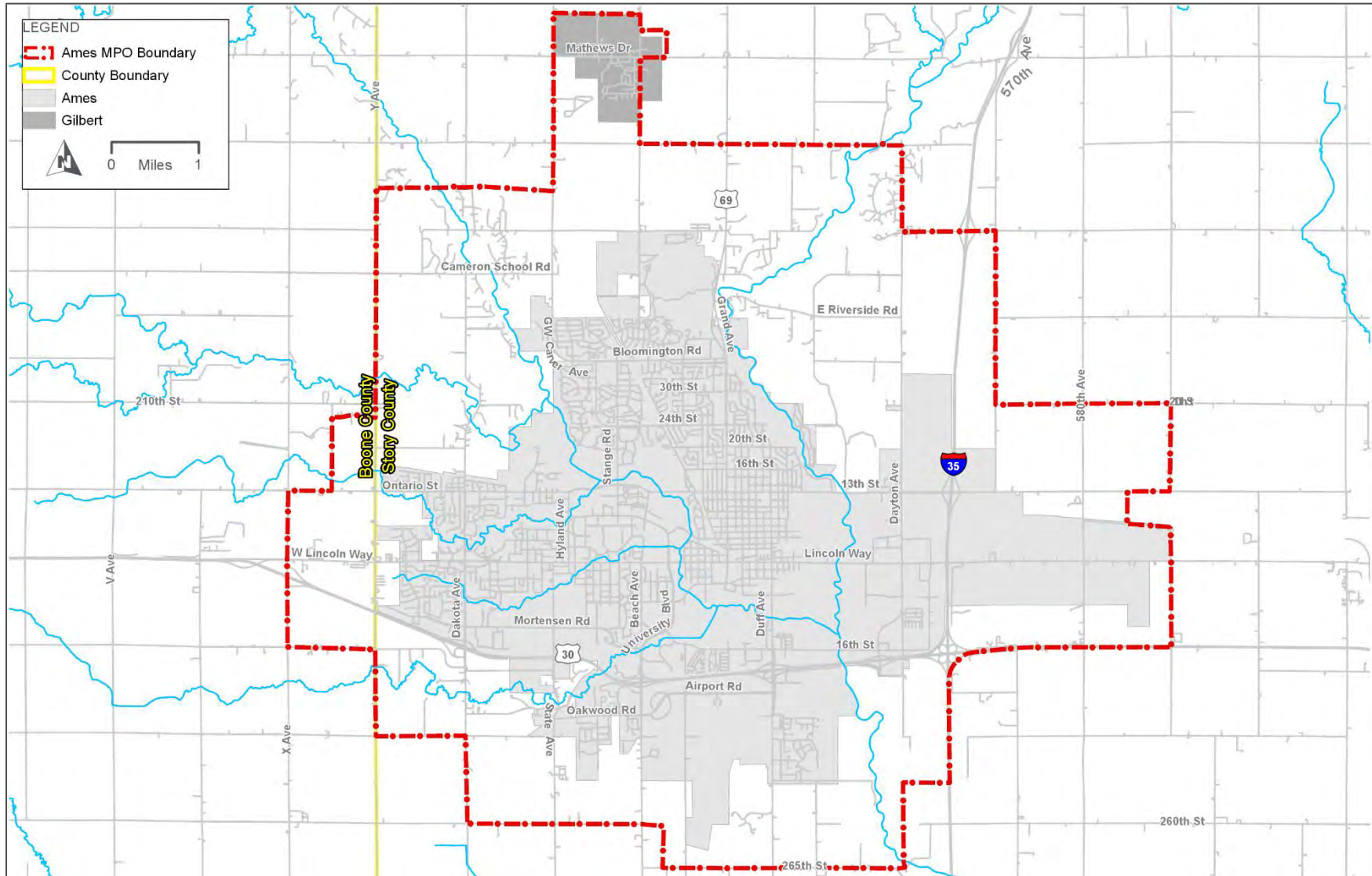
- Story County
- Boone County
- CyRide (Ames transit agency)
- Iowa State University
- Iowa Department of Transportation
- Federal Highway Administration
- Federal Transit Administration

Two committees govern AAMPO:

- **Transportation Policy Committee (TPC):** Provides policy direction for the development of regional long-range transportation planning and selects projects within the metropolitan area for inclusion in a short-range Transportation Improvement Program (TIP). The TPC consists of the City of Ames mayor and city council, Boone and Story County representatives, a CyRide representative, and a City of Gilbert Representative. Non-voting representatives from the Iowa Department of Transportation (DOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Iowa State University are also TPC members.
- **Transportation Technical Committee (TTC):** Serves as the technical advisory body to the TPC and consists of professionals representing various transportation-related agencies within the MPO area, including the City of Ames, Story and Boone Counties, Iowa DOT, FHWA, FTA, and Iowa State University.



Figure 1-1: AAMPO Planning Area





### Metropolitan Transportation Plan

AAMPO is updating its Metropolitan Transportation Plan (MTP), Forward 2045. This Plan acts as the framework for guiding the MPO's transportation investments and policy decisions over the next 25 years by identifying a regional vision for the multi-modal transportation system through stakeholder and community input. Goals and objectives, based on this vision, were developed to articulate the actionable strategies available to the MPO for realizing this vision. Included in Forward 2045 is a prioritized list of multimodal system improvements that fit within the fiscal constraints of AAMPO based on anticipated future funding.

### Performance-Based Planning

Forward 2045 is a performance-based document that supports AAMPO's continuing system performance goals and targets through the application of FWA performance management techniques. These techniques are used to inform transportation investments and policy decisions that support national, state, and local transportation goals. Performance-based planning relies on the ongoing monitoring of the transportation system, which enables AAMPO to monitor the progress made towards its regional vision. **Forward 2045** utilizes this performance-based approach and ties the regional vision for the transportation system to Federal planning requirements, the conditions of the existing system, and state and local agencies. Through the continual monitoring of the system, the AAMPO will be able to constantly gauge progress made towards the MTP goals and objectives.





### The Forward 2045 Vision

The Vision Statement for Forward 2045 was developed early in the MTP process and was based on input given by the community during the Public Visioning Open House event (for more information on Forward 2045 public engagement, check out **Appendix A**).

**Based on the input from community members, the vision statement for Forward 2045 is:**

*“The Ames area future transportation plan delivers **safe, efficient** and **reliable** solutions that are **accessible** to all users. The plan focuses on **preserving** the existing network and shaping the public realm through **placemaking**, while providing long-term **sustainability**.”*





## Related Planning Efforts



### *Ames Plan 2040 (Comprehensive Plan):*

The Ames Plan 2040 serves as an update to the City of Ames' current Comprehensive Plan. Ames Plan 2040 will re-focus the City's vision for its land use planning and decision-making as the community seeks to manage anticipated growth through the year 2040. Under the unifying themes of Sustainability, Health, Choices, and Inclusivity, Ames Plan 2040 reinforces Forward 2045 through supporting the MTP's goals for a financially and environmentally sustainable future transportation system that provides safe and efficient multi-modal transportation operations.



### *AAMPO 2020-2024 Final Passenger Transportation Plan:*

AAMPO's 2020-2024 Final Passenger Transportation Plan (PTP) was coordinated by the MPO with the purpose of enhancing transportation access throughout the MPO region by working to allocate public transportation resources in the most efficient manner possible, while meeting the needs of residents who rely on public transit. A major element of the PTP is the identification of public transit projects and strategies funded with Federal FTA funds, which are received by the MPO for disbursement to the public transit operators in the region.



### *CyRide Transit Asset Management Plan (TAM):*

CyRide's TAM Plan outlines the structure in which asset management policy and goals address public transit equipment and facilities, as well as providing accountability and visibility for furthering the understanding of asset management practices to ensure the safe and reliable provision of public transit services. A major element of the TAM Plan is the identification and reporting of transit operations performance and performance targets for CyRide's bus fleet, equipment, and other public transit facilities per Federal requirement.







*Complete Street Ames:*

Complete Streets Ames formalizes a context-sensitive planning and design approach to developing a street network that is safer, more comfortable, and more useful for all modes. The plan shifts transportation priorities to be more encompassing of bicycle, pedestrians, and transit, guides design decisions, and increases consistency in transportation design. The Complete Streets Policy articulated in the Plan applies to all existing and future public roads, as well as transportation projects funded by Federal, state, and/or local sources. As such, projects presented in Forward 2045 and located within the boundaries of the City of Ames are subject to the Complete Streets Policy.



*State Transportation Asset Management Plan (TAMP):*

The Iowa DOT's TAMP seeks to identify the optimal strategies for managing existing transportation infrastructure through the most cost-effective approaches available. The TAMP inventories existing assets and presents a series of investment strategies based on the financial plan developed for the state's transportation assets. The goals of the TAMP include planning for the maintenance and expansion of the transportation system more cost-effectively, improving system performance, delivering to Iowa DOT customers the best value for each dollar spent, and enhancing Iowa DOT's credibility and accountability in stewardship of its transportation assets.



*Strategic Highway Safety Plan (SHSP):*

The Iowa DOT's SHSP is a statewide-coordinated plan providing a comprehensive framework for improving safety on public roads. The SHSP identifies goals, objectives, and emphasis areas for Federal, state, and local stakeholders to work towards the vision of Zero Fatalities.





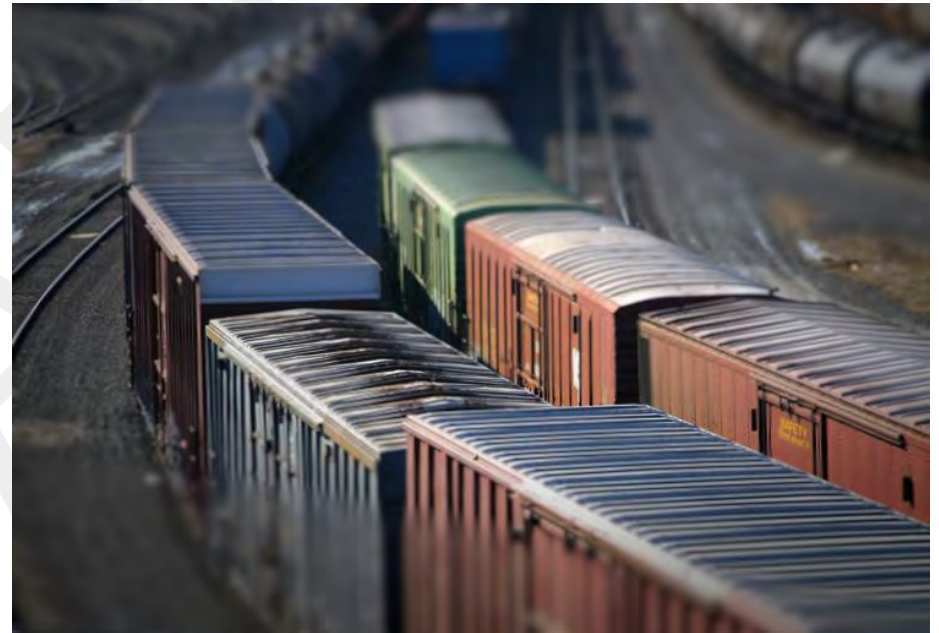
*Iowa State Freight Plan:*

The Iowa DOT's State Freight Plan serves as a supplement to the state's long-range transportation plan, Iowa in Motion 2045. The State Freight Plan provides an in-depth overview of existing and future freight conditions, strategic goals and objectives for freight in Iowa, a freight system investment plan, and an outline of how the state's freight plan supports national economic goals related to freight.



*Iowa In Motion 2045:*

Iowa in Motion 2045 is the state's long-range transportation plan that addresses Federal requirements while presenting a statewide transportation financial and investment plan. The Plan is updated every 5 years so that trends, forecasts, and factors effecting the transportation system are current and best reflect the conditions of the state's system. Iowa In Motion 2045 sets the statewide perspective for planning efforts, which then shapes how MPOs and Regional Planning Affiliations shape their local planning efforts.





## Forward 2045 Goals and Objectives

The transportation goals and objectives presented in the MTP guide the vision for how the future multi-modal system should operate while reflecting the values of the community. These goals and objectives were developed based on input received during the public engagement process, FAST-Act goal areas, and the Metropolitan Planning Factors set forth under 23 U.S.C 450.306(b)(1). **Table 1-1** shows the major goal areas and objectives that were identified for inclusion in this MTP.

## Forward 2045 Goals and Federal Metropolitan Planning Factors

As part of the MTP update, AAMPO is federally-required to develop the plan through a performance-driven and outcome-based approach. To guide MPO's through a planning process that is continuous, cooperative, and comprehensive, 10 Metropolitan Planning Factors that must be met during the MTP were identified by Federal government under 23 CFR 450.306.<sup>1</sup> **Table 1-2** shows a matrix that illustrates how the six goal areas shown in Table 1-1 align with the Metropolitan Planning Factors listed below:







1. Support the economic vitality of the metropolitan area
2. Increase the safety of the transportation system for motorized and non-motorized users
3. Increase the security of the transportation system for motorized and non-motorized users
4. Increase the accessibility and mobility of people and freight
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
6. Enhance the integration and connectivity of the transportation system across modes, for people and freight
7. Promote efficient system management and operation
8. Emphasize the preservation of the existing transportation system
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
10. Enhance travel and tourism

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<sup>1</sup> 23 CFR § 450.306 - Scope of the metropolitan transportation planning process.






**Table 1-1: Forward 2045 Goal Areas**

Goal Area	Description
 <b>Accessible</b>	The ease of connecting people to goods and services in the Ames area, as well as providing choices for different modes of transportation (i.e. car, bike, bus, etc.)
 <b>Safe</b>	Reducing the risk of harm to users of the Ames transportation system
 <b>Sustainable</b>	Reducing or eliminating negative environmental impacts from the Ames transportation system and promoting financially sustainable investments
 <b>Efficient &amp; Reliable</b>	Provide for the efficient and reliable movement of people, service, and goods
 <b>Placemaking</b>	Integrating the transportation system with land use to create well-designed places and complete communities
 <b>Preservation</b>	Maintain the existing transportation system in a state of good repair






**Table 1-2: Forward 2045 Goals and Objectives Alignment with Federal Metropolitan Planning Factors**

Goal	Objectives	Federal Planning Factors									
		1 - Economic Vitality	2 - Safety	3 - Security	4 - Accessibility and Mobility for People and Freight	5 - Environment and Energy Conservation, Quality of Life, Economic Development	6 - System Integration and Connectivity for People and Freight	7 - Efficient Operation and Management	8 - Preserve the Existing Transportation System	9 - System Resiliency and Reliability; Reduce or Mitigate Stormwater Impacts	10 - Enhance Travel and Tourism
Accessible											
	Improve walk, bike, and transit system connections				▲	▲	▲			▲	
	Provide appropriate arterial and collector spacing				▲		▲	▲			
	Improve bicycle and pedestrian access to CyRide routes				▲	▲	▲				
	Provide improved access to transit for transit dependent, disabled, and disadvantaged populations				▲	▲	▲				
	Incorporate bicycle, pedestrian, and transit-friendly infrastructure in new developments				▲	▲	▲				
Safe											
	Reduce number and rate of crashes		▲								
	Reduce the number of bicycle and pedestrian crashes		▲								
	Reduce number and rate of serious injury and fatal crashes		▲								
	Identify strategies and projects that improve user safety for all modes		▲								
	Prioritize projects that improve the Ames Area Safe Routes to School Program		▲								
Sustainable											
	Reduce transportation impacts to natural resources					▲			▲		
	Make transportation infrastructure more resilient to natural and manmade events					▲			▲		
	Limit transportation system emissions of greenhouse gases					▲			▲		
	Promote financially sustainable transportation system investments	▲				▲			▲		
	Promote transportation decisions that follow State of Iowa Smart Planning Principles					▲			▲		



**Table 1-2: Forward 2045 Goals and Objectives Alignment with Federal Metropolitan Planning Factors con't.**

Goal		Objectives	Federal Planning Factors									
			1 - Economic Vitality	2 - Safety	3 - Security	4 - Accessibility and Mobility for People and Freight	5 - Environment and Energy Conservation, Quality of Life, Economic Development	6 - System Integration and Connectivity for People and Freight	7 - Efficient Operation and Management	8 - Preserve the Existing Transportation System	9 - System Resiliency and Reliability; Reduce or Mitigate Stormwater Impacts	10 - Enhance Travel and Tourism
Efficient and Reliable												
	Identify context-sensitive strategies and projects that improve traffic flow in corridors with high levels of peak period congestion.				▲			▲				
	Maintain acceptable travel reliability on Interstate and principal arterial roadways				▲			▲				
	Provide frequent transit service to high trip generation locations				▲	▲		▲				
	Increase the regional share of trips made by walking, biking, and transit							▲				
	Improve freight system reliability	▲			▲			▲				
	Identify technology solutions to enhance system operation			▲	▲		▲	▲				
Placemaking												
	Provide transportation strategies and infrastructure that support current adopted plans				▲	▲	▲					
	Increase the percentage of population and employment within close proximity to transit and/or walking and biking system	▲				▲						
	Provide transportation investments that fit within their context			▲			▲					
	Connect activity centers and adjoining developments with complete streets	▲			▲	▲	▲				▲	
Preservation												
	Maintain NHS routes in good condition while minimizing routes in poor condition								▲			
	Maintain NHS bridges in good condition while minimizing bridges in poor condition								▲			



## Chapter 2 Regional Trends

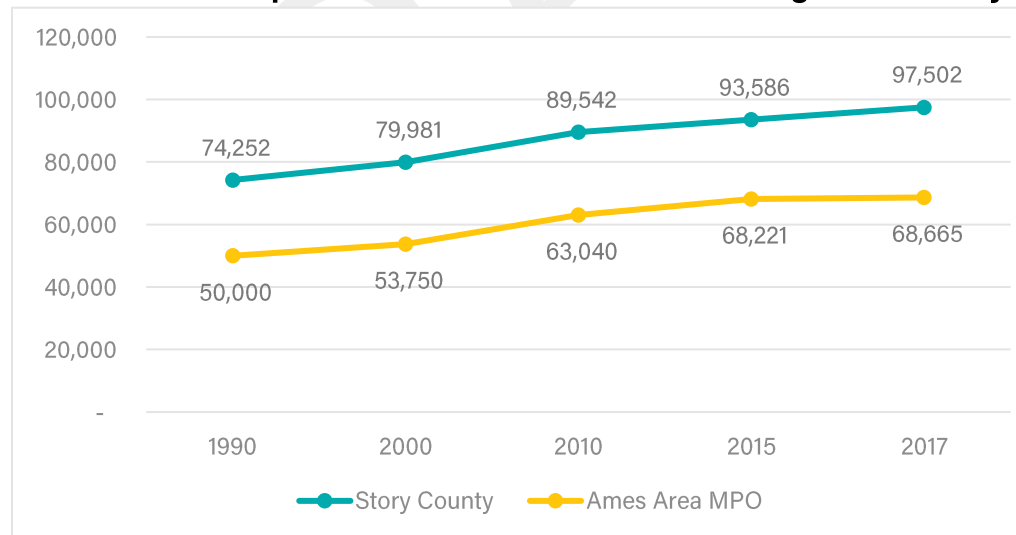
As the Ames area continues to grow, the accompanying demographic changes could have substantial influence on how the regional transportation system operates in the future. Continued shifts in population and employment could exacerbate the need to provide a variety of modal options that match the needs of all residents living and working in the region. This chapter provides an overview of the historical population and employment trends in the region as well as a snapshot of the current demographic profile of the Ames Urbanized Area.

### Historical Regional Trends

#### Historic Population and Employment Growth Trends

Population levels in the Ames Area increased from an estimated 50,000 in 1990 to over 68,000 in 2017. During this same time period, the population of Story County increased by nearly 25,000 people, as shown in **Figure 2-1**.

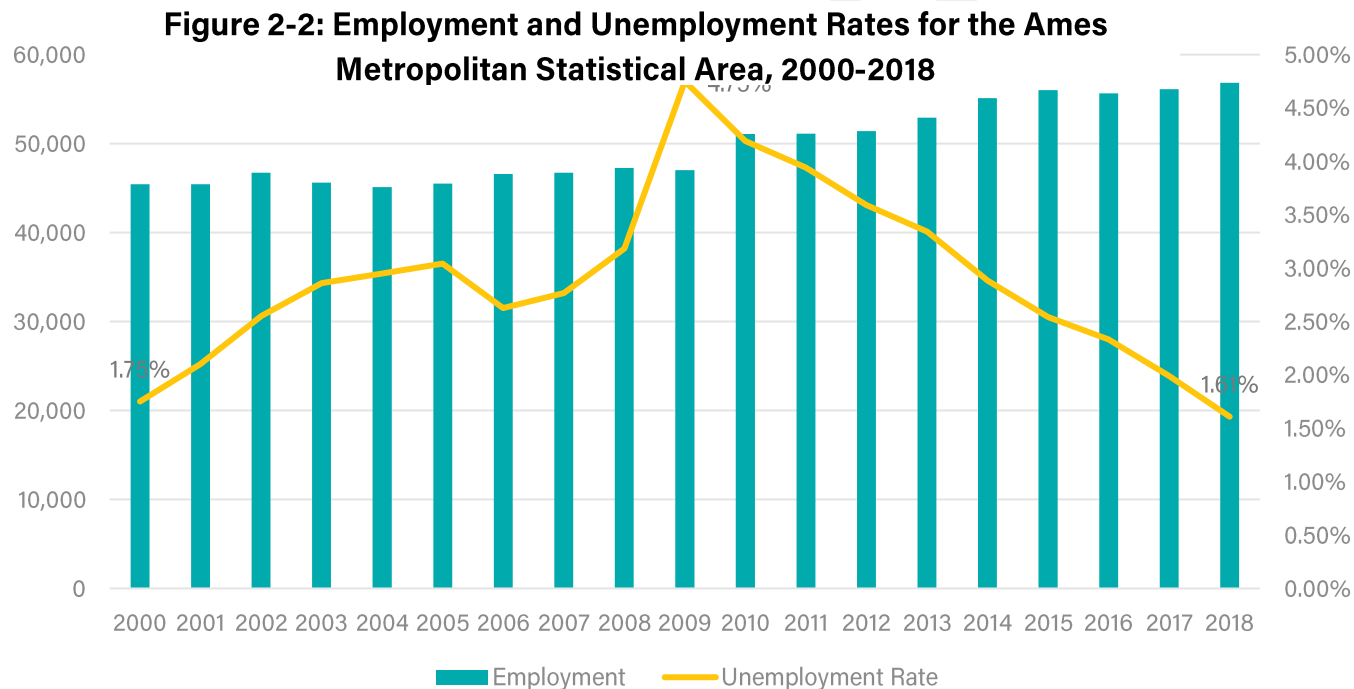
**Figure 2-1: Historical Population Growth for the AAMPO Region and Story County\***





Source: US Census Bureau, Woods and Poole, HDR  
\*A small portion of Boone County falls within the MPO planning area

Employment in the Ames Metropolitan Statistical Area experienced steady growth between 2000 and 2018, while the unemployment rate peaked at 4.75% in 2009 before declining to 1.61% in 2018. **Figure 2-2-2** displays the employment and unemployment rate trends during this 19-year period.



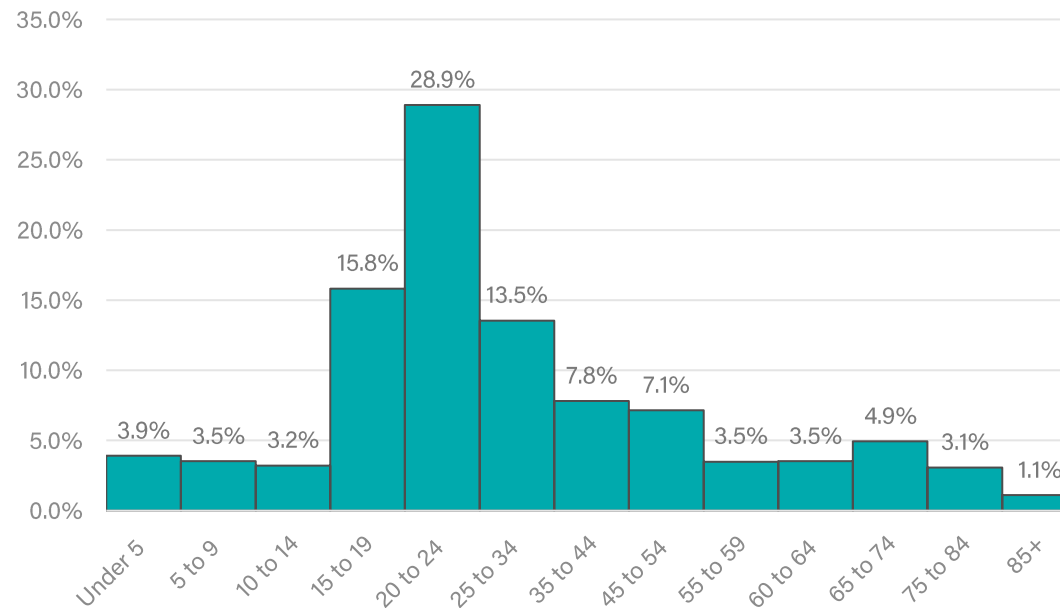
Source: ACS 2013-2017 5-Year Estimates



## Current Demographics

The population for the Ames Urbanized Area is estimated to be 66,511, which is an increase of roughly 6,000 people since the year 2010. The median age of Ames Area residents is 23 years old, which reflects the largest share of residents, 28.9%, that comprise the age range of 20 to 24. **Figure 2--3** below presents the proportion of Ames residents by age group. Being home to Iowa State University (ISU), the City of Ames has a significant portion of its population who are students as enrollment at ISU in the year 2017 totaled 35,993. This population distribution results in unique challenges and needs for AAMPO to address in its transportation planning processes.

**Figure 2-3. Population Cohorts by Age, Ames Urbanized Area**

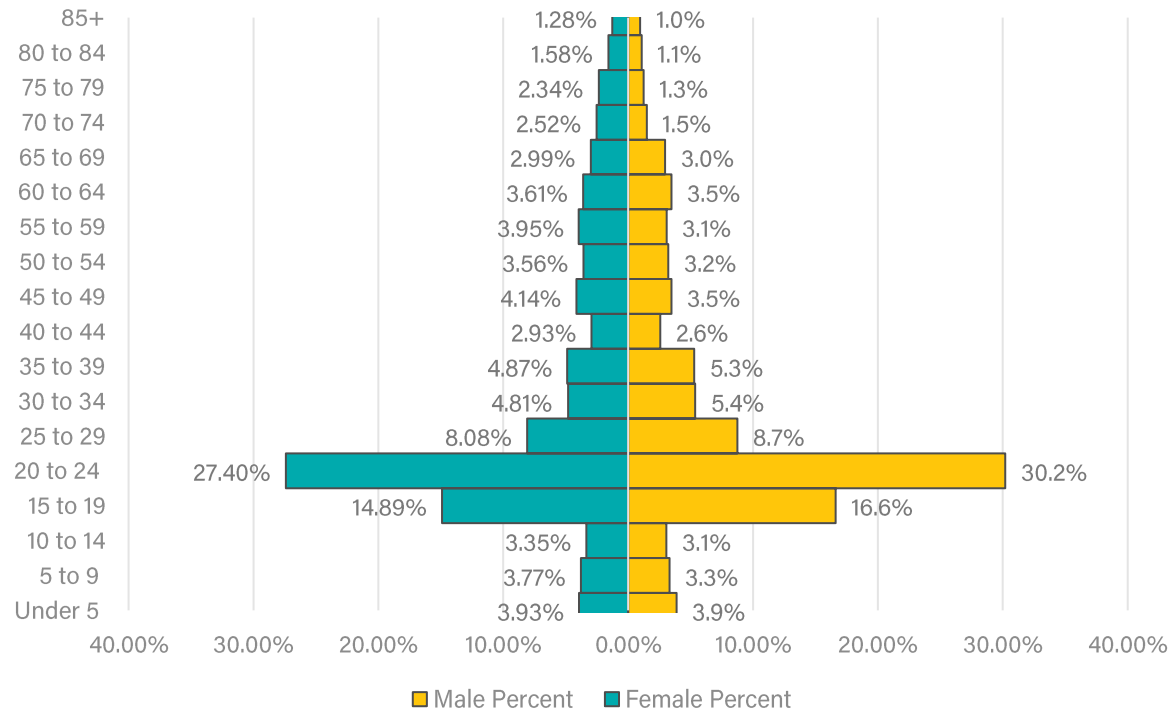


Source: ACS 2013-2017 5-Year Estimates



Males make up 53.4% of the Ames Urbanized Area population while 46.6% are female. As previously mentioned, the largest age group of residents is 20 years to 24 years; 27.4% of the male population falls into this age range while 30.2% of females are between 20 and 24 years. 14.9% of males in the Ames Urbanized Area are aged 15 to 19 years while 16.6% of females are in this age cohort. **Figure 2-4** illustrates the population pyramid for the Ames Urbanized Area.

**Figure 2-4. Population Pyramid, Ames Urbanized Area**



Source: ACS 2013-2017 5-Year Estimates



As shown in **Table 2-1**, 83% of the Ames Urbanized Area population identifies as White or Caucasian while 10% identifies as Asian. Hispanic or Latino residents comprise 3.4% of the population while 2.6% identifies as Black or African American. **Table 2-2** contains the number households with limited English-speaking proficiency by language spoken at home.

**Table 2-1: Population of Ames Urbanized Area by Race**

Race	People	Percent
White	55,234	83.04%
Black or African American	1,737	2.61%
Asian	6,719	10.10%
Hispanic or Latino	2,281	3.43%
American Indian or Alaska Native	157	0.24%
Native Hawaiian or Pacific Islander	43	0.06%
Other	336	0.51%

Source: ACS 2013-2017 5-Year Estimates

**Table 2-2: Households with Limited English-Speaking Proficiency**

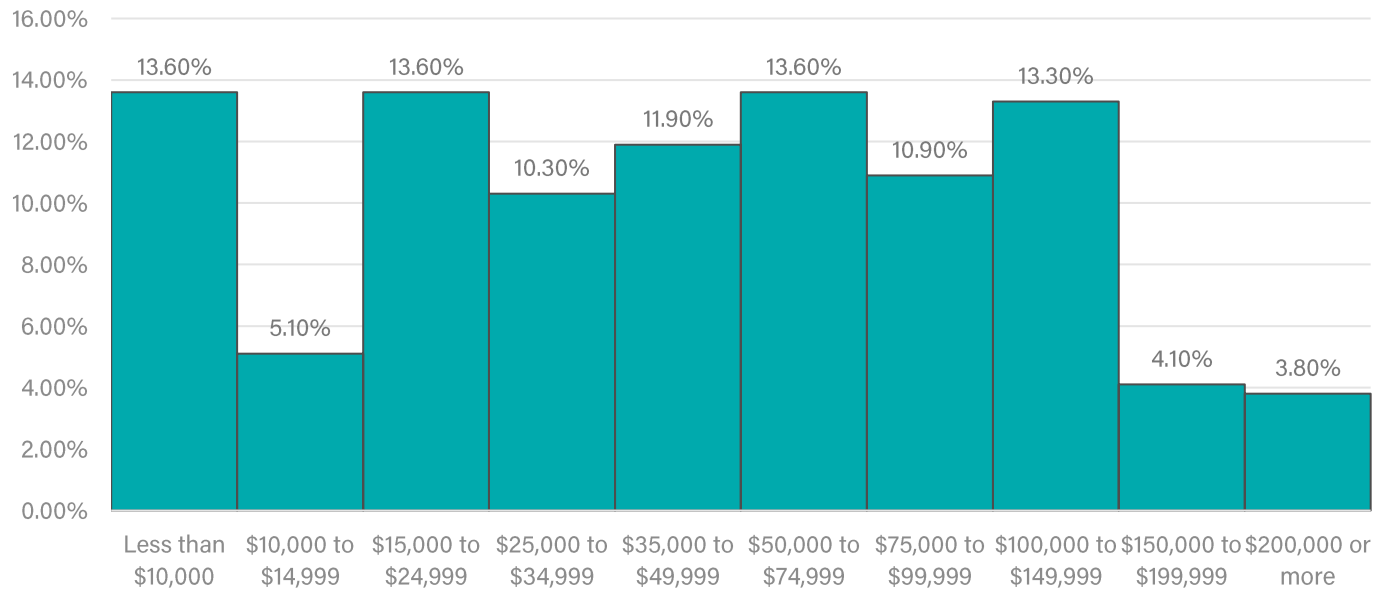
Language Spoken	Number of Households	Percent
Limited English-speaking households-Spanish	37	0.14%
Limited English-speaking households-Other Indo-European languages	32	0.12%
Limited English-speaking households-Asian and Pacific Island languages	1,025	3.98%
Limited English-speaking households-Other languages	116	0.45%

Source: ACS 2013-2017 5-Year Estimates



The median household income for Ames residents in 2017 dollars is \$43,214, while the median family income is \$85,833. **Figure 2-55** shows the proportion of Ames households by 2017 income. Percentages of age cohorts living below the poverty level are shown in **Table 2-5**.

**Figure 2-5: Household Incomes of Residents in the Ames Urbanized Area**



Source: ACS 2013-2017 5-Year Estimates



**Table 2-3: Percent of Households Living Below the Poverty Level**

Age Cohort	Population for whom poverty status is determined	Percent below poverty level
<b>Under 18 years</b>	8,049	9.1%
<b>18 to 64 years</b>	43,026	36%
<b>65 years and over</b>	5,876	3.2%

*Source: ACS 2013-2017 5-Year Estimates*

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41% of individuals employed in the Ames Urbanized Area are employed in the educational services, health care, and social assistance industry. The second highest share of Ames workers are employed in the arts, entertainment, and recreation, and accommodation and food services industry. The smallest share of Ames workers are employed in the wholesale trade industry. **Table 2-4** summarizes occupation by industry for the Ames Urbanized Area.

**Table 2-4: Occupation by Industry for the Ames Urbanized Area**

Industry	Percent
Agriculture, forestry, fishing and hunting, and mining	1.79%
Construction	3.81%
Manufacturing	8.29%
Wholesale trade	1.40%
Retail trade	9.69%
Transportation and warehousing, and utilities	1.89%
Information	1.75%
Finance and insurance, and real estate and rental and leasing	3.68%
Professional, scientific, and management, and administrative and waste management services	7.84%
Educational services, and health care and social assistance	41.12%
Arts, entertainment, and recreation, and accommodation and food services	11.85%
Other services, except public administration	3.20%
Public administration	3.69%

Source: ACS 2013-2017 5-Year Estimates



69% of workers aged 16 years or older commute to work alone in a private vehicle. Walking and the use of public transit (excluding taxi cabs) are used for commuting purposes at much higher rates when compared to the proportions of United States residents who use these modes for commuting; the ACS 2017 5-Year data indicate that 9.6% of Ames residents walk to work while 8.1% use public transit. For the national share of walking and public transit commuters, these figures are 2.7% and 5.1%, respectively. **Table 2-5** summarizes the means of transportation to work for both Ames Area residents and national averages.

**Table 2-5: Means to Work for Residents of the Ames Urbanized Area**

Means to Work	Ames Urbanized Area	United States
<b>Drove Alone</b>	69.1%	76.4%
<b>Carpool</b>	5.3%	9.2%
<b>Public Transportation (excluding taxi)</b>	8.1%	5.1%
<b>Walk</b>	9.6%	2.7%
<b>Bike</b>	3.3%	0.6%
<b>Taxi, Motorcycle, or Other Means</b>	0.6%	1.2%
<b>Work from Home</b>	4.0%	4.7%

*Source: ACS 2013-2017 5-Year Estimates*



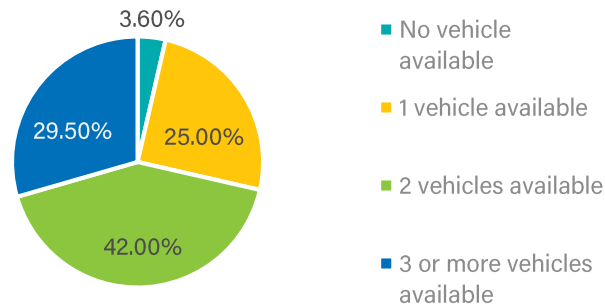
For over half of the workers in the Ames Urbanized Area, it takes less than 15 minutes for their daily commute to work, while approximately three-quarters of Ames residents have a commute that takes less than 20 minutes. **Table 2-6** summarizes travel times to work for Ames commuters. Additional data related to commuting trends in the Ames Urbanized Area show that 42% households have 2 vehicles available while 29.5% have three or more available, as seen in **Figure 2-6**.

**Table 2-6: Travel Time to Work for Ames Urbanized Area Residents**

Travel Time to Work	Ames Urbanized Area
Less than 10 minutes	24.60%
10 to 14 minutes	28.70%
15 to 19 minutes	20.60%
20 to 24 minutes	9.10%
25 to 29 minutes	2.00%
30 to 34 minutes	3.70%
35 to 44 minutes	3.40%
45 to 59 minutes	5.90%
60 or more minutes	2.00%

Source: ACS 2013-2017 5-Year Estimates

**Figure 2-6: Household Car Ownership, Ames Urbanized Area**





### Socioeconomic Conditions and Transportation Planning in the AAMPO Region

The socioeconomic characteristics of Ames area residents impact current and future transportation needs and demands in the AAMPO region. Transportation costs can be a large portion of typical household expenses, so understanding the socioeconomic conditions of AAMPO area residents informs the required modal balance of transportation needs. From an equity perspective, economically disadvantaged residents are often more reliant on transit, bicycling, and/or walking for their daily work or school trips to meet their mobility needs. Additionally, the high student population is more transit-dependent, due the relative concentration of their trip destinations on the ISU campus and limited parking and student car ownership as illustrated below.

A comparison of regional commuting patterns for fixed-route transit usage between the student and non-student population for work commutes is shown in **Table 2-7**. The comparison was based on the Public Use Microdata (PUMAS) program administered by the U.S. Census Bureau for Story and Boone Counties. According the to the PUMAS data, roughly 14.5% of students use transit to reach their place of employment while only 1.5% of non-student workers commute via transit.

**Table 2-7: Student vs. Non-Student Transit Usage for Commuting**

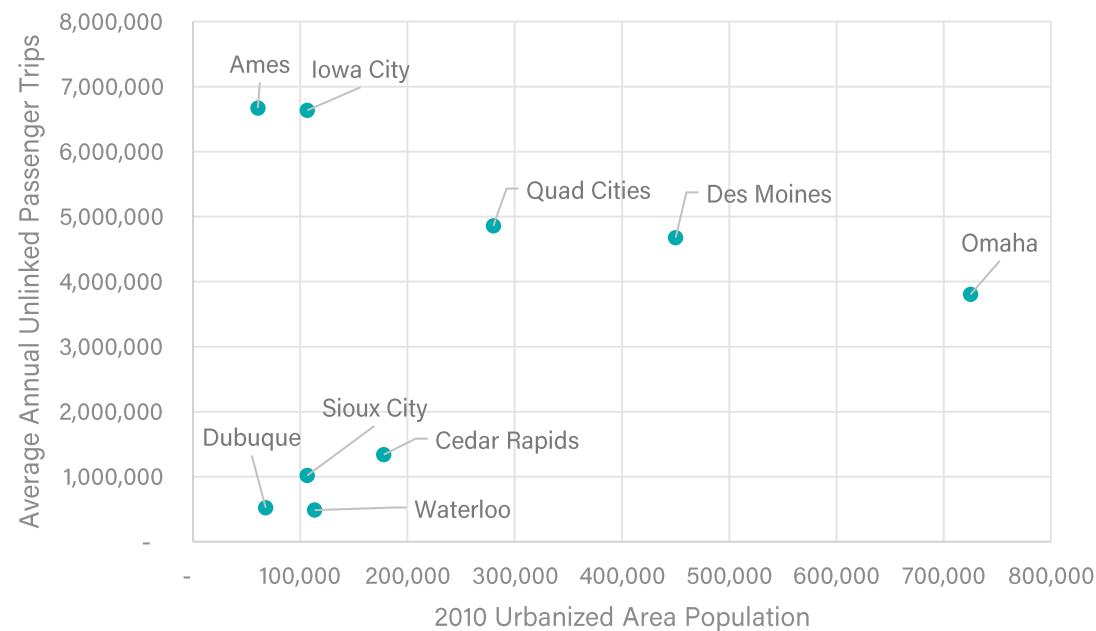
Commute Mode	Students	Non-Students
<b>Transit commuters</b>	2,376	656
<b>Non-Transit commuters</b>	13,945	45,683
<b>Total Commuters</b>	16,321	46,339
<b>Percent Transit Commuters</b>	14.6%	1.4%

*Source: Public Use Microdata, 2018*



Comparing fixed route transit usage between AAMPO's CyRide system with transit systems for Iowa's other major metropolitan areas highlights the importance of this mode for residents, especially the student population, within the region. As **Figure 2-7** shows, CyRide's average annual fixed route passenger trip level was the highest among all other public transit providers in the state during the years 2014-2018. Iowa City's transit provider recorded a similar level of fixed route trips during this time period; similar to Ames, the City of Iowa City is home to a large student population who rely on fixed route transit.

**Figure 2-7: Average Fixed Route Trips for Iowa's Public Transit Providers, 2014-2018**



Source: National Transit Database



### Inter-City Commute Patterns

Inter-city commute patterns were obtained from the United States Census Bureau's Longitudinal Household-Employer Dynamics (LEHD) Program, which compiles Federal, State, and Census Bureau data on employers and employees to allow for more detailed information pertaining to local economies.<sup>2</sup> LEHD data for the Cities of Ames, Ankeny, and Des Moines were reviewed to identify inter-city commuting patterns between these metropolitan areas located along the Interstate 35 Corridor.

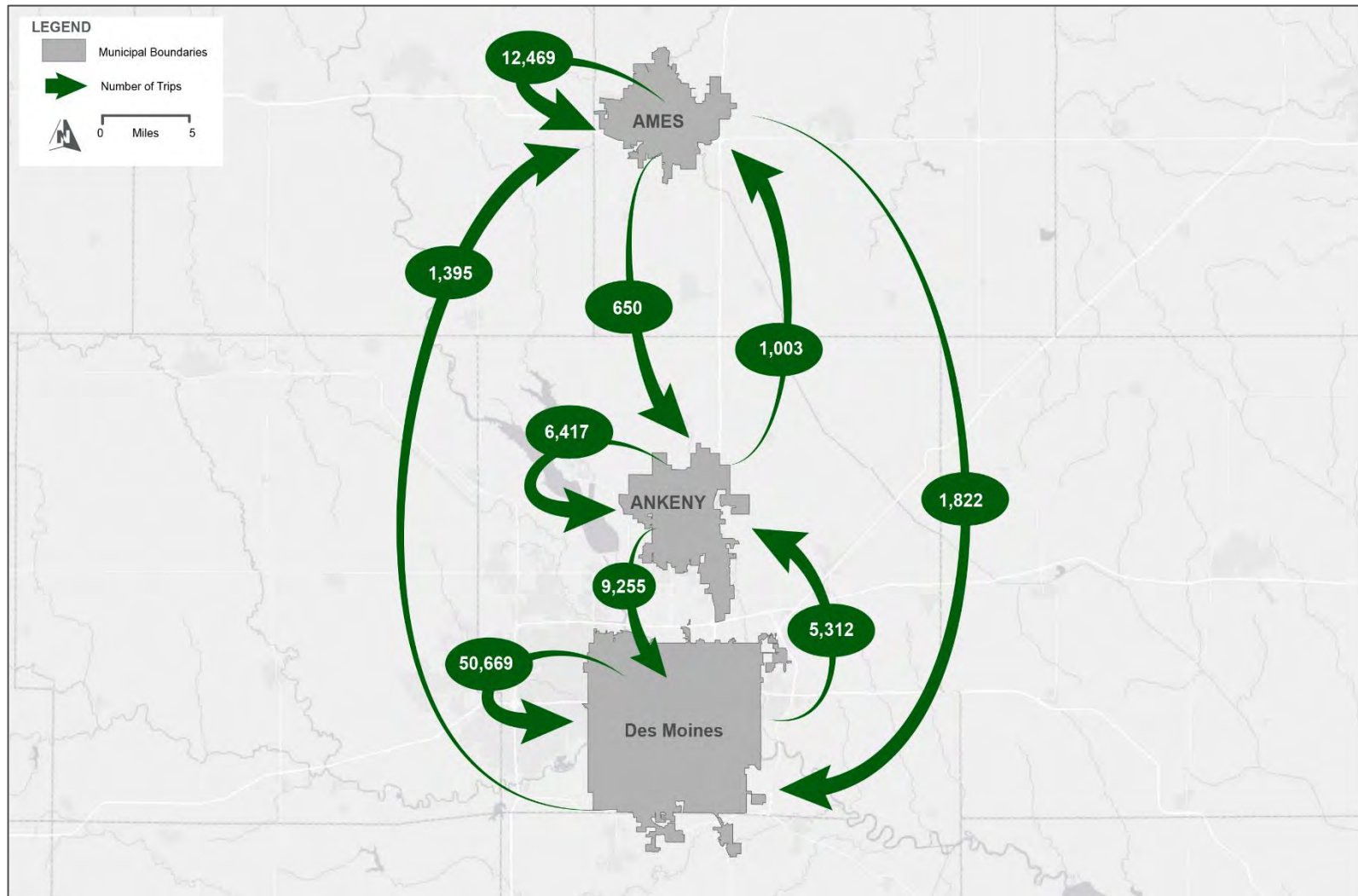
As seen in **Figure 2-8**, the LEHD data indicates that the largest number of trips occurs within the boundaries of Des Moines, Ames, and Ankeny. The city with the largest flow of inbound travel is Des Moines, likely due to its higher population and greater concentration of economic and educational opportunities. Significant flow occurs along the Ankeny-Des Moines segment in both directions. The Ankeny-Des Moines segment sees between 1,300-1,800 commuters and the Ankeny-Ames segment sees between 600-1,000.

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<sup>2</sup> United States Census Bureau. Longitudinal Household-Employer Dynamics Program. <https://lehd.ces.census.gov/>



Figure 2-8: Regional Commuting Patterns





## Chapter 3 Existing System Performance

### Roadway System Conditions

The evaluation of traffic operations, including peak period congestion, travel reliability, and bridge and pavement conditions was conducted to assess the existing conditions of the AAMPO roadway system.

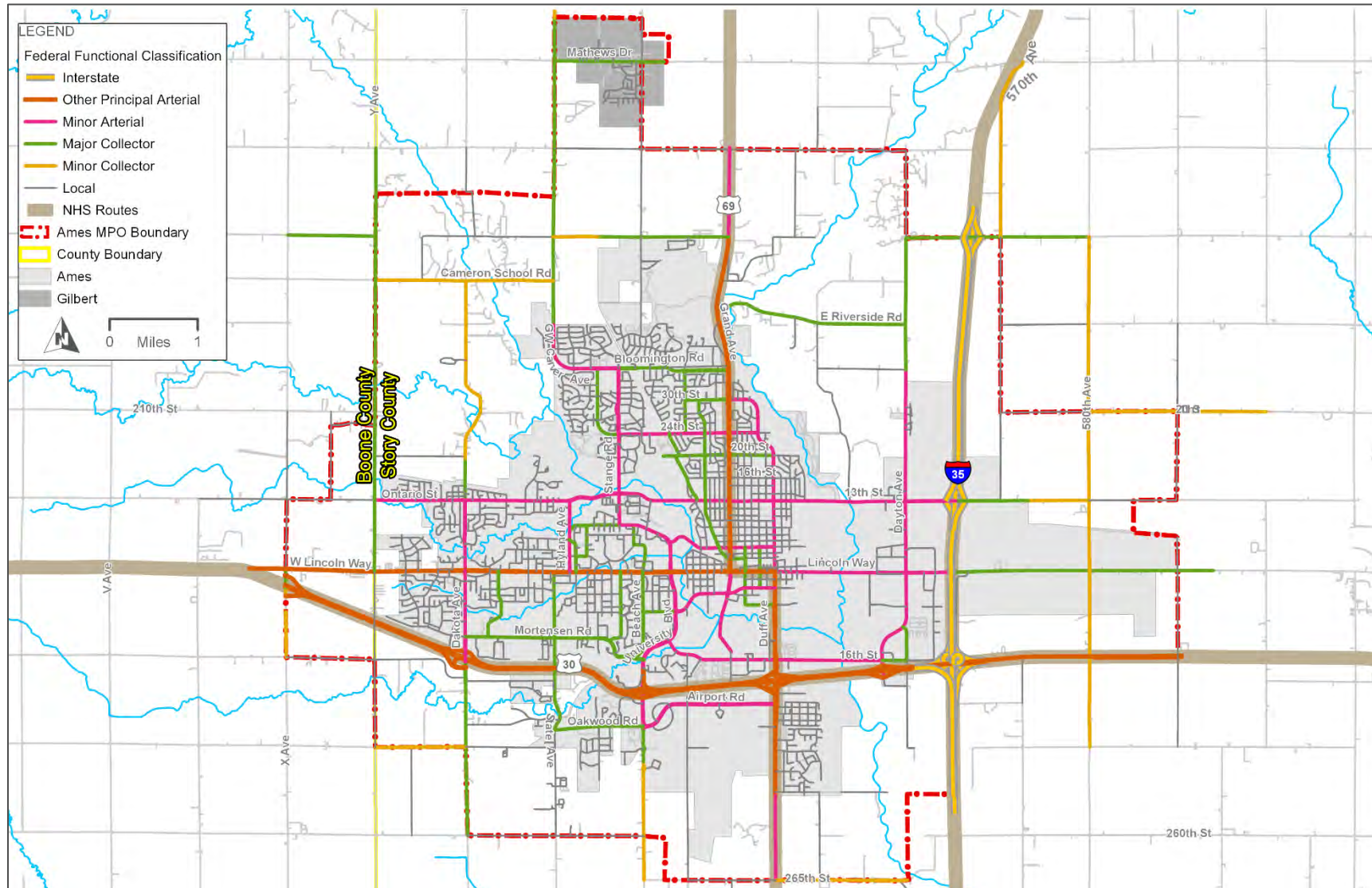
### Roadway Classifications

Roadways within the Ames Area MPO boundary are classified according to a Federal functional classification system developed by the Federal Highway Administration (FHWA). This system is used to determine which roads are eligible for federal transportation funds. The functional classifications for AAMPO roadways are presented in **Figure 3-1**.

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### Figure 3-1: Functional Classifications for the AAMPO Roadways





## Traffic Operations

Existing traffic operations were reviewed from two different perspectives:

- Peak period travel conditions
- Passenger and freight travel reliability

### Peak Period Traffic Operations

Peak period travel conditions focused on evaluating congestion levels during typical peak period conditions. These travel conditions are described using a standard vehicular Level of Service (LOS) classification that ranges from A, or free flow traffic, to F, or complete gridlock. **Figure 3-2** provides a definition for each LOS category.

**Figure 3-2: Level of Service Definitions**

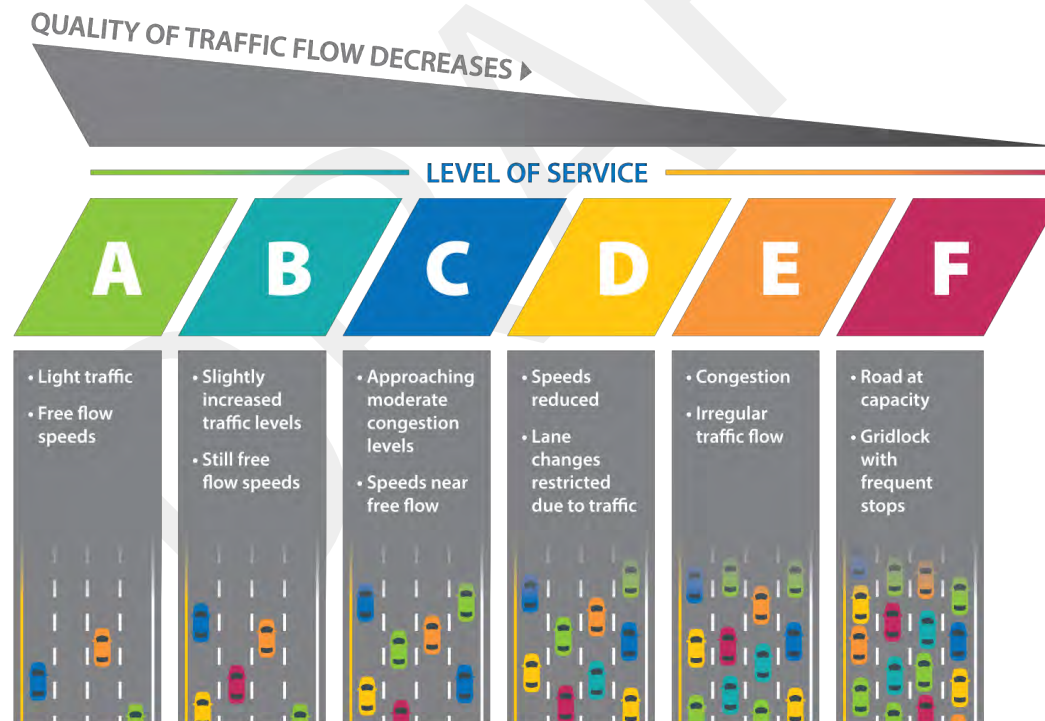
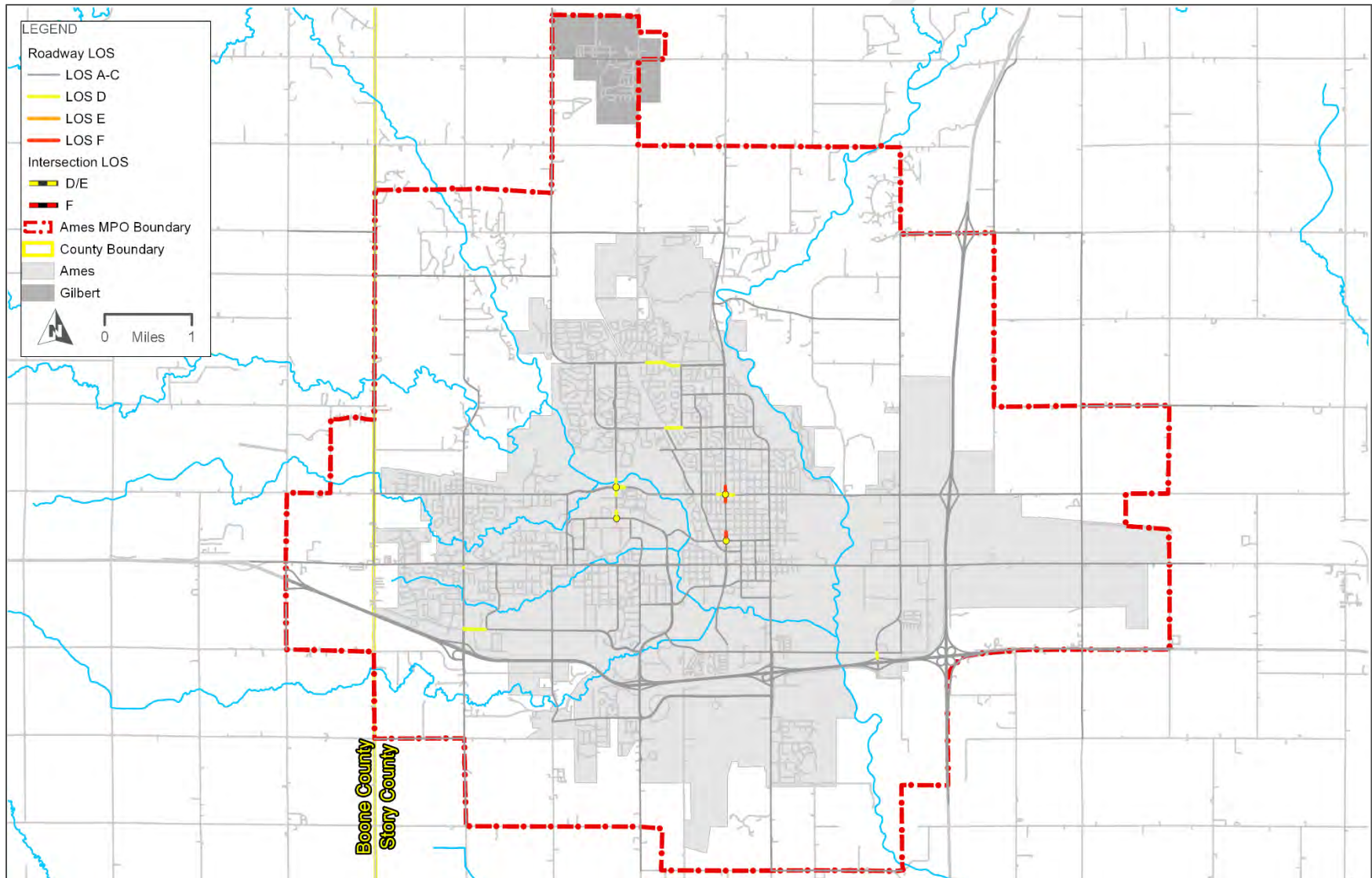




Figure 3-3 shows the existing peak period traffic operations for AAMPO.

**Figure 3-3: Existing Peak Period Traffic Operations**





For the existing AAMPO roadway system, over 98% of functionally-classified roads are operating at LOS C or better as shown in **Table 3-1**. Just over 1% are operating at LOS D, while less than half of one percent are operating at LOS F. The peak period traffic operations analysis demonstrates that the MPO's existing roadway system operates well during the peak period and congestion throughout the region is limited.

**Table 3-1: Summary of Functionally-Classified Roads by Peak Hour Level of Service**

Level of Service	Percent of Lane Miles
LOS A/B/C	98.5%
LOS D	1.1%
LOS E	0.0%
LOS F	0.4%

### Travel Reliability

#### *Passenger Vehicle Travel Reliability*

Travel reliability looks at how predictable travel times are for passenger vehicles and freight trucks in a corridor. The metric used to describe travel reliability for passenger vehicles is Level of Travel Time Reliability (LOTTR) and is used only for corridors located on the NHS.

Within the AAMPO region, the least reliable corridors are:

- **Duff Avenue:** From Lincoln Way to 265<sup>th</sup> Street
- **Lincoln Way:** From Grand Avenue to S Dayton Avenue
- **Grand Avenue:** From 170<sup>th</sup> Street to 30<sup>th</sup> Street / Duff Avenue

In 2017 and 2018, 100% of the Interstate segments were considered reliable. The AAMPO non-Interstate NHS contained unreliable road segments during this same period, but saw improvement between 2017 and 2018. For the non-Interstate NHS, the annual percentage of person-miles traveled that are reliable were 87.8% in 2017 and 96.6% in 2018. **Figure 3-5** shows the LOTTR for all NHS routes in the AAMPO area.



### *Freight Travel Reliability*

A metric similar to LOTTR is used to describe highway freight reliability in a corridor. This metric is referred to as Truck Travel Time Reliability Index (TTTR); only Interstate routes are analyzed for TTTR. The most recent data for highway freight travel reliability indicates that the AAMPO region does not have any unreliable corridors for highway freight travel, as all TTTR levels recorded were below the target of 1.5. In 2017, the average regional TTTR was 1.10 and rose to 1.12 in 2018. TTTR peaked slightly during the winter months of 2017-2018, but was still well below 1.5 as seen in **Figure 3-4**. For reference, the values 0.0 through 1.5 pertain to TTTR levels. Lower values represent higher reliability, and any TTTR over 1.5 would be considered an unreliable corridor.

**Figure 3-4: Monthly TTTR for the AAMPO Region, 2017-2018**

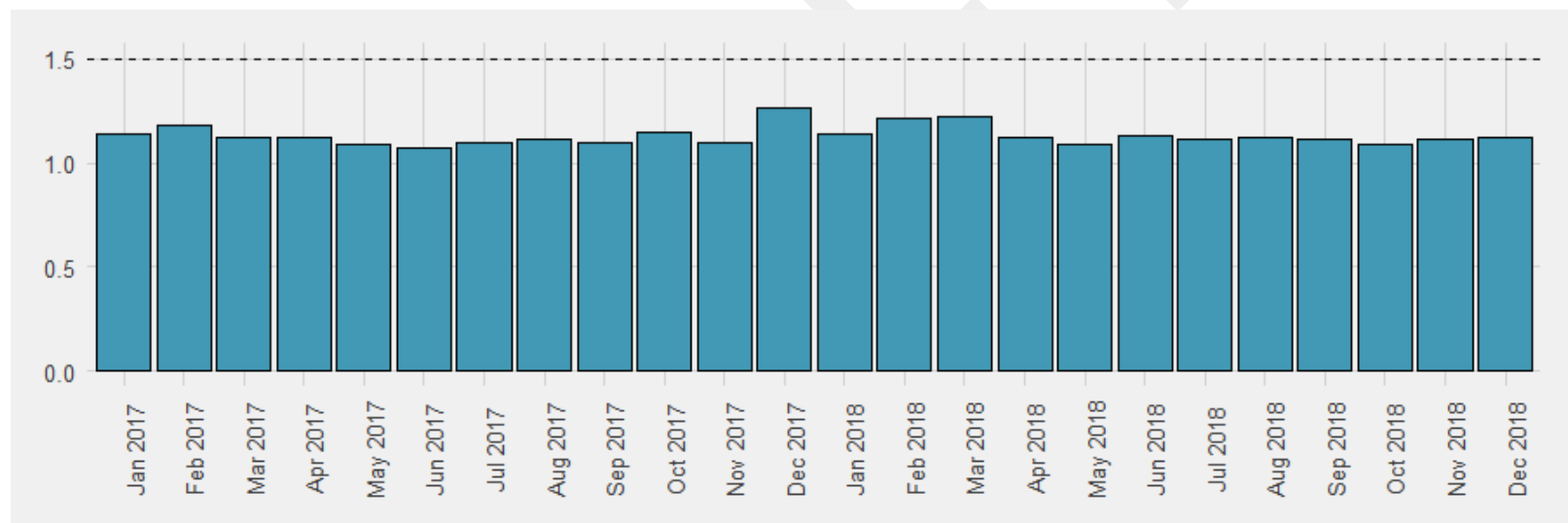
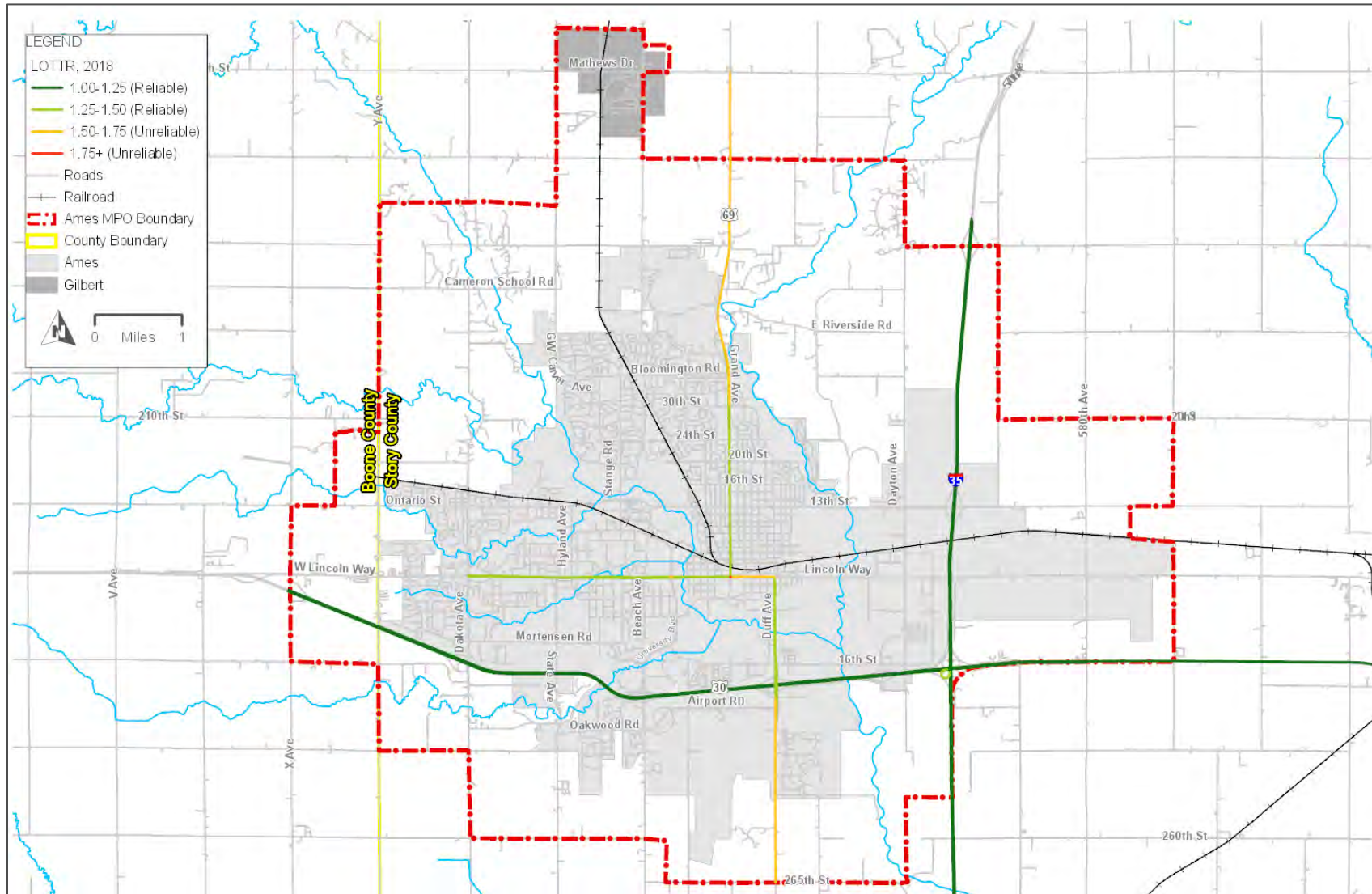




Figure 3-5: Passenger Vehicle Travel Reliability, 2018





## System Condition

### AAMPO Bridge Conditions

There are 58 bridges in the AAMPO boundary, and 20 of these structures are located on the NHS. **Table 3-2** presents the condition of all bridges in the AAMPO region, as well as the condition of NHS structures.

For AAMPO bridges, most are in Fair condition, 37, while 2 bridges are in Poor condition and the remaining 19 reported as being in Good condition. The locations of the bridges rated as Poor are:

- **W 190<sup>th</sup> Street:** Northwest of Ames, over Squaw Creek
- **Ken Maril Road:** Southeast Ames, over the Skunk River

**Figure 3-6** shows AAMPO bridges and their conditions.

**Table 3-2: Condition of AAMPO Bridges**

Bridge Ratings	Interstate and non-Interstate NHS Bridges	All AAMPO Bridges
<b>Good</b>	4	19
<b>Fair</b>	16	37
<b>Poor</b>	0	2

*Source: National Bridge Inventory*

**Table 3-3** displays conditions of Interstate and non-Interstate NHS bridges as well as non-NHS bridge by deck area (in square meters). For those bridges located on the Interstate or non-Interstate NHS, 15% of total deck area is rated as being in Good condition while the remaining 85% of total deck area is classified as being in Fair condition. For all AAMPO bridges, a greater share of the total deck area is rated as being in Good condition while roughly 2/3rds of the total deck area is in Fair condition. The two bridges in Poor condition, as identified above, make up 1% of the total deck area.



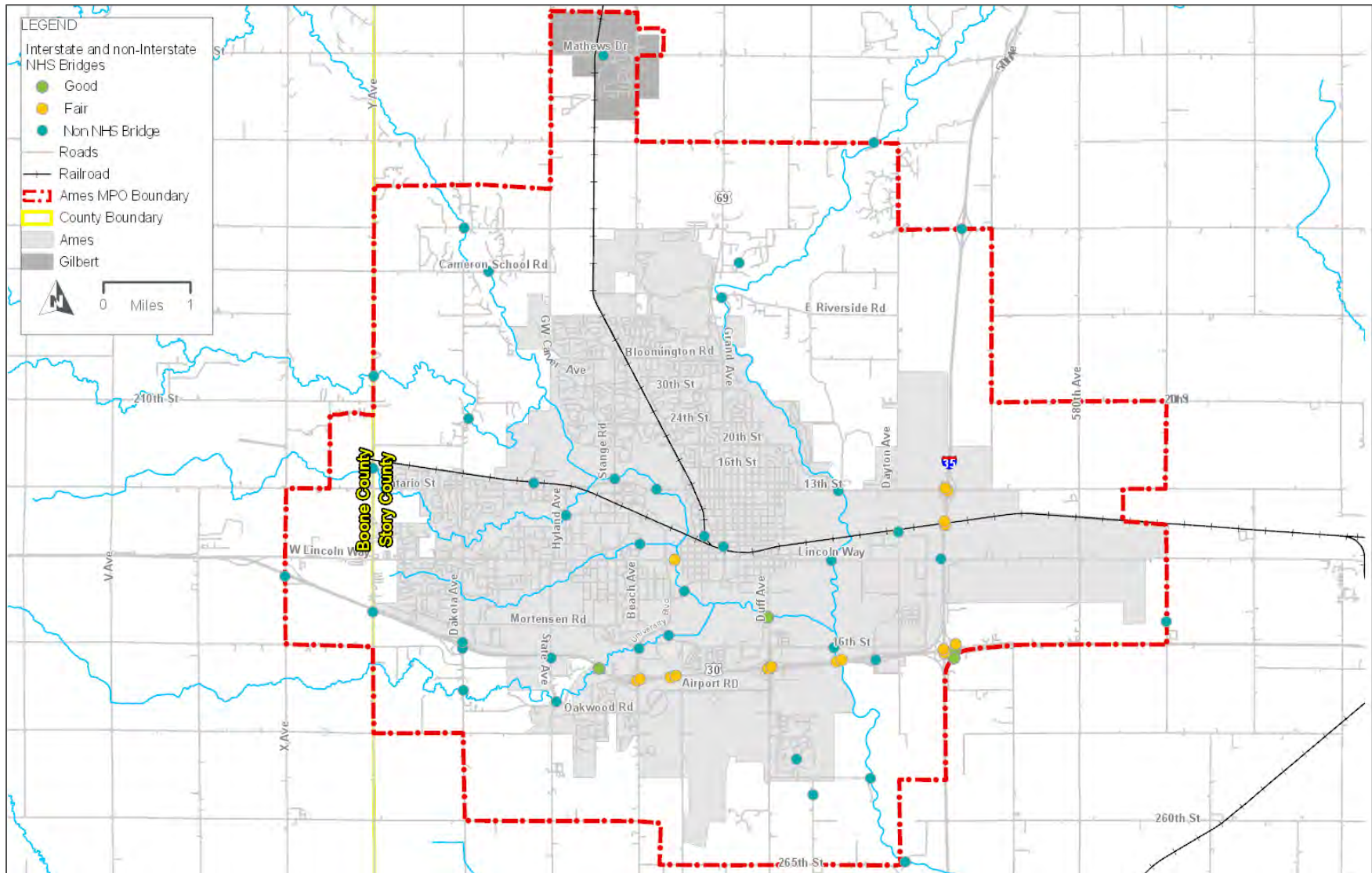
**Table 3-3: AAMPO Bridge Condition by Total Deck Area**

Bridge Rating	Interstate and non-Interstate NHS Bridges	% of Total Deck Area	All AAMPO Bridges	% of Total Deck Area
Good	2,239.93	15%	12,201.61	31%
Fair	13,131.21	85%	26,533.33	68%
Poor	-		463.65	1%
Total	15,371.14		39,198.59	

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Figure 3-6: AAMPO Bridge Locations





### AAMPO Pavement

The majority of pavement in the AAMPO region is in Fair or Good condition, as shown in **Table 3-4** and **Table 3-5**. For NHS routes, only 4% of pavement is in Poor condition while the remaining pavement is in Fair condition or better.

**Table 3-4: Pavement Condition Ratings for Non-Interstate, Non-NHS Roads**

Functional Classification	Pavement Condition Rating (CityPCI)		
	Poor	Fair	Good
Collector	13%	46%	41%
Local	22%	49%	28%
Minor Arterial	17%	25%	58%
Principal Arterial	24%	31%	45%
Total	21%	45%	35%

Source: AAMPO

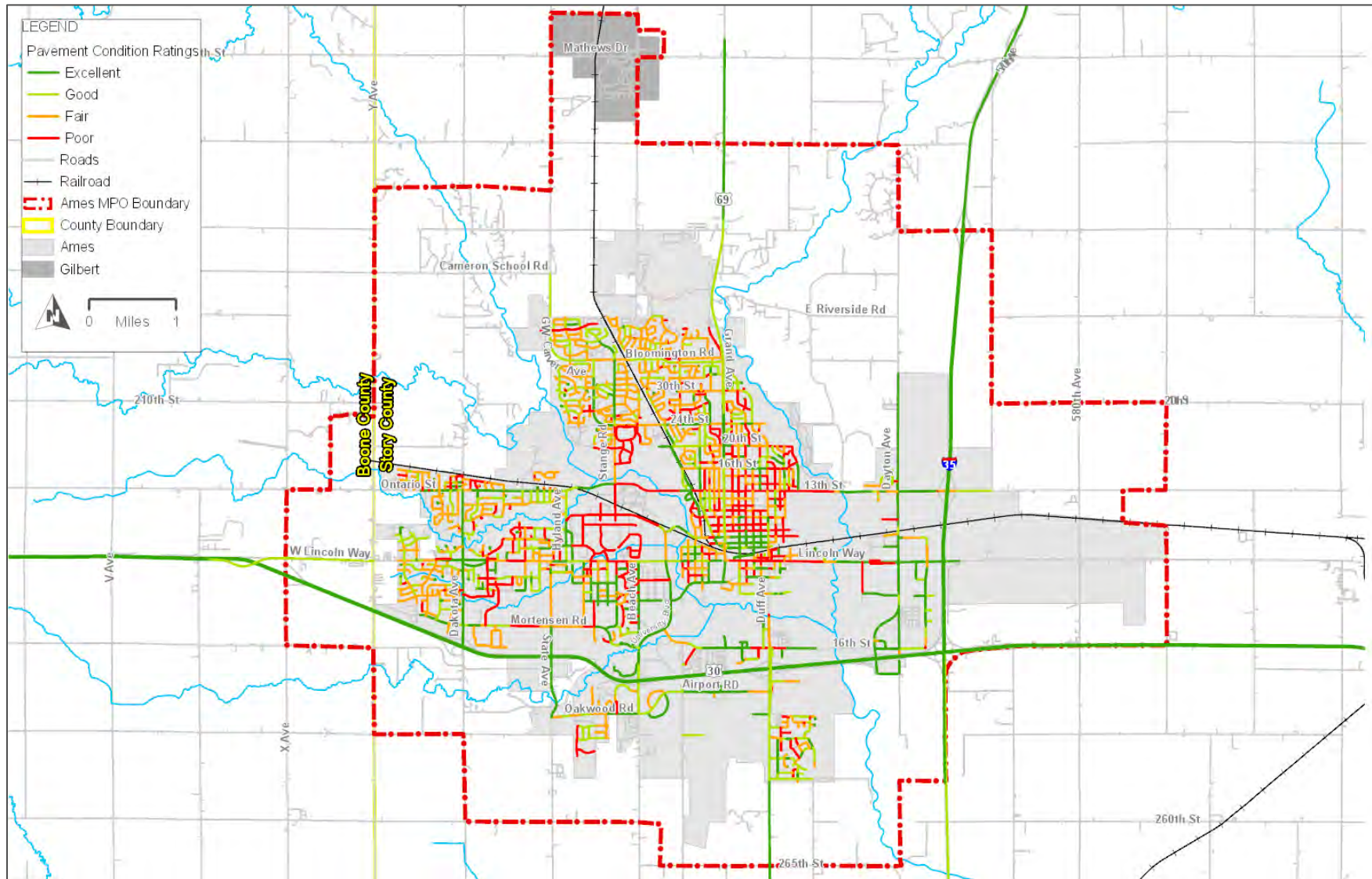
**Table 3-5: Pavement Condition Ratings for NHS Routes**

Functional Classification	Pavement Condition						Total
	Poor		Fair		Good		
Interstate	0	0%	0	0%	56.71	100%	56.71
Non-Interstate NHS	4.37	4%	10.03	9%	97.46	87%	111.86
Total	4.37	3%	10.03	6%	154.17	91%	168.57

Source: AAMPO



Figure 3-7: Pavement Condition Ratings for AAMPO Roads



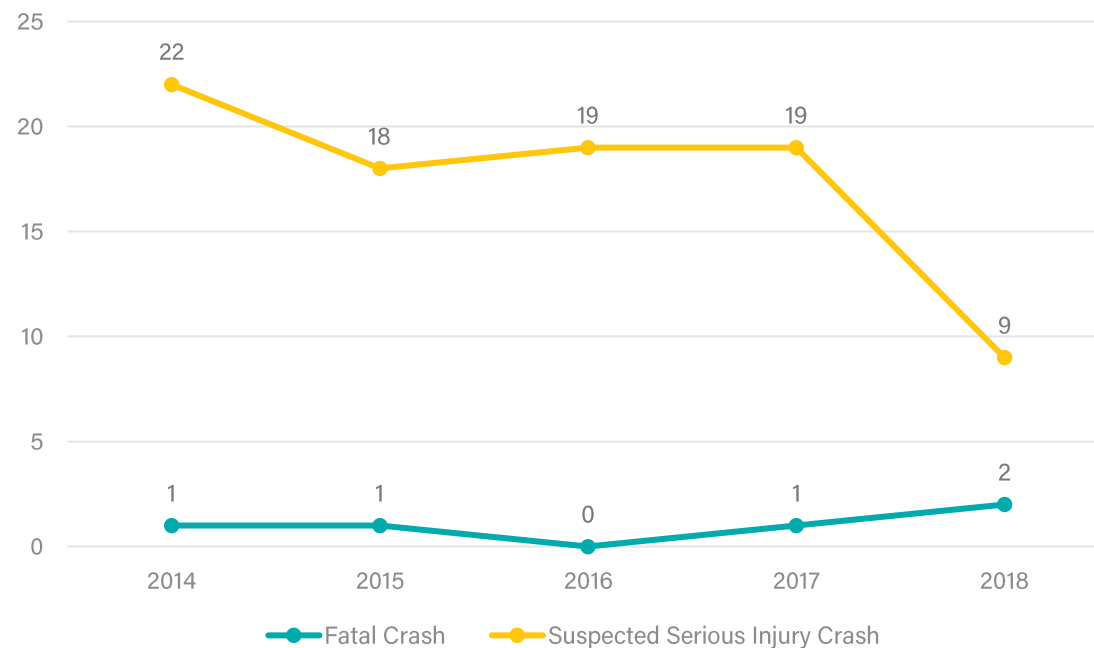


## System Safety

### Fatal and Serious Injury Crash Frequencies

The number of crashes resulting in fatalities on AAMPO roads has remained consistent, averaging 1 per year, while the number of crashes resulting in serious injuries has been declining since a 2014 level of 22, with an average of 17 per year. **Figure 3-8** shows the 5-year trend for these crash types for the years 2014 through 2018.

**Figure 3-8: Fatal and Serious Injury Crashes, 2014-2018**



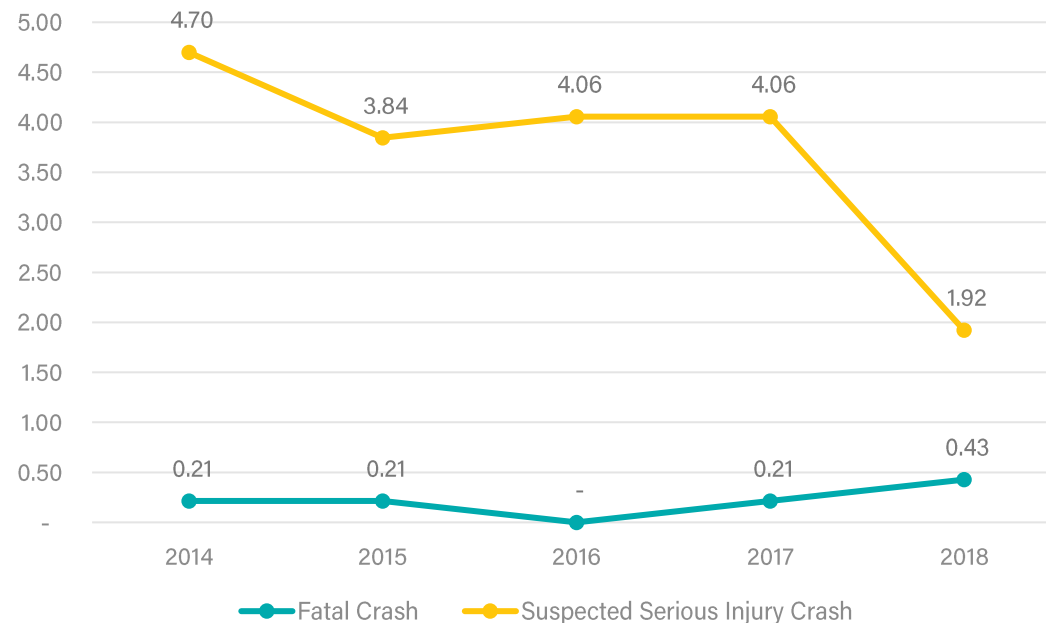
Source: Iowa DOT, Iowa Crash Analysis Tool (ICAT)



### Fatal and Serious Injury Crash Rates per 100 Million VMT

Fatal crash rates per 100 million VMT stayed constant during the years 2014 through 2017, then saw a slight increase in the year 2018. The rates of serious injury crashes per 100 million VMT saw a significant decrease between 2014 and 2018, as these crash types became less frequent during the 5-year period. **Figure 3-9** summarizes the annual trend for fatal and serious crash rates per 100 million VMT between 2014 and 2018.

**Figure 3-9: Fatal and Serious Crash Rates per 100 Million VMT, 2014-2018**



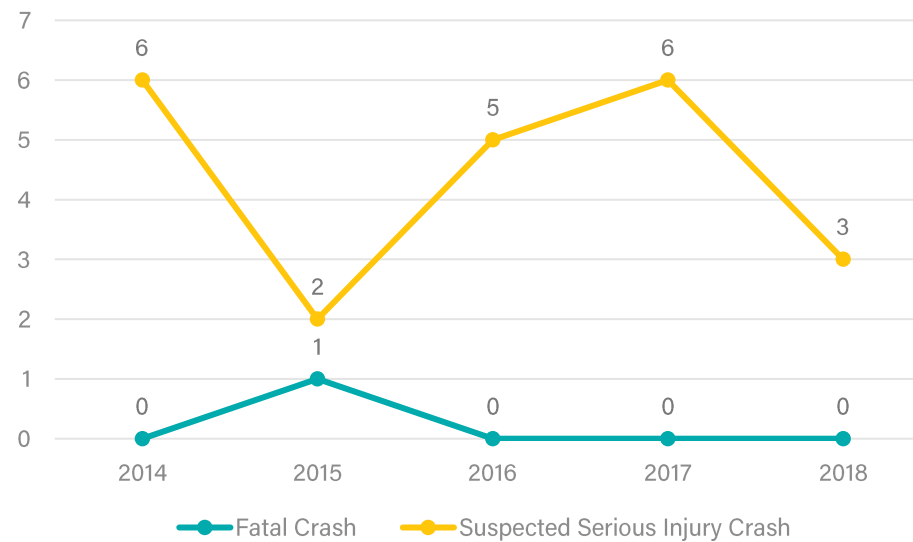
Source: Iowa DOT, Iowa Crash Analysis Tool (ICAT)



### Nonmotorized Fatal and Serious Injury Crash Frequencies

Fatalities resulting from crashes involving a non-motorized mode have been rare in the MPO area, averaging less than 1 per year between 2014 and 2018. Non-motorized crashes in which a serious injury occurred have fluctuated between a high of 6 in both 2014 and 2017, with a low of 2 in 2015. During 2014 to 2018, the MPO area averaged 4 non-motorized crashes per year that resulted in serious injury. **Figure 3-10** shows annual fatal and serious injuries related to non-motorized crashes between 2014 and 2018.

**Figure 3-10: Non-Motorized Fatal and Serious Injury Crashes, 2014-2018**



Source: Iowa DOT, Iowa Crash Analysis Tool (ICAT)



## Bicycle and Pedestrian System Conditions

### Existing Bicycle and Pedestrian System Network

AAMPO's existing bicycle and pedestrian system is comprised of several different types of on- and off-street facilities as shown in **Table 3-6**.

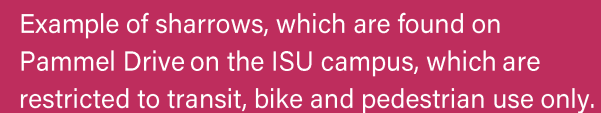
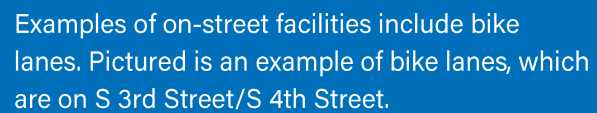
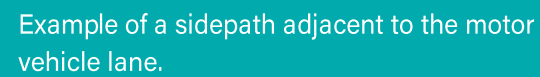
**Table 3-6: Existing Bicycle and Pedestrian Facilities**

Facility Type	Length (miles)
Bike lanes	9
Paved shoulder	13
Signed bike routes / shared lanes	13
Paved sidepaths	60
Unpaved sidepaths	6

Source: AAMPO

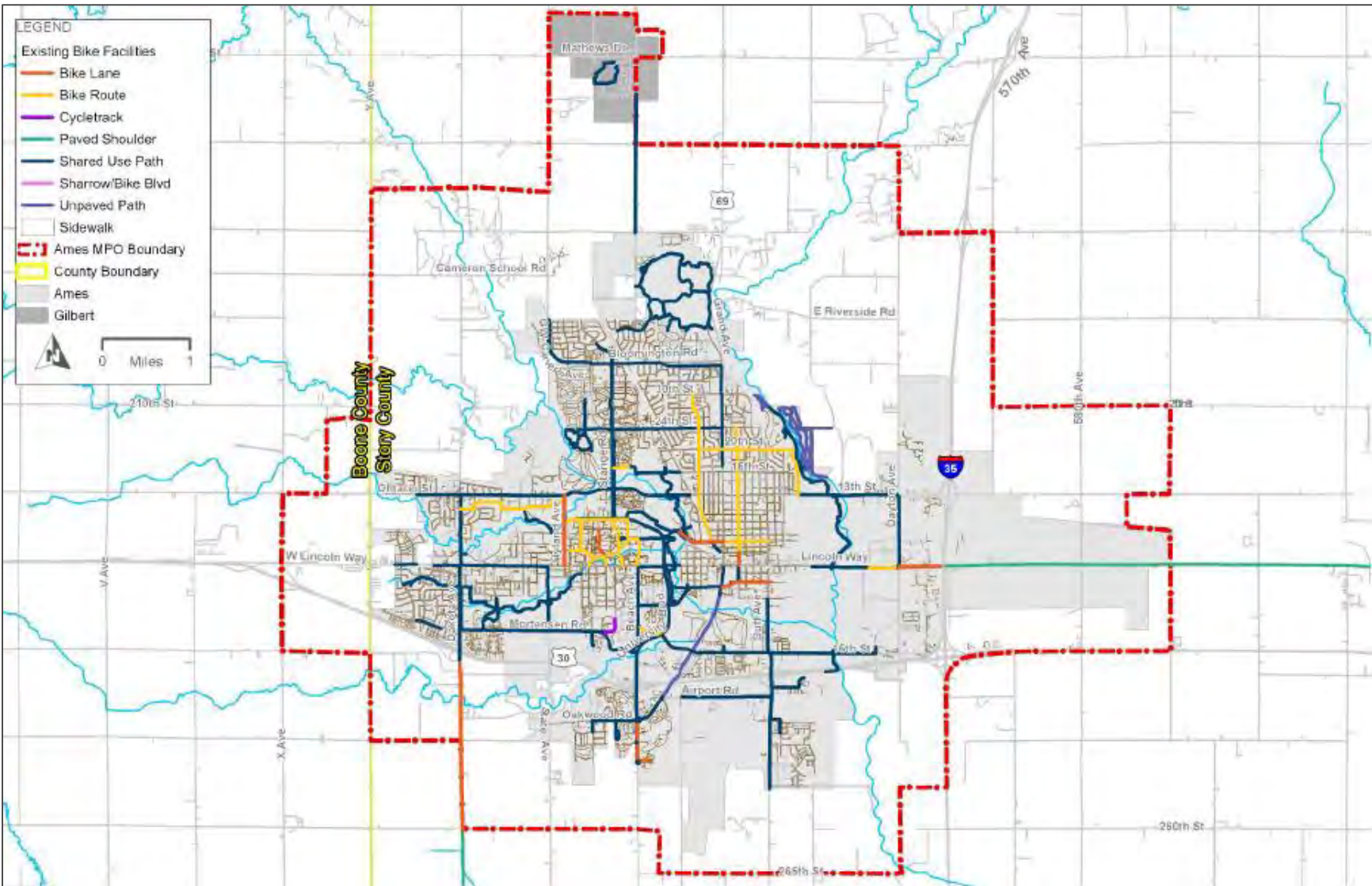


## Chapter 3: Existing System Performance and 2045 Metropolitan Transportation Plan





### Figure 3-11: Existing Bicycle and Pedestrian Network





### Bicycle Level of Traffic Stress

Bicycle Level of Traffic Stress (LTS) for the AAMPO region bicycle and pedestrian network ranked roads and intersections on a scale of 1 to 4, with 4 being the most stressful due to a number of roadway characteristics (for more information, see the Bicycle and Pedestrian Appendix).

The resulting bicycle LTS shows that the more stressful roads in the region are:

- Lincoln Way
- Grand Avenue
- Duff Avenue
- 13th Street
- Dayton Avenue
- Stand Road
- George Washington Carver Avenue
- University Boulevard
- Beach Avenue
- Cameron School Road
- Ontario Street
- N and S Dakota Avenue
- Mortensen Road
- Oakwood Road
- Airport Road
- 16th Street

The intersections in the AAMPO region that considered to be more stressful for bicyclists are:

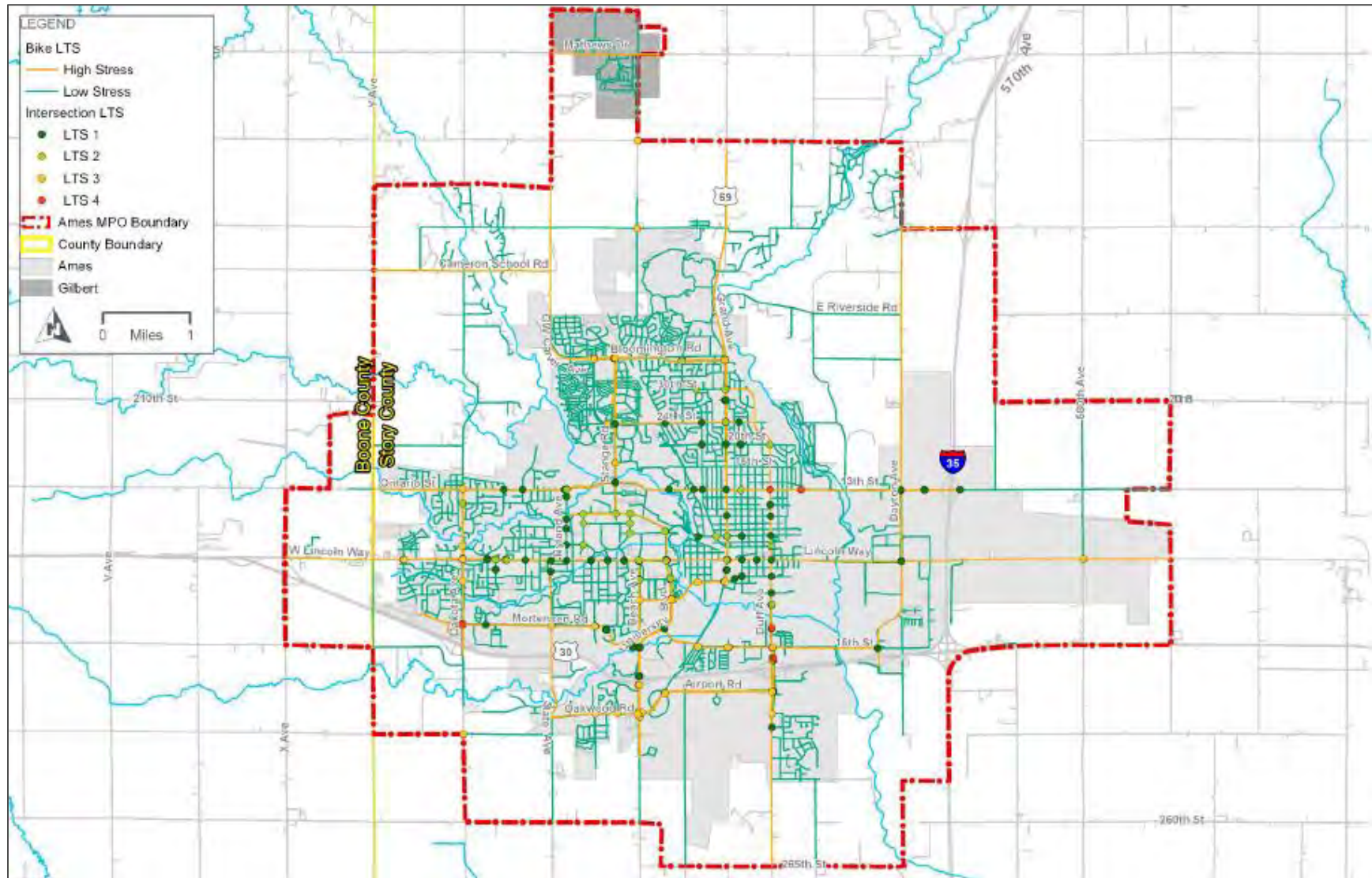
- South Dakota Avenue & Mortensen Road
- South Duff Avenue & Chestnut Street
- South Duff Avenue at US 30 westbound ramp terminal
- South Duff Avenue & 13<sup>th</sup> Street
- 13<sup>th</sup> Street & Meadowlane Avenue

**Figure 3-12** shows the complete bicycle LTS for AAMPO roads and intersections





### Figure 3-12: Bicycle Level of Traffic Stress





## Transit System Conditions

### Transit Services

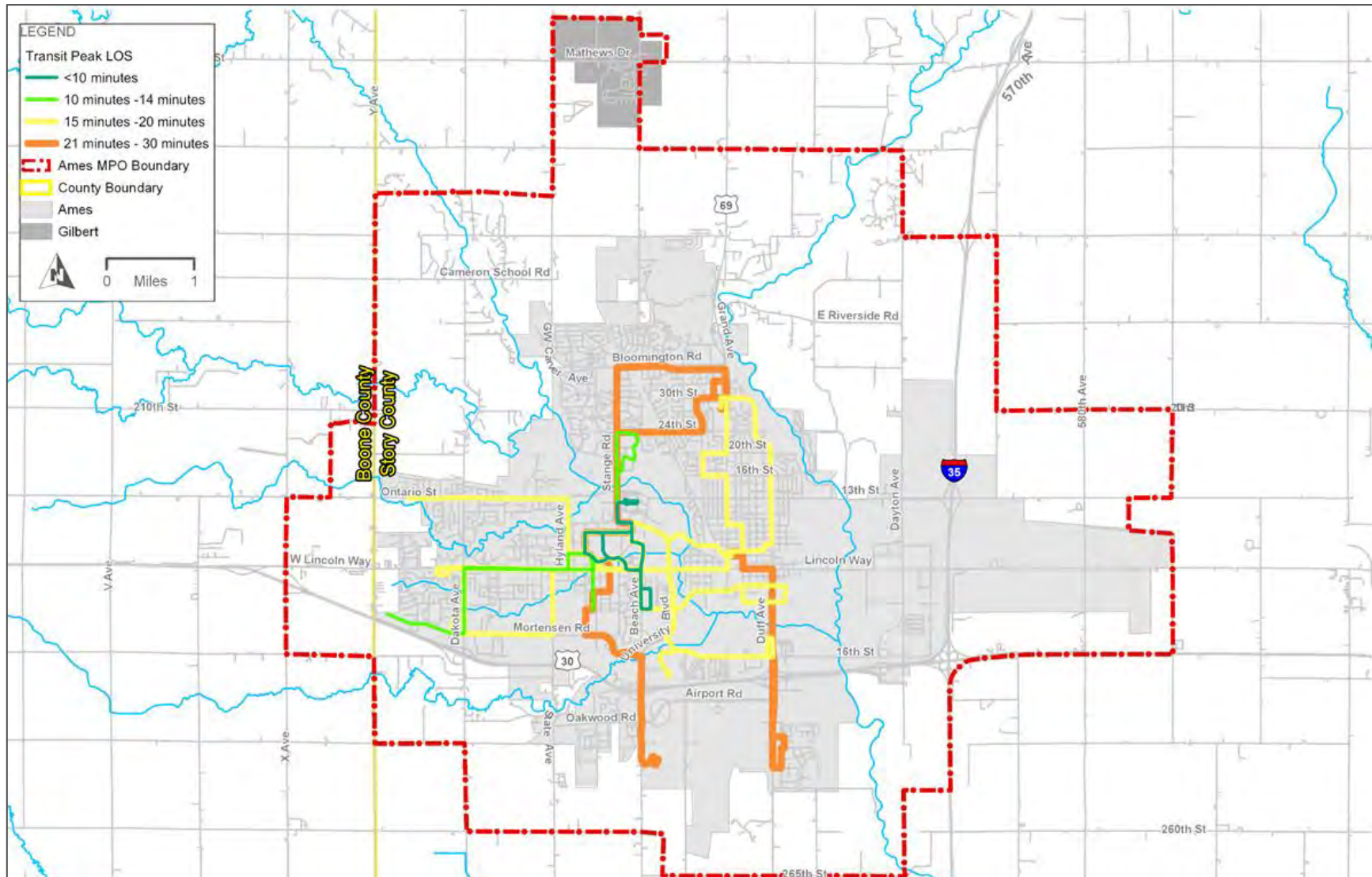
CyRide is the primary transit service provider in the AAMPO region and operates local bus and paratransit services to riders throughout the City of Ames. CyRide is a division of the City of Ames and operates in partnership with Iowa State University (ISU) and Iowa State University's Government of the Student Body (GSB). Additional transit services in the MPO area are presented in **Table 3-7**, while **Figure 3-13** shows a map of CyRide's current fixed routes.

**Table 3-7: Transit Services in the AAMPO Region**

Service	Description
<b>CyRide</b>	Primary transit provider in the MPO area, operating 13 fixed routes as well as paratransit services.
<b>East Ames Service Extension (EASE)</b>	On-demand, curb-to-curb service serving the eastern part of the City of Ames. Riders are picked up at Ames City Hall and dropped off at any location in the eastern part of the city.
<b>Moonlight Express</b>	Fare-free service with three routes and an additional door-to-door service for Ames residents living outside of other shuttle coverage areas. This service is offered during the University's Fall and Spring semesters
<b>Paratransit</b>	Door-to-door paratransit service operated by CyRide and contracted through Heart of Iowa Transit Agency (HIRT), serving individuals with a disability who reside within the City of Ames.
<b>Regional Public Transit Service</b>	Additional service provided by HIRT includes a regional door-to-door service throughout central Iowa.



Figure 3-13: CyRide Fall 2019 Route Network





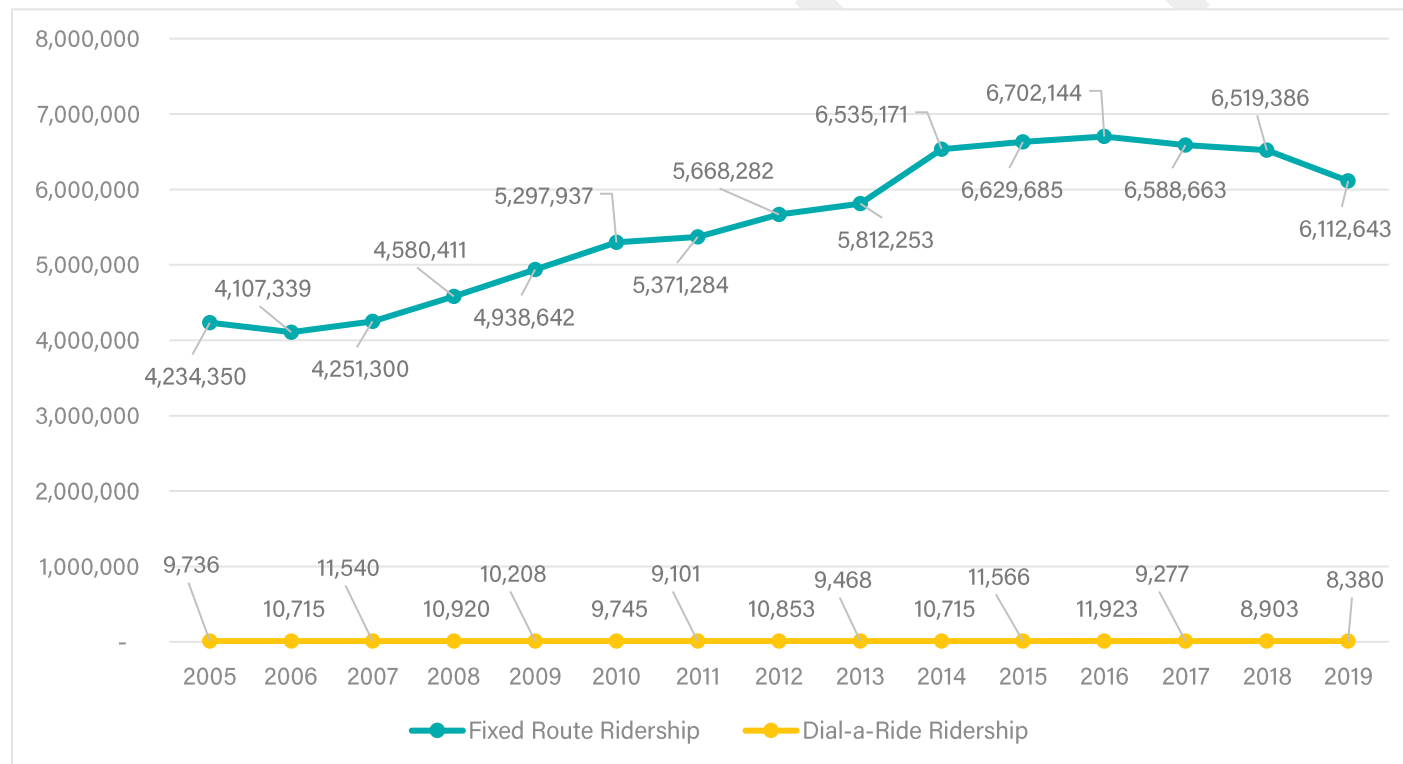
## System and Route Performance

### System Level Performance

Demand for fixed-route transit service in Ames grew continually from 2006-2016; however, in recent years overall ridership has declined as seen in **Figure 3-14**. Some other transit system-level trends include:

- Fixed-route service saw a 6.9% decrease in ridership in FY2019 compared to FY2018
- Dial-a-Ride service has fluctuated throughout the years but has seen a steady decrease between FY2016 to FY2019

**Figure 3-14: Annual Fixed-Route and Paratransit Ridership, 2005-2019**



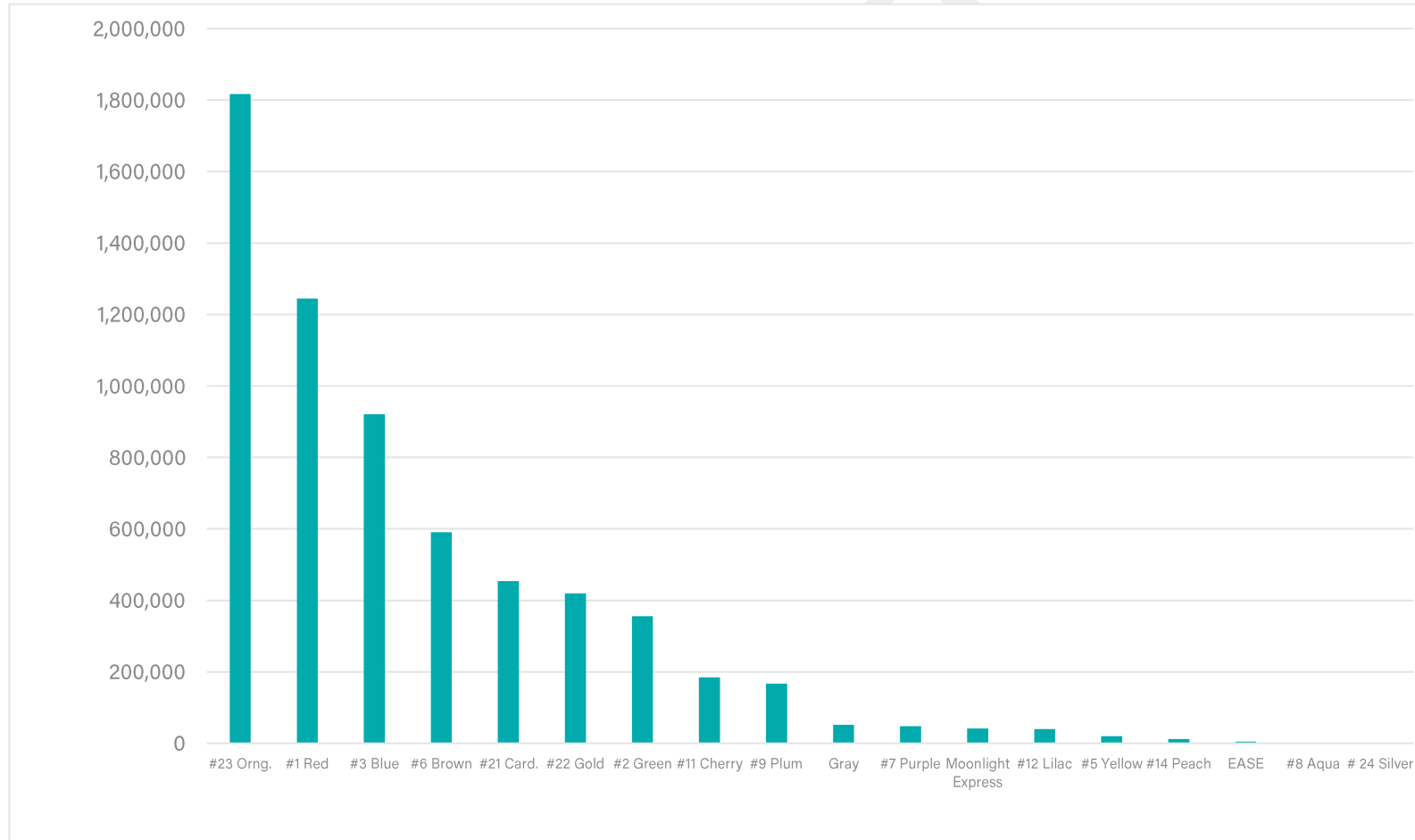
Source: CyRide



*Route Level Performance*

- Highest ridership routes: #23 Orange, #1 Red, #3 Blue-65% of trips made during FY2018  
Lowest ridership routes: #14 Peach, #5 Yellow, #12 Lilac-Less than 1% of trips made during FY2018

**Figure 3-15: FY2018 CyRide Ridership per Route**



Source: CyRide



## Transit Level of Service

### Level of Service Results

Transit level of service for CyRide's peak period (defined as 6 a.m. to 9 a.m. and 3 p.m. to 6 p.m. on weekdays), shown in **Figure 3-156**, identifies the fixed-routes that operate at the highest and lowest LOS.

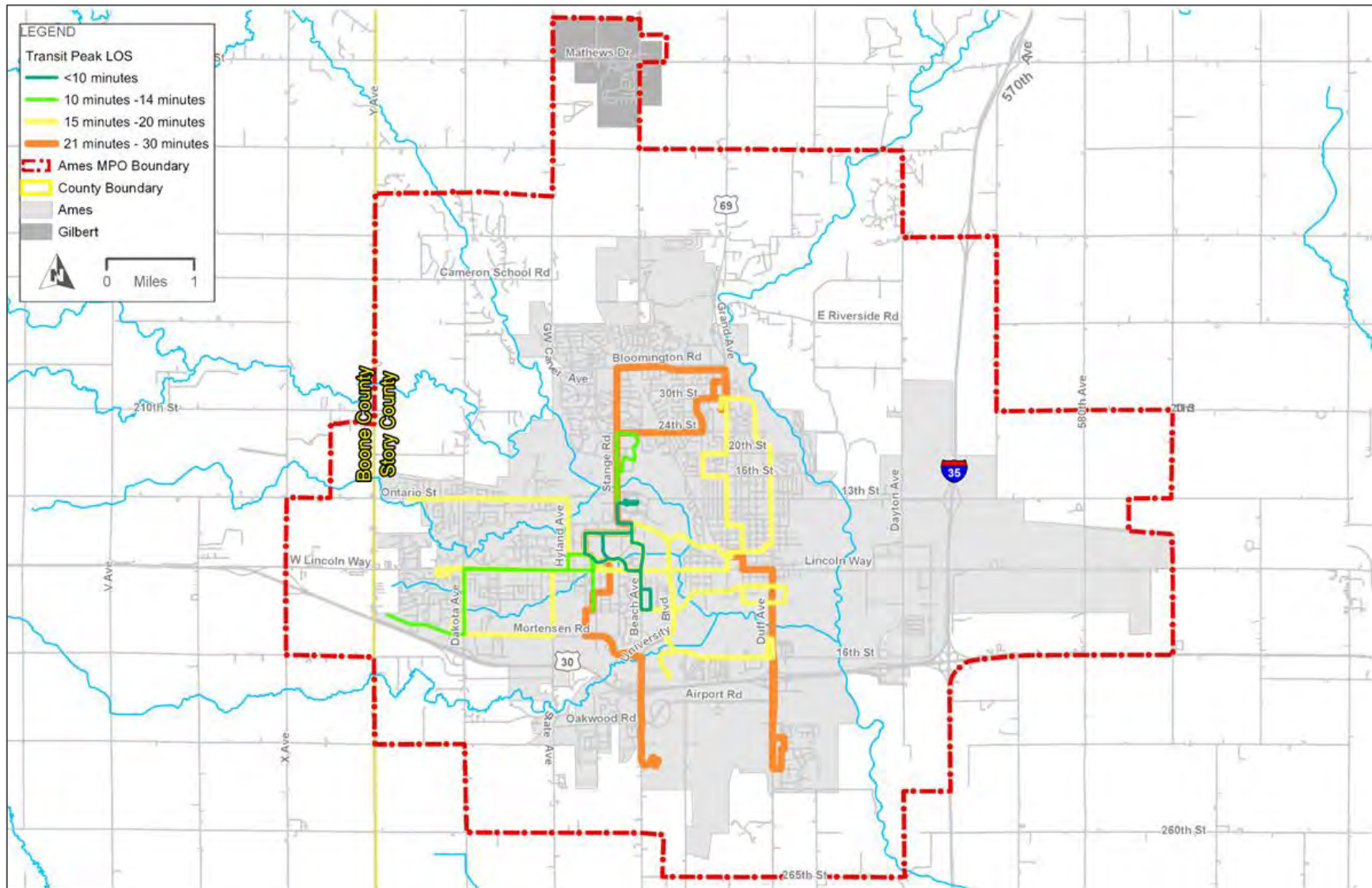
- Highest LOS routes:
  - #23 Orange
  - #21 Cardinal
  - #11 Cherry
  - #25 Gold
- Lowest LOS routes:
  - #5 Yellow
  - #6 Brown
  - #14 Peach

Frequency (Minutes)	Description
<10	No bus schedule needed
10 - 14	Passengers may consult schedules
15 - 20	Passengers will consult schedules to minimize wait time
21 - 30	Passengers adapt travel to transit schedule
31 - 40	Provides minimal service to meet basic travel needs

Source: TCRP



**Figure 3-156: Transit Peak Level of Service**





## Freight

Freight activities provide a foundation for the regional economy of the AAMPO area, as several critical state and national freight corridors are within the MPO boundary. In addition to the critical highway facilities located within the MPO area, several freight rail lines are operated in the region. This section of the plan will present an overview of the existing highway, rail, and pipeline freight system conditions.

### Highway Freight

The efficient movement of goods is contingent upon a reliable freight network that is capable of maintaining multi-modal connections. Within the AAMPO boundary, there are 7 major freight routes that serve the industrial and manufacturing facilities within the region:

- Interstate 35
- U.S. Highway 30
- U.S. Highway 69
- S. Duff Avenue
- S. 16<sup>th</sup> Street (east of S. Duff Avenue)
- Lincoln Way (east of S. Duff Avenue)

### Rail Freight

Union Pacific Railroad (UPRR) operates several freight lines within the AAMPO boundary. The east-west mainline track consists of two tracks that run through the City of Ames, north of Lincoln Way, while the north-south track is a single track that passes through the City of Gilbert and meets the east-west line just west of Grand Avenue and Lincoln Way.

### Pipelines

There are 195.12 total miles of active pipelines in Story County, with 99.23 miles dedicated to gas transmission and the remaining 95.89 miles used for hazardous liquid mileage. In Boone County, there are 282.12 miles of active pipelines—253.32 miles of gas transmission pipeline and 28.81 miles of hazardous liquid pipeline.<sup>3</sup>



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<sup>3</sup> National Pipeline Mapping System, Active Pipeline Database



## Existing Regional Connections

While private vehicle travel is the predominate mode within the AAMPO area, the reliability of the local transportation system is contingent upon its ability to remain balanced and maintain connections with other transportation modes. This section of the plan discusses the existing regional connections, including rail, aviation, and waterways.

### Intercity Bus Service

Several operators provide intercity bus service between the City of Ames and other communities not served by aviation services. These intercity services are based at the Ames Intermodal Facility, located at Hayward Avenue and Chamberlain Street. Users can then connect to destinations in the MPO area that are served by the fixed route transit system. The current intercity bus services serving the AAMPO region are:

- **Jefferson Lines:** Jefferson Lines serves the I-35 corridor through the state of Iowa, offering daily bus service to destinations north and south of the City of Ames. Jefferson Lines also offers the College Connection service, which provides intercity bus service to college campuses across the Midwest.
- **Executive Express:** Executive Express provides one-way and round trip shuttle service to and from the Des Moines International Airport, picking up users at the Ames Intermodal Facility or the Quality Inn and Suites Starlight Village Conference Center located on E 13<sup>th</sup> Street. Executive Express also offers professional charter services.



### Passenger Rail

While Union Pacific operates several freight lines in the AAMPO region, there are currently no passenger rail lines in operation. However, the Boone & Scenic Valley Railroad operates several seasonal passenger lines, such as the Wolf Dinner Train and the Santa Express. These lines operate between the City of Boone and Fraser, IA.

Amtrak offers passenger rail service from their stations located in Creston, IA and Osceola IA; the Creston station is located 106 miles south of the City of Ames while the Osceola station is located 85 miles to the south.



## Aviation

Aviation services within the AAMPO boundary are provided by the Ames Municipal Airport, which is located two miles southeast of the City of Ames. While the airport is open to the public, the only service offered is general aviation; the nearest facility offering commercial aviation is the Des Moines International Airport, located approximately 40 miles south of the City of Ames. Executive Express, a shuttle service operated from the Des Moines International Airport, offers regular service to and from the City of Ames.

The Ames Municipal Airport is in the National Plan of Integrated Airport Systems (NPIAS), which is a biennial report developed by the Federal Aviation Administration that plans the five-year development needs for airports within the national system.<sup>4</sup> Due to eligibility in the NPIAS, the Ames Municipal Airport is in consideration for being a recipient of FAA funding for facility improvements.

Airport operational statistics are available from Airnav.com. The main operational statistics for the Ames Municipal Airport include:

- 78 aircraft based on the field
  - 53 single engine airplanes
  - 7 multi-engine airplanes
  - 2 jet airplanes
  - 13 glider airplanes
  - 3 ultralight airplanes
- 92 aircraft operations per day
  - 56% transient general aviation
  - 37% local general aviation
  - 5% air taxi
  - 1% military

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<sup>4</sup> Iowa Aviation System Plan, <https://iowadot.gov/aviation/studiesreports/technicalreport/4%20-%20Chapter%201.pdf>



### Waterways

A notable recreational waterway located in the AAMPO region is the Skunk River Water Trail. Beginning in Story City and passing through the City of Ames, this popular water trail provides a scenic route for paddlers of all skill levels. Numerous access points are found within the AAMPO boundary and offers residents an outdoor recreation activity for the spring and summer months.

### Alternate Mobility Providers

Travelers within the AAMPO region have a slate of mobility options to choose from in addition to public transit and the bicycle and pedestrian network. Uber and Lyft, two popular ridehailing services, operate in Ames and allow users to connect with drivers via a smart phone application. The carsharing service Zipcar operates on the Iowa State University campus and is aimed towards providing students and university staff with a low-cost mobility option through providing vehicles that can be rented on an hourly basis; these vehicles are rented at an on-campus location and must be returned to the same location. Zipcar is available to the public, but users must be 18 years or older and hold a valid driver's license. Cyclone Cab provides a traditional taxi service within the City of Ames.

### The State of the Existing System

Existing conditions on the AAMPO roadway system reflect a network that operates efficiently, with limited recurring peak hour congestion and reliable corridors for passenger and freight vehicles. Regional infrastructure is sound, with the majority of bridge structures and roadway pavement in good condition. In terms of safety, the number of fatal and serious injury crashes for cars and non-motorized modes have been steady or decreasing, while intersections with the highest crash frequencies and crash rates have been identified and safety countermeasures for these locations have been discussed.

A number of roads and intersections in the AAMPO were determined as higher stress for bicyclists, and these locations will be further evaluated when developing alternative projects for inclusion in the MTP. Fixed route and paratransit usage has been decreasing since its peak ridership in 2016, while the fixed routes that have recorded the highest levels of ridership continue to be those serving the ISU campus and central Ames. As the MPO looks to a more multi-modal future, building off the existing non-motorized facilities and developing connections with the existing CyRide routes can help reach this goal.



## System Performance and Targets

Performance-based planning and performance management became a focus of State and regional transportation planning with the signing of the 2012 surface transportation bill Moving Ahead for Progress in the 21st Century (MAP-21). The Federal government established seven national goals through MAP-21, and then maintained in subsequent Federal legislation, with the purpose of improving decision-making through performance-based planning and programming. Federal Highway Administration has established required performance measures in 23 CFR 490.

### System and Freight Reliability



**Goal:** Achieve a significant reduction in congestion on the National Highway System.



**Performance Targets:** Rather than setting its own system and freight reliability targets, the Ames Area MPO has chosen to support the Iowa DOT's system and freight reliability targets as submitted in the most recent baseline period performance report (2018).

Table System and Freight Reliability Performance Measure	2018 Performance*	4 Year Target
Percent of person-miles traveled on the Interstate that are reliable	100%	99.50%
Percent of person-miles traveled on the non-Interstate NHS that reliable	96.60%	95%
Truck Travel Time Reliability (TTTR) Index	1.12	1.14

Source: AAMPO Draft Transportation Improvement Program, 2021-2024

\*2018 Performance sourced from the NPMRDS



## Pavement and Bridge



**Goal:** Maintain the condition of pavement and bridges in a state of good repair.



**Performance Targets:** Rather than setting its own pavement and bridge targets, the AAMPO has chosen to support the Iowa DOT's pavement and bridge targets as submitted in the most recent baseline period performance report (2018).

TPavement Performance Measure	2018 Performance	4 Year Target
Percent of Interstate pavements in Good condition	100%	49.40%
Percent of Interstate pavements in Poor condition	0%	2.70%
Percent of non-Interstate NHS pavements in Good condition	87%	46.90%
Percent of non-Interstate NHS pavements in Poor condition	4%	14.50%

Source: AAMPO Draft Transportation Improvement Program, 2021-2024; City of Ames

Bridge Performance Measures	2018 Performance	4 Year Target
Percent of NHS bridges classified as in Good condition	15%	44.60%
Percent of NHS bridges classified as in Poor condition	0%	3.20%

Source: AAMPO Draft Transportation Improvement Program, 2021-2024; FHWA National Bridge Inventory



## Road Safety



**Goal:** Significant reduction in traffic fatalities and serious injuries on all public roads.



**Performance Targets:** Rather than setting its own safety targets, the AAMPO has chosen to support the Iowa DOT's safety targets as published in the most recent Iowa Highway Safety Improvement Program Annual Report.

Safety Performance Measures	2014-2018 AAMPO Performance*	2017-2021 Statewide Target
Number of Fatalities	1.0	336.8
Fatality rate per 100 million VMT	0.210	0.983
Number of Serious Injuries	17.4	1,370.8
Serious Injury rate per 100 million VMT	3.680	4.002
Non-Motorized Fatalities and Serious Injuries	4.6	131.0

Source: AAMPO Draft Transportation Improvement Program, 2021-2024; Iowa DOT ICAT Database

\*2014-2018 Performance is for the Ames Area MPO only

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## Transit Asset Management



**Goal:** Maintain the condition of public transit assets in a state of good repair.



**Performance Targets:** CyRide, the transit agency within the Ames Area MPO, has established their own TAM plan and targets which they review and amend, if needed, each fall by October 1st. In March 2020, the Ames Area MPO adopted these transit asset management targets that also match CyRide transit asset management targets.

TAM Performance Measure Class	2019 Target	2019 Year-End Results	2020 Performance Target	2021	2022	2023	2024
<b>Rolling Stock: 40'-60' Buses</b>	35%	36%	33% of fleet exceeds CyRide's ULB of 15 yrs.	33%	33%	31%	33%
<b>Rolling Stock: Cutaways</b>	67%	67%	67% of fleet exceeds FTA ULB of 8 yrs.	89%	89%	0%	0%
<b>Equipment: Shop Trucks</b>	0%	50%	0% of fleet exceeds CyRide's ULB of 10 yrs.	0%	0%	0%	0%
<b>Facilities: Admin./Maint. Facility</b>	0%	0%	0% of facilities rated under 3.0 on TERM scale	0%	0%	0%	0%
<b>Facilities Ames: Intermodal Facility</b>	0%	0%	0% of facilities rated under 3.0 on TERM scale	0%	0%	0%	0%

Source: AAMPO Draft Transportation Improvement Program, 2021-2024

## Transit Safety

Transit safety performance measures and targets will be required for MPO TIPs and MTPs beginning July 20, 2021. Should the MTP be amended any time after this date, the inclusion of the Transit Safety performance measures and targets will be required as part of the amendment.



## Chapter 4 Future Trends & Needs

### Future System Performance

A performance analysis of the future AAMPO transportation system was conducted to better understand how projected household and employment growth will likely impact future year 2045 regional travel demand. This analysis was based on the Travel Demand Model (TDM) update that uses a base year of 2015 and was developed to support the Forward 2045 plan transportation decisions and investments.

### Future Growth in the AAMPO Region

The steady growth in population and employment for the AAMPO region that was presented in Chapter 2 is consistent with the projected future regional household and job growth through the year 2045. While the estimated job and household growth levels are not indicative of how future land uses will be planned, zoned, and phased, they inform the travel parameters used in the future system performance analysis presented in this chapter.

**Table 4-1** shows the region-wide changes in the number of households and jobs in the region between 2015 and 2045. These projected levels serve as the primary inputs in the AAMPO TDM, and their development is outlined in the Travel Demand Model Appendix.

**Table 4-1: Projected Regional Growth Trends, 2015-2045**

	Households	Population	Employment
<b>2015</b>	26,179	68,221	43,297
<b>2045</b>	33,698	88,546	56,744
<b>Growth</b>	29%	30%	31%

*Source: Ames Area MPO, City of Ames, Woods and Poole*

As shown in the table, the population and number of households in the AAMPO region are projected to increase by 30% and 29%, respectively, between 2015 and 2045 while the number of jobs is anticipated to increase from a 2015 level of 43,297 to a 2045 level of 56,744. This marks an employment growth change of 31%.



Rather than use counts for the numbers of jobs per TAZ, the AAMPO TDM uses square footage of non-residential land uses as the input representing employment. Employment projections were converted to non-residential building square footages for various development types to support the TDM. Growth in household and employment levels were allocated to the AAMPO's Traffic Analysis Zones (TAZs), which make up the geographical units employed in the TDM. Projected household growth by TAZ is shown in **Figure 4-1** while projected growth in non-residential land uses by TAZ is shown in **Figure 4-2**.

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Figure 4-1: Projected Household Growth by TAZ, 2015-2045

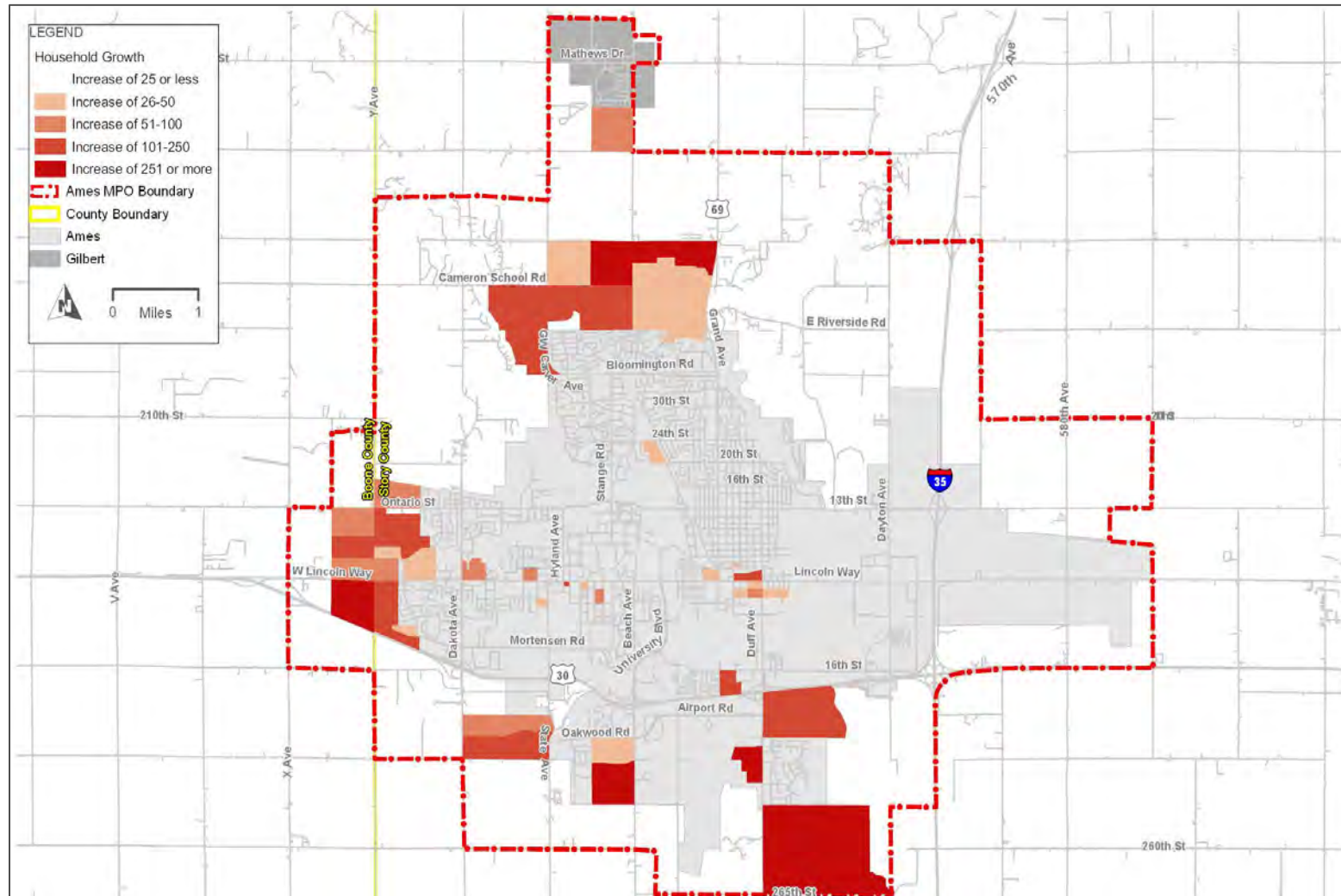
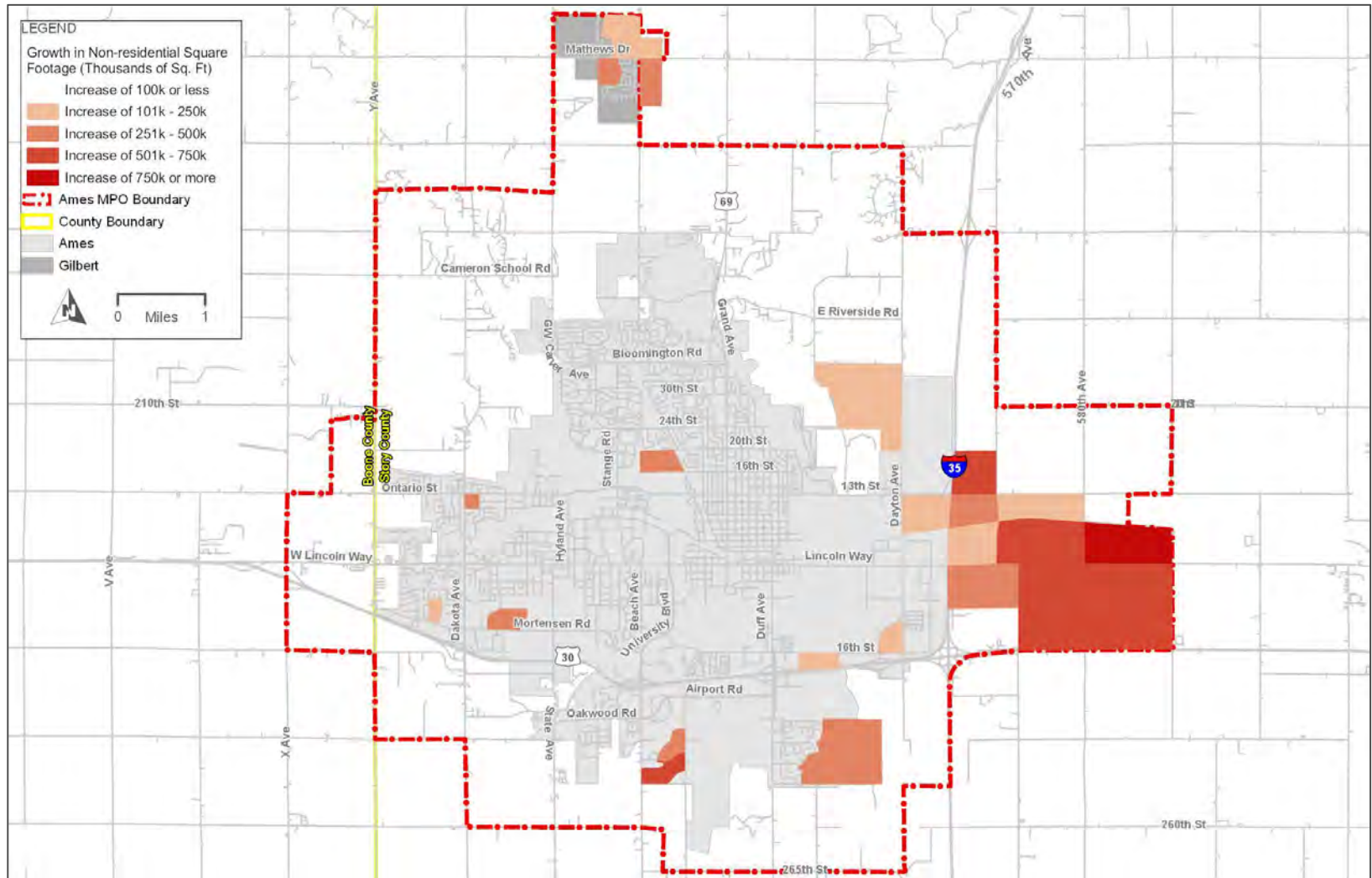




Figure 4-2: Growth in Non-Residential Land Use, 2015-2045





## Travel Demand Model

The TDM is a set of mathematical procedures and parameters that simulate daily travel based on residential and employment data. This tool is the primary method for assessing the conditions and performance of the future transportation system, which is done by predicting the number, purpose, origin and destination, and route of trips made on the system. The underlying idea of the TDM is that land use patterns influence the type and number of trips individuals take, with “trip” being defined as travel between two points for a specified purpose, i.e. home to work, home to school, or work to shopping.

AAMPO’s model network is comprised of the existing roadways and their characteristics, such as number of lanes, number of turn lanes limits, and speed limits. The geographic bounds of the AAMPO region are divided into Transportation Analysis Zones (TAZs), in which population, employment, and land use data are entered. These TAZs are then connected to one another via the model network and travel patterns are estimated.

In addition to being used to assess future traffic scenarios, TDM output is used in the alternatives development and evaluation process to aid in the identification of projects for inclusion in the Fiscally-Constrained Plan. Several of the scoring metrics discussed in **Chapter 6** involve the TDM output.

### *2045 Existing plus Committed Baseline*

System conditions for the year 2045 used an “existing plus committed” (E+C) network scenario. The E+C scenario is considered a “business-as-usual” scenario in that it assumes no improvements are made to the system beyond the current Transportation Improvement Program (TIP). For this E+C scenario, the existing roadway system plus the following major roadway projects are included:



- Grand Avenue extension, from S 5<sup>th</sup> Street to S 16<sup>th</sup> Street
- Cherry Avenue extension, from Lincoln Way to SE 5<sup>th</sup> Street
- Hoover Avenue and 30<sup>th</sup> Street to Duff Avenue and 16<sup>th</sup> Street road diet



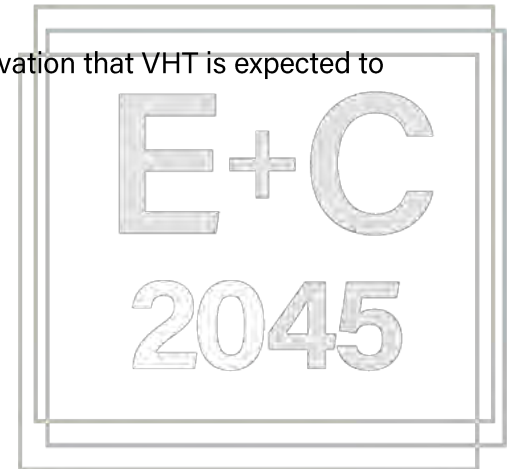
### Future Traffic Operations

Traffic volumes for the year 2045 were forecasted through comparing the volume output for the base year 2015 model with the output of the 2045 E+C scenario. The household and population data used to update the TDM was sourced from AAMPO, Iowa DOT and Woods and Poole Economics. The allocation of the 2045 household and employment data was based on future growth areas identified through the scenario planning activities of the City of Ames' 2040 Comprehensive Plan.

To account for deviations between 2015 base year modeled and observed traffic levels for 2015, a post-processing procedure was applied to the 2045 E+C traffic volumes. This post-processing procedure recognizes that the difference between the base year 2015 modeled traffic levels and observed 2015 traffic levels should be applied to the 2045 E+C modeled traffic volumes to forecast future traffic volumes. The traffic forecasts for the E+C 2045 network are compared to those for the base year 2015 network in **Figure 4-3**.

System-wide statistics based on the 2045 E+C model run are shown in **Table 4-2**. As shown in the table:

- Vehicle Miles Traveled (VMT) is predicted to increase by 53% during the 30-year period, which indicates that the average trip will be longer, in terms of distance, than trips taken today.
- Vehicle Hours Traveled (VHT) is predicted to increase by nearly 74% under the E+C scenario, which indicates that the average trip will be longer, in terms of time spent traveling, than trips taken today.
- The number of trips are predicted to increase by 31% during the 30-year period.
- Average trip lengths are expected to see a 16% increase, which is consistent with the anticipated growth of the urban area especially at the fringe areas identified as future high growth locations.
- Average travel speeds are expected to see a 12.5% decrease, as consistent with the observation that VHT is expected to outpace VMT. Decreasing average trip speeds indicate future roadway congestion.





**Table 4-2: System Wide Statistics for the E+C 2045 Scenario**

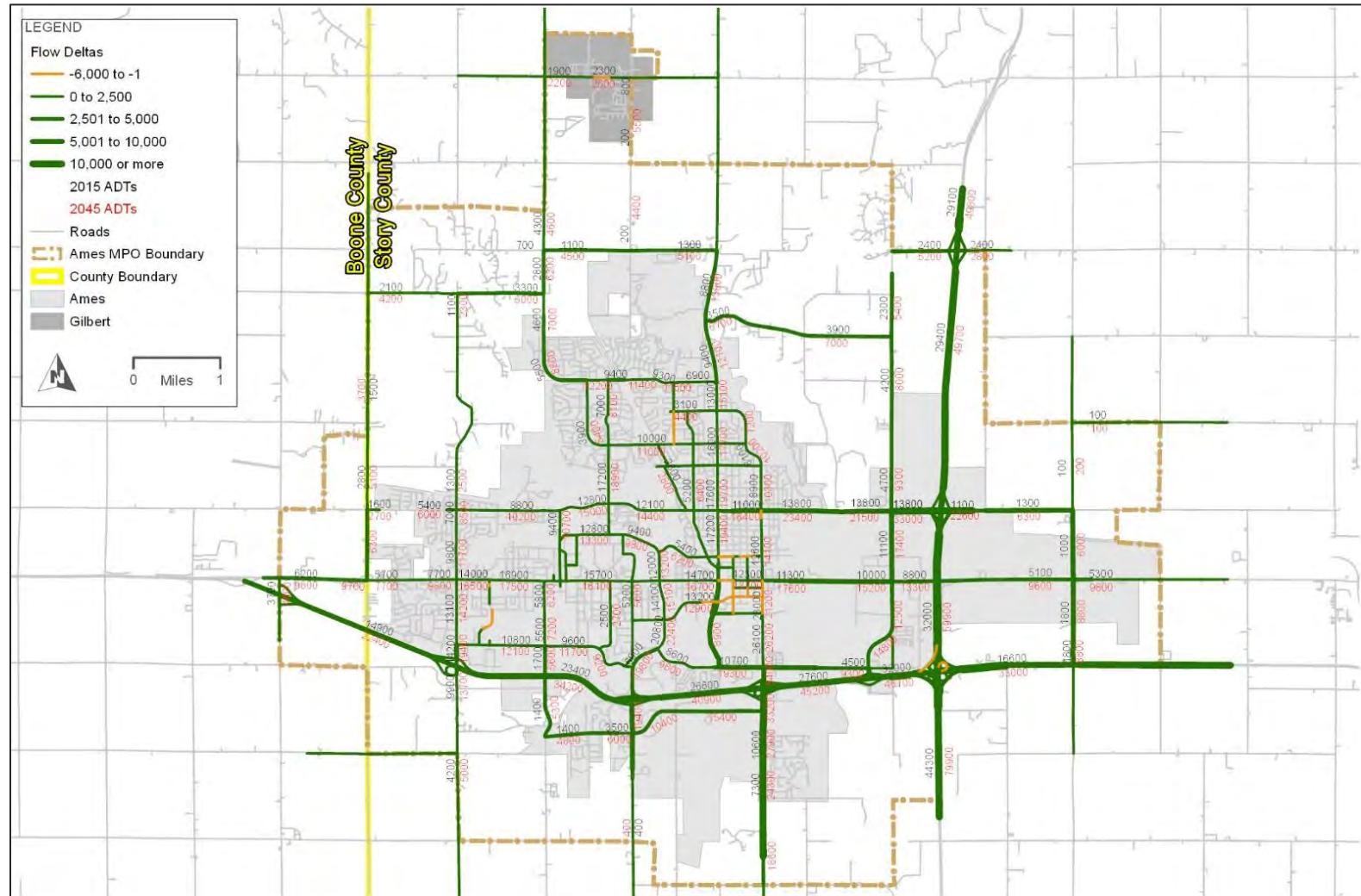
Performance Measure (Annual)	2015	2045	Change
<b>Vehicle Miles Traveled (VMT)</b>	468,226,535	714,556,026	52.6%
<b>Vehicle Hours Traveled (VHT)</b>	11,836,478	20,602,681	74.1%
<b>Trips</b>	154,187,813	202,555,211	31.4%
<b>Average Trip Length (miles)</b>	3.04	3.53	16.2%
<b>Average Travel Speed (mph)</b>	39.6	34.7	-12.5%

*Source: Ames Area MPO Travel Demand Model*

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Figure 4-3: 2015 ADTs and Forecasted E+C 2045 ADTs





### *E+C 2045 Traffic Operations*

A planning-level assessment of peak hour traffic operations based on the E+C 2045 forecasts was conducted using the volume-to-capacity approach described in Chapter 4: Existing Conditions. The resulting assessment is shown in **Figure 4-4**. The corridors that are projected to exhibit LOS issues (level of service D or worse) under the E+C 2045 scenario are:

- S Duff Avenue, from Highway 30 to 265<sup>th</sup> Street
- I-35, south of Highway 30
- Mortensen Road, from Seagrave Boulevard to Welch Avenue
- Lincoln Way, from I-35 to 590<sup>th</sup> Avenue
- Bloomington Road, from Hyde Avenue to Hoover Avenue
- Grand Avenue, from north of Bloomington Avenue to Arrasmith Trail
- E 13<sup>th</sup> Street, from Dayton Avenue to 570<sup>th</sup> Avenue
- Dayton Avenue, from E 13<sup>th</sup> Street to USDA

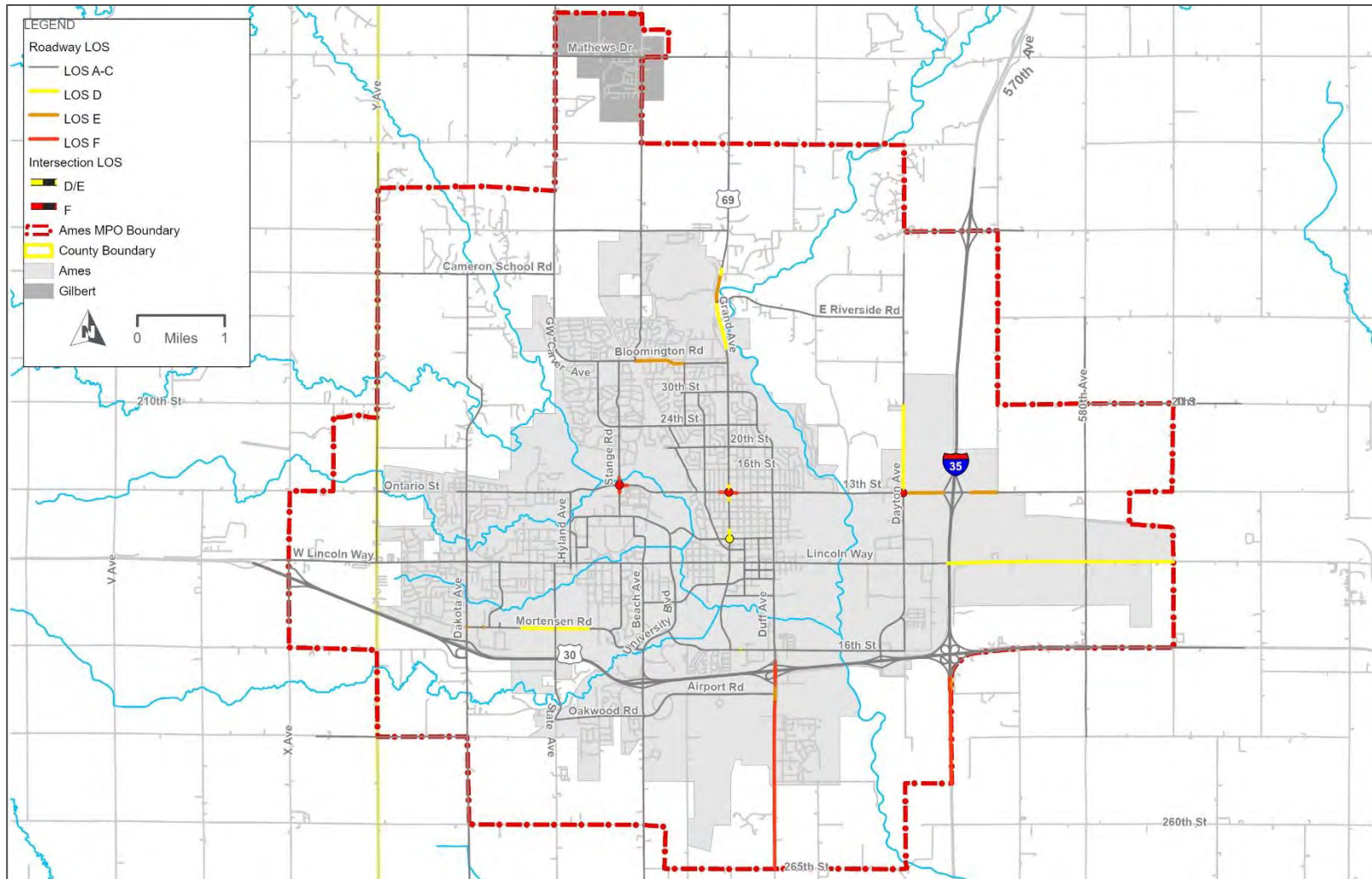
The HCM approach used in the future traffic operations analysis identified intersections, in addition to roadway segments, that are projected to exhibit LOS issues under the E+C 2045 scenario. These intersections are:

- Stange Road and 13<sup>th</sup> Street
- Grand Avenue and 6<sup>th</sup> Street
- Grand Avenue and 13<sup>th</sup> Street
- Dayton Avenue and E 13<sup>th</sup> Street





Figure 4-4: Peak Hour Traffic Operations for the E+C 2045 Scenario





## Future Multi-Modal System Opportunities

Population growth, employment growth, and future developments highlight where long-term expansions to the transit, bicycle, and pedestrian networks will be needed. New development in the City of Ames is anticipated in four key zones: North Ames, East Ames, South Ames, and West Ames. Infill development and growth in central Ames is concentrated in the Campustown/Lincoln Way corridor and Downtown Ames.

### Active Transportation

Development of new residential neighborhoods and employment areas at the edge of the city provides opportunities to expand the active transportation network. High-priority gaps for long-term low-stress walking and biking facilities are:

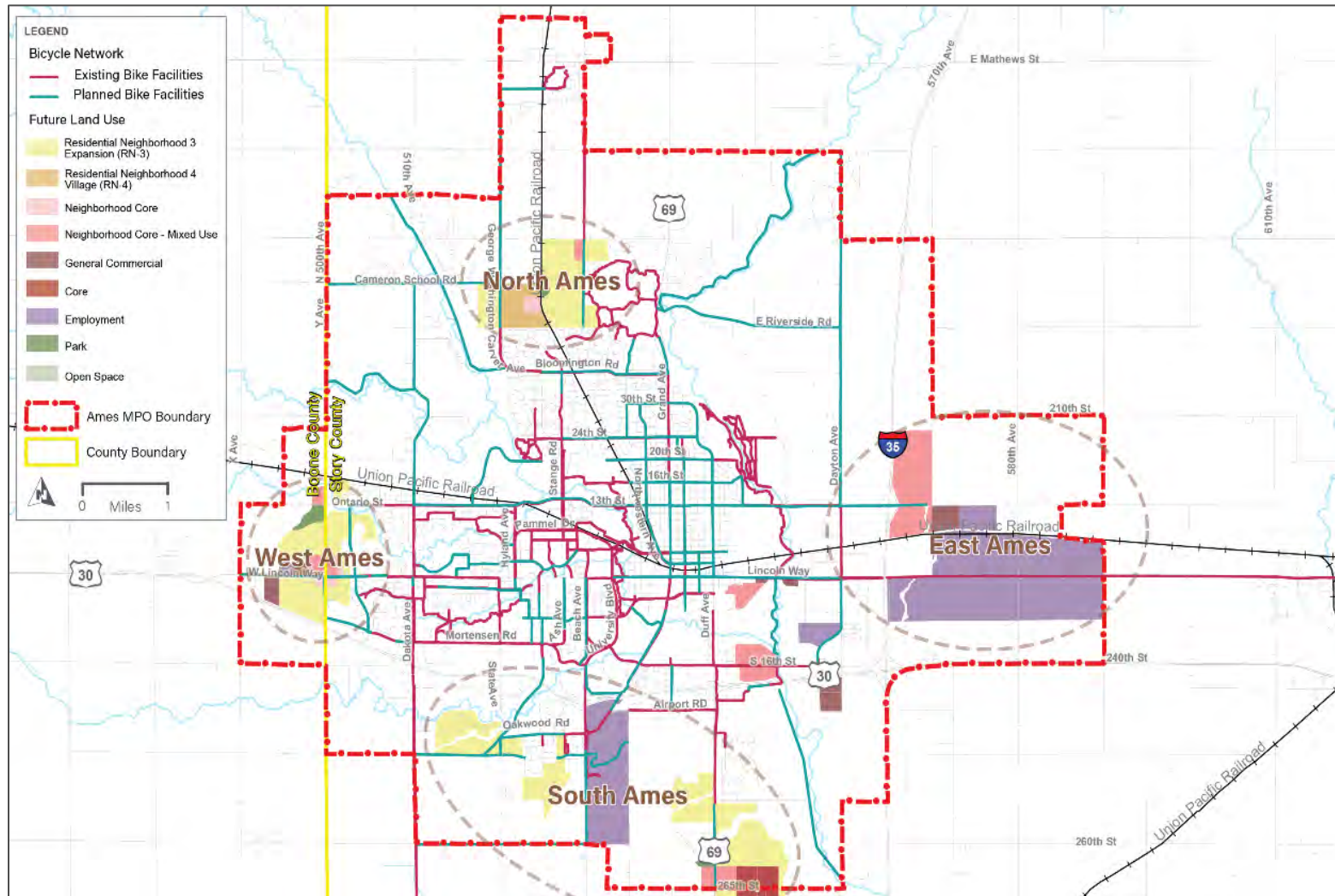
- N North Ames:** Existing and planned biking and walking facilities on Stange Road and Hyde Avenue should continue between Bloomington Road and W 190<sup>th</sup> Street, connecting future residential and mixed-use areas.
- E East Ames:** Future employment and commercial centers can be served by facilities on: S 3<sup>rd</sup> Street east of Duff Avenue; 570<sup>th</sup> Avenue north of E Lincoln Way; 220<sup>th</sup> Street east of 570<sup>th</sup> Avenue; 580<sup>th</sup> Avenue.
- S South Ames:** Neighborhoods and Iowa State University (ISU) Research Park can be better linked to central Ames by facilities on: State Avenue south of Mortensen Road; Cedar Lane south of Oakwood Road; Ken Maril Road; 265<sup>th</sup> Street east of US 69; 550<sup>th</sup> Avenue between Ken Maril Road and 265<sup>th</sup> Street.
- W West Ames:** Existing and planned facilities should be extended into new neighborhoods on Mortensen Road and Ontario Street west of Idaho Avenue. 500<sup>th</sup> Avenue between US 30 and Ontario Street is a good candidate for a new bike and pedestrian connection.

As local roads are developed in the future growth areas, a complete streets approach should be applied to planning and design.

**Figure 4-5** shows changes in land use that increase demand for walking and bicycling.



Figure 4-5: Ames Existing and Planned Bicycle Network and Future Land Use





## Transit

CyRide's existing network provides good coverage in the City of Ames. Student housing complexes and destinations on ISU's main campus will continue to generate high demand for transit. **Figure 4-6** shows future household density, and **Figure 4-7** shows land use of future developments. Note that on-campus housing is not classified as households (they are classified as "group quarters"), which explains the main campus' low residential density shown in Figure 4-6. There are opportunities for transit investment to support future population and employment growth in these locations and others, including the following:

- N North Ames:** Some development will occur outside the service area and in areas with low levels of existing service, including North Ames. Some of this development will be low density and may be difficult to serve effectively with traditional fixed-route transit service.
- E East Ames:** Jobs located in the eastern portion of Ames are a potential market with a limited level of existing service. However, these locations are also less dense in terms of land use than other areas in the city and may not support traditional fixed-route transit service.
- S South Ames:** New commercial development will likely occur along the South Duff corridor in the form of big box retail. There may be opportunities for improved connections from housing geared toward the general workforce to support employment growth at ISU Research Park.

Lincoln Way will remain an important transit corridor. Given existing activity levels oriented toward ISU, new transit demand will inevitably follow future higher-density multi-unit development anticipated for the western portion of Lincoln Way. Future demand in this area could lead to crowding on buses and will likely require higher levels of capital investment.



Figure 4-6: CyRide System and Household Density in 2045

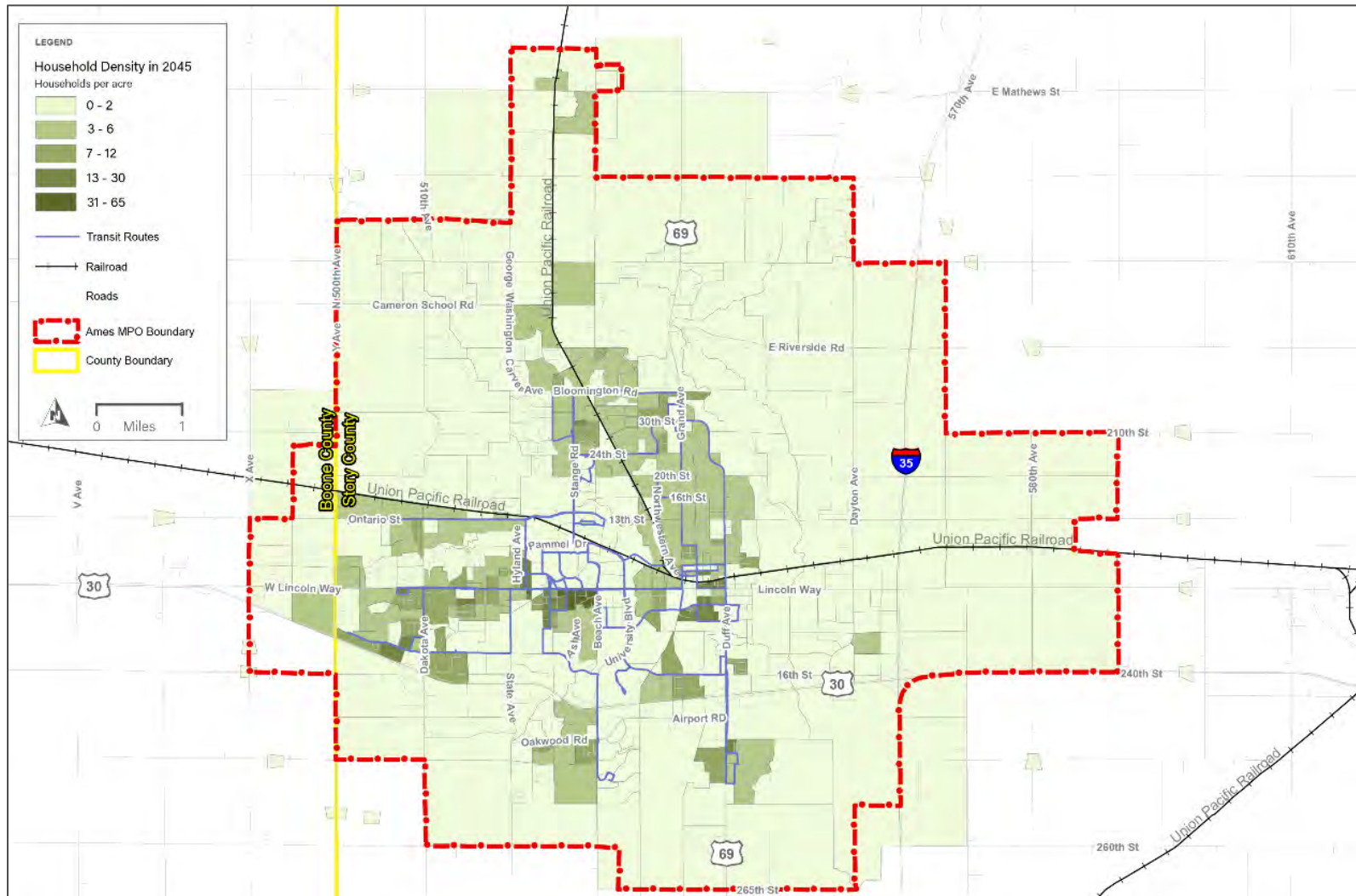
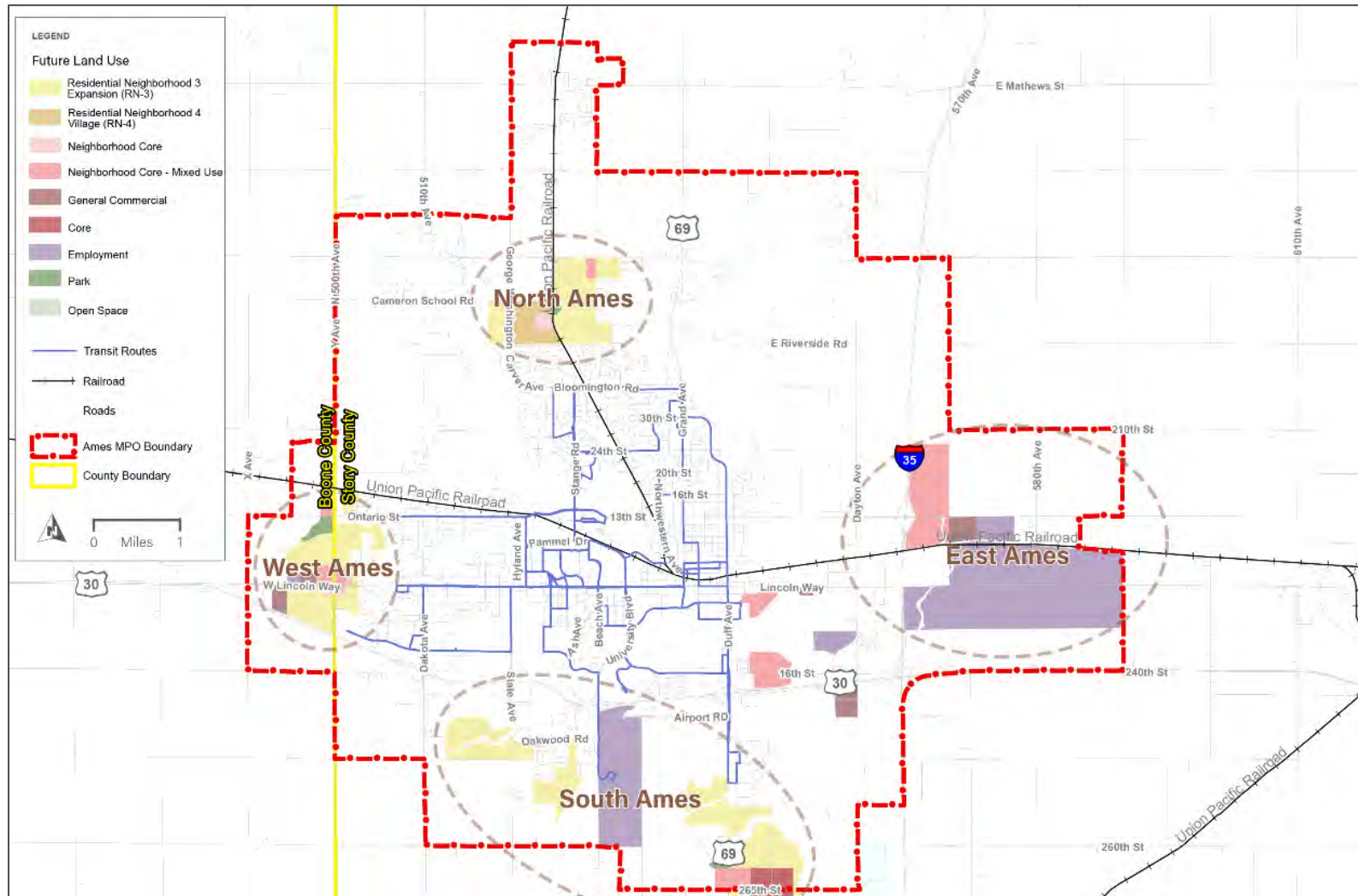




Figure 4-7: CyRide System and Future Land Use





## Emerging Transportation Trends and Technology

Transportation is entering an era of unprecedented change. Emerging technologies are coming together at a rapid pace in ways that will shift the underlying assumptions about and operation of our transportation network. The key factors driving this change include connected and autonomous vehicles, electrification, and the emergence of alternate mobility devices for both people and goods.

These emerging technologies are coming closer to wide spread implementation. More autonomous features are being added to new vehicles, with highly advanced versions now testing across the country. Mobility disrupters such as e-bikes and scooters appeared in many cities practically overnight within the past 2 years. Every year brings broader electrification of all types of vehicles in our multimodal fleet. These may seem to be isolated examples of technology deployment, but are actually part of a greater set of trends driving this inevitable change.

### Trends

#### *The Accelerating Growth of Technology*

The rapid pace of technological change has created planning challenges. While planning horizons typically extend 20 years and longer beyond plan adoption, the exponential growth of technological capabilities has created unanticipated disruption that would have been difficult to foresee and is likely to accelerate even more quickly.

Understanding the rate at which technology adoption grows is a central component to planning for transportation technology, and was first coined in 1936 by aeronautical engineer Theodore Wright<sup>5</sup>. Examining the growth of technologies throughout the last century, this concept has been the most accurate predictor of technology growth across industries.<sup>6</sup>

Wright's law describes exponential growth, the periodic doubling of technological progress within a given time increment. This type of growth is deceptive, as it may start small and appear to be making little progress but eventually the doubling effects produce tremendous growth in a relatively short amount of time. It is through the lens of exponential growth that we should be viewing the future of transportation-related technology and how soon these technologies will need to be addressed. Today's trends that may seem

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<sup>5</sup> Wright TP, (1936). "Factors affecting the costs of airplanes." *Journal of Aeronautical Sciences* 10: 302-328.

<sup>6</sup> Nagy B, Farmer JD, Bui QM, Trancik JE (2013) Statistical Basis for Predicting Technological Progress. *PLoS ONE* 8(2): e52669. <https://doi.org/10.1371/journal.pone.0052669>



linear may in fact be exponential which may lead to technologies and capabilities that seemed unimaginable emerging within a short period of time.

### *New Mobility*

Recent advances in technologies and business models have shaped a new category of transportation, often referred to as “new mobility.” These new modes, services, and infrastructure hold both opportunities and risks for our transportation system and our communities, offering greater access and more mobility options, but also creating challenges integrating these options into our transportation system. Many of these technologies are either here already or coming soon, but there is not always a firm understanding of how to implement them and what the full consequences will be.

The Forward 2045 plan has organized these broader new mobility technologies into four sets of trends, which are then tied to a series of potential strategies. These “new mobility” categories and related policy areas will be based upon the following definition:

*New Mobility - A service, mode, transportation infrastructure, or a combination of these, that leverages new digital communication platforms and data to connect travelers to mobility options to move, share and use the transportation infrastructure.*

The four key new mobility technology trends that will inform the technology and strategy analysis for the Ames Area are:



**Autonomous:** Vehicle automation for the purpose of transporting people and goods that can navigate and operate without assistance from a human driver or operator.



**Connected:** The ability to communicate real-time information between mobility modes, infrastructure, users, and any other component critical to the movement of people and goods.



**Electric:** Transportation that uses stored or transmitted electricity to power a vehicle instead of traditional internal combustion engines (ICE), usually by means of batteries, ultra-capacitors, or hydrogen fuel cells.



**Shared:** Transportation services and resources that are shared among users, either concurrently or one after another.



These technology areas are intended to address transportation and technology trends that may present future challenges and opportunities for the Ames Area. These technology trend policy areas are often overlapping, collaborative technologies and describe how we might capture the best aspects in the evolving transportation practices in the region.

**Chapter 6** contains a discussion of the potential strategies available to AAMPO based on the four key new mobility technologies described above.

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### Autonomous

#### What is it?

Vehicle automation for the purpose of transporting people and goods. This technology can navigate and operate without assistance from a human driver or operator.

#### What are the trends?

Most major automobile manufacturers and tech companies are actively pursuing programs to develop autonomous vehicles as of 2020. These efforts are maturing rapidly. For example, it took Google's autonomous vehicle company Waymo approximately six years to drive a million miles, starting in 2009. Their autonomous vehicles now drive over a million miles per month, and over half of their 20 million total miles driven to date have been in the past year.<sup>7</sup>

Automation, a suite of technologies that enables a vehicle to operate independently of human intervention, does not lend itself to one form of vehicle, mode, or service model over another. This means autonomous vehicles could be privately-owned and operated similar to a single occupancy vehicle, or they could be part of a robo-taxi fleet that provides mobility by trip or subscription. Further, these technologies could be applied to transit vehicles such as buses and shuttles to enable lower operating costs and better service for passengers. The future transportation



Source: HDR

<sup>7</sup> <https://venturebeat.com/2020/01/06/waymos-autonomous-cars-have-driven-20-million-miles-on-public-roads/>



opportunities and challenges from automation will depend on the forms it takes and how consumer preference and government policies shape the technology.

Full automation will enable different service models, including a Mobility as a Service (MaaS) model, where a traveler would pay for a service (transportation) instead of owning an actual vehicle. This trend could be to be one of the most significant advances in transportation since the mass adoption of the automobile, with consequences extending into land use, traffic, safety, employment, and cost of transportation. The full consequences of automation adoption will likely transform cities and regions. How these technologies will be deployed depends largely on what government policies are in place to direct these changes to the best possible outcomes for communities and individuals.

Several companies have begun development of technology that allows autonomous vehicles, such as scooters, to reposition themselves without human intervention, and the ability to meet travelers at their front door<sup>8</sup>. This technology could negatively impact right-of-way space and visibility and conflict with pedestrians and other vehicles, posing similar challenges to robotic delivery and MaaS curb management issues.

Autonomous vehicles will also move goods, which could present challenges for cities and regions. Delivery robots are navigating city streets on a limited basis today, and their use will likely expand considerably. Companies such as Amazon, FedEx, and UPS have all been developing and testing ground-based robotic delivery systems. The grocery delivery service Nuro recently received National Highway Traffic Safety Administration (NHTSA) approval for fully autonomous delivery on public roads.<sup>9</sup>

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<sup>8</sup> <https://www.sightline.org/2019/12/27/zombie-scooters-are-coming/>

<sup>9</sup> <https://www.nhtsa.gov/press-releases/nuro-exemption-low-speed-driverless-vehicle>





#### *Connected*

##### *What is it?*

The ability to communicate real-time information between mobility modes, infrastructure, users, and any other component critical to the movement of people and goods.

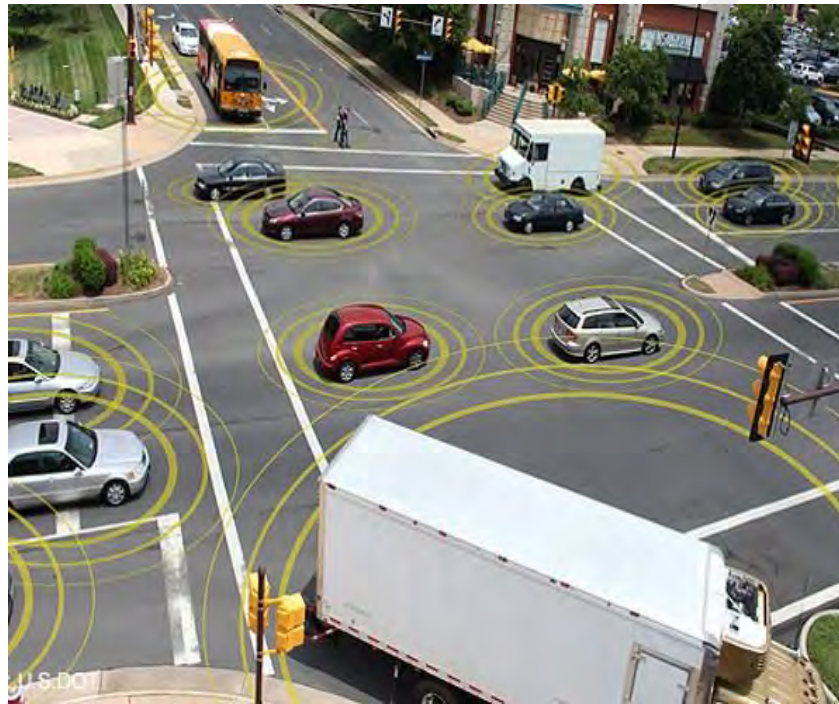
##### *What are the trends?*

5G and the Internet of Things are next-generation communication technologies that promise ubiquitous connectivity between all facets of transportation. Communications standards based on new technologies, such as Vehicle to Infrastructure (V2I), Vehicle to Vehicle (V2V), and Vehicle to Everything (V2X) are forming the basis of the digital connectivity needed to support future transportation modes and models. These technologies are being applied to a variety of applications, including transit, freight, and safety-critical features such as forward collision warning and forward intersection assist.

Data and information play an increasingly important role in mobility, working to enable MaaS systems, ensure safety-critical functions, and enable the system-wide management and optimization of our transportation network. Connectivity enables services and travelers to make informed decisions based on real-time information and forms the backbone of emerging transportation technologies such as Transportation Network Companies (TNC) and shared micromobility. Connectivity is an enabling set of technologies that can be used to leverage better transportation outcomes and should be coordinated to enable greater functionality for alternative modes such as micromobility or active mobility.



All of the major US cellular carriers have now launched some form of 5G cellular network. 5G is predicted to improve internet speeds 20-fold compared to the fastest network widely available now, 4G LTE.<sup>10</sup>



Source: United States Department of Transportation

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<sup>10</sup> <https://www.networkworld.com/article/3330603/5g-versus-4g-how-speed-latency-and-application-support-differ.html>





### *Electric*

#### *What is it?*

Transportation vehicle or infrastructure that uses stored or transmitted electricity to power a vehicle instead of traditional internal combustion engines (ICE), usually by means of batteries, ultra-capacitors, or hydrogen fuel cells.

#### *What are the trends?*

Several key metrics will drive the adoption of battery-powered electric vehicles, which is the most popular commercialized type at this time. Since 2010, the battery cost per kWh has fallen approximately 87%. This trend is forecast to continue, making electric vehicles cost-competitive with ICE vehicles around 2024.<sup>11</sup> This drop in price will likely create a strong economic incentive to adopt electric vehicles, creating demand for charging facilities and infrastructure. The performance of batteries also continues to increase, which gives vehicles more range, shorter charging times, and longer battery life. Research group Bloomberg New Energy Finance (BNEF) estimates that by 2040, that 57% of all vehicle sales worldwide will be electric vehicles.<sup>12</sup>

ICE require fossil fuels to run while electric vehicles can utilize any number of domestic power sources to operate, including renewables like wind and solar, carbon-free sources like nuclear, and fossil fuels like natural gas and coal. Moving to electrified vehicle fleets means there is flexibility to add new and cleaner power sources as they become available, with the added benefit of eliminating tailpipe emissions and reducing roadway noise. However, increased demand for electric vehicles will spur increased demand for electricity, inducing further stress on electrical grids and related infrastructure necessary for transmission. A second, planning-related, challenge is the provision of charging stations. As EV fleets grow, so too will the need for publicly accessible charging stations. Many

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<sup>11</sup> <https://about.bnef.com/blog/battery-pack-prices-fall-as-market-ramps-up-with-market-average-at-156-kwh-in-2019/>

<sup>12</sup> <https://about.bnef.com/electric-vehicle-outlook/#toc-viewreport>



communities throughout the United States have begun considering the need for charging stations in their planning activities and are working towards ensuring these facilities are evenly distributed for all community members.



Source: Electrify America





### Shared

#### What is it?

Transportation services and resources that are shared among users, either concurrently or one after another.<sup>13</sup>

#### What are the trends?

Enabled by technologies such as wireless communications and smartphones, the trend toward shared mobility has continued to gain traction, especially in urbanized areas.<sup>14</sup> The shared mobility trend encompasses both the sharing of vehicles and the sharing of trips and includes transit, microtransit, TNCs, docked and dockless scooters and bicycles, and carshare. Rapid adoption of shared personal mobility (such as bicycles or scooters) has been further accelerated by the introduction of dockless electric scooters, accounting for nearly 45% of shared personal mobility trips in 2018<sup>15</sup>. The trend toward a frictionless trip planning, ticketing, routing, and payment process is a typical feature of today's shared mobility services and modes. The trends toward shared mobility, however, are not occurring evenly across regions and modes. Shared modes and services work most efficiently in dense urban areas, which have seen the largest adoption rates, while suburban and rural areas may require innovative approaches and policies to develop shared mobility options.

While these modes may not be uniformly adopted, they do provide expanded access opportunities for many places. The movement toward shared mobility, along with other technologies such as automation, has led to the emerging concept of MaaS. In general, this describes the movement away from private-vehicle towards purchasing or contracting trips. Although the MaaS market is difficult



Source: Arlington, VA

<sup>13</sup> <https://sharedusemobilitycenter.org/what-is-shared-mobility/>

<sup>14</sup> <https://www.grandviewresearch.com/press-release/global-shared-mobility-market>

<sup>15</sup> <https://nacto.org/shared-micromobility-2018/>



to pinpoint due to inconsistent definitions and methodologies, several data points indicate a high magnitude of growth over time: the MaaS market is projected to grow from \$39 billion (2017) to \$358 billion by 2025 (nearly a tenfold increase)<sup>16</sup> and by 2025 it is expected that 18% of Americans will use TNCs like Uber and Lyft daily.<sup>17</sup>

### Other Future Modal Considerations

Impacts of emerging transportation technologies are expected to change the manner in which individuals move through urban landscapes. While some of these technologies are starting to see implementation today, other trends have been shifting relationships between transportation systems and land uses. The major trend leading this shift is increasing consumer demand for home delivery of items, aka e-commerce, and the ability of distributors to meet this demand. With companies like Amazon marketing “same-day” delivery, more and more freight vehicles are entering urban areas to deliver e-commerce goods. This is leading to increased congestion, noise, pollution, and safety risks. Another challenge to planning posed by increased home delivery is the conflict between designing roadways that accommodate these freight vehicles and roadways that accommodate a multi-modal system, or Complete Streets. Further impacts stemming from same day delivery could affect aviation as increased demand for this service could incentivize industry to turn to air freight modes in order to expand their same day delivery services. Currently, the Ames Municipal Airport does not support air freight but future planning activities should consider the need for this service.<sup>18</sup>

Freight rail is an additional area for the MPO to consider in future planning activities. The Iowa DOT’s 2017 Freight Rail Plan predicts annual increases of 1.1%, 1.4%, and 2.2% for outbound, inbound, and intra movements, respectively, for the dominant industries that utilize rail for freight movements. These industries are agriculture, mining/extraction, and manufacturing, and all three are central to the statewide economy.<sup>19</sup> While they do not play a dominant role within the AAMPO region’s economy, increased freight rail movements through the region could pose noise and safety impacts, especially at non-grade separated rail crossings.

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<sup>16</sup> <https://www.marketwatch.com/press-release/mobility-as-a-service-maas-market-size-will-reach-35835-billion-usd-by-the-end-of-2025-2019-10-17>

<sup>17</sup> Previous HDR research for Florida DOT

<sup>18</sup> Urban Freight Challenges with the Rise of E-Commerce. <https://carolinaangles.com/2019/03/21/urban-freight-challenges-with-the-rise-of-e-commerce/>

<sup>19</sup> Iowa State Rail Plan. [https://iowadot.gov/iowainmotion/railplan/2017/iowaSRP2017\\_Ch2.pdf](https://iowadot.gov/iowainmotion/railplan/2017/iowaSRP2017_Ch2.pdf)



## Chapter 5 Financial Plan

### Time Frames

For the purpose of forecasted future costs and revenues, three distinct time frames are identified for categorizing future year dollars:

- **Short-Term:** Years 2025-2029
- **Mid-Term:** Years 2030-2037
- **Long-Term:** Years 2038-2045

### Federal, State, and Local Funding Programs

#### Federal Funding Programs

The MPO has frequently received funding from two formula-based Federal funding programs to fund transportation projects within the region:

- **Surface Transportation Block Grant (STBG) Program:** provides funding for roadway projects on Federal-Aid routes, bridges, transit capital improvements, and transportation planning activities.
- **Surface Transportation Block Grant Program funding for Transportation Alternatives (STBG-TAP or TAP):** provides funding for projects that provide “transportation alternatives”, including bicycle and pedestrian facilities, trails, safe routes to schools, historic preservation, and environmental mitigation.
- **STBG-TAP Flex:** Additional STBG funds that are available to MPO’s on a per capita basis. The MPO is responsible for determining how much TAP Flex funding is used in local projects funded using TAP dollars.

Discretionary Federal funding sources that have been included in the previous TIP documents for the AAMPO include:

- **National Highway Performance Program (NHPP):** Funding support for the condition and performance of the National Highway System (NHS), as well as for constructing new facilities on the system. This funding is directed by the Iowa Department of Transportation (Iowa DOT) for use on the NHS system in the Ames area.
- **Congestion Mitigation Air Quality (CMAQ) Program:** Funding for State and local governments for transportation projects and programs that help meet the requirements of the Clean Air Act. The state of Iowa uses its CMAQ funding for the Iowa Clean Air Attainment Program (ICAAP), which is a competitive grant program described below in state funding programs.



- **Emergency Relief (ER) Program:** Funding dedicated to reconstruction and/or repair of Federal-Aid routes that suffered extensive damage from a natural disaster. The most recent year that the MPO received ER funds was in FY2011.
- **Federal Demonstration Funds:** Funding for “demonstration” projects that used new or innovative construction, funding, or other techniques.<sup>20</sup> These projects leveraged earmarked funds designated by Congress; under Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), this funding source and other transportation earmarks were eliminated. These funds will not be considered in projecting future funding levels.
- **Metropolitan Planning Funds (PL):** Federal funds available to all MPOs to carry out Federal requirements, including metropolitan transportation planning process, and transportation improvement programs.

Several state funding sources were identified while reviewing the TIP documents for the previous 11 fiscal years. These state funding sources include:

- **Primary Roads Fund:** The major state funding source for supporting the primary road system within the State of Iowa. A proportion of the overall receipts from the Road Use Tax Fund (RUTF) are deposited into the Primary Roads Fund on an annual basis.
- **State Grants:** Grants administered by the Iowa DOT and other state agencies used to fund transportation projects throughout the state.
- **TIME-21:** Funding created by the State legislature in 2008 to create a dedicated revenue stream for the maintenance and construction of projects on Iowa’s primary highway system.
- **Iowa Clean Air Attainment Program (ICAAP):** Competitive funding source administered by the Iowa DOT for projects that demonstrate potential for reducing transportation-related congestion and air pollution. Roadway, bicycle and pedestrian, transit, and railroad projects are eligible for ICAAP funds. While this is a state of Iowa program, ICAAP funding is sourced Federal CMAQ monies. Historically, the MPO has received ICAAP funds for traffic signal enhancement and transit projects.

### Federal Transit Funding Programs

While the majority of Federal funding received by the MPO is reserved for highway and bicycle and pedestrian projects, a substantial amount of funding for transit projects was awarded to the regional transit agency, CyRide, during our financial analysis period of TIPs.

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<sup>20</sup> Federal Highway Administration, Guide to Federal-Aid Programs and Projects. <https://www.fhwa.dot.gov/federalaid/projects.pdf>



Federal transit funds are administered by the Federal Transit Agency (FTA), which oversees a number of funding programs such as:

- **Section 5303-Metropolitan and Statewide Planning and Non-Metropolitan Transportation Planning:** Funds and procedural requirements for multi-modal transportation planning in metropolitan areas and states.
- **Section 5305-Statewide Transportation Planning Program:** Funds and procedural requirements for statewide multi-transportation planning.
- **Section 5307-Urbanized Area Formula Program:** Funds for transit activities (capital, planning access to employment, operating expenses) in urbanized areas exceeding 50,000 in population.
- **Section 5309-Capital Investment Program:** Funds to assist in completing transit capital improvements such as new or expanded bus transit service.
- **Section 5310-Enhanced Mobility of Seniors and Individuals with Disabilities Program:** Funding program designed to meet the needs of certain transit-dependent populations in rural and/or urbanized areas.
- **Section 5339-Bus and Bus Facilities:** Funds for purchasing replacement transit equipment and to construct transit facilities.

### Local Funding Programs

A number of local funds are drawn upon to assist in funding Federal-aid transportation projects within the AAMPO region. These local funding sources fall into two categories—Bond Proceed Funds and City Funds—and comprise a significant share of the annual funds that are used for transportation projects. Note that these Local funding figures reflect only amounts programmed for matching Federal-aid projects. Additional local funds have been used on local transportation projects not reflected in past TIPs.

- **Bond Proceed Funds:** General obligation and TIF-abated general obligation bonds make up the local bond proceed funds for the MPO.
- **City Funds:** City funds consists of road use taxes, local option sales tax (LOST) revenues, local transit fund, parking reserve fund, airport construction fund, and utility water, electrical, sewer, stormwater) funds.
- **Miscellaneous Funding Sources:** City assessments and similar sources

### Other Funding Programs Available to AAMPO

In addition to the Federal, state, and local programs that AAMPO has historically received funding from, there are other sources that provide funding that is available to the MPO. These sources include:



*Federal Sources:*

- **Recreational Trails Program (Federal):** Federal funding to provide and maintain motorized and nonmotorized recreational trails and trail-related projects.
- **STBG-Highway Bridge Program (STBG-HBP):** Federal funding for the replacement or rehabilitation of a structurally-deficient or functionally obsolete bridge on a public roadway. This program is funded through a set-aside of the state's annual STBG funding.
- **Highway Safety Improvement Program (HSIP):** Federal funding for projects that aim to reduce traffic fatalities and serious injury crashes on all public roads, including non-State owned roads and roads on tribal lands.

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*State Sources:*

- **Revitalize Iowa's Sound Economy (RISE):** State funding to promote economic development through the construction or improvement of roads and streets. Funding is disbursed to any Iowa city or county through the form of either a grant, loan, or combination of both. Projects funded under RISE program must involve the construction or improvement of a public road.
- **Recreational Trails Program (State):** State funding to fund public recreational trails.
- **Traffic Safety Improvement Program (TSIP):** State funding for traffic safety improvement or safety study projects on any public road, including county roads, city streets, state highways, state parks, and institutional roads.
- **Urban-State Traffic Engineering Program (U-STEP):** Funding to assist in solving traffic operation and safety problems on primary roads in Iowa cities. Eligible projects must involve a municipal extension of a primary road. The match is 45% local and 55% state.
- **Statewide TAP:** State-administered funding for regional projects that address regional priorities. This funding source uses a portion of the state's annual STBG-TAP funding and disburses it to local jurisdictions while removing some of the requirements that come with STBG-TAP funding, thus allowing for a more flexible source of funding.

*Federal and State Swap Programs*

Iowa DOT administers a Federal-aid swap program, in which Federal transportation dollars are swapped with the state's Primary Road Funds, for all MPO road and bridge projects eligible under the program policy<sup>21</sup>. The swap program does not require a local match and these funds can be spent on roads classified as rural minor collectors. The Federal programs for which funds can be swapped are:

- **Surface Transportation Block Grant (STBG)**
- **Congestion Mitigation and Air Quality Improvement (CMAQ) / Iowa Clean Air Attainment Program (ICAAP)**
- **Highway Safety Improvement Program (HSIP)**
- **County Bridge Program**
- **City Bridge Program**

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<sup>21</sup> Iowa Department of Transportation, Federal-Aid Swap Policy. [https://iowadot.gov/local\\_systems/Federal-aid-swap-policy.pdf](https://iowadot.gov/local_systems/Federal-aid-swap-policy.pdf)



All MPOs and Regional Planning Affiliations (RPA's) are assumed to be participants of the swap program, unless their policy board declines. AAMPO is a participant in the swap program.

### MPO Roadway and Bicycle/Pedestrian Historical Funding Levels

Projects programmed in the 2010 through 2020 TIP documents were reviewed and categorized by funding source in **Table 5-1**. The funding levels shown in the table were normalized to 2020 dollars based on an assumed 4.5% increase in annual construction costs. These funding levels were normalized to account for changes in transportation construction costs over time, and to allow for a better understanding of historical funding levels in the context of current year dollars.

Spending for federal-aid eligible roadway and bicycle/pedestrian projects totaled almost \$104 million over the 11-year period while the average total funding level for each year was \$4.9 million. The non-STBG/TAP funding sources presented in **Table 5-1** are considered "discretionary" programs and are not guaranteed annually. The forecasted future funding levels discussed in this section are based on historical averages and it is possible that actual future funding from these discretionary sources may not reflect the projections presented below.

**Table 5-1: MPO TIP Funding (\$ 1000's) by Program Source, 2010-2020 (\$ 2020)**

Program	Federal	Local	State	Total
<b>STP/STBG</b>	\$16,562	\$17,658	\$9,137	\$43,357
<b>TE/TAP*</b>	\$4,432	\$8,617	\$1,746	\$14,795
<b>NHPP/NHS</b>	\$30,503	\$118	\$7,626	\$38,247
<b>ER</b>	\$205	\$52	\$0	\$257
<b>Primary Roads</b>	\$0	\$0	\$2,396	\$2,396
<b>Demonstration/Earmarks</b>	\$717	\$178	\$0	\$895
<b>ARRA</b>	\$998	\$249	\$0	\$1,247
<b>CMAQ</b>	\$304	\$76	\$0	\$380
<b>Illustrative Regional Projects</b>	\$0	\$0	\$2,396	\$2,396
<b>Total</b>	\$53,720	\$26,949	\$23,301	\$103,970

Source: Ames Area MPO Transportation Improvement Programs, 2010-2020

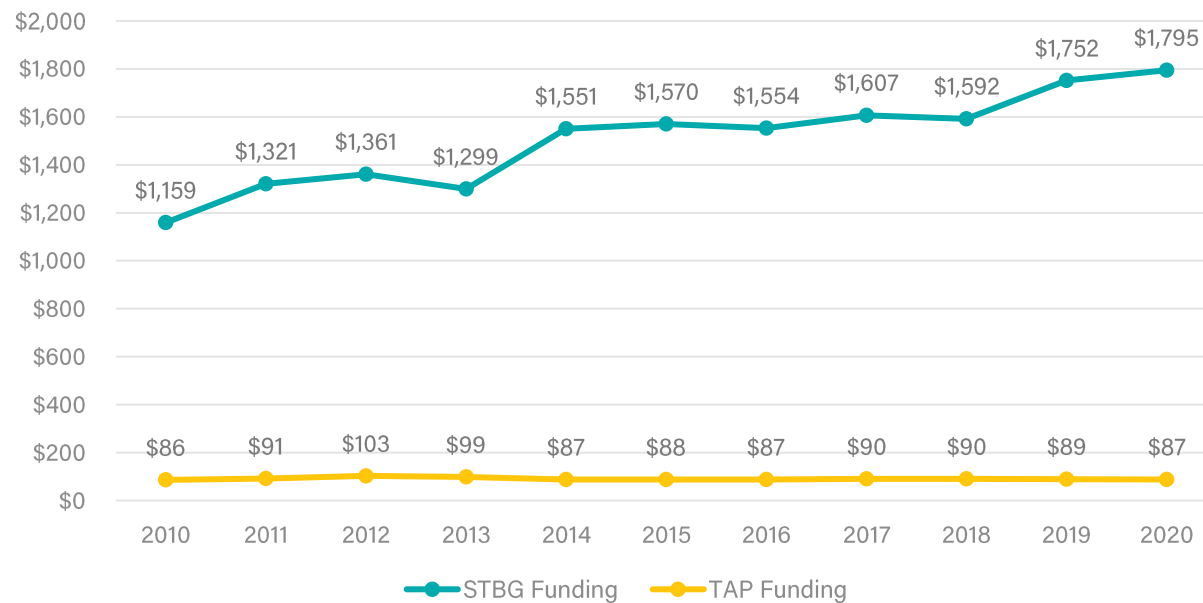
\*TE/TAP includes TAP Flex monies received during the period



### Historical Federal Funding Levels

Based on the review of past AAMPO TIP documents, historic STBG and TAP funding levels were identified for the years 2010-2020. These funding levels are presented in **Figure 5-1**, and are based on the STBG and TAP targets published in the corresponding year's TIP document.<sup>22</sup>

**Figure 5-1: Historical STBG and TAP Funding Levels (\$ 1000's) for the Ames Area MPO**



Source: Ames Area MPO Transportation Improvement Programs, 2010-2020 and Iowa DOT

<sup>22</sup> Historic funding levels shown in YOE assume a 1.5% compounded annual budget increase.



**Table 5-2** contains the total amounts of funding received from Federal programs between 2010 and 2020. The table includes the average annual funding level in year of expenditure (YOE) dollars as well as the annual average normalized to 2020 dollars. **Table 5-3** shows the historic levels of Federal funding sourced from FTA programs.

**Table 5-2: Historical Funding Levels (\$ 1000's) from Federal Sources, 2010-2020**

Year	Formula-Based			Discretionary	
	STBG	TAP	TAP-Flex**	NHPP	CMAQ*
2010	\$1,159	\$86	\$0	\$0	\$0
2011	\$1,321	\$91	\$0	\$0	\$0
2012	\$1,361	\$103	\$0	\$0	\$0
2013	\$1,299	\$99	\$0	\$0	\$0
2014	\$1,551	\$87	\$32	\$0	\$0
2015	\$1,570	\$88	\$32	\$0	\$1,039
2016	\$1,554	\$87	\$33	\$0	\$1,131
2017	\$1,607	\$90	\$35	\$0	\$1,877
2018	\$1,592	\$90	\$34	\$3,431	\$689
2019	\$1,752	\$89	\$34	\$0	\$0
2020	\$1,795	\$87	\$33	\$0	\$0
Average YOE	\$1,506	\$91	\$33	\$312	\$431
Average 2020 \$	\$1,615	\$98	\$35	\$321	\$454

Source: Ames Area MPO Transportation Improvement Programs, 2010-2020

\*CMAQ funding includes ICAAP funds received by AAMPO during this time period

\*\*TAP-Flex funding was not available until 2014



**Table 5-3: Historical FTA Funding (\$ 1000's), 2010-2020**

Year	Section 5303	Section 5307	Section 5309	Section 5310	Section 5339
2010	\$28	\$1,500	\$34,823	\$179	\$160
2011	\$30	\$1,528	\$28,638	\$182	\$0
2012	\$20	\$1,700	\$5,545	\$183	\$0
2013	\$31	\$1,700	\$5,785	\$184	\$0
2014	\$0	\$2,000	\$2,550	\$223	\$2,958
2015	\$0	\$2,100	\$430	\$231	\$5,984
2016	\$0	\$2,100	\$0	\$245	\$3,094
2017	\$0	\$2,100	\$600	\$381	\$3,557
2018*	\$0	\$2,184	\$4,300	\$390	\$4,730
2019	\$0	\$2,406	\$0	\$268	\$3,354
2020	\$0	\$3,455	\$0	\$268	\$5,962
Average YOES	**	\$2,070	\$7,515	\$249	\$2,709
Average 2020 \$	**	\$2,210	\$8,558	\$265	\$2,828

Source: Ames Area MPO Transportation Improvement Programs, 2010-2020

\*Data for 2018 based on FY 2017-2020 TIP.

\*\*Note that funding for Section 5303 ended after 2013.

### Historic Local Funding Levels

**Table 5-4** presents historical funding levels for non-Federal road funds received by the Cities of Ames and Gilbert. These funds include the Local receipts from the RUTF, Other Road Monies, and Bond Proceed Funds. Note that the local funds shown in **Table 5-4** do not reflect all local funds for transportation investments, just those funds shown in past TIPs for Federal-aid projects.



**Table 5-4: Historic Local Revenue Levels (\$ 1000's), 2010-2020**

Year	City of Ames			City of Gilbert		
	RUTF	City Funds	Bond Proceed Funds	RUTF	City Funds	Bond Proceed Funds
2010	\$4,422	\$5,400	\$4,893	No Data Available		
2011	\$5,013	\$5,488	\$5,990			
2012	\$5,547	\$4,780	\$6,500			
2013	\$5,717	\$4,032	\$5,988	\$103	\$3	\$0
2014	\$5,860	\$4,598	\$6,200	\$104	\$17	\$0
2015	\$6,283	\$4,291	\$9,240	\$108	\$15	\$0
2016	\$6,283	\$4,291	\$9,240	\$113	\$13	\$0
2017	\$7,229	\$8,531	\$9,939	\$134	\$30	\$0
2018	\$7,535	\$6,555	\$5,195	\$134	\$34	\$0
2019	\$7,322	\$8,476	\$7,521	\$138	\$15	\$0
2020*	\$7,664	\$5,548	\$6,850	\$140	\$23	\$0
2020*	\$7,430**	\$5,770*	\$8,320	\$146*	\$24*	\$0
Average YOE \$	\$6,366	\$5,770	\$6,967	\$124	\$19	\$0
Average 2020 \$	\$6,813	\$6,190	\$7,476	\$132	\$20	\$0

Source: Ames Area MPO Transportation Improvement Programs (2010-2021), City of Ames Program Budgets (2010-2021), City of Ames Capital Improvements Plans (2010-2020)

\*2020 Revenue levels were projected based on 2019 levels at an assumed growth of 4%

\*\*Based on 2019-2020 Adjusted Budget from 2020-21 Program Budget Document

### Operations and Maintenance

Operations and Maintenance (O&M) is an annual expenditure for the Cities of Ames and Gilbert that is funded with STBG monies in addition to the RUTF, LOST, and GO funds. **Table 5-5** shows the historical O&M expenditures for the Cities of Ames and Gilbert for both the Federal-Aid and Non-Federal-Aid systems.



**Table 5-5: City of Ames and City of Gilbert Operations and Maintenance Expenditures (\$ 1000's), 2010-2020**

Jurisdiction		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*	Average YOY \$	Average 2020 \$
City of Ames	Federal-Aid Operations	\$486	\$403	\$296	\$448	\$498	\$467	\$324	\$600	\$662	\$847	\$881	\$537	\$572
	Federal-Aid Maintenance	\$927	\$1,175	\$1,110	\$889	\$1,084	\$1,075	\$1,142	\$1,530	\$1,330	\$1,565	\$1,628	\$1,223	\$1,309
	Non-Federal-Aid Operations	\$1,585	\$1,312	\$964	\$1,360	\$1,513	\$1,429	\$977	\$1,787	\$1,967	\$2,448	\$2,546	\$1,626	\$1,736
	Non-Federal-Aid Maintenance	\$3,021	\$3,834	\$3,621	\$2,700	\$3,292	\$3,293	\$3,445	\$4,561	\$3,952	\$4,521	\$4,701	\$3,722	\$3,991
City of Gilbert	Federal-Aid Operations	No Data Available		\$1	\$1	\$2	\$2	\$1	\$8	\$9	\$5	\$5	\$4	\$4
	Federal-Aid Maintenance			\$12	\$15	\$23	\$11	\$13	\$8	\$8	\$6	\$6	\$11	\$12
	Non-Federal-Aid Operations			\$6	\$6	\$11	\$8	\$8	\$42	\$48	\$26	\$32	\$21	\$22
	Non-Federal-Aid Maintenance			\$69	\$76	\$120	\$65	\$73	\$46	\$47	\$34	\$42	\$64	\$68
Total O&M Spending		\$6,070	\$6,759	\$6,079	\$5,495	\$6,543	\$6,350	\$5,983	\$8,582	\$8,023	\$9,452	\$9,842	\$7,216	\$7,723

Source: Ames Area MPO Transportation Improvement Programs, 2010-2020

\*2020 O&M levels were projected based on 2019 levels at assumed growth of 4%



## Future Year Forecasts

### Federal Funding Programs

The amounts of federal funding—formula-based and discretionary—available to the MPO between 2010 and 2020 were forecasted out to the year 2045 and categorized into the three time periods discussed in the beginning of this report, based on an assumed annual growth of 1.5% beyond the 2020-2023 TIP. **Table 5-6** presents the resulting forecasted funding levels by time period.

As seen in the table, STBG funding is estimated to total \$47 million between 2025 and 2045 while TAP funds are anticipated to equal just over \$2 million. Based on the annual average of \$33,000 in STBG funding that is flexed to TAP, it is estimated the MPO will flex a total of \$870,000 between 2025 and 2045. AAMPO is anticipated to receive almost \$8.5 million in NHPP funds and \$12 million in CMAQ funding during the 20-year planning period.

**Table 5-6: Future Year Federal Funding Level Forecasts by Time Period (\$ 1000's)**

Time Period/Years		STBG	TAP	TAP Flex	NHPP	CMAQ
<b>Current TIP</b>	2021-2024	\$6,783	\$348	\$132	\$15,637	\$2,647
<b>Short-Term</b>	2025-2029	\$9,780	\$485	\$183	\$1,784	\$2,519
<b>Mid-Term</b>	2030-2037	\$17,245	\$855	\$323	\$3,145	\$4,442
<b>Long-Term</b>	2038-2045	\$19,426	\$964	\$364	\$3,543	\$5,004
<b>Total*</b>		\$46,451	\$2,304	\$870	\$8,472	\$11,965

Source: Ames Area MPO Transportation Improvement Programs, 2010-2020

\*Totals only reflect Short-, Mid-, and Long-Term projections as funds in the current TIP are programmed

### Local Funding Programs

Local non-Federal aid revenues and O&M costs were forecasted through the planning horizon year 2045, based on an assumed annual 1.5% growth factor. For non-Federal aid revenue sources, the amount received in FY2020 was used as the basis for the forecast except for the Bond Proceed fund. This revenue source forecast used the historic average for the years 2010-2020 normalized to 2020 dollars, to account for the historic volatility associated with it.

The resulting forecasts in **Table 5-7** show that the estimated amount of non-Federal aid revenue (comprised of the RUTF, City funds, and Bond Proceed funds) for the Cities of Ames and Gilbert is expected to total over \$570 million during the 20 year period, while total



O&M costs are anticipated to be around \$200 million over this same period. Based on these projections, the local revenue in excess of local O&M costs is anticipated to be roughly \$374 million between 2025 and 2045.

**Table 5-7: Forecasted Local Revenue and O&M Costs (\$ 1000's) for the Cities of Ames and Gilbert by Time Period**

	TIP Years (2021-2024)	Short-Term (2025-2029)	Mid-Term (2030-2037)	Long-Term (2038-2045)	Total*
<b>Non-Federal Aid Revenue</b>	\$130,992	\$120,389	\$212,273	\$239,123	\$571,785
<b>Total Maintenance Costs</b>	\$15,210	\$29,003	\$51,139	\$57,607	\$137,749
<b>Total Operations Costs</b>	\$15,168	\$12,649	\$22,304	\$25,125	\$60,078
<b>Revenue in Excess of O&amp;M</b>	\$100,613	\$78,737	\$138,833	\$156,391	\$373,958

*\*Totals shown only reflect the Short-, Mid-, and Long-Term forecasted revenues and costs*

### System Preservation and Improvement Spending Comparison

To allocate projected future funds to meet the needs of both preserving and improving the transportation system, a review of the historical spending breakdowns of preservation and improvement projects was conducted. The TIP documents for the years 2010 through 2020 were reviewed to establish a basis for the funding requirements for AAMPO's roadway and bicycle and pedestrian systems. Program costs were delineated into two main project categories:

**System Preservation:** Projects that improve existing infrastructure, such as reconstruction, rehabilitation, resurfacing, and operations and maintenance.

**System Improvements:** Projects that expand the existing system through the construction of new corridors, bridges, lane widenings, turn lanes, etc.

This historical analysis was supplemented with an understanding of the future pavement and bridge preservation requirements on the system to meet system performance requirements. This will require a greater portion of future roadway funding to go towards system preservation. **Table 5-8** presents the historic breakdown of funding for project categories by mode.



**Table 5-8: Historic System Improvement and System Addition Spending Breakdowns**

	System Preservation	System Improvement
<b>MPO Roadway Funding</b>	60%	40%
<b>Local Roadway Funding<sup>23</sup></b>	80%	20%
<b>MPO Bicycle and Pedestrian Funding</b>	20%	80%
<b>Local Bicycle and Pedestrian Funding</b>	30%	70%

*Source: Ames Area MPO Transportation Improvement Programs, 2010-2020*

The resulting Federal funding levels for preservation and improvement projects are shown in **Table 5-9**. The local funding levels for local preservation and improvement projects (including the improvement spending by Federal-Aid and Local system roads) are shown in **Table 5-10**. The table shows local funding for roadway and bicycle and pedestrian projects based on the breakdowns in **Table 5-9**, and assumes 90% of available local funds are spent on roadway projects while the remaining 10% is spent on bicycle and pedestrian projects.

**Table 5-9: Formula-Based Federal Funding Levels for System Preservation and System Improvement Projects**

Time Period/Years		STBG		TAP		TAP Flex	
		System Preservation	System Improvement	System Preservation	System Improvement	System Preservation	System Improvement
<b>Short-Term</b>	2025-2029	\$5,868	\$3,912	\$97	\$388	\$37	\$146
<b>Mid-Term</b>	2030-2037	\$10,347	\$6,898	\$171	\$684	\$65	\$258
<b>Long-Term</b>	2038-2045	\$11,656	\$7,770	\$193	\$771	\$73	\$291
<b>Total*</b>		\$27,871	\$18,580	\$461	\$1,843	\$175	\$695

<sup>23</sup> Of the locally-funded roadway projects, 60% of funding went to the Federal-aid roads and 40% of funding went to non-Federal-aid roads.



**Table 5-10: Local Funding Levels for System Preservation and System Improvement Projects**

Time Period/Years		Non-Federal Aid Revenue*				
		Bike / Pedestrian Funding		Roadway Funding		
		System Preservation	System Improvement	System Preservation	System Improvement	
					Fed Aid System	Local System
<b>TIP Years</b>	2021-2024			\$68,417	\$19,318	\$12,878
<b>Short-Term</b>	2025-2029	\$2,362	\$5,512	\$56,691	\$8,503	\$5,669
<b>Mid-Term</b>	2030-2037	\$4,165	\$9,718	\$99,960	\$14,994	\$9,996
<b>Long-Term</b>	2038-2045	\$4,692	\$10,947	\$112,602	\$16,890	\$11,260
<b>Total*</b>		\$11,219	\$26,177	\$269,253	\$40,387	\$26,925

\*Revenues shown are based on the Revenues in Excess of O&M Spending in Table 5-7



## Chapter 6 Alternatives Development and Evaluation

Public input received during the engagement activities for this MTP and projects presented in past plans and studies for the AAMPO region served as the basis for the development of project and policy alternatives for inclusion in Forward 2045. The past plans and studies that were reviewed include:

- Ames Mobility 2040 Long Range Transportation Plan
- 2020-2024 Transit Development Plan
- 2018 Lincoln Corridor Plan
- 2020 Passenger Transportation Plan
- 2018 Complete Streets Plan

Projects screened during the alternatives development process were categorized by mode—roadway, bicycle and pedestrian, and transit—before being reviewed for consistency with the MTP’s goals and objectives, and how well they align with the prioritization metrics shown in **Table 6-1**. An additional factor considered in the screening process was context, meaning how well the project would perform in the providing desired transportation service levels, as well as how well the project fits into the surrounding built and natural environment.

### Strategy Development and Prioritization Process

The initial phase of the strategy development and prioritization process was to evaluate potential projects against the goals and objectives presented in **Chapter 1**. After this evaluation, the projects were screened against the project-level metrics shown in **Table 6-1**, which were developed under a performance-based approach tied to the MTP’s goals and regional performance measures.

In addition to the public input and connection the MTP goals and objectives, the project scoring metrics were developed to reflect the planning efforts of the Iowa DOT in the State Transportation Asset Management Plan (TAMP), the Strategic Highway Safety Plan (SHSP), and the State Freight Plan (SFP).



- The State TAMP is supported in the alternative project scoring process through the promotion of financially sustainable projects as well as prioritizing projects that minimize impacts on the environment and natural resource areas of the region. The MPO has also set aside sufficient funding levels to continue investing in current transportation assets to maintain them within established performance measures. In addition to bridge and pavement investments, CyRide proactively plans for vehicle replacements through the MPO's annual Transportation Improvement Program process. Future updates to the AAMPO MTP will need to incorporate the goals and objectives of the MPO's forthcoming Public Transportation Agency Safety Plan (PTASP), which establishes safety planning for public transit agencies who receive Federal funding. The compliance deadline for the PTASP has been extended from July 20, 2020 to December 31, 2020 due to the COVID-19 public health emergency.
- Consideration of the SHSP performance measures, which included a reduction in fatal and serious injury crashes and crash rates, were integrated into this process by giving higher scores to projects that addressed both vehicular and non-motorized safety at the top crash intersections discussed in **Chapter 3**.
- The alternatives scoring metrics address the SFP through the prioritization of projects that have potential to improve freight reliability on Interstate corridors. The specific measure related to the SFP looks at existing Truck Travel Time Reliability (TTTR) indexes on the Interstate system; any project that has potential to improve future TTTR receives a higher project score.



**Table 6-1: Alternative Project Scoring Criteria**



Goal	Objective	Scoring Approach			
		+2	+1	0	-1
Accessible					
	Improve walk, bike, and transit system connections	Creates or improves connection between two or more modes	Creates or improves connections for non-motorized or transit modes	No impact on connectivity for non-motorized or transit modes	Non-motorized or transit connection is removed, or barrier to non-motorized or transit modes is created
	Improve bicycle and pedestrian access to CyRide routes				
	Provide appropriate arterial, collector, bicycle, pedestrian, and transit corridor spacing	New Multimodal network connection where a gap of ½ mile or more existing before.	Provides a new connection between two existing facilities, or an extension of an existing facility	-	-
	Provide improved access to transit for transit dependent, disabled, and disadvantaged populations	Improves transit accessibility in identified EJ area	-	Does not impact transit accessibility in identified EJ area	Removes or creates barriers to transit accessibility in identified EJ area
	Incorporate bicycle, pedestrian, and transit-friendly infrastructure in new developments	Extends a bike, pedestrian, or transit corridor closer to an identified future development growth area.	-	Does not extend a bike, pedestrian, or transit corridor closer to an identified future development growth area.	Reduces facility connectivity.
Safe					
	Reduce number and rate of crashes	Has the potential to improve safety at top crash frequency or crash rate intersection	Has the potential to improve safety at any intersection	Does not impact safety at top crash frequency or crash rate intersection	Has the potential to negatively impact safety
	Reduce number and rate of serious injury and fatal crashes				
	Reduce the number of bicycle and pedestrian crashes	Has the potential to improve non-motorized safety at top crash frequency or crash rate intersection	Has the potential to improve non-motorized safety at any intersection	Does not impact non-motorized safety at top crash frequency or crash rate intersection	Has the potential to negatively impact non-motorized safety
	Prioritize projects that improve the Ames Area Safe Routes to School Program	Creates or improves connection to Safe Route to School network for two or more modes	Creates or improves connection to Safe Route to School network	No impact on connectivity to Safe Routes to School network	Removes or creates barrier to Safe Routes to School network



Table 6-1. con't.




Goal	Objectives	Scoring Approach			
		+2	+1	0	-1
Sustainable					
	Reduce transportation impacts to natural resources	Is not located in an identified natural resource area	-	Is located in an identified natural resource area	-
	Limit transportation system emissions of greenhouse gases	Provides a significant reduction system-wide in VMT and VHT	Provides significant reduction system-wide in either VMT or VHT	Does not significantly impact system-wide VMT or VHT	Increases system-wide VMT and VHT
	Make transportation infrastructure more secure, and resilient to natural and manmade events	Project would reduce flooding risk for corridor.	-	Project would have no impact on flooding risk for corridor.	Project would increase flooding risk for corridor.
	Promote financially sustainable transportation system investments	Technology or management strategies on existing infrastructure	Minor system enhancements to existing infrastructure (e.g. turn lanes, protected bike lanes/side path)	Major system enhancements to existing infrastructure or new trails (e.g. roadway widening)	New transportation infrastructure (e.g. new corridor)
Efficient and Reliable					
	Identify context-sensitive strategies and projects that improve traffic flow in corridors with high levels of peak period congestion (LOS D or worse)	Improves LOS in corridor estimated to have LOS D or worse in 2045	Improves LOS	Does not impact LOS	Degrades LOS a letter grade or worse
	Maintain acceptable travel reliability on Interstate and principal arterial roadways	Has potential to improve reliability on an NHS corridor identified as having reliability issues	Has potential to improve reliability on an NHS corridor	Does not impact LOTTR	Worsens LOTTR on a NHS corridor
	Provide frequent transit service to high trip generation locations	Improves transit frequency in identified high trip location	-	Does not impact transit frequency in identified high trip location	Worsens transit frequency in identified high trip location
	Increase the regional share of trips made by walking, biking, and transit	Major Increase to mode share for walking, biking, and/or transit	Slight Increase to mode share for walking, biking, and/or transit	Does not impact mode share for walking, biking, or transit	Reduces mode share for walking, biking, and/or transit
	Improve freight system reliability	Has potential to improve freight reliability on Interstate corridor identified as having freight reliability issues	Has potential to improve freight reliability on Interstate corridor	No expected impact to freight reliability on Interstate corridor	Has potential to worsen freight reliability on Interstate corridor
	Identify technology solutions to enhance system operation	Includes technology element that more effectively manages system operation	-	Does not include technology element	-



Table 6-1 con't.

Goal	Objectives	Scoring Approach			
		+2	+1	0	-1
Placemaking					
	Increase the percentage of population and employment within close proximity to transit and/or walking and biking system.	Creates new, multi-modal connection between highest tier of dense / diverse land use.	Creates new, multi-modal connection between second highest tier of dense / diverse land use.	Does not create new, multi-modal connection to dense / diverse land use.	Removes multi-modal connection to dense / diverse land use.
	Provide transportation strategies and infrastructure that support current adopted plans	Project is proposed by other plan or would support neighborhood or district development goals.	-	Project is not included in other plans and is neutral in relation to neighborhood or district development goals.	Project is not included in other plans and would negatively impact neighborhood or district development goals.

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## Potential Alternatives

Alternative projects identified through public feedback, input from AAMPO staff, and the technical analyses described in **Chapter 4** and **5** covered a range of strategies for the roadway, bicycle and pedestrian, and transit systems within the region. Examples of these strategies for each mode are described below.

### Roadway Projects

Roadway projects were primarily developed to address areas with higher potential for future traffic congestion, improve vehicular and non-motorized safety, reduce environmental impacts, and encourage greater multi-modality. The roadway alternatives were developed to adequately balance system preservation projects with system improvement projects while remaining within the funding levels identified in **Chapter 5**. Examples of roadway projects identified through the alternatives development process include:

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**New Corridors:** These projects would construct new roadways.

*Source: FHWA*



**Widenings:** These projects would add additional lanes to existing roadways, i.e. convert a 2-lane road to 4 lanes.

*Source: Omaha World Herald*



**Turn Lanes:** These projects would construct turn lanes (either left or right) at intersections to facilitate improved through traffic flow due to the removal of vehicle queuing.

*Source: FHWA*





**Road Diet:** Road diets remove a travel lane from a 4-lane, undivided roadway and convert it to 3-lane roadway with 2 through lanes and a center turn lane. This roadway configuration improves safety while sometimes offering opportunities for bicycle and pedestrian and transit facilities.

*Source: Virginia DOT*



**Grade Separation:** Grade separations construct an underpass or overpass that separates vehicular traffic from passing trains. These projects reduce travel delay as vehicle-train conflicts are removed at rail crossings.

*Source: UPRR*



**Traffic Signals:** These projects would install traffic signals at higher-volume intersections that are currently uncontrolled, or upgrade existing traffic signals to leverage new technologies that facilitate improved traffic management solutions.

*Source: FHWA*





### Roadway System Management Strategies

In addition to the alternative strategies for the roadway system discussed above, several operational and management strategies could be pursued by the AAMPO to maximize operational abilities of the existing roadway system while improving safety and mobility. These strategies, referred to as Transportation System Management and Operations (TSMO), are more cost-effective than traditional projects that add capacity to the system and aim to address congestion issues beyond recurring peak hour congestion. TSMO strategies fall into three categories:

- **System Performance Monitoring:** Use of real-time data and information to guide regional transportation decision making based on data analytics and information management systems. Examples of system performance monitoring include Transportation Management Centers (TMCs), and Dynamic Message Signs (DMS) that provide travelers real time information to help with trip planning.
- **Management of Recurring Issues:** Strategies that addresses recurring, and thus, predictable congestion issues in the region. These include freeway and arterial management strategies, traffic signal operational planning, and demand management for bicycle and pedestrian users.
- **Management of Non-Recurring Issues:** Non-recurring issues are not easy to plan for as they are typically unpredictable. To best prepare for them, the AAMPO can consider strategies such as Traffic Incident Management (TIM), Road Weather Management, Work Zone Management, and Special Event Management.



## Bicycle and Pedestrian Projects

Bicycle and pedestrian projects screened during the alternatives development process sought to provide improved connections between existing bicycle and pedestrian facilities while strengthening the multi-modal nature of the AAMPO region, improving non-motorized safety, reducing environmental impacts, and providing bicycle and pedestrian facilities in areas with denser, and more diverse land uses. Some of the project types screened were:

**Crossing Improvements:** Examples of crossing improvement projects include improved intersection markings, pedestrian signals, and treatments to improve visibility.

*Source: San Francisco Metropolitan Transportation Authority*



**Bike lanes:** These projects would construct dedicated lanes in the roadway for exclusive use by bicyclists.

*Source: City of Fort Lauderdale, FL*



**Protected bike lanes:** Protected bike lanes provide an exclusive lane for bicyclists within the roadway while using a physical barrier to separate bicycle traffic from vehicular traffic.

*Source: City of Burlington, VT*





**Bicycle Boulevards:** Bicycle boulevard projects would install signage, markings, and traffic calming measures so low volume and low speed roads can give priority use to bicyclists.

*Source: City of Berkeley, CA*



**Shared-Use Path:** These projects would construct new off-street trails, or extend existing off-street trails, for use by bicyclists and pedestrians.

*Source: Iowa DOT*



**Shared streets/pedestrian mall:** Shared street projects would convert existing roadway cross sections to a more informal setting for vehicles and pedestrians on roads with low volumes and speeds. Shared streets prioritize pedestrian movements and limit/prohibit through vehicle movements.

*Source: NACTO*





## Bicycle and Pedestrian Facility Selection

### *Bike Facilities*

There are many types of bikeways, including bike lanes, routes, and off-street paths. The appropriate type of bikeway for a given street depends on the characteristics of the roadway and the desired level of comfort for people bicycling.

Conventional guidance recognizes three general types of potential riders based on their likelihood to utilize a particular type of bicycle facility. These rider types are:

- Strong and Fearless: Confident and comfortable riding intermixed with other modes in all contexts
- Enthused and Confident: Comfortable riding in many contexts, prefers designated bikeways
- Interested, but Concerned; Would like to ride, but primarily concerns about safety and therefore rides less often or not at all.

The *Interested, but Concerned* group includes children, older adults, people new to riding a bicycle, and those who prefer as much separation as possible between themselves and motor vehicles. The national best practice for creating a comfortable and appealing bike network is to design for “All Ages and Abilities”—in other words, to design facilities so that *Interested, but Concerned* riders will feel comfortable using them. Building bicycle infrastructure that meets this criteria is an essential strategy for cities seeking to improve traffic safety, reduce congestion, improve air quality and public health, provide better and more equitable access to jobs and opportunities, and bolster local economies.

### *Bikeway Selection Guidance*

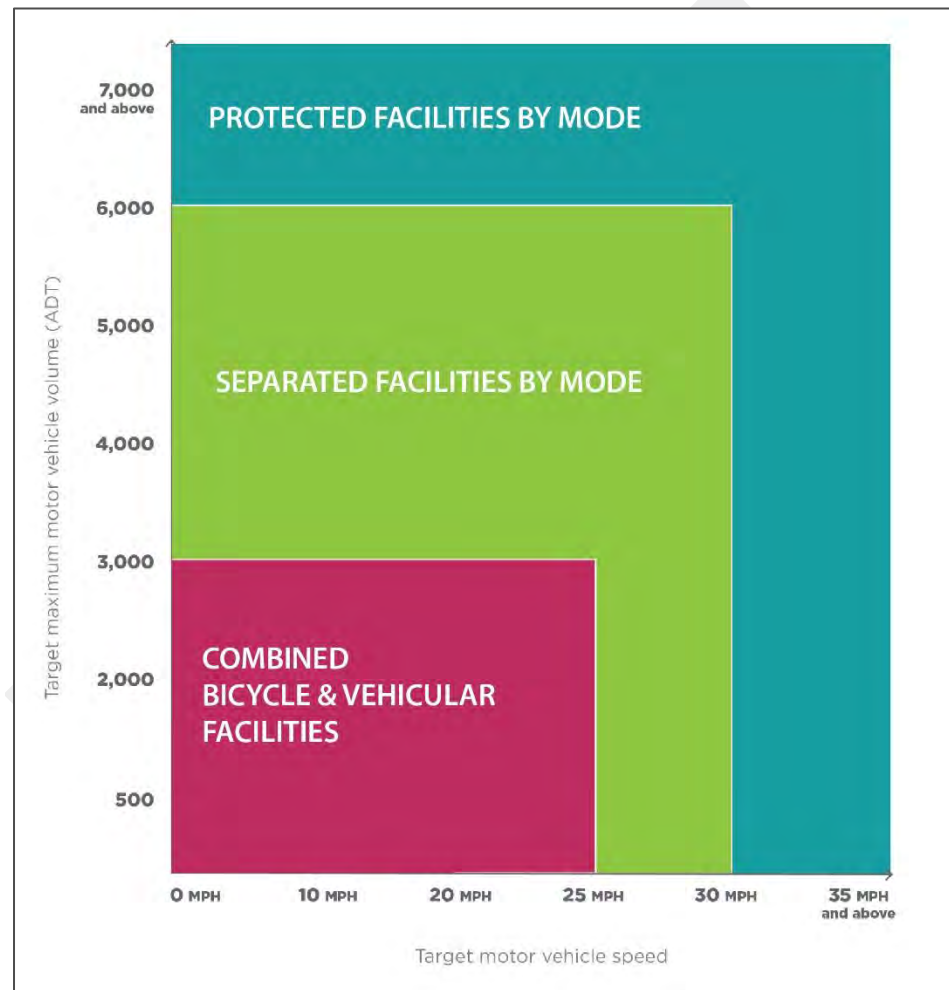
National guidance on selecting bike facilities to achieve a network suitable for All Ages and Abilities is available from several sources.

- **The Federal Highway Administration (FHWA) *Bikeway Selection Guide***
- **The American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities***
- **The National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide*** includes All Ages and Abilities facility selection and design guidance



Recommended bike facilities in Forward 2045 are based on FHWA guidance, which uses the daily volume of motor vehicle traffic and posted speed limit of the street to determine the appropriate bike facility, as illustrated in **Figure 6-1**.

**Figure 6-1: FHWA Bikeway Selection Guidance**





### *Pedestrian Crossings*

Improvements to intersection design and the addition of mid-block crossings can go a long way to making walking a more comfortable and viable transportation option. A variety of proven countermeasures may be applied to increase safety for pedestrians crossing the street, including:

- High-visibility crosswalk markings
- Raised crosswalks
- Signs
- Curb extensions
- Pedestrian refuge islands
- Rectangular Rapid-Flashing Beacons (RRFBs)
- Road diets
- Pedestrian Hybrid Beacons

### *Countermeasure Selection Guidance*

The FHWA PEDSAFE Pedestrian Safety Guide and Countermeasure Selection System provides a broad suite of information and tools to improve pedestrian safety and mobility. Forward 2045 uses the Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations as the basis for selecting potential design treatments for uncontrolled crossings in Ames. **Figure 6-2** shows the countermeasure options recommended by FHWA based on the posted speed limit, number of lanes, and average annual daily traffic of the street. These countermeasures are proven to reduce the number and severity of collisions involving people walking. The guide does not necessarily recommend applying all of the potential countermeasures listed in the corresponding cell of the table for any given location, but rather selecting those countermeasures that best fit the specific location.



Figure 6-2: Application of Pedestrian Countermeasures by Roadway Feature

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
<b>2 lanes</b> (1 lane in each direction)	① 2 4 5 6	① 5 6 7 9	① 5 6 7 9	① 4 5 6 7 9	① 5 6 7 9	① 5 6 7 9	① 4 5 6 7 9	① 5 6 7 9	① 5 6 9
<b>3 lanes with raised median</b> (1 lane in each direction)	① 2 3 4 5	① 3 5 7 9	① 3 5 7 9	① 3 4 5 7 9	① 3 5 7 9	① 3 5 7 9	① 3 4 5 7 9	① 3 5 7 9	① 3 5 9
<b>3 lanes w/o raised median</b> (1 lane in each direction with a two-way left-turn lane)	① 2 3 4 5 6 7 9	① 3 5 6 7 9	① 3 5 6 9	① 3 4 5 6 7 9	① 3 5 6 7 9	① 3 5 6 9	① 3 4 5 6 7 9	① 3 5 6 9	① 3 5 6 9
<b>4+ lanes with raised median</b> (2 or more lanes in each direction)	① 3 5 7 8 9	① 3 5 7 8 9	① 3 5 8 9	① 3 5 7 8 9	① 3 5 7 8 9	① 3 5 8 9	① 3 5 7 8 9	① 3 5 8 9	① 3 5 8 9
<b>4+ lanes w/o raised median</b> (2 or more lanes in each direction)	① 3 5 6 7 8 9	① 3 5 6 7 8 9	① 3 5 6 8 9	① 3 5 6 7 8 9	① 3 5 6 7 8 9	① 3 5 6 8 9	① 3 5 6 7 8 9	① 3 5 6 8 9	① 3 5 6 8 9
<p>Given the set of conditions in a cell,</p> <ul style="list-style-type: none"> <li># Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.</li> <li>● Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.</li> <li>○ Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*</li> </ul> <p>The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.</p> <ul style="list-style-type: none"> <li>1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs</li> <li>2 Raised crosswalk</li> <li>3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line</li> <li>4 In-Street Pedestrian Crossing sign</li> <li>5 Curb extension</li> <li>6 Pedestrian refuge island</li> <li>7 Rectangular Rapid-Flashing Beacon (RRFB)**</li> <li>8 Road Diet</li> <li>9 Pedestrian Hybrid Beacon (PHB)**</li> </ul>									



### Transit Projects

*Forward 2045* was developed through a multimodal approach, where interactions among the various modes of transportation in the MPO region were assessed and deficiencies identified. While the MTP presents specific candidate projects for the roadway and bicycle and pedestrian modes, the transit projects are aimed at describing capital and operational improvements that can further build upon the region's multi-modal connections while improving accessibility and mobility for residents.

Transit projects evaluated in the alternatives development process were based on the unique needs and funding programs of CyRide's fixed-route and paratransit systems. In addition to these needs and funding requirements, transit projects were assessed on their potential to improve transit access, especially for disadvantaged populations, and connectivity with other modes. Due to the nature of transit planning in the AAMPO region, fiscally-constrained projects for the fixed-route and paratransit systems will not be identified but potential transit improvements will be. These improvements are described below:



**Transit Signal Priority:** Improve signal timings for transit vehicles to allow increased transit reliability and travel time.

Source: New York City Department of Transportation



**Facility Improvements:** Improvements for the Ames Intermodal Facility.

Source: Iowa State University Facilities Planning and Management



**Transit-Oriented Development:** Implementation of Transit-Oriented Development in future redevelopments.

Source: Metro Transit (MN)



**Technology-Based:** Vehicle location tracking, passenger counting, and other technological solutions for improving transit planning and decision-making capabilities.

Source: Cincinnati Metro Transit





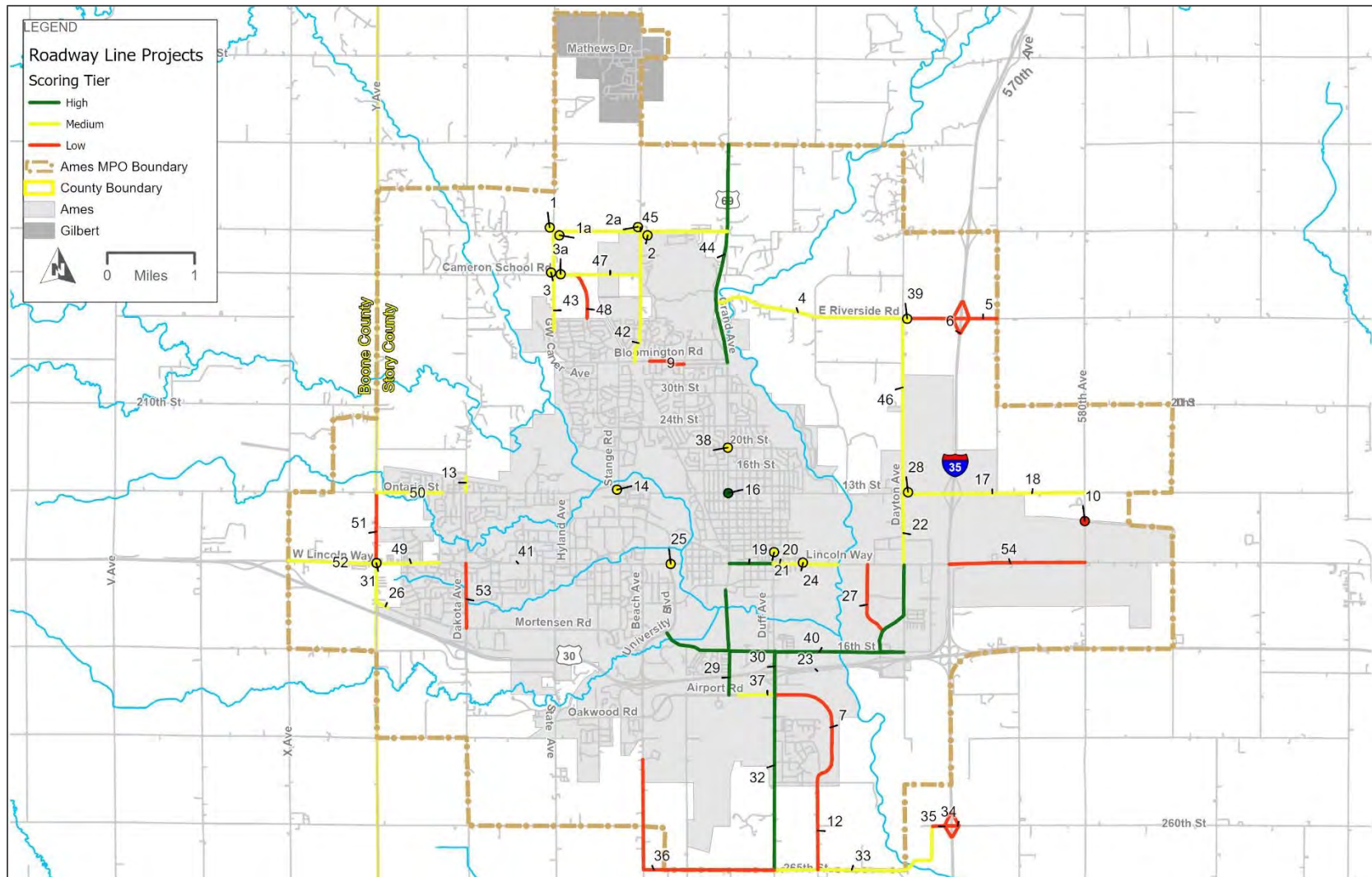
## Alternatives Scoring Results

The alternative roadway and bicycle and pedestrian projects were scored based on how well they met the criteria shown in **Table 6-1** and ranked into three tiers—High, Medium, and Low. Projects receiving “High” scores are considered to best meet the current needs of the AAMPO transportation system, however, projects receiving “Low” scores are not considered to be poor projects. While “Low” scoring projects still address needs of the regional transportation system, they fail to meet a wide range of the goals and objectives of *Forward 2045* relative to the higher scoring projects. **Figure 6-3** shows the resulting scores for the alternative roadway projects while **Figure 6-4** and **Figure 6-5** show the scores for the alternative bicycle and pedestrian projects. Refer to the Alternatives Development and Evaluation appendix for the complete list of roadway and bicycle and pedestrian alternative projects.

For alternative roadway projects, the higher scoring projects were those that have the most potential to improve traffic operations and safety in areas that are projected to have congestion issues under the 2045 E+C scenario or are experiencing current safety issues, while minimizing impacts on the environment and remaining financially sustainable. The highest scoring bicycle and pedestrian projects were those that extended and/or connected the existing bicycle and pedestrian system with areas of denser, more diverse land uses while also minimizing environmental impacts and being financially sustainable.



Figure 6-3: Alternative Roadway Projects by Scoring Tier





**Figure 6-4: Alternative Bike and Pedestrian Projects by Scoring Tier**

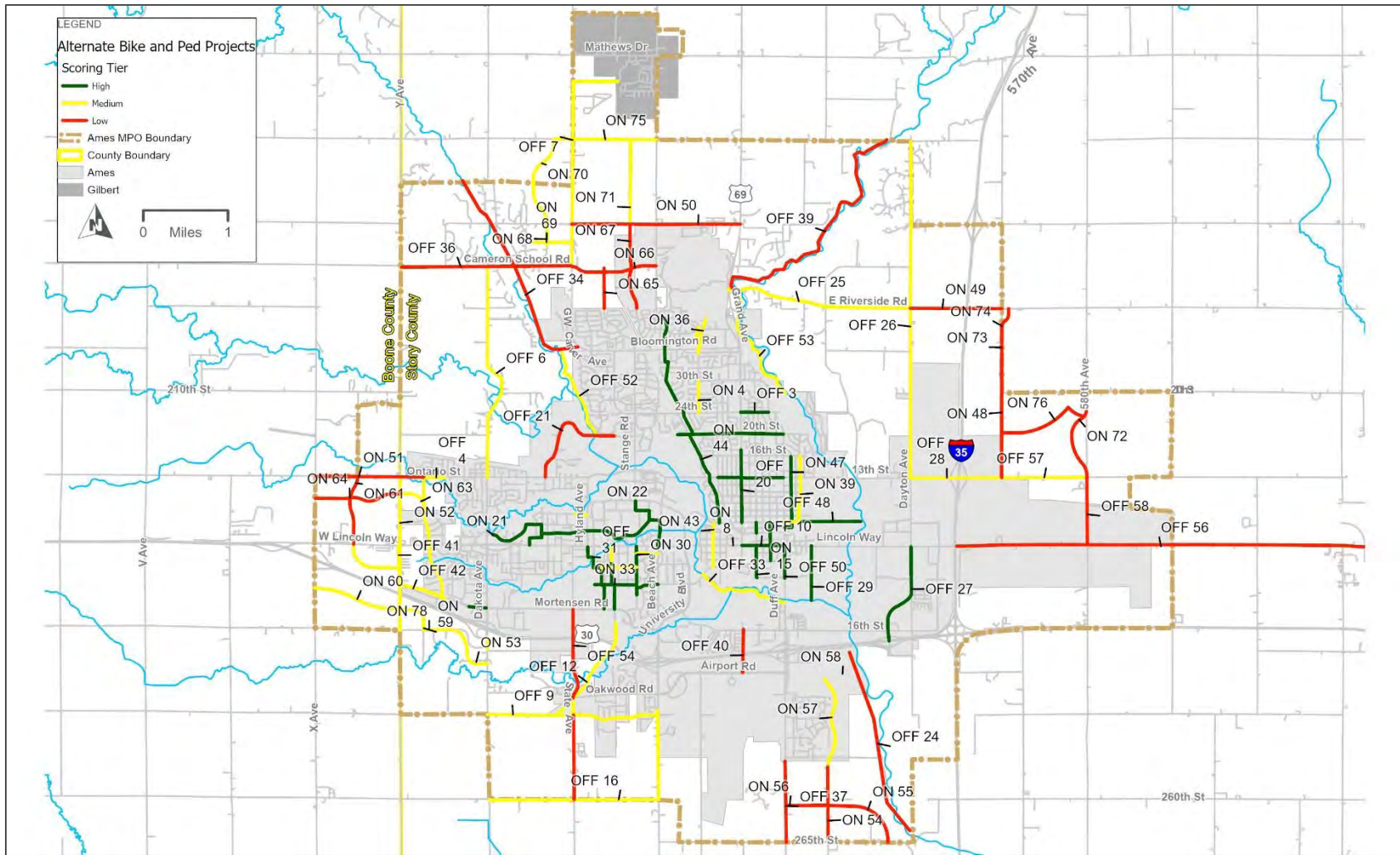
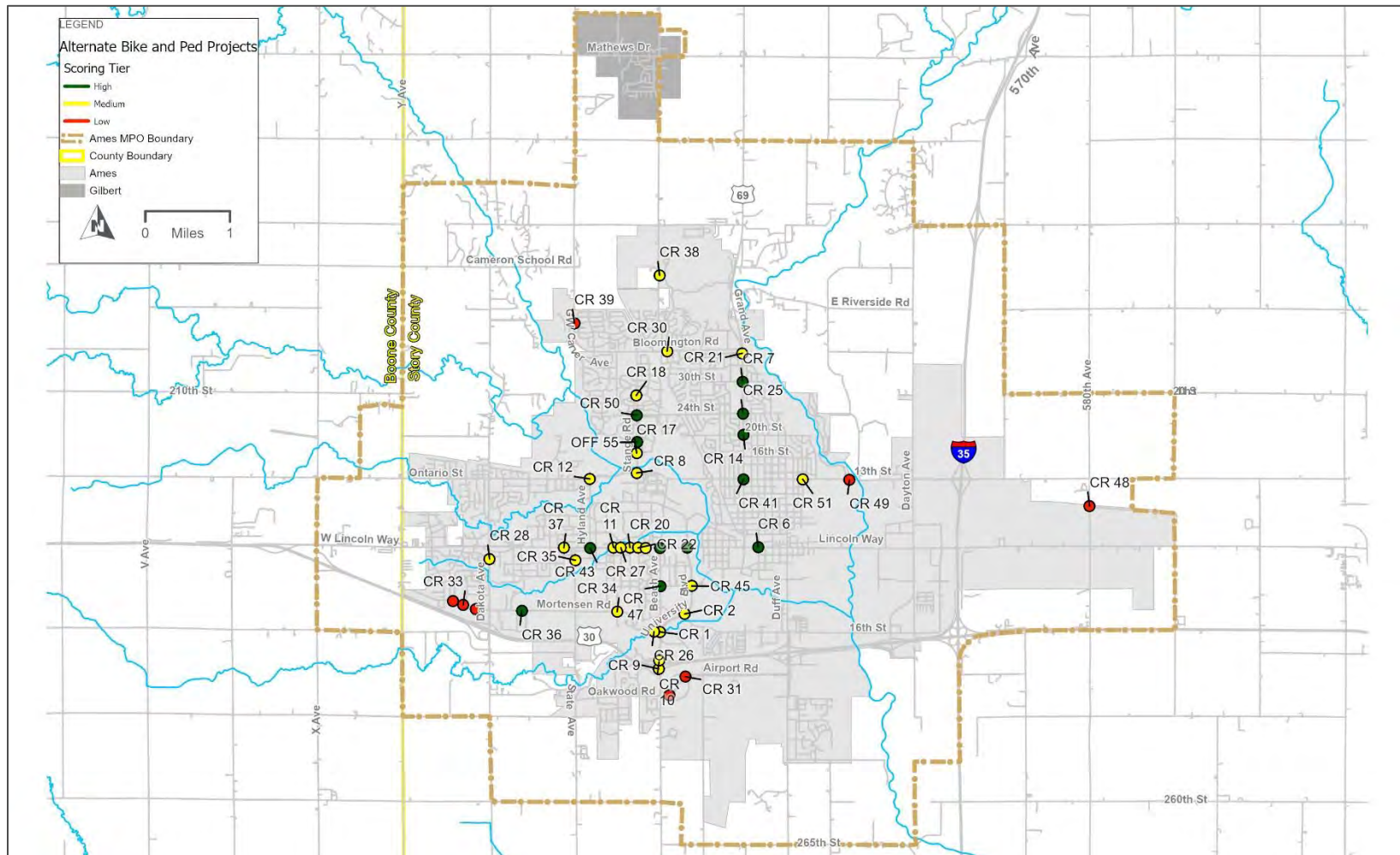




Figure 6-5: Alternative Bike and Pedestrian Crossing Projects by Scoring Tier





## Emerging Trends and Technologies

### Strategies and Treatments

The following is a list of potential influencing strategies and treatments that are likely to have the greatest impact in the coming years throughout the reach of the AAMPO:

- **Mobility as a Service (MaaS):** Facilitate an integrated mobility platform, capturing trip planning and payment across multiple modes to increase transportation access and decrease per-mile cost.
- **MaaS Parking Strategy:** Establish a “futureproofing” strategy for parking, considering autonomous vehicle impacts of decreased future parking demand and gained efficiencies based on self-parking vehicles.
- **Connected and Autonomous Vehicles (CAVs):** Prepare for the coming shift to autonomy by considering strategies encouraging shared mobility, reduction of vehicle miles travelled due to induced demand, and finding more efficiencies in the existing roadway network.
- **Autonomous Shuttles:** Establish autonomous shuttle pilot projects to test coordination with real-world roadway conditions and to familiarize the public with AV operations.
- **Smart Traffic Signal Controls and System Management:** Move traffic, pedestrians, bicyclists, and transit vehicles more efficiently on existing streets by coordinating traffic signals through vehicle-to-infrastructure and vehicle-to-vehicle communication.
- **Electrification / Charging Stations:** Accelerate the shift to low-emissions vehicles by providing access to a region wide system of charging stations.
- **5G / Communications:** Establish the communication backbone needed for the function of connected and autonomous vehicles and the links to smart infrastructure.
- **Micromobility:** Provide additional transportation options to complement the changing mobility network, particularly improving first-last mile access as well as opportunities for underserved populations.
- **Curb Management:** Anticipate the growing competition for limited curb space resulting from increases in shared mobility and urban freight delivery due to e-commerce and automation.
- **Robotic Delivery:** Respond to the rapidly growing e-commerce sector and prepare our roadway and sidewalk networks to accommodate ground-based robotic drone delivery vehicles.

**Table 6-2** presents greater detail on these ten strategies, including their pros and cons, timeframe, and impact on Ames.



**Table 6-2: Pros, Cons, Timeframe, and Impact of Strategies Related to Ames**

Strategy	Pros	Cons	Timeframe	Impacts
<b>Mobility as a Service</b>	<ul style="list-style-type: none"> <li>Decreased cost of mobility when paired with autonomous technology</li> <li>Innovative approaches to personal mobility</li> <li>Benefits to land use/housing/density</li> <li>Better access to transit with a larger catchment area through mobility hubs and short-range mobility options</li> </ul>	<ul style="list-style-type: none"> <li>Uncoordinated implementation</li> <li>Unintended impacts to existing system (curbs, traffic flow, pedestrian access)</li> <li>Induced demand if costs to consumers drop</li> </ul>	Near to mid-term	High
<b>MaaS Parking Strategy</b>	<ul style="list-style-type: none"> <li>Reuse of well-located existing structures paired with autonomous vehicle technology</li> <li>More efficiency (added spaces) in existing structures</li> <li>Allows temporary use of surface parking to accommodate off-site storage</li> </ul>	<ul style="list-style-type: none"> <li>Many current structures will become obsolete</li> <li>Transition to MaaS will not be uniform, so triggers must be determined</li> </ul>	Near to mid-term	High
<b>Connected and Autonomous Vehicles</b>	<ul style="list-style-type: none"> <li>Decreased cost of mobility</li> <li>Enabling of MaaS at substantial scale</li> <li>Greater development density/less parking</li> </ul>	<ul style="list-style-type: none"> <li>Unintended vehicle uses</li> <li>Induced demand/negative impacts on system</li> <li>Inability to regulate/coordinate effectively</li> </ul>	Mid to long-term	High
<b>Autonomous Shuttles</b>	<ul style="list-style-type: none"> <li>Lower cost/increase effectiveness of transit with better first mile/last mile connectivity</li> <li>More efficient - fewer trips to serve same number of people when compared to privately owned vehicles</li> <li>Introduce AV technology to broader public</li> </ul>	<ul style="list-style-type: none"> <li>Integration with other modes on roadways</li> <li>Initial tests limited to fixed routes</li> </ul>	Near to mid-term	Moderate



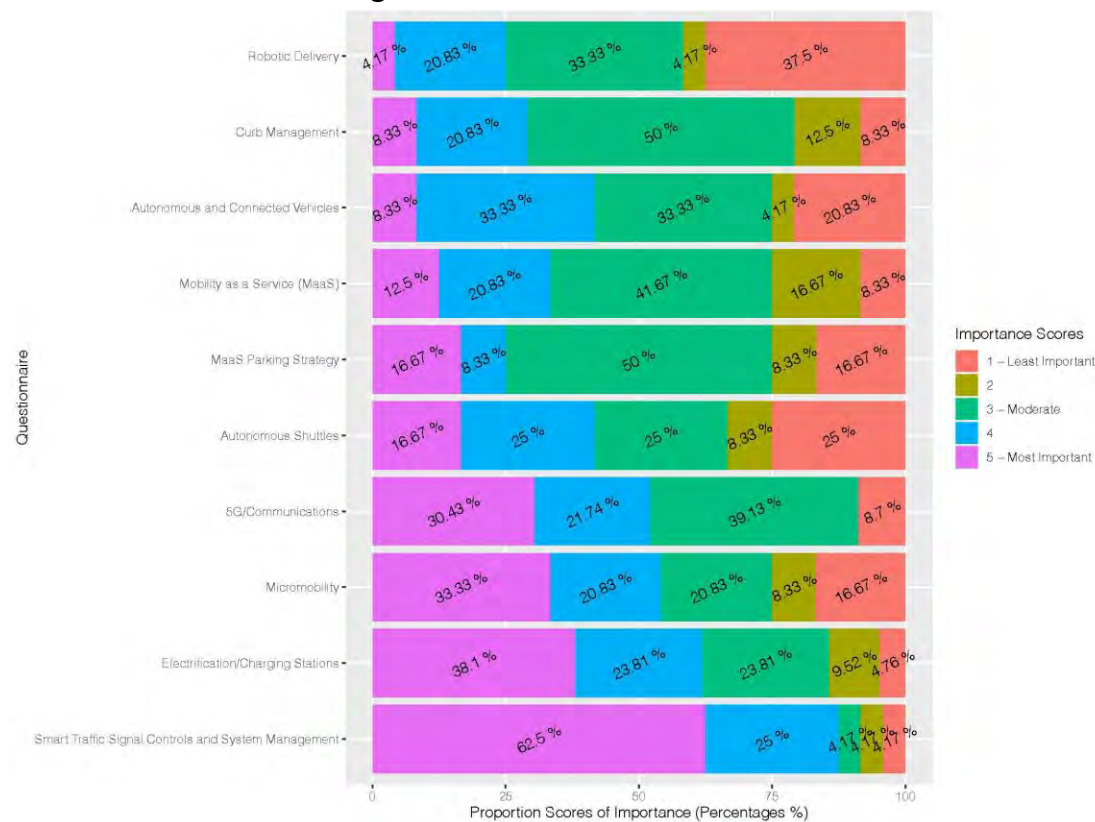
Strategy	Pros	Cons	Timeframe	Impacts
<b>Smart Traffic Signal Controls and System Management</b>	<ul style="list-style-type: none"> <li>Increased situational awareness (vehicles and pedestrians)</li> <li>Improved corridor throughput</li> <li>Reduced emissions</li> <li>Long-term potential to reduce or eliminate signal infrastructure if CAV adoption becomes universal</li> </ul>	<ul style="list-style-type: none"> <li>Medium-term will likely require both traditional detection methods and emerging technologies</li> <li>Uncertainty about adoption time horizons and communication protocols</li> <li>Increased efficiency could be at the expense of new mobility options</li> </ul>	Near-term	Significant
<b>Electrification / Charging Stations</b>	<ul style="list-style-type: none"> <li>No tailpipe emissions and lower carbon emissions than internal combustion engine</li> <li>Price for consumers is rapidly declining</li> <li>Overall cost of ownership for travelers is typically less than a comparable internal combustion engine vehicle</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient supporting infrastructure for power distribution and charging</li> <li>Transportation system reliant upon power grid</li> </ul>	Near-term	Moderate to high
<b>5G / Communications</b>	<ul style="list-style-type: none"> <li>Data-based decision-making and insights</li> <li>Creation of backbone infrastructure that enables advanced safety and traffic management capabilities</li> <li>Real-time system conditions and ability to react</li> </ul>	<ul style="list-style-type: none"> <li>Data security and privacy</li> <li>No access to proprietary data</li> <li>No transparency in public access/ownership of data</li> <li>Too much data/inability to draw conclusions</li> </ul>	Immediate to near-term	High
<b>Micromobility</b>	<ul style="list-style-type: none"> <li>Expansion of mobility options</li> <li>Better access to transit with a larger catchment area through mobility hubs and short-range mobility options</li> <li>Availability to wide range of users</li> </ul>	<ul style="list-style-type: none"> <li>Conflicts with other modes</li> <li>Lack of “slow lane” options in ROW</li> <li>Conflicts with sidewalk uses - pedestrians</li> </ul>	Immediate to near-term	Moderate
<b>Curb Management</b>	<ul style="list-style-type: none"> <li>Coordination of curb access with increasing competition</li> <li>Shared mobility pick-up / drop-off</li> <li>Urban freight delivery designation areas/times</li> </ul>	<ul style="list-style-type: none"> <li>Conflicts with on-street parking</li> <li>Enforcement challenges</li> <li>Reconfiguration of curb lane</li> </ul>	Near to mid-term	Moderate
<b>Robotic Delivery</b>	<ul style="list-style-type: none"> <li>“Right-size” trip options per delivery</li> <li>E-commerce efficiency</li> <li>Reduce truck delivery trips</li> </ul>	<ul style="list-style-type: none"> <li>Greatly increased number of individual deliveries</li> <li>Overwhelm ROW or sidewalks</li> </ul>	Near to mid-term	Moderate



## Implementation Strategies

Public reaction to the identified technologies was gathered as part of the public open house process. **Figure 6-6** shows the results of the public questionnaire. The smart traffic signal controls and system management strategy had the highest number of respondents that indicated this as most important, while robotic delivery received the highest amount of least important scores.

**Figure 6-6: Results of Public Questionnaire**



Potential implementation actions were developed and are shown in **Table 6-3**. These projects and policies are split into three timeframes: near-term (NT), mid-term (MT), and long-term (LT).



**Table 6-3. Potential Implementation Actions**

Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
NT	"Slow lanes" / shared lanes tactical test	<ul style="list-style-type: none"> <li>Select key corridors for slow lane test deployment</li> <li>Implement test deployment</li> <li>Record results to inform permanent strategy</li> </ul>	X	X		X		X		X	X	X
NT	Smart parking	<ul style="list-style-type: none"> <li>Create app-based parking for tracking of parking availability and payment: onstreet, city-owned lots/garages, agreements with private owners</li> <li>Install linked meters that communicate data to parking app, adjust fare, and accept app-based payment</li> <li>Install meters / fareboxes that relay usage and capacity data to app</li> <li>Create wayfinding displaying linked parking data</li> </ul>		X	X			X	X		X	



Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
NT	Integrate parking and transit data	<ul style="list-style-type: none"> <li>Integrate parking data with CyRide transit data, including arrival times</li> <li>Integrate parking and transit payment options</li> </ul>	X	X								
NT	Microtransit pilot	<ul style="list-style-type: none"> <li>Implement a pilot microshuttle project downtown/campus</li> <li>Integrated with CyRide service</li> </ul>		X		X	X				X	
NT	Expand electric charging capabilities	<ul style="list-style-type: none"> <li>Expand current charging facilities beyond City Hall and Bandshell Park</li> <li>Identify key locations that integrate with other mobility strategies of micromobility and smart parking</li> <li>Identify key regional locations in conjunction with destinations or transit links</li> </ul>		X				X				
NT	Smart traffic signal controls	<ul style="list-style-type: none"> <li>CAV infrastructure at crash hot spots</li> <li>Signal priority on congested arterials</li> <li>CAV-readiness for signal upgrades</li> </ul>			X		X		X			
NT	Standards for alternate micromobility options	<ul style="list-style-type: none"> <li>Create and implement policies for scooters, e-bikes, etc., using the models borrowed from other cities</li> </ul>	X							X	X	



Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
NT	Guidelines for autonomous ground-based delivery	<ul style="list-style-type: none"> <li>Prepare for alternative delivery options</li> <li>Look to other communities for emerging regulations</li> </ul>									X	X
MT	5G connected vehicle test corridor	<ul style="list-style-type: none"> <li>Select key transportation corridors to implement and test CV technology for V2X</li> <li>Record results to inform permanent strategy</li> </ul>			X		X		X			
MT	Adaptable streets strategy	<ul style="list-style-type: none"> <li>Establish standards to convert lane usage, whether for peak hours or throughout the day</li> <li>Implement added adaptable lanes over time</li> </ul>	X		X		X			X	X	
MT	Parking requirements revisions/strategy	<ul style="list-style-type: none"> <li>Determine remote parking policies and locations for self-parking vehicles</li> <li>Determine CAV adoption triggers to reduce or eliminate parking requirements</li> </ul>		X		X				X		
MT	Site development standards	<ul style="list-style-type: none"> <li>Revise site development standards to reflect reduced parking demand, preference from front-door drop off, etc.</li> </ul>	X	X				X		X	X	X



Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
MT	Curb management policy	<ul style="list-style-type: none"> <li>Map current freight deliveries, and TNC hotspots</li> <li>Create and implement policies that manage how curb access will be provided as mobility evolves</li> </ul>		X				X		X	X	X
MT	Land use and zoning standards update	<ul style="list-style-type: none"> <li>Parking reductions as adoption occurs</li> <li>Freight-warehousing</li> <li>Retail changes</li> </ul>	X		X							
LT	Thoroughfare plan revision	<ul style="list-style-type: none"> <li>Update outcomes and capital improvement priorities based on impacts of new mobility technology</li> </ul>	X		X		X			X	X	X
LT	Conversion of roadway network to full CAV	<ul style="list-style-type: none"> <li>Complete infrastructure technology needed for full functionality of connected and autonomous vehicles</li> </ul>			X	X	X		X		X	
LT	Parking demand change strategy	<ul style="list-style-type: none"> <li>Develop a real estate and redevelopment strategy to capture underutilized parking areas</li> </ul>	X	X	X	X				X		
LT	New lane use policies	<ul style="list-style-type: none"> <li>Update long-term land use for an age of autonomous driving and delivery, based on a trends analysis of behavioral shifts</li> </ul>	X	X								X



Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
NT	Microtransit pilot	<ul style="list-style-type: none"> <li>Implement a pilot microshuttle project downtown/campus</li> <li>Integrated with CyRide service</li> </ul>		X		X	X				X	
NT	Expand electric charging capabilities	<ul style="list-style-type: none"> <li>Expand current charging facilities beyond City Hall and Bandshell Park</li> <li>Identify key locations that integrate with other mobility strategies of micromobility and smart parking</li> <li>Identify key regional locations in conjunction with destinations or transit links</li> </ul>		X				X				
NT	Smart traffic signal controls	<ul style="list-style-type: none"> <li>CAV infrastructure at crash hot spots</li> <li>Signal priority on congested arterials</li> <li>CAV-readiness for signal upgrades</li> </ul>			X		X		X			
NT	Standards for alternate micromobility options	<ul style="list-style-type: none"> <li>Create and implement policies for scooters, e-bikes, etc., using the models borrowed from other cities</li> </ul>	X							X	X	
NT	Guidelines for autonomous ground-based delivery	<ul style="list-style-type: none"> <li>Prepare for alternative delivery options</li> <li>Look to other communities for emerging regulations</li> </ul>									X	X



Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
MT	5G connected vehicle test corridor	<ul style="list-style-type: none"> <li>Select key transportation corridors to implement and test CV technology for V2X</li> <li>Record results to inform permanent strategy</li> </ul>			X		X		X			
MT	Adaptable streets strategy	<ul style="list-style-type: none"> <li>Establish standards to convert lane usage, whether for peak hours or throughout the day</li> <li>Implement added adaptable lanes over time</li> </ul>	X		X		X			X	X	
MT	Parking requirements revisions/strategy	<ul style="list-style-type: none"> <li>Determine remote parking policies and locations for self-parking vehicles</li> <li>Determine CAV adoption triggers to reduce or eliminate parking requirements</li> </ul>		X		X				X		
MT	Site development standards	<ul style="list-style-type: none"> <li>Revise site development standards to reflect reduced parking demand, preference from front-door drop off, etc.</li> </ul>	X	X				X		X	X	X
MT	Curb management policy	<ul style="list-style-type: none"> <li>Map current freight deliveries, and TNC hotspots</li> <li>Create and implement policies that manage how curb access will be provided as mobility evolves</li> </ul>		X				X		X	X	X



Timeframe	Tactical Action	Description	Mobility as a Service (MaaS)	MaaS Parking Strategy	Connected and Autonomous Vehicles	Autonomous Shuttles	Smart Traffic Controls and System Management	Electrification / Charging Stations	5G / Communications	Micromobility	Curb Management	Robotic Delivery
MT	Land use and zoning standards update	<ul style="list-style-type: none"> <li>Parking reductions as adoption occurs</li> <li>Freight-warehousing</li> <li>Retail changes</li> </ul>	X		X							
LT	Conversion of roadway network to full CAV	<ul style="list-style-type: none"> <li>Complete infrastructure technology needed for full functionality of connected and autonomous vehicles</li> </ul>			X	X	X		X		X	
LT	Parking demand change strategy	<ul style="list-style-type: none"> <li>Develop a real estate and redevelopment strategy to capture underutilized parking areas</li> </ul>	X	X	X	X				X		
LT	Thoroughfare plan revision	<ul style="list-style-type: none"> <li>Update outcomes and capital improvement priorities based on impacts of new mobility technology</li> </ul>	X		X		X			X	X	X
LT	New lane use policies	<ul style="list-style-type: none"> <li>Update long-term land use for an age of autonomous driving and delivery, based on a trends analysis of behavioral shifts</li> </ul>	X	X								X



## Chapter 7 Fiscally Constrained Plan

Fiscal constraint is a Federal requirement for MTPs and means the MPO has identified a list of future transportation projects whose costs are within the anticipated revenues forecasted for the region. Through the development of a fiscally-constrained plan, the MPO is able to demonstrate that identified projects considered for future implementation are financially feasible.

### Selection of Projects for the Fiscally-Constrained Plan

Candidate projects were selected for inclusion in the Fiscally-Constrained Plan based on how they scored against the project scoring criteria shown in **Chapter 6**, and the forecasted year-of-expenditure costs associated with their planning, design, and construction in relation to the available Federal and local revenue levels that were projected.

### 2020-2045 Fiscally-Constrained Plan

The Fiscally-Constrained Plan is presented in the time bands described in **Chapter 5** and includes the estimated costs in 2020 dollars, Year-of-Expenditure (YOE) dollars, potential funding source, and potential funding sponsor in addition to a brief description of each project.

### 2020-2024 Transportation Improvement Program

The current Transportation Improvement Program covers the years 2021 through 2024 and the projects presented in the current TIP document reflect those that are considered to be committed for purposes of developing the Fiscally-Constrained Plan. Fiscally-constrained projects that are to be considered for implementation beyond the current TIP will start in the year 2025, or the Short-Term time band.

The committed roadway projects identified in the 2021-2024 TIP are in **Table 7-1** while the committed bicycle and pedestrian projects are shown in **Table 7-2**. **Table 7-3** shows the committed transit projects identified by CyRide for the fixed-route and paratransit systems.



**Table 7-1: List of Committed Roadway Projects from the AAMPO 2021-2024 TIP**

<b>ID</b>	<b>Project Description</b>	<b>Type</b>
<b>C1</b>	Cherry Ave from Lincoln Way to SE 5th Street - Add New Road	New Road
<b>C2</b>	Grand Ave from S 3rd St to S 16th St - Add New Road	New Road
<b>C3</b>	Duff Ave & S 16th Street - Add Turn Lanes	Turn Lanes
<b>C4</b>	Hoover Ave & 30th St to Duff Ave & 13th St - Road Diet to 3 Lanes	Road Diet
<b>C5</b>	Duff Ave from 13rd St to Crystal St - Add Adaptive Signal Control Technologies	Signal Upgrades
<b>C6</b>	Lincoln Way from Beach Ave to Hyland Ave - Add Adaptive Signal Control Technologies	Signal Upgrades
<b>C7</b>	Lincoln Way from Grand Ave to Duff Ave - Add Adaptive Signal Control Technologies	Signal Upgrades
<b>C8</b>	University Blvd from Lincoln Way to US30 - Add Adaptive Signal Control Technologies	Signal Upgrades
<b>C9</b>	State Ave & Mortensen Rd - Traffic Signal & Turn Lanes	Traffic Signal/Turn Lanes
<b>C10</b>	SE 16th St & Dayton Ave - Traffic Signal	Traffic Signal
<b>C11</b>	Duff Ave & US30 EB Ramp - Traffic Signal	Traffic Signal
<b>C12</b>	Hyde Ave & Bloomington Rd - Traffic Signal	Traffic Signal



**Table 7-2: List of Committed Bicycle and Pedestrian Projects from the AAMPO 2021-2024 TIP**

ID	Description	Type
<b>C 1</b>	Intersection of Dayton / S 16th - Improve visibility for crossing	Crossing
<b>C 2</b>	Intersection of Duff / S 16th St - Improve crossing visibility, median refuge. Part of project 44A.	Crossing
<b>C 3</b>	Intersection of Grand / 6th St - Improve crossing visibility of Grand	Crossing
<b>C 4</b>	S 16th midblock trail crossing near Vet Med - High visibility treatment for trail cross - over	Crossing
<b>C 5</b>	Intersection of Grand / (N) 16th St - Cycling Enhancements to support 16th Street Bike Route	Crossing
<b>C 6</b>	Intersection of Duff / S 5th - Improve crossing visibility of Duff and 5th. Part of project 44A.	Crossing
<b>C 7</b>	N Walnut Sharrows	Bike Route
<b>C 8</b>	North Duff Bike Lanes	Bike Lane
<b>C 9</b>	30th St Bike Lanes	Bike Lane
<b>C 10</b>	6th Street Bike Lanes	Bike Lane
<b>C 11</b>	Hoover Ave bike lanes from 30th to Bloomington Rd	Bike lanes
<b>C 12</b>	Grand Ave Side Path between Lincoln Way and 6th Street	Shared-use path
<b>C 13</b>	Skunk River - South Duff Trail Connection along Billy Sunday Rd.	Shared-use path
<b>C 14</b>	Gilbert to Ames trail - Hyde Ave south of W 190th St	Shared-use path
<b>C 15</b>	Stange Road to Bloomington Trl	Shared-use path
<b>C 16</b>	Squaw Creek Trail	Shared-use path
<b>C 17</b>	S Dakota Side Path	Shared-use path
<b>C 18</b>	S 5th sidepath from Walnut to Duff Ave	Shared-use path
<b>C 19</b>	Lincoln Way Bike Lanes, Duff Ave to Dayton. With roadway projects 19 and 20.	Bike lanes
<b>C 20</b>	Complete bike trail/shared path connection between SE 16th and Lincoln Way	Shared-use path
<b>C 21</b>	Pave existing gravel trail between South 4th St to SUP 15	Shared-use path
<b>C 22</b>	Grand Avenue extension sidepath	Shared-use path
<b>C 23</b>	Oakwood Rd from State Ave to Cedar Ln sidepath	Shared-use path
<b>C 24</b>	E 13th from Meadowlane Ave to Duff Ave sidepath	Shared-use path
<b>C 25</b>	Mortensen Rd from Wilder Blvd to 0.4 miles west	Shared-use path
<b>C 26</b>	Lincoln Way from Hartford Dr to Lincoln Way frontage road	Shared-use path
<b>C 27</b>	Grand Ave from Bloomington Rd to Dawes Rd sidepath	Shared-use path
<b>C 28</b>	Southwest Greenbelt Trail	Shared-use path



**Table 7-3: Committed Transit Projects for CyRide's Fixed-Route and Paratransit Systems**

ID	Description	Type
1	Vehicle Replacement/Expansion - 3 buses per year	Equipment
2	Building Improvements and Expansion	Capital
3	Real-Time Passenger Information	Technology
4	Passenger Amenity Improvements	Operations
5	Battery Electric Buses	Vehicles
6	Battery Electric Bus Charging Infrastructure	Capital
7	Battery Electric Bus Facility Modifications	Capital
8	Light Duty Vehicles	Vehicles
9	Articulated Bus Expansion/Replacement	Vehicles
10	Install Benches & Shelters	Operations



### Fiscally-Constrained Projects

The fiscally-constrained projects are presented by time band (Short-, Mid-, and Long-Term), but the projects selected for implementation beyond the Short-Term may be implemented sooner. A list of Illustrative Projects, which are projects that are priorities for the MPO but are unable to be selected for the Fiscally-Constrained Plan due to their cost, is also included in this section. Projects identified as illustrative could be implemented within the planning horizon of 2045 should additional funding resources be identified.

#### Short-Term Projects

Projects to be implemented in the Short-Term are shown in Tables 3 through 5. With an implementation timeframe of 2025 through 2029, these projects were identified as being critical to addressing the current needs of the system. Total costs (in YOE dollars) by mode for the Short-Term period are:

- **Roadway:** \$14,930,000 in roadway expansion and improvements
- **Bicycle and Pedestrian:** \$5,780,000 in bicycle and pedestrian expansion and improvements
- **Transit:** \$18,870,000 on transit vehicles and capital improvements

#### Mid-Term Projects

Projects to be implemented in the Mid-Term are shown in Table 6. With an implementation timeframe of 2030 through 2037, these projects were identified as being a high priority in furthering the operational efficiency and safety of the system. Total costs (in YOE dollars) by mode for the Mid-Term period are:

- **Roadway:** \$31,430,000 in roadway expansion and improvements
- **Bicycle and Pedestrian:** \$10,660,310 in bicycle and pedestrian expansion and improvements
- **Transit:** \$36,630,000 on transit vehicles and capital improvements

#### Long-Term Projects

Projects to be implemented in the Long-Term are shown in Table. With an implementation timeframe of 2038 through 2045, these projects address the remaining high and medium priority needs that remain for the system. Total cost (in YOE dollars) by mode for the Long-Term period are:

- **Roadway:** \$33,710,000 in roadway expansion and improvements
- **Bicycle and Pedestrian:** \$11,820,000 in bicycle and pedestrian expansion and improvements



- **Transit:** \$46,400,000 on transit vehicles and capital improvements

The following Tables and Figures present the fiscally-constrained projects for the roadway, bicycle and pedestrian, and transit system by time band.

DRAFT

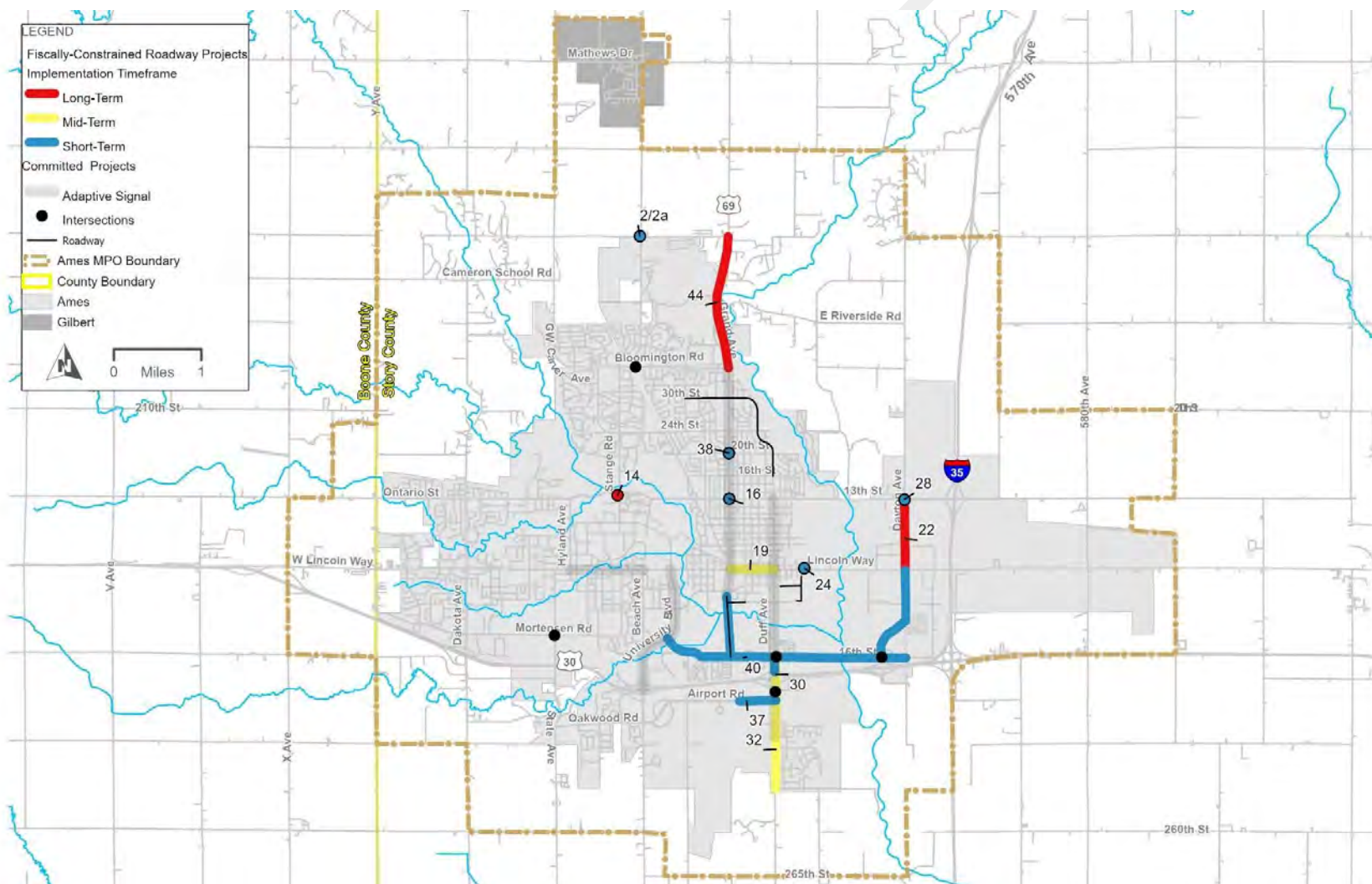


**Table 7-4: Fiscally-Constrained Roadway Projects**

Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share	Potential Non-Local Funding Sources	Potential Sponsor(s)
Short-Term (2025-2029)	40	16th Street, Grand Avenue, and Dayton Avenue Traffic Signals	\$1,130,000	\$1,440,000	\$724,752	\$715,248	ICAAP	City of Ames
	37	Airport Rd from Duff Ave to Sam's Club - Improve Roadway Access	\$800,000	\$1,020,000	\$513,366	\$506,634	STBG Swap	City of Ames
	16	13th St & Grand Ave - Left Turn Lanes (All Approaches)	\$3,000,000	\$3,820,000	\$1,922,606	\$1,897,394	STBG Swap	City of Ames
	2 OR 2A	Hyde Ave/Grant Ave & W 190th St	\$2,000,000	\$2,540,000	\$1,278,382	\$1,261,618	STBG Swap	Story County / City of Ames
	28	13th Street & Dayton Ave - Add turn lane(s)	\$2,000,000	\$2,540,000	\$1,278,382	\$1,261,618	STBG Swap	City of Ames
	24	Cherry - Lincoln Way Intersection Improvements	\$1,200,000	\$1,530,000	\$770,049	\$759,951	STBG Swap	City of Ames
	38	Grand Ave & 20th St - Left Turn Lanes	\$1,600,000	\$2,040,000	\$1,026,732	\$1,013,268	STBG Swap	City of Ames
<b>Time Frame Total</b>			<b>\$11,730,000</b>	<b>\$14,930,000</b>	<b>\$7,514,269</b>	<b>\$7,415,731</b>		
Mid-Term (2030-2037)	30	Duff Ave from S 16th Street to Airport Rd - Widen to 6 Lanes/Reconstruct Interchange	\$10,000,000	\$15,910,000	\$8,007,503	\$7,902,497	STBG / NHPP / ICAAP	City of Ames / Iowa DOT
	19	Lincoln Way from Gilchrist St to Duff Ave - Road Diet from 4 Lanes to 3 Lanes	\$1,750,000	\$2,780,000	\$1,399,174	\$1,380,826	STBG Swap	City of Ames
	32a	Duff Ave from Airport Rd to Ken Maril - Widen to 5 Lanes	\$8,010,000	\$12,740,000	\$6,412,042	\$6,327,958	ICAAP	City of Ames
<b>Time Frame Total</b>			<b>\$19,760,000</b>	<b>\$31,430,000</b>	<b>\$15,818,719</b>	<b>\$15,611,281</b>		
Long-Term (2038-2045)	44a	Grand Ave from Bloomington Rd to 190th St - Widen to 5 Lanes	\$10,400,000	\$21,790,000	\$10,966,907	\$10,823,093	ICAAP / NHPP	City of Ames / Iowa DOT
	22	Dayton Ave from 13th St to Lincoln Way - Widen to 5 Lanes	\$3,200,000	\$6,700,000	\$3,372,110	\$3,327,890	STBG Swap	Story County / City of Ames
	14	13th St & Stange Road - N/S Left Turn Lanes	\$2,490,000	\$5,220,000	\$2,627,226	\$2,592,774	Local	City of Ames
<b>Time Frame Total</b>			<b>\$16,090,000</b>	<b>\$33,710,000</b>	<b>\$16,966,243</b>	<b>\$16,743,757</b>		
<b>Grand Total</b>			<b>\$47,580,000</b>	<b>\$80,070,000</b>	<b>\$40,299,231</b>	<b>\$39,770,769</b>		



**Figure 7-1: Fiscally-Constrained Roadway Projects by Implementation Timeframe**





**Table 7-5: Fiscally-Constrained Bicycle and Pedestrian Projects**

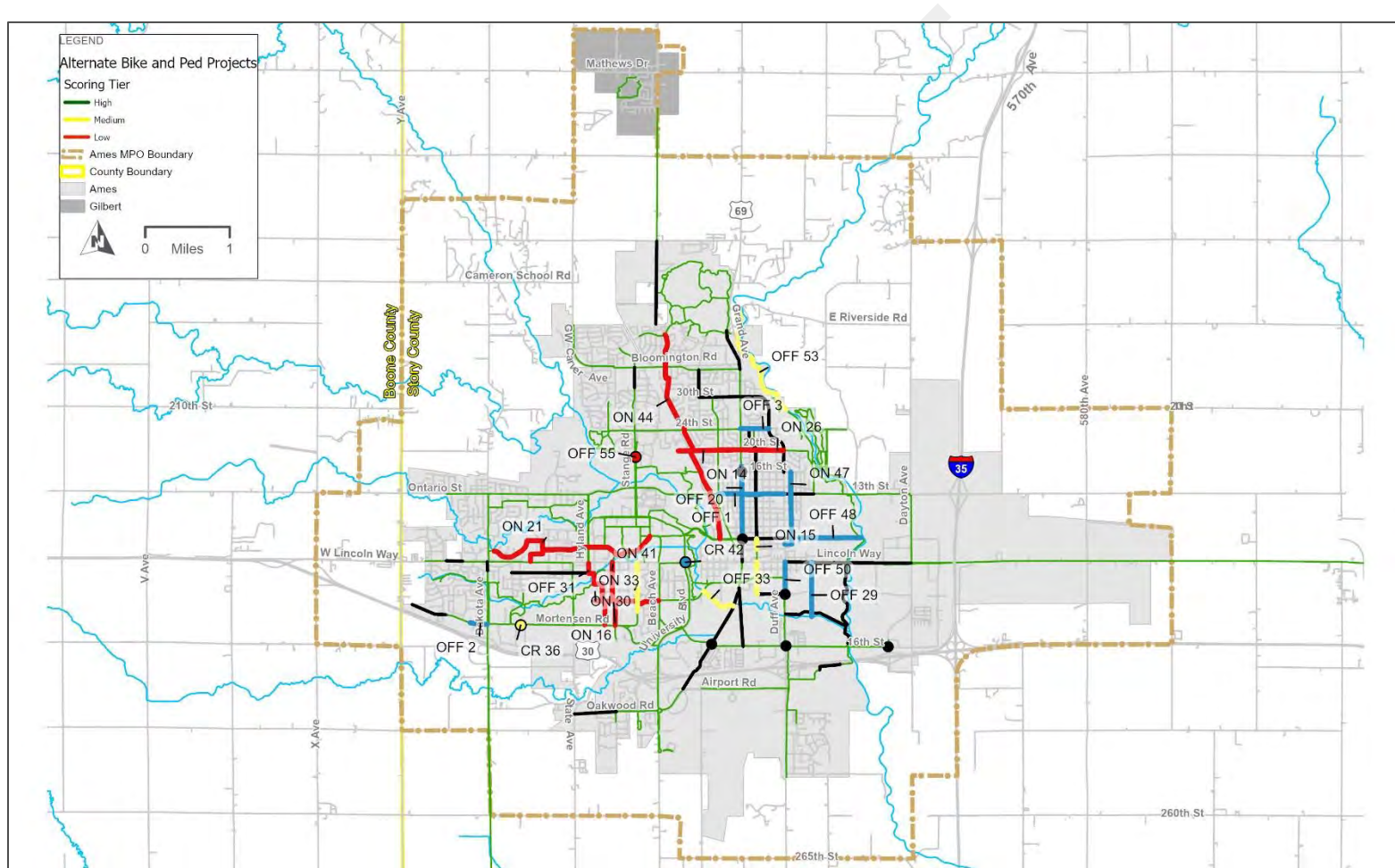
Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share	Potential Funding Sources	Potential Sponsor(s)
Short-Term (2025-2029)	CR 42	Intersection of Lincoln Way / University - Protected intersection. Roadway project 25	\$750,000	\$950,000	\$0	\$950,000	TAP / Local	City of Ames
	OFF 1	East 13th sidepath, Northwestern Ave to Duff Ave	\$560,000	\$710,000	\$87,330	\$622,670	TAP / Local	City of Ames
	OFF 2	West Mortensen Side Path, fill in gap west of South Dakota	\$410,000	\$520,000	\$63,960	\$456,040	TAP / Local	City of Ames
	OFF 3	24th St Sidepath Grand to Duff	\$250,000	\$320,000	\$39,360	\$280,640	TAP / Local	City of Ames
	OFF 20	Grand Ave Side Path between 6th and 16th Street	\$650,000	\$830,000	\$102,090	\$727,910	TAP / Local	City of Ames
	OFF 29	Cherry Street Connection to Squaw Creek	\$490,000	\$620,000	\$76,260	\$543,740	TAP / Local	City of Ames
	OFF 48	East 6th St to Skunk River Connection	\$550,000	\$700,000	\$86,100	\$613,900	TAP / Local	City of Ames
	OFF 50	South Duff Sidepath	\$290,000	\$370,000	\$45,510	\$324,490	TAP / Local	City of Ames
	ON 15	Clark / Walnut Bike Route, South 3rd to S 5th Street	\$90,000	\$110,000	\$13,530	\$96,470	TAP / Local	City of Ames
	ON 47	Carroll Ave Bike Route	\$150,000	\$190,000	\$116,466	\$73,534	TAP / Local	City of Ames
<b>Time Frame Total</b>			<b>\$4,190,000</b>	<b>\$5,320,000</b>	<b>\$630,606</b>	<b>\$4,689,394</b>		
Mid-Term (2030-2037)	OFF 53	Skunk River trail connection	\$2,990,000	\$4,760,000	\$585,480	\$4,174,520	TAP / Local	City of Ames
	OFF 33	Squaw Creek Trail from Grand Avenue Extension to 4th Street	\$2,200,000	\$3,500,000	\$430,500	\$3,069,500	TAP / Local	City of Ames
	ON 30	Ash Ave Bike Route, current bike lane end to Lincoln Way	\$80,000	\$130,000	\$15,990	\$114,010	TAP / Local	City of Ames
	CR	Various Pedestrian Crossing Projects	\$1,700,000	\$2,700,000	\$0	\$2,700,000	TAP / Local	City of Ames
<b>Time Frame Total</b>			<b>\$6,970,000</b>	<b>\$11,090,000</b>	<b>\$1,031,970</b>	<b>\$10,058,030</b>		



Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share	Potential Funding Sources	Potential Sponsor(s)
Long-Term (2038-2045)	OFF 31	Hyland-Hayward South Campus Trail Connection	\$1,850,000	\$3,880,000	\$477,240	\$3,402,760	TAP / Local	City of Ames
	OFF 55	Stange Rd Pedestrian Crossing	\$110,000	\$230,000	\$28,290	\$201,710	TAP / Local	City of Ames
	ON 14	20th St Bike Route, Ames High to Grand	\$150,000	\$310,000	\$38,130	\$271,870	TAP / Local	City of Ames
	ON 16	Welch On-Street Bike Treatment, Mortensen to Union Drive	\$90,000	\$190,000	\$23,370	\$166,630	TAP / Local	City of Ames
	ON 21	Bike Route north of Lincoln Way between North Dakota and Iowa State Campus	\$350,000	\$730,000	\$89,790	\$640,210	TAP / Local	City of Ames
	ON 26	20th Street Bike Route, Grand to Duff	\$70,000	\$150,000	\$18,450	\$131,550	TAP / Local	City of Ames
	ON 33	Cessna St Bike Route	\$110,000	\$230,000	\$28,290	\$201,710	TAP / Local	City of Ames
	ON 41	Welch Ave Pedestrian Mall (Lincoln to Hunt)	\$130,000	\$270,000	\$33,210	\$236,790	TAP / Local	City of Ames
	ON 44	Eisenhower Ave/Hayes Ave/Ridgewood Ave from Harrison Rd to 6th St - Bike Route	\$380,000	\$800,000	\$98,400	\$701,600	TAP / Local	City of Ames
	CR	Various Pedestrian Crossing Projects	\$2,400,000	\$5,030,000	\$0	\$5,030,000	TAP / Local	City of Ames
<b>Time Frame Total</b>			<b>\$5,640,000</b>	<b>\$11,820,000</b>	<b>\$835,170</b>	<b>\$10,984,830</b>		
<b>Grand Total</b>			<b>\$16,800,000</b>	<b>\$28,230,000</b>	<b>\$2,497,746</b>	<b>\$25,732,254</b>		



**Figure 7-2: Fiscally-Constrained Bicycle and Pedestrian Projects**





**Table 7-6: Fiscally-Constrained Transit Projects**

Time Frame	Project ID	Project Description	Cost (YOE \$)
Short-Term (2025-2029)	1	Vehicle Replacement/Expansion - 3 buses per year	\$9,200,000
	2	Building Improvements and Expansion	\$3,880,000
	8	Light Duty Vehicles	\$660,000
	9	Articulated Bus Expansion/Replacement	\$4,930,000
	10	Install Benches & Shelters	\$200,000
	Total		\$18,870,000
Mid-Term (2030-2037)	1	Vehicle Replacement/Expansion - 3 buses per year	\$17,860,000
	2	Building Improvements and Expansion	\$7,540,000
	8	Light Duty Vehicles	\$1,280,000
	9	Articulated Bus Expansion/Replacement	\$9,570,000
	10	Install Benches & Shelters	\$380,000
	Total		\$36,630,000
Long-Term (2038-2045)	1	Vehicle Replacement/Expansion - 3 buses per year	\$22,620,000
	2	Building Improvements and Expansion	\$9,550,000
	8	Light Duty Vehicles	\$1,620,000
	9	Articulated Bus Expansion/Replacement	\$12,130,000
	10	Install Benches & Shelters	\$480,000
	Total		\$46,400,000
Grand Total			\$101,900,000



Project costs shown in the tables above include all funding sources, including Federal formula-based, Federal discretionary, and local funds. **Table 7-7** and **Table 7-8** below provides a summary of MPO revenue levels and project costs to demonstrate fiscal constraint.

**Table 7-7: Summary of Revenue Levels and Project Costs for the Fiscally-Constrained Roadway Plan**

Time Periods	Funding Type	Carry Over From Previous Period	Revenue (YOE \$)	Project Costs (YOE \$)
<b>Short-Term (2026-2029)</b>	Federal Sources	\$1,903,943	\$8,215,000	
	Local Sources	\$0	\$8,503,380	
	Total	\$1,903,943	\$16,718,380	\$14,930,000
<b>Mid-Term (2030-2037)</b>	Federal Sources		\$14,485,000	
	Local Sources		\$14,993,820	
	Total	\$3,692,323	\$29,478,820	\$31,430,000
<b>Long-Term (2038-2045)</b>	Federal Sources		\$16,317,000	
	Local Sources		\$16,889,940	
	Total	\$1,741,143	\$33,206,940	\$33,710,000
<b>Ending Balance</b>		<b>\$1,238,083</b>		



**Table 7-8: Summary of Revenue Levels and Project Costs for the Fiscally-Constrained Bicycle and Pedestrian Plan**

Time Periods	Funding Type	Carry Over From Previous Period	Revenue (YOE \$)	Project Costs (YOE \$)
<b>Short-Term (2026-2029)</b>	TAP	\$245,758	\$534,000	
	Local	\$0	\$5,511,590	
	Total	\$245,758	\$6,045,590	\$5,780,000
<b>Mid-Term (2030-2037)</b>	TAP		\$942,000	
	Local		\$9,718,310	
	Total	\$511,348	\$10,660,310	\$11,090,000
<b>Long-Term (2038-2045)</b>	TAP		\$1,062,000	
	Local		\$10,947,370	
	Total	\$81,658	\$12,009,370	\$11,820,000
<b>Ending Balance</b>		<b>\$271,028</b>		

#### Bicycle and Pedestrian Projects Tied to Roadway Projects

Several bicycle and pedestrian projects were identified as priorities that could be implemented in coordination with roadway improvement projects. These bicycle and pedestrian projects that are anticipated to be implemented at the time of roadway project construction are shown in **Table 7-9**.



**Table 7-9: Coordinated Roadway and Bicycle and Pedestrian Projects**

Bicycle / Pedestrian Project ID	Bicycle / Pedestrian Project Description	Coordinated Roadway Project
<b>CR 8</b>	Intersection of Stange / 13th St - Improvements for trail crossing visibility	Tied to Roadway Project 14
<b>CR 14</b>	Intersection of 20th / Grand - Crossing / Signal improvements	Tied to Roadway Project 38
<b>CR 41</b>	Intersection of Grand Ave / 13th St - Improvements for crossing visibility and safety (on bikeway)	Tied to Roadway Project 16
<b>OFF 10</b>	East 13th Street separated bikeway - Ridgewood Ave to Grand Ave.	Tied to Roadway Project 19

#### *Illustrative Projects*

Due to limitations on Federal and local funding levels, not all projects that meet the needs of the MPO region can be included in the Fiscally-Constrained Plan. These projects, termed Illustrative Projects, are retained in the event that additional funding becomes available in the future. The roadway projects identified as Illustrative are listed in **Table 7-10**. They are also shown in **Figure 7-3**. The transit projects identified as illustrative are listed in **Table 7-11**.

#### *Developer-Driven Projects*

Several of the candidate roadway and bicycle and pedestrian projects are expected to be “developer-driven,” meaning that their funding and implementation is the responsibility of the developer and will not be considered in the Fiscally-Constrained Plan or Illustrative list because AAMPO will not need to source Federal or local funds for their implementation. Developer-driven projects are listed in Table and shown in **Figure 7-3**.

#### *Potential Iowa DOT Projects*

The Iowa DOT has identified several projects for implementation on the NHS in the AAMPO region, but these projects currently do not have a funding source identified. These projects consist of roadway widenings and interchange reconstruction. Potential Iowa DOT projects are listed in **Table 7-11** and shown in **Figure 7-3**.



**Table 7-10: Illustrative Roadway Projects**

<b>MTP ID</b>	<b>Project Description</b>	<b>Project Cost</b>
<b>1</b>	520th Ave & W 190th St - Roundabout	\$1,500,000
<b>4</b>	E Riverside Rd to from Grand Ave to N Dayton Ave - Widen to 3 Lanes	\$12,920,000
<b>5</b>	E Riverside Rd from N Dayton Ave to 570th Ave - Add New 3-Lane Road & I-35 Overpass	\$7,950,000
<b>6</b>	E Riverside Rd & I-35 - New Interchange (remove 190th St/I-35 Interchange)	\$15,000,000
<b>9</b>	Bloomington Rd from Hyde Ave to Hoover Ave - Widen to 4 Lanes	\$3,210,000
<b>10</b>	580th St and UPPR Grade Separation	\$2,830,000
<b>11</b>	Duff Ave & 16th/20th/24th St Roundabout/Traffic Circle	\$1,500,000
<b>13</b>	N Dakota from Ontario St to UPRR - Widen to 3 Lanes	\$840,000
<b>17</b>	13th St from Dayton Ave to 570th Ave - Widen to 6 Lanes/Reconstruct Interchange to 4 lane Diverging Diamond Interchange	\$11,880,000
<b>21</b>	Duff Ave and UPPR grade separation	\$22,000,000
<b>29</b>	Grand Ave from S 16th Street to Airport Rd - New Road w/ Traffic Signal @ Airport Road	\$13,500,000
<b>33</b>	265th St from Duff Ave to Skunk River - Pave to 3 Lanes	\$5,500,000
<b>34</b>	265th St from Skunk River to I-35 - Pave to 2 Lanes	\$2,800,000
<b>35</b>	265th St & I-35 - New Interchange	\$15,000,000
<b>36</b>	265th from University Ave to Duff Ave & University Ave from 265th to Collaboration PI - Pave to 3 Lanes	\$9,660,000
<b>45</b>	190th St from 520th Ave to Grand Ave - Widen to 3 Lanes / Grade Separation w UPRR	\$11,310,000
<b>53</b>	South Dakota Avenue from Lincoln Way to Mortensen Road - Widen to 5 lanes	\$6,000,000
<b>1a</b>	520th Ave & W 190th St - Traffic Signal & Turn Lanes	\$1,400,000



**Table 7-11: Illustrative Transit Projects**

MTP ID	Project Description	Project Type	Notes
1	Lincoln & Beach - Add Transit Signal Priority	Transit Signal Priority	Projects 1 and 2 tied to committed project C6 - Lincoln Way from Beach Ave to Hyland Ave traffic signal project. Funding would be coordinated with City of Ames Public Works. Project funding would be coordinated with City of Ames Public Works
2	Lincoln & Welch - Add Transit Signal Priority	Transit Signal Priority	
3	Stange & Bruner - Add New Signal	New Signal	
4	Stange & Blankenburg - Add Pedestrian Crossing	Pedestrian Crossing	Project funding would be coordinated with City of Ames Public Works
5	South Dakota & Steinbeck - Add Pedestrian Crossing	Pedestrian Crossing	Project funding would be coordinated with City of Ames Public Works
6	Ames Intermodal Facility Improvements	Facilities	Facility is new in 2012, but some improvements like lot resurfacing are anticipated by 2045. Assume some cost sharing with City.
7	Iowa State Center (ISC) - Implement Transit-Oriented Development in Conjunction with Redevelopment	Transit Oriented Development	Project funding would be coordinated with ISU. CyRide participation not certain, and impacts to service will vary according to redevelopment project plans.
8	South 16th Street - Add Innovative Transit Service Zone	Service	Additional vehicle in East Ames on weekdays 7am-7pm (year-round)
9	North Ames (Somerset/Northridge/Valley View) - Add Innovative Transit Service Zone	Service	Weekdays 7am-7pm (year-round)
10	Applied Sciences - Add Innovative Transit Service Zone	Service	Weekdays 7am-7pm (school year only)
11	Stange Road from Bloomington to University - Corridor Service Improvements	Service	Daily 20-minute service (school year only)
12	University Blvd from ISU/ISC to ISU Research Park - Corridor Service Improvements	Service	Daily 20-minute service (school year only)
13	South Duff from Lincoln to Crystal - Corridor Service Improvements	Service	Daily 20/30-minute service (year-round with reduced summer/break schedule)



MTP ID	Project Description	Project Type	Notes
14	Airport Road from South Duff to University - Corridor Service Improvements	Service	Weekdays 7am-7pm (year-round)
15	Ames to Ankeny and Des Moines Intercity/Commuter Service	Service	Would likely not be funded by CyRide
16	Amtrak Thruway from Ames to Osceola Intercity/Commuter Service	Service	Two trips per day; would likely not be funded by CyRide
17	ISU to College of Veterinary Medicine - Corridor Service Improvements	Service	Weekdays 7am-7pm (school year only)
18	Additional Vehicle Replacement/Expansion	Rolling Stock	Vehicle replacement beyond levels in constrained plan.
19	Additional Battery Electric Buses	Rolling Stock	
20	Additional Battery Electric Bus Charging Infrastructure	Facilities	
21	Facility Expansion/Modifications	Facilities	
22	Automatic Passenger Counters (APCs) for Full Fleet to Collect Stop-Level Ridership Data	Technology	Eleven vehicles have APCs now; install APCs on 69 remaining vehicles in peak fleet (total of 80 large vehicles)
23	Automatic Vehicle Location (AVL) Technology Upgrades - Future Technology	Technology	
24	Real-Time Passenger Information System - Information to Customers on Vehicle Location and Passenger Loads	Technology	
25	On-Demand Trip Booking App for East Ames Service Extension (EASE) and Moonlight Express	Technology	
26	Electronic Farebox System	Fares	RFID/QR reader to validate passes; assumed installation on 80 vehicles
27	Provide Free Fares for Youth (18 and Under)	Fares	
28	Regional Commuter Study (North Ames, Nevada, Gilbert, Boone, etc.)	Planning	Planning funds would be requested from Ames MPO
29	Late-Night Service Effectiveness Study	Planning	Planning funds would be requested from Ames MPO
30	Install Benches & Shelters	Passenger Amenities	Benches and shelters beyond levels in constrained plan.



MTP ID	Project Description	Project Type	Notes
31	Add Passenger Information at Bus Stops	Passenger Amenities	
32	Add LED Signage and Real-Time Passenger Information at Major Bus Stops	Passenger Amenities	Would be installed in high-demand and transfer stops
33	Transit and Bicycle Integration - Roadway Improvement Projects	Multimodal Integration	Transit islands and other infrastructure improvements when road diets are implemented. Project funding coordinated with City of Ames.

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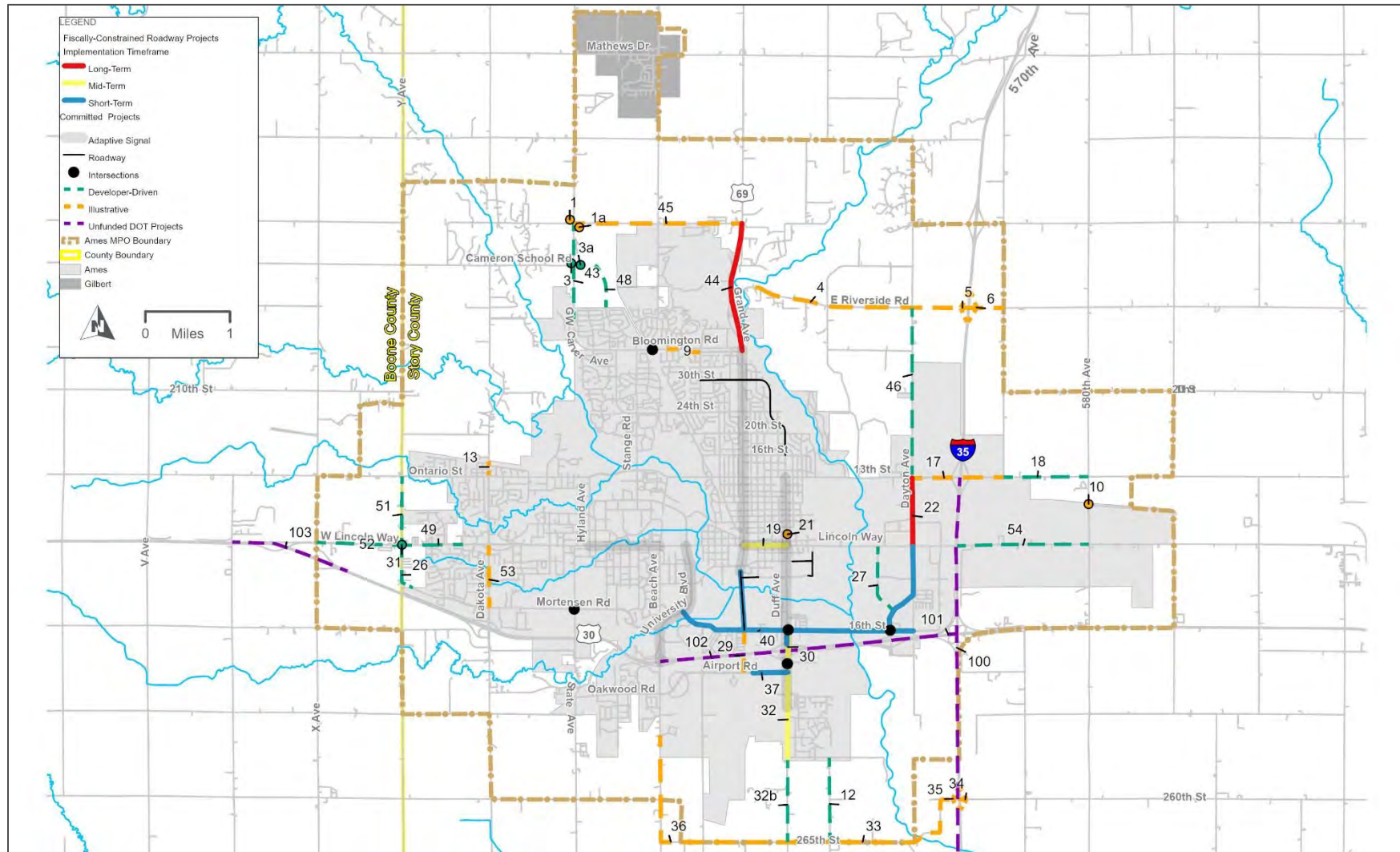


**Table 7-12: Developer-Driven and Unfunded Iowa DOT Projects**

Developer-Driven		
MTP ID	Project Description	Cost
12	550th Ave from 265th to Ken Maril Rd - Pave 2 Lanes	\$5,600,000
18	13th St from 570th Ave to 580th Ave - Widen to 4 Lanes	\$8,040,000
26	Y St from Lincoln Way to Mortensen Rd including Mortensen Rd Extension to Y St - Pave 3 Lanes	\$3,200,000
27	Freel Dr from Lincoln Way to Dayton Ave - Add New Road	\$4,500,000
32	Duff Ave from Airport Rd to 265th St - Widen to 5 Lanes	\$16,020,000
43	George Washington Carver from Weston Dr to 190th St - Widen to 3 Lanes	\$5,650,000
46	Dayton Ave from 13th St to Riverside Rd - Widen to 3 Lanes	\$9,870,000
48	Stange Rd Extension North to Cameron School Rd - Pave 3 Lanes	\$2,700,000
49	Lincoln Way from Thackery Rd to Y Ave - Widen to 4 Lanes	\$5,800,000
51	Y Ave from Lincoln Way to Ontario St - Widen to 3 Lanes	\$4,070,000
52	Lincoln Way from Y Ave to X Ave - Widen to 4 Lane	\$8,070,000
54	Lincoln Way from I-35 to 580th Ave - Widen to 3 Lanes	\$8,200,000
Unfunded Iowa DOT Projects		
MTP ID	Project Description	
100	I-35 Widening-From 13th St south to MPO Boundary	
101	US 30 Widening-From I-35 to Duff Ave	
102	US 30 Widening-From Duff Ave to University Ave	
103	US 30-X Ave / W Ave interchange reconstruction and reconfiguration	



**Figure 7-3: Fiscally-Constrained and Alternative Roadway Projects**





## Future Planned System Performance

An additional scenario that incorporates the roadway projects identified in the Fiscally-Constrained Plan was analyzed to evaluate system performance under the Existing plus Committed and Planned network (E+C+P). The same regional growth levels presented in **Chapter 4** are retained for this scenario, with the only change being the addition of the planned (fiscally-constrained) roadway projects. The same post-processing procedure outlined in **Chapter 4** was applied to the 2045 E+C+P scenario traffic volumes, which are shown in **Figure 7-4**.

A comparison of system-wide statistics for the Existing, 2045 E+C, and 2045 E+C+P scenario are shown in **Table 7-** below:

**Table 7-13: Comparison of System-Wide Performance Statistics for Existing, E+C, and E+C+P Scenarios**

Performance Measure (Annual)	2015	2045 E+C	2045 E+C+P	2015-2045 E+C change	2015-2045 E+C+P change
<b>Vehicle Miles Traveled (VMT)</b>	468,226,535	714,556,026	713,740,563	52.6%	52.4%
<b>Vehicle Hours Traveled (VHT)</b>	11,836,478	20,602,681	19,921,382	74.1%	68.3%
<b>Trips</b>	154,187,813	202,555,211	202,555,211	31.4%	31.4%
<b>Average Trip Length (miles)</b>	3.04	3.53	3.52	16.2%	16.0%
<b>Average Trip Speed (mph)</b>	39.6	34.7	35.8	-12.5%	-9.4%

Source: Ames Area MPO Travel Demand Model

As shown in **Table 7-13**, when comparing the E+C+P network to the 2015 base year:

- Vehicle Miles Traveled (VMT) is predicted to increase by 52% during the 30-year period, which indicates that the average trip will be longer, in terms of distance, than trips taken today.
  - Compared to the E+C scenario, the E+C+P scenario is expected to have 0.1% less VMT.
- Vehicle Hours Traveled (VHT) is predicted to increase by nearly 68%, which indicates that the average trip will be longer, in terms of time spent traveling, than trips taken today.
  - Compared to the E+C scenario, the E+C+P scenario is expected to have 3.3% less VHT.
- The number of trips are predicted to increase by 31% for both the E+C and E+C+P scenarios.

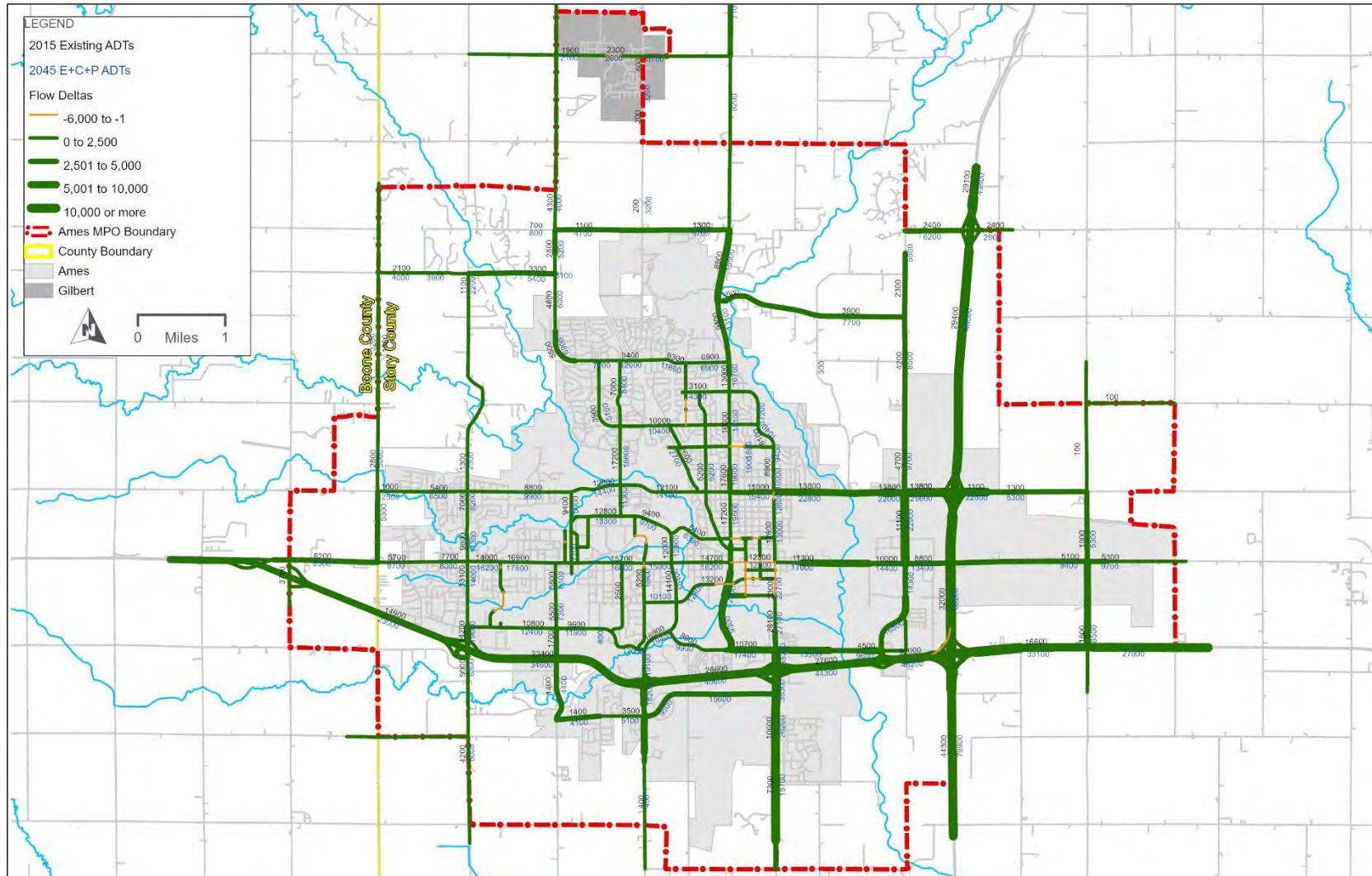


- Average trip lengths are expected to see a 16% increase, consistent with the anticipated growth on the urban fringe areas identified as future high growth locations.
  - Compared to the E+C scenario, the E+C+P scenario is expected to have 0.1% shorter trip lengths.
- Average travel speeds are expected decrease 9.4%, consistent with the observation that VHT is expected to outpace VMT.
  - Compared to the E+C scenario, the E+C+P scenario is expected to have 3.3% higher travel speeds.
  - Decreasing average trip speeds indicate future roadway congestion, but at a lower congestion level than the E+C network.

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Figure 7-4: Existing and 2045 E+C+P Annual ADTs





### E+C+P 2045 Traffic Operations

A planning-level assessment of peak hour traffic operations based on the E+C+P 2045 forecasts was conducted using the volume-to-capacity approach described in **Chapter 4: Existing Conditions**. The resulting assessment is shown in **Figure 7-5**. The corridors that are projected to exhibit LOS issues (level of service D or worse) under the E+C+P 2045 scenario are:

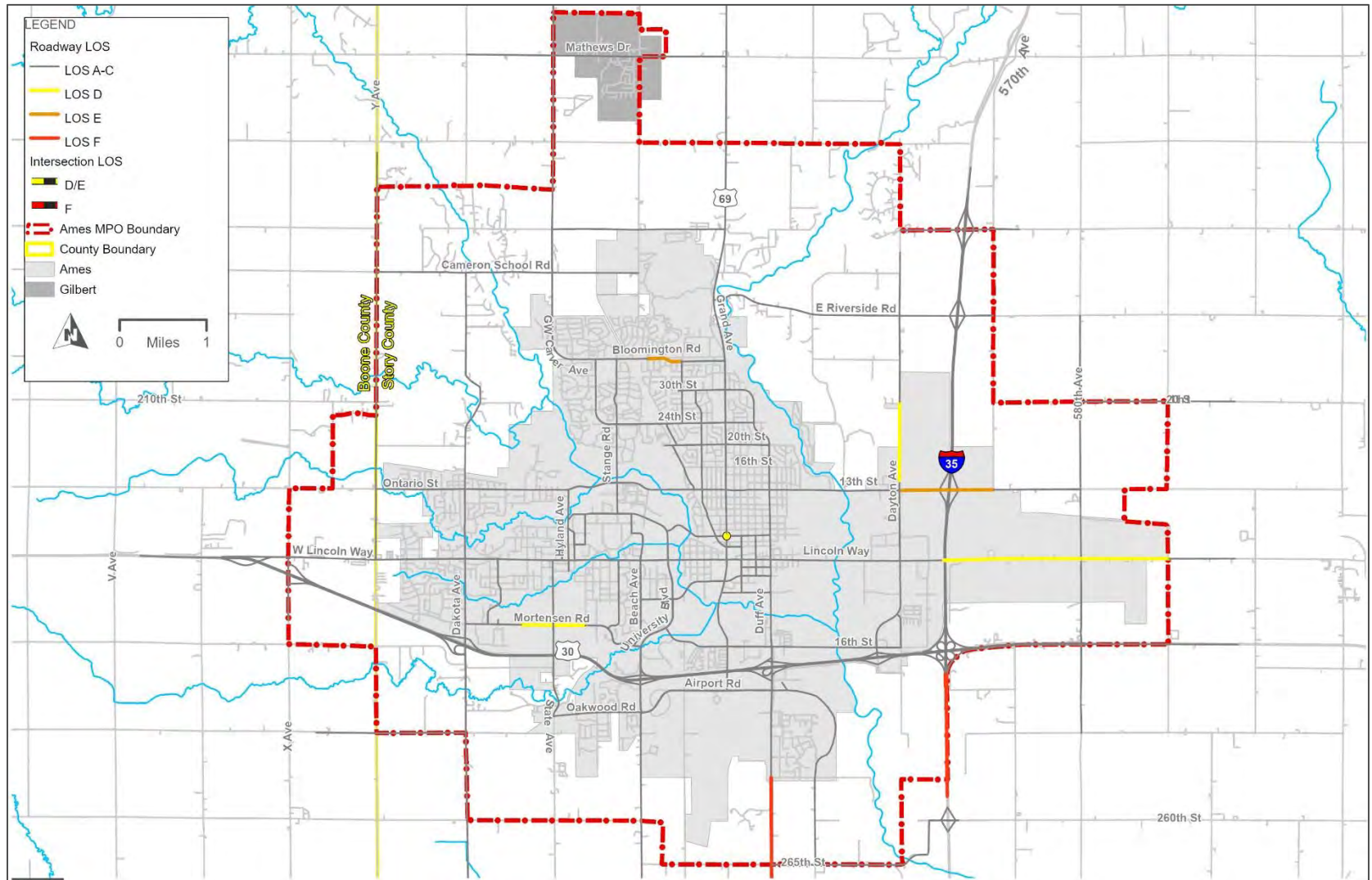
- S Duff Avenue, from Ken Maril Rd to 265<sup>th</sup> Street (assumed developer-driven)
- I-35, south of Highway 30
- Mortensen Road, from Seagrave Avenue to Welch Avenue
- Lincoln Way, from I-35 to 590<sup>th</sup> Avenue (assumed developer-driven)
- Bloomington Road, from Hyde Avenue to Hoover Avenue
- E 13<sup>th</sup> Street, from Dayton Avenue to 570<sup>th</sup> Avenue (assumed developer-driven)
- Dayton Avenue, from E 13<sup>th</sup> Street to USDA (assumed developer-driven)

The HCM approach used in the future traffic operations analysis identified intersections, in addition to roadway segments, that are projected to exhibit LOS issues under the E+C+P 2045 scenario. The only intersection is:

- Grand Avenue and 6<sup>th</sup> Street



Figure 7-5: 2045 E+C+P Roadway Level of Service





## Regional Policy Options & Strategies

The Forward 2045 plan is a regional document that sets priorities and identifies future projects and programs for implementation. The plan has focused mainly on specific infrastructure projects for implementation, but to augment those projects there are a specific set of regional-based policy options, strategies, and corridors that have been identified as priorities. Those include the following:

- **Bicycle/Pedestrian Master Plan:** Specific bicycle/pedestrian projects are included in this plan update. It is recommended that a detailed Bicycle/Pedestrian Master Plan be developed to identify the appropriate bicycle/pedestrian treatments.
- **Emerging Trends & Technologies:** The Alternatives Development and Evaluation chapter includes potential influencing strategies and treatments that are likely to have the greatest impact in the coming years throughout the Ames area. It is recommended that the MPO develop a committee in order to identify specific implementation actions in regards to emerging trends and technologies. It is also recommended to develop a Transportation System Management & Operations (TSMO) Concept of Operations for the region.
- **Duff Avenue from S. 16<sup>th</sup> Street to Airport Road:** This project is included in the mid-term constrained plan as a 6-lane facility which includes modifying the interchange configuration. A corridor study is recommended to better identify the lane requirements, interchange configuration and traffic control in order to better identify the overall project cost.
- **13<sup>th</sup> Street & Grand Avenue Intersection:** This project is included in the short-term constrained plan. A detailed study is recommended to evaluate the traffic operations and develop context-sensitive solutions in order to address the traffic operations deficiencies.
- **13<sup>th</sup> Street & Stange Road Intersection:** This project is included in the long-term constrained plan. A detailed study is recommended to evaluate the traffic operations and develop context-sensitive solutions in order to address the traffic operations deficiencies.
- **Lincoln Way Corridor Study:** The Grand Avenue Extension to S 16<sup>th</sup> Street will divert traffic off of Lincoln Way between Grand Avenue and Duff Avenue. The amount of diversion is unknown at this point. It is recommended to conduct a detailed traffic and concept study of Lincoln Way after the Grand Avenue Extension is open. This corridor study would evaluate the traffic operations and identify the operational lane configuration for this corridor.



## Chapter 8 Environmental Mitigation

### Environmental Analysis

The transportation alternatives in Forward 2045, particularly the candidate roadway projects, were evaluated as a part of the alternatives assessment for how well they fit within the natural and built environment. State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation were also consulted during MTP development draft plan phase of the study.

Under the National Environmental Policy Act (NEPA) of 1969, Federal agencies are required to consider environmental resources and potential impacts on them during the planning design phase of any project receiving Federal monies. As such, this analysis highlights potential environmental resources that could require further consideration as the alternative projects reach implementation phase in the future.

### Environmental Screening / Considerations

Environmental resources that could potentially be affected by transportation projects included in Forward 2045 are discussed in this section. The MTP process included the screening of environmental characteristics for each alternative. Forward 2045 is a regional-scale assessment, and projects included in the MTP would require additional project development prior to implementation. As those project details are developed, more detailed environmental review would be conducted in the future phases of study.

**Figure 8-1** and **Figure 8-2** show some of the environmentally sensitive natural and human-built areas in the study area. Discussion regarding the resources shown in the figures, such as historic resources and waters of the United States, are detailed below.



Figure 8-1: Physical Environmental Constraints

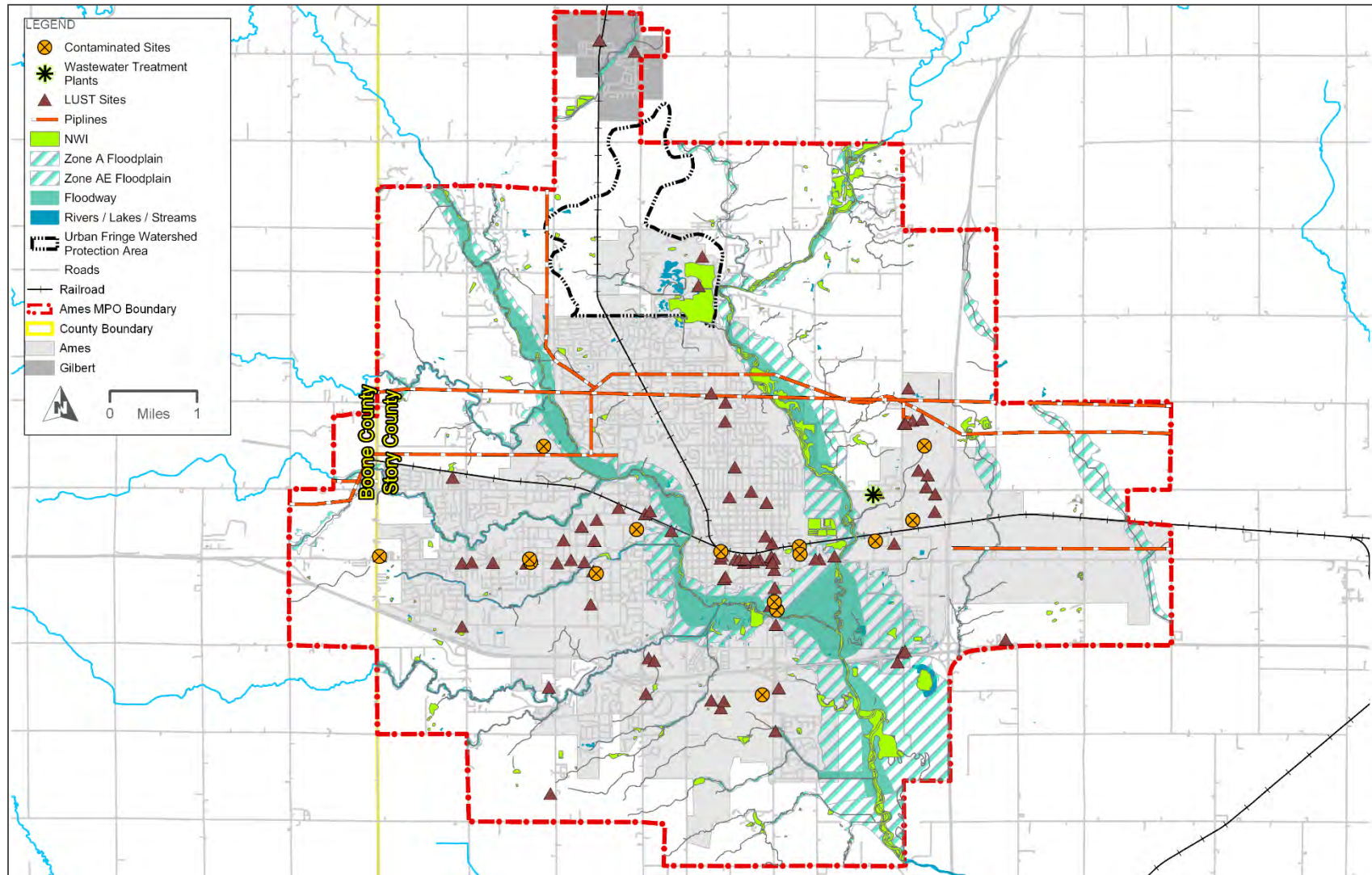
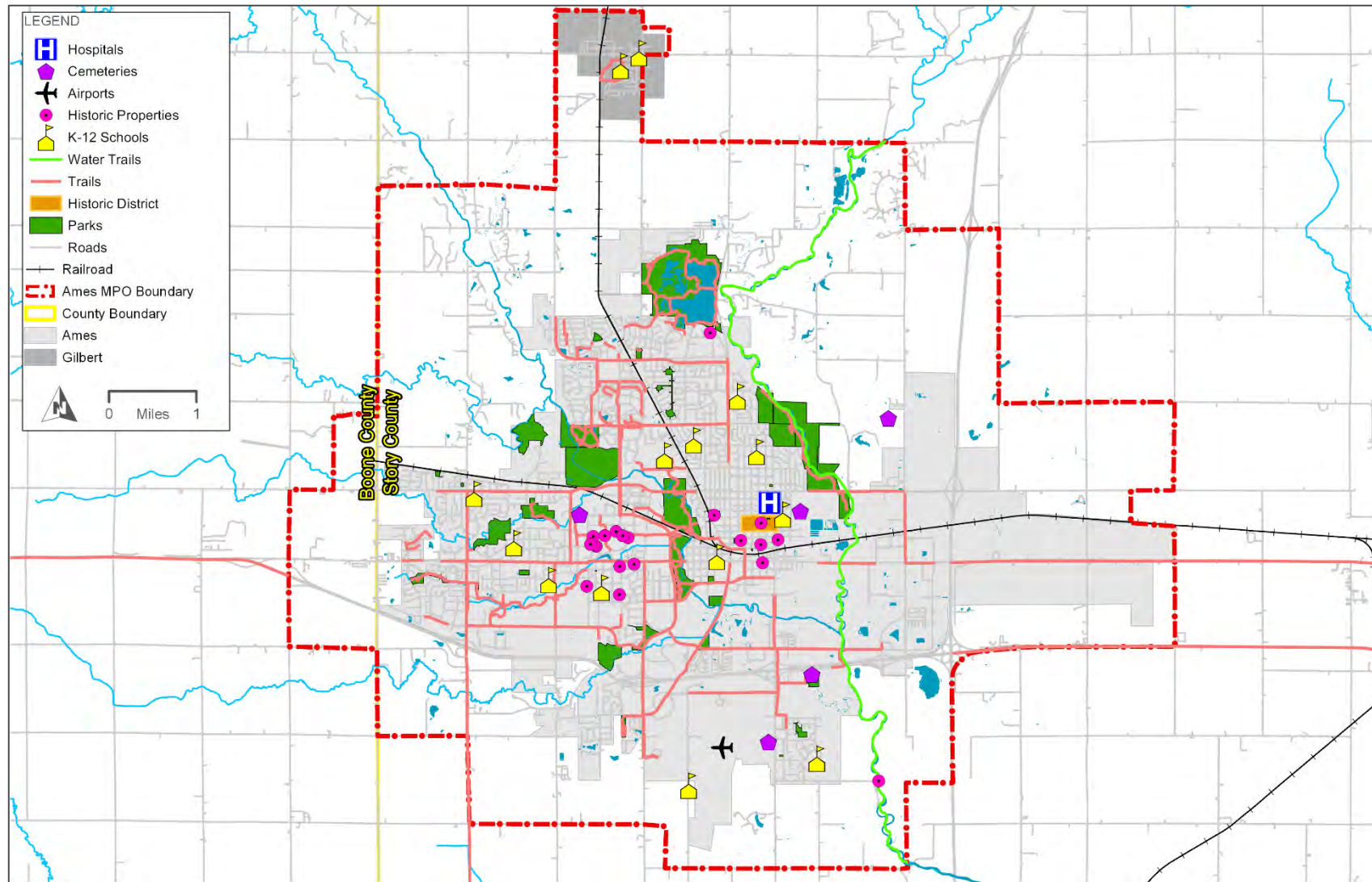




Figure 8-2: Human Environmental Constraints





### *Archaeological and Historical Resources*

The consideration of impacts on cultural resources is subject to several federal laws, regulations and guidelines. Principal among these are NEPA and Section 106 of the National Historic Preservation Act. Section 106 requires federal agencies (and agencies receiving federal assistance for projects) to take into account the effects of their undertakings on historic properties (any prehistoric or historic district, site, building, structure, or object listed on or eligible for listing on the National Register of Historic Places). Through the consultation process among agency officials and other parties, the effects of the undertaking on historic properties are considered, beginning with the earliest stages of project planning. The goal is to identify historic properties within the area of potential effect (APE) as early as possible in project development, evaluate the historic significance of the properties, assess the expected project impacts, and seek ways to avoid, minimize, or mitigate any adverse effects.

Archaeological and historical data from the "I-Sites" public access website, maintained by the Iowa Office of the State Archaeologist were reviewed to determine the number of historic sites within close proximity of roadway alternatives. Several roadway alternatives are within areas with several archaeological sites nearby. As roadway alternatives continue to evolve throughout the project development process, an APE for the project would be proposed by sponsoring agencies (Iowa DOT and local governments). Coordination with the Iowa State Historic Preservation Office (SHPO) would confirm the APE. Records of known historic sites would be searched to determine the presence of historic resources within the APE. The potential for unknown archaeological sites would be determined through site specific cultural resource surveys. Through consultation with Iowa SHPO, the potential for projects to affect historic resources would be determined: No Historic Properties Affected, No Adverse Effect on Historic Properties, or an Adverse Effect on Historic Properties (when a historic resource cannot be avoided). In the event of an adverse effect on historic properties, FHWA must contact the Advisory Council to advise it of the situation, and offer an opportunity for participation in the consultation with SHPO and others to plan measures to minimize harm and, ultimately, to mitigate the adverse effects. The agency sponsoring the project would consult with SHPO and other interested parties to formulate a mitigation plan which would become the basis for a Memorandum of Agreement (MOA) drawn up and executed between FHWA, SHPO, and the DOT or local agency. Execution of the MOA completes consultation under Section 106 unless there are changes or additions to the project.



### Section 4(f) and Section 6(f) Resources

The Department of Transportation Act (DOT Act) of 1966 included a provision, Section 4(f), which is intended to protect any publicly-owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance or any land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site). U.S. Department of Transportation agencies, including FHWA, cannot approve any program or project which requires the use these lands unless:

- There is no feasible and prudent alternative to the use of such land, and the program or project includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use; or
- FHWA determines that the use of the property, including any measures to minimize harm (such as avoidance, minimization, mitigation, or enhancement measures), would have a *de minimis* impact (a determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f) or a Section 106 finding of no adverse effect or no historic properties affected on a historic property).

There are three types of Section 4(f) impacts: direct use, temporary occupancy, and constructive use. A direct use would be the conversion of public park land into a transportation use and may include *de minimis* impacts. Temporary occupancy is the temporary use of Section 4(f) land for construction operations. Constructive use is proximity impacts, such as noise, of a proposed project that is adjacent, or nearby, to a Section 4(f) property resulting in a substantial impairment to the property's activities, features, or attributes that qualify the property for protection under Section 4(f). Several roadway alternatives are located near parks and other Section 4(f)-protected properties. These alternatives would be further evaluated in the project planning phase.

Section 6(f), which was created as a part of the Land and Water Conservation Act, protects state- and locally-sponsored projects that were funded as part of the Land and Water Conservation Fund (LWCF). These lands cannot be converted to non-park/recreation use without the approval of the National Park Service. Conversion of these lands is allowed if it is determined that there are no practicable alternatives to the conversion and that there would be provision of replacement property. Mitigation for Section 6(f) lands impacted by a project must include replacement with land of at least the same fair market value, and reasonably equivalent usefulness and location relative to the impacted land. The potential for roadway alternatives to impact Section 6(f) lands was evaluated by determining the proximity of alternatives to public parks, recreation areas, and refuges using GIS data from the city of Ames and Iowa DNR. A few alternatives may be located near Section 6(f)-protected lands; further evaluation would be needed in the project planning phase.



### *Regulated Material Sites*

Regulated materials are hazardous substances that are regulated by federal, state, or local entities based on their potential to result in environmental contamination and potentially affect public health. The purpose of an initial regulated materials review is to identify properties that are, or may be, contaminated with regulated materials along the alternatives within the corridor study area so that the presence of these properties may be factored into subsequent alternative selection and design considerations. It is preferable to avoid highly contaminated sites in order to minimize potential additional costs, liability, or schedule delays due to site remediation.

Roadway alternatives were evaluated using GIS data from Iowa DNR to determine the proximity of any national priority sites, non-national priority sites, contaminated sites, and leaking underground storage tanks as defined by Iowa DNR and U.S. EPA. Several roadway alternatives are located near regulated material sites. More detailed assessments of projects moving forward in the planning process would be needed in future environmental reviews.

### *Wetlands and Waters of the U.S.*

For purposes of the Clean Water Act (CWA) and its implementing regulations, the term “waters of the United States” means: all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters, including interstate wetlands; the territorial seas; all impoundments of waters otherwise identified as waters of the United States (U.S.) in the CWA; and all tributaries, as defined in the CWA. Waters of the U.S. are subject to the CWA and are under the jurisdiction of the United States Corps of Engineers (USACE). A permit from USACE is necessary for all projects that would discharge dredged or fill material into waters of the U.S., including wetlands.

For Forward 2045, the National Wetlands Inventory (NWI) and aerial photography were reviewed within the Ames Area MPO study area to determine potential project impacts on wetlands and other waters of the U.S. Several roadway alternatives would potentially affect wetlands and other waters of the U.S. Wetland delineations are recommended in the initial stages of these roadway improvement project to determine the boundaries of wetlands and other waters of the U.S. within the project area and to coordinate with USACE to determine if USACE has jurisdiction over these areas.



### *Floodplains*

Development in floodplains is regulated by the Federal Emergency Management Agency (FEMA) and the Iowa DNR. Iowa DNR floodplain regulations affect only those roadway projects in the floodplains of streams draining over 100 square miles in rural areas and two square miles in urban areas. Projects on streams with drainage areas below these thresholds are regulated by cities and counties. A floodplain permit from Iowa DNR or city or county is required for most projects within a floodplain. A hydraulic review must be completed for projects within floodplains to determine the effect of the project on the water surface elevation of the 100-year flood. FEMA regulations prohibit encroachments in regulated floodways unless it is accompanied by a no-rise analysis that demonstrates the project would cause no increase in the 100-year flood level.

Roadway alternatives for Forward 2045 were reviewed to determine the extent that they would occur within the 100-year floodplain using the latest Flood Insurance Rate Maps showing the extent of the 100-year floodplain in Story County. Several alternatives are located in floodplains and would need to be further evaluated.

### *Threatened and Endangered Species*

Threatened and endangered species listed under the federal Endangered Species Act (ESA) would need to be considered for each project. The State of Iowa also maintains a list of state-listed threatened and endangered species, and species of special concern. Consultation with U.S. Fish and Wildlife Service (USFWS) and Iowa DNR would be required to determine which listed species have the potential to occur within each project area and the potential for the project to affect each species present.

Roadway alternatives were reviewed for their potential to affect protected species by assessing the potential habitat affected by each alternative. Potential habitat does exist along various alternatives. Projects moving forward in the planning process would need further review for their potential to affect species by completing habitat surveys and potential consultation with the U.S. Fish and Wildlife Service and Iowa DNR.



## Environmental Justice Assessment

Executive Order 12898 requires federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health or environmental effects, including the interrelated social and economic effects of their programs, policies, and activities on minority populations and low-income populations in the United States. U.S. Department of Transportation (USDOT) Order 5610.2(A) and FHWA Order 6640.23A define an adverse effect as the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to:

- Bodily impairment, infirmity, illness or death;
- Air, noise, and water pollution and soil contamination;
- Destruction or disruption of human-made or natural resources;
- Destruction or diminution of aesthetic values;
- Destruction or disruption of community cohesion or a community's economic vitality;
- Destruction or disruption of the availability of public and private facilities and services;
- Vibration;
- Adverse employment effects;
- Displacement of persons, businesses, farms, or nonprofit organizations;
- Increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and
- The denial of, reduction in, or significant delay in the receipt of, benefits of FHWA programs, policies, or activities.

In accordance with FHWA Order 6640.23A, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, minority and low-income populations were identified in the area affected by the MTP. Projects identified as part of the Forward 2045 were analyzed to determine if they would potentially disproportionately highly and adversely affect minority and low-income populations in the Ames Area MPO. The City would engage all populations, including minority and low-income populations, in the Long Range Transportation Plan public involvement process to obtain public comments during the planning process. The AAMPO's Public Participation Plan is the basis for the public engagement efforts for the Long Range Transportation Plan update, and provides the direction with the intent of involving all populations within the community.

NEPA documentation for any MTP projects would analyze these populations at a more detailed level, address potential disproportionate impacts to these populations, document efforts to inform minority and low-income populations of proposed road



improvement activities and engage them in the public involvement process, and document efforts to minimize and avoid environmental impacts on the environmental justice populations.

### Minority Populations

FHWA defines a minority population as any readily-identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity. FHWA defines a minority as:

- Black: a person having origins in any of the black racial groups of Africa
- Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race
- Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent
- American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition
- Native Hawaiian and Other Pacific Islander: a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

The smallest unit for minority groups, which is preferred for analysis, is the census block<sup>24</sup>. Census block data is gathered at the decennial censuses which is currently underway for the year 2020. To account for changes since the 2040 LRTP, which used the 2010 decennial data, data from the 2013-2018 American Community Survey [ACS) was used to determine the number and percentage of minority populations in Ames Area MPO. The ACS is a Census Bureau product that is updated annually but the smallest geographic unit from the 2013-2018 ACS is the census block group which is one grouping larger than the census block<sup>25</sup>. Per FHWA guidance,

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<sup>24</sup> Census blocks are statistical areas bounded by visible features, such as streets, roads, streams, and railroad tracks, and by non-visible boundaries, such as selected property lines and city, township, school district, and county limits. Generally, census blocks are small in area; for example, a block in a city bounded on all sides by streets. Census blocks in suburban and rural areas may be large, irregular, and bounded by a variety of features, such as roads, streams, and transmission lines. While there are no defined populations within blocks, they typically contain from 0 to 100 people.

<sup>25</sup> Block Groups (BGs) are statistical divisions of census tracts, and are generally defined to contain between 600 and 3,000 people. A block group consists of clusters of blocks within the same census tract that have the same first digit of their four-digit census block number.



readily identifiable groups of minority persons and clusters<sup>26</sup> of minority populations were identified. A group of minority persons was identified as any census block group with a substantial minority population: where the percentage of minority population was at least one standard deviation (34%) higher than the mean of a typical normal data distribution curve as compared to the percentage of the minority population within the Ames Area MPO boundary. Clusters were identified where a minority population is not substantially greater than the Ames Area MPO average, but due to the large population, the minority population is great enough to be potentially disproportionately and highly adversely affected by the proposed actions of the MTP.

Clusters identified in the Forward 2045 MTP were compared to current data to verify that the clusters identified at the block level were not diluted in the block group level. It is assumed that clusters identified in the 2040 LRTP but not in the current analysis are still present and not identifiable by the block group ACS data. The minority population of the AAMPO area is 22% of the total population; the threshold value used to determine a substantial minority population is 30% (22% multiplied by 1.34). **Figure 8-3** shows the Environmental Justice populations identified.

### Low-Income Populations

FHWA defines a low-income population as any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity. FHWA defines low-income as a person whose median household income is at or below the Department of Health and Human Services (DHHS) poverty guidelines. The best approximation for the number of people below the DHHS poverty guidelines in a particular area is the number of persons below the Census Bureau poverty thresholds in that area. In this analysis, 2013-2018 ACS was used to determine low-income data for the AAMPO area. The smallest geographical unit available for ACS data is the census block group. Similar to the minority population, a readily identifiable group of low-income population was identified as any census block with a substantial low-income population: where the percentage of low-income population was at least one standard deviation (34%) higher than the mean of a typical normal data distribution curve as compared to the AAMPO area percentage of the low-income population. The low-income population of the AAMPO area is 26% of the total population; the threshold value used to determine a substantial low-income population is 35%.

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<sup>26</sup> Clusters are discussed in the December 16, 2011 FHWA memo "Guidance on Environmental Justice and NEPA. The analysis of environmental justice is to include any readily identifiable group or cluster of minority or low-income population.

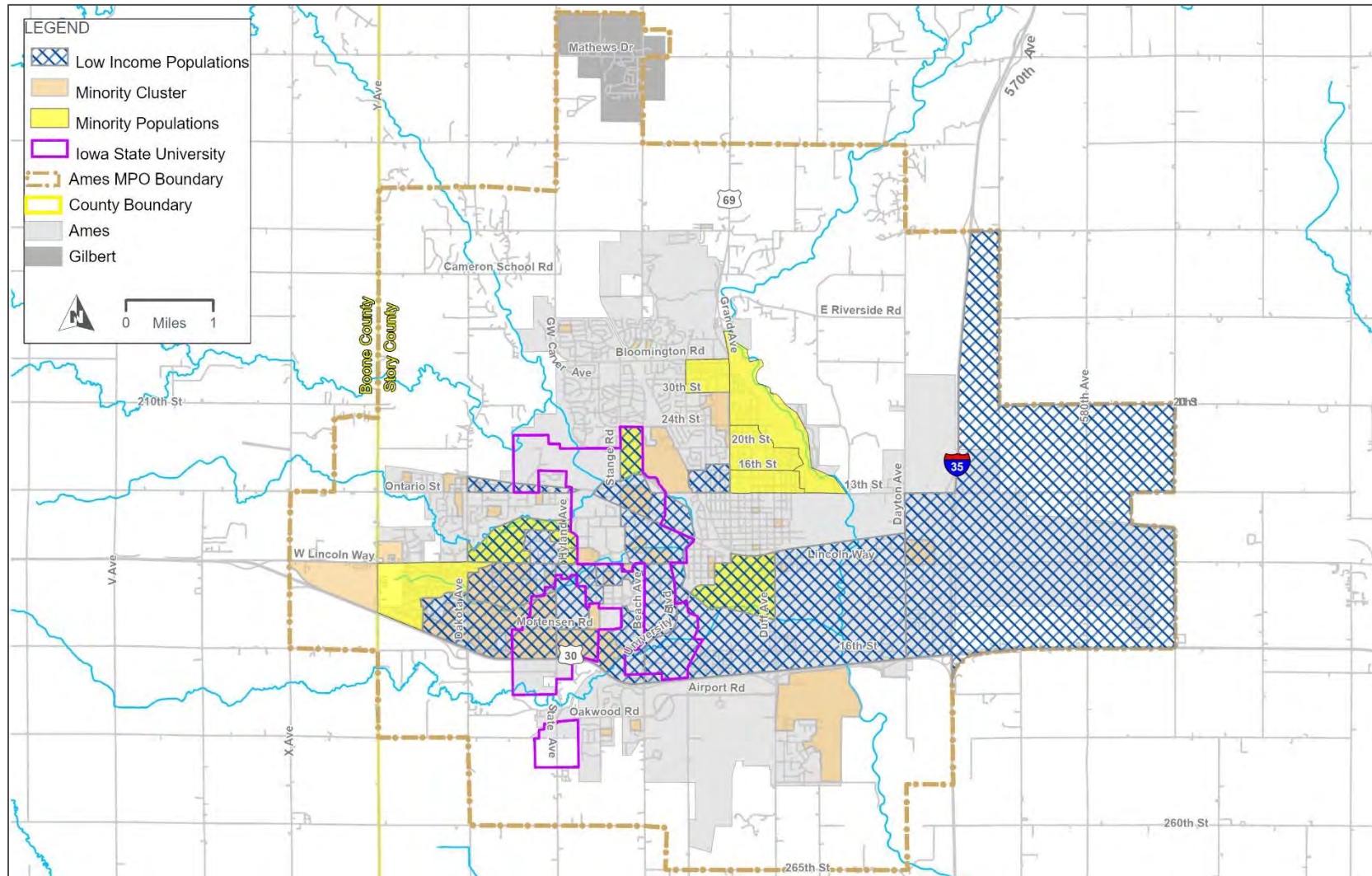


**Figure 8-3** shows the Environmental Justice populations identified. It should be noted that the location of University students has an effect on the results for the Ames area. The student population tends to be younger, and those living away from home have limited income and can heavily influence the low-income population results.

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**Figure 8-3: Identified Environmental Justice Populations**





### Fiscally-Constrained Projects and Environmental Justice Evaluation

The roadway and bicycle and pedestrian projects selected for the Fiscally-Constrained Plan were screened against the environmental justice populations shown in **Figure 8-3**. The purpose of this screening was to assess the potential benefits and impacts these projects could have on neighborhoods with high proportions of minority and/or low-income residents. While the full benefits and impacts related to the Fiscally-Constrained projects are not known at this time, this high-level evaluation provides insight into the relationship between the environmental justice populations and the projects selected for implementation over the next 25 years.

Projects screened through this process are evaluated based on their potential benefits, such as improved access and mobility, and their potential impacts, such as degradation of environmental resources or adverse effects on the adjacent populations. Examples of projects that would impart benefits would be reconstructions, system management, and rehabilitation projects while projects that would impart impacts would be road widenings, new corridors, and grade separations.

### *Regional Households within Environmental Justice Populations*

To better understand the distribution of households that are located within census blocks identified as environmental justice populations, an analysis was performed using the 2015 household totals associated with the TAZs in the AAMPO travel demand model. The analysis found that 54% of the AAMPO households are located within the EJ census blocks while 46% are outside of the EJ census blocks.

### *Project Proximity to Environmental Justice Populations*

The Fiscally-Constrained Plan includes 13 roadway projects and 37 bicycle and pedestrian projects. These projects were screened for proximity to environmental justice populations based on a ¼ mile buffer around each project. Project buffers were compared to environmental justice populations of minority and/or low-income residents; project buffers that overlapped EJ geography was considered to have proximity to EJ populations.

- **Roadway Projects:** 11 of the 13 fiscally-constrained projects, or 85%, were contained within the ¼ mile buffer.
- **Bicycle and Pedestrian Projects:** 23 of the 25 fiscally-constrained bicycle and pedestrian projects were contained within the ¼ mile buffer. Thus, 92% of the fiscally-constrained bike and pedestrian projects are accessible to EJ populations.



### *Project Benefits and Impacts*

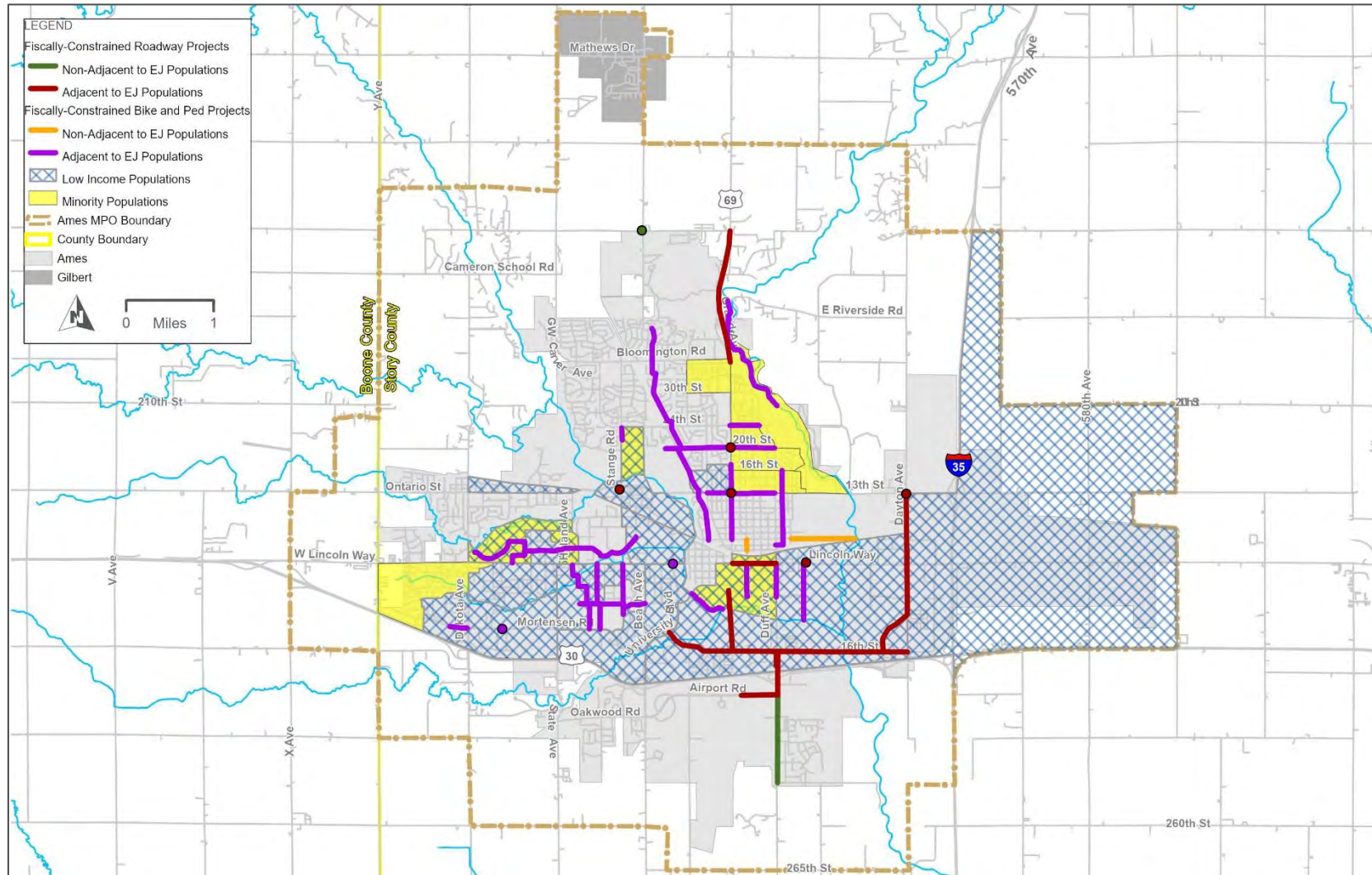
For fiscally-constrained roadway projects, nine (9) are lower-impact, non-widening projects that were considered to provide mobility benefits. Four (4) projects include some sort of widening or reconfiguration of facilities that have the potential to be higher-impact projects. There was a higher proportion of “benefit” projects adjacent to EJ population than “impact” projects: 89% of the roadway projects providing benefits are adjacent to EJ populations, while 75% of the potentially higher-impact projects are located in proximity to EJ populations. All of the bicycle and pedestrian projects were considered beneficial, as they have limited impacts to private property and increase overall accessibility and recreational opportunities. The high proportion of bicycle and pedestrian projects (92%) adjacent to EJ populations represents a disproportionate benefit to EJ populations.

Overall, there are a relatively high number of fiscally-constrained projects located in proximity to environmental justice populations. However, the majority of these projects are lower-impact and provide benefits in terms of enhanced mobility and access for neighborhoods with higher proportions of minority and/or low-income residents. Thus, these projects are considered to be investments in the EJ population areas. Direct impacts on environmental justice populations should be limited to the extent practical during the project development phase.

**Figure 8-4** illustrates which of the fiscally-constrained projects are adjacent to environmental justice populations.



**Figure 8-4: Fiscally-Constrained Projects Proximity to Environmental Justice Populations**





## Chapter 9 MTP Engagement

### Public and Stakeholder Engagement

The AAMPO strives to make the creation and development of the Forward 2045 MTP a community-driven process. The overall goal for Forward 2045 MTP public engagement was to educate the public and stakeholders on the Forward 2045 effort and allow audiences ample opportunities for engagement and input on the planning of Ames' future transportation network. The engagement process was conducted in accordance with the AAMPO's Public Participation Plan, which can be found at:

<http://www.cityofames.org/home/showdocument?id=27726>.

To solicit feedback from Ames area residents, the AAMPO utilized a variety of outreach methods and events to provide opportunities for idea sharing, collaboration, awareness and consensus in the planning process. Public engagement materials for the Forward 2045 MTP can be found in Public Engagement Appendix.

### Website

The project website, [www.cityofames.org/forward45](http://www.cityofames.org/forward45), served as the primary means for interested individuals to learn more about the Forward 2045 MTP effort and participate in input opportunities. The website page included:


- Two videos. The first video provided an overview of what an MTP is and why it is important to the Ames community. The second video provided a brief overview of the goal areas that were used to guide the Forward 2045 MTP.
- Project schedule.
- Links to open house and online meeting materials.





## Social Media & Email

The AAMPO used the City of Ames' existing Facebook and Twitter platforms to create awareness of the MTP process and promote input opportunities, such as open house events and online meetings. The AAMPO also partnered with other organizations, such as CyRide, to share posts on their social media feeds to maximize the audience. These outreach methods supplemented traditional methods such as press releases and direct mail invitations to stakeholders.



### Ames Area MPO Seeking YOUR Input on Area Transportation Alternatives and Improvements!

As a precautionary measure, instead of an in-person open house, the Ames Area Metropolitan Planning Organization (AAMPO) is hosting a virtual public meeting for the Metropolitan Transportation Plan (MTP), known as Forward 2045.

This virtual meeting is your opportunity to learn about the vision and goals for Forward 2045 and review, comment and provide ideas (big or small!) on potential alternatives and strategies within the Ames transportation system.

[Visit our Virtual Meeting Now! >>](#)

The virtual meeting is available now, through April 14, 2020 at: [amesgisweb.city.ames.ia.us/forward45](http://amesgisweb.city.ames.ia.us/forward45)

#### About Forward 2045

Forward 2045 will result in a 25-year prioritized and financially constrained plan that will define how the metropolitan area will manage and operate our multi-modal transportation system, which includes transit, highway, bicycles, and pedestrians. The AAMPO is committed to implementing a holistic planning process that fosters wider regional inclusion and prosperity, higher standards of living, and connections for people throughout the community.



## Statistically Valid Regional Travel Survey

The AAMPO conducted a regional transportation survey of residents during fall 2019 in support of the Forward 2045 MTP update. 404 people participated in a statistically-valid survey regarding multi-modal transportation issues and opportunities relating to transportation planning and improvements within the region. Survey results revealed how Ames residents feel about the current state of the transportation system and hopes for the future of the transportation system. The figures on this page illustrate some of the key findings from this survey.

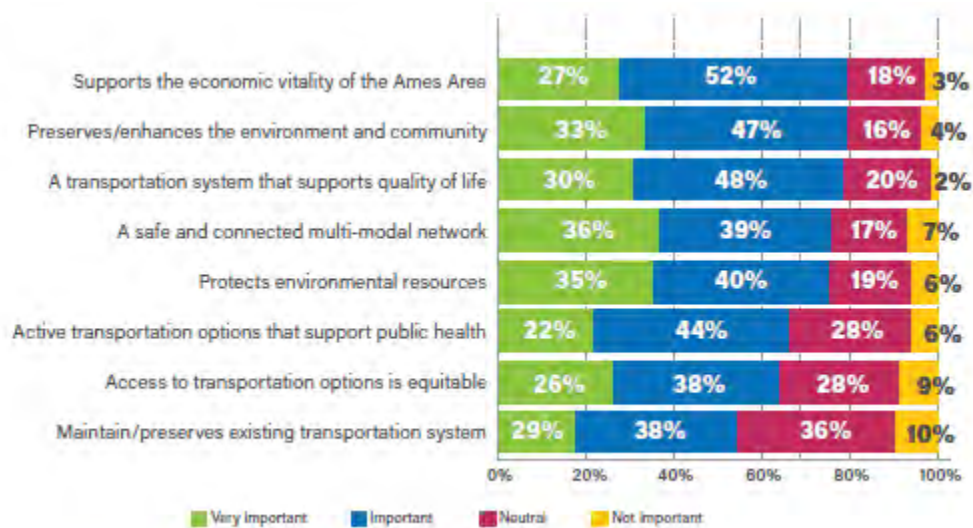


Figure 9-2: Importance of Long-Range Goals

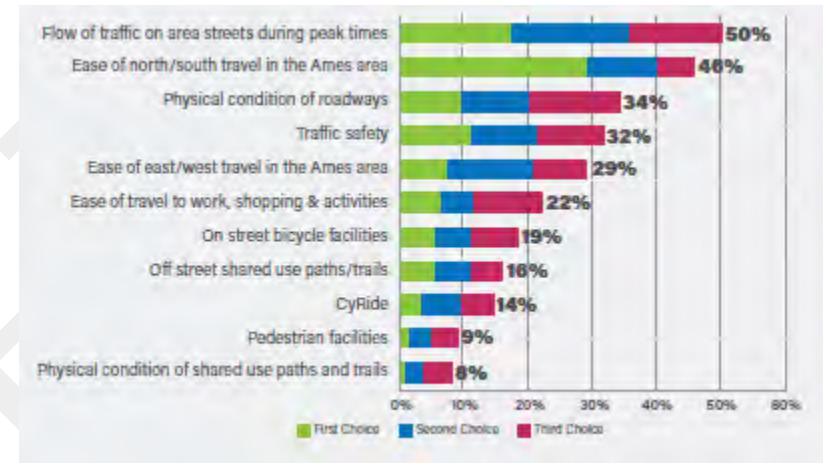


Figure 9-1: Most Important Transportation Issues

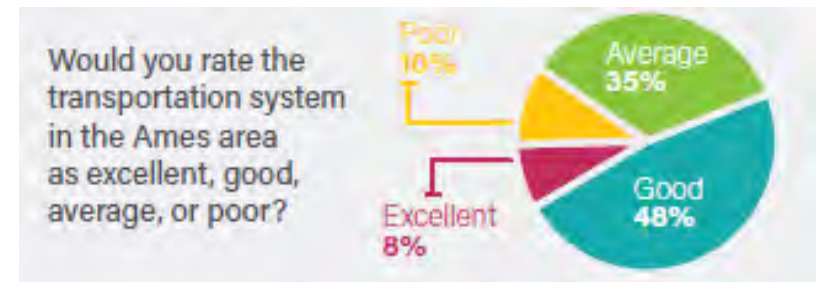


Figure 9-3: Overall Ames Transportation Rating



## In-Person and Online Events

The AAMPO hosted open house events to solicit feedback at key milestones during MTP development. All open houses were advertised through traditional means, such as press releases and direct mail invitations, in addition to the AAMPO's website and social media channels.

### Visioning Open House

On November 14, 2019, the AAMPO hosted a Visioning Open House for the public to contribute ideas to establish a transportation vision and goals for the Forward 2045 MTP. The open house was held in the Ames Public Library in Ames, Iowa.

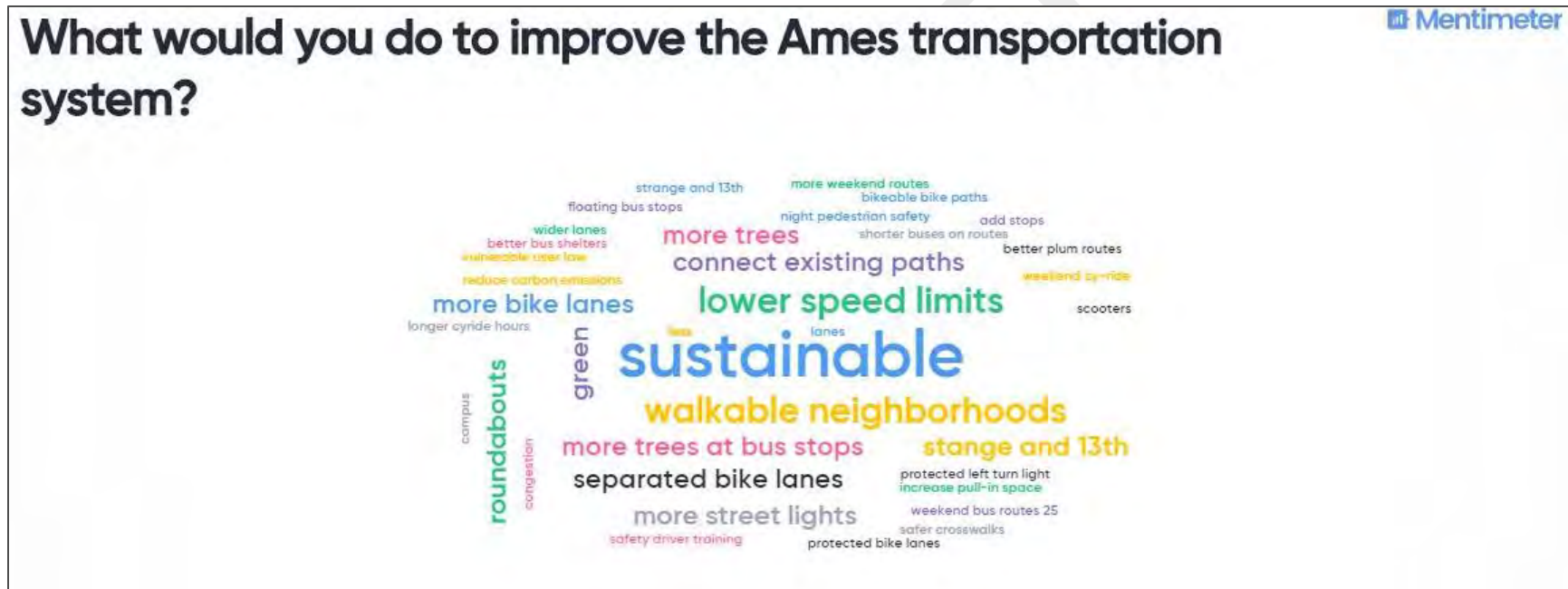
The open house utilized the following interactive activities to engage the public and stakeholders in sharing their thoughts and ideas:

- **Mapping Exercises:** Attendees were encouraged to identify the issues they faced when traveling on the Ames transportation system, including roads, bicycle and pedestrian facilities and transit, using color-coded stickers on large plot maps of the Ames metropolitan area.





- **Vision Priorities Exercise:** A large board presented potential transportation priorities that could be reflected in the Forward 2045 MTP. Attendees were provided three stickers and asked to choose their top three priorities.
- **Transportation Improvement Station:** This station provided the opportunity for attendees to provide their input on what they would do to improve the Ames transportation system through an online survey tool. Results from this exercise can be found in **Figure 9-4**.



### Figure 9-4: Improvements to the Ames Transportation System

## Online Visioning Open House

In conjunction with the in-person Visioning Open House event, the AAMPO hosted an online event at [amesgisweb.city.ames.ia.us/forward45](https://amesgisweb.city.ames.ia.us/forward45) to provide an additional input opportunity during this important planning milestone. The online Visioning Open House replicated information and activities from the in-person meeting.



### Online Community Transportation Assessment Survey

During the visioning phase, the AAMPO conducted an online survey to gain a better understanding of transportation behavior in Ames. The survey was open from November 5, 2019 through November 27, 2019, and during that time 182 individuals responded to the survey. The survey was promoted primarily through City of Ames social media pages, on the website and at the in-person and online Visioning Open House.

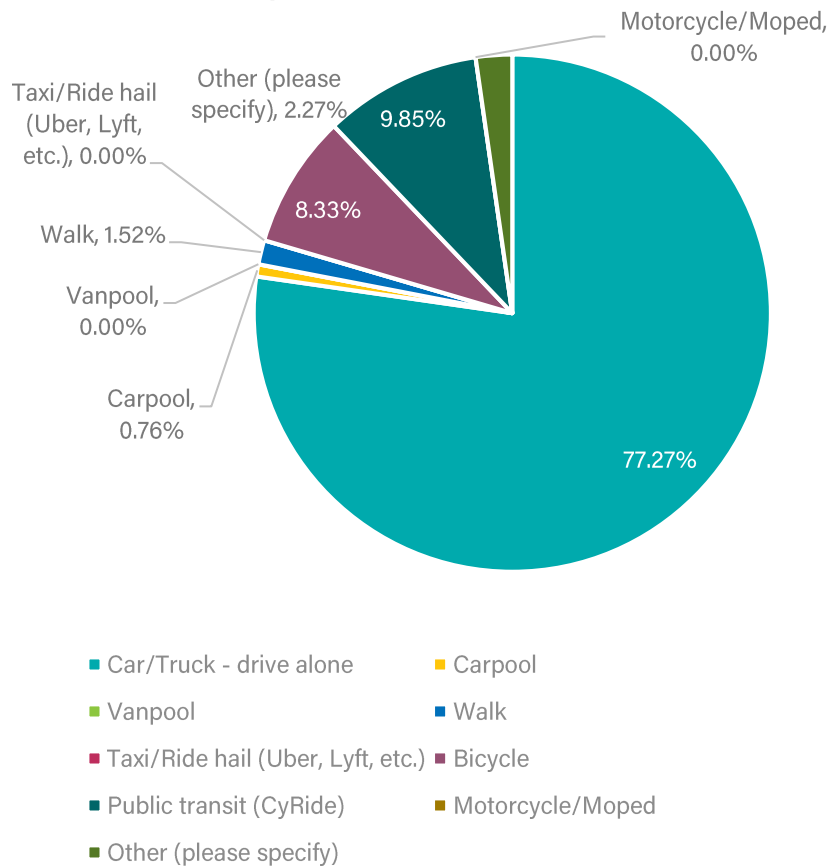
As shown in **Figure 9-6**, the results of the survey indicate that the majority of respondents commute to work or school in a car or vehicle alone, while 9.85% of respondents use public transit and 8.33% commute via bicycle.

When asked what would encourage respondents to use a mode of transportation other than driving a personal vehicle to complete daily trips, respondents indicated that expanded transit service coverage, more bicycle and pedestrian connections or nothing would change their mode of transportation. **Figure 9-5** summarizes the breakdown of responses.

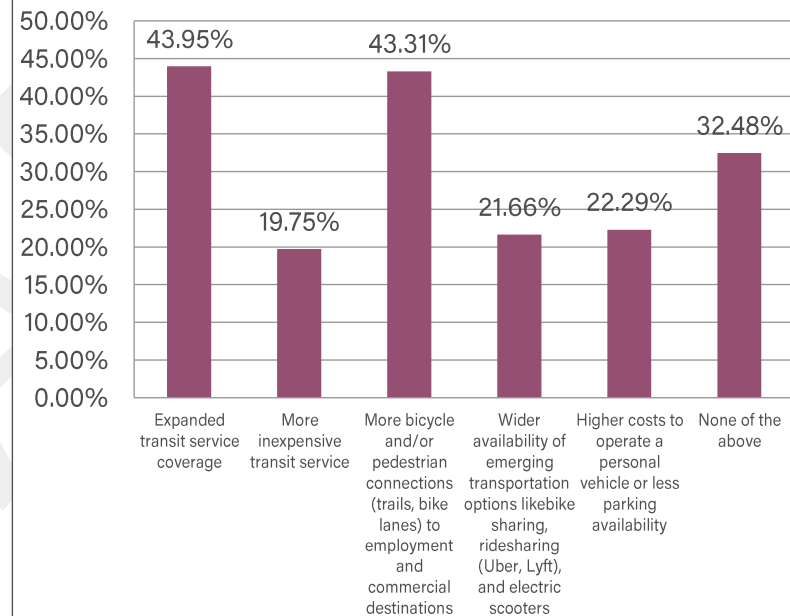
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**Figure 9-6: What Method of Transportation Do You Normally Use to Go to School/Work?**



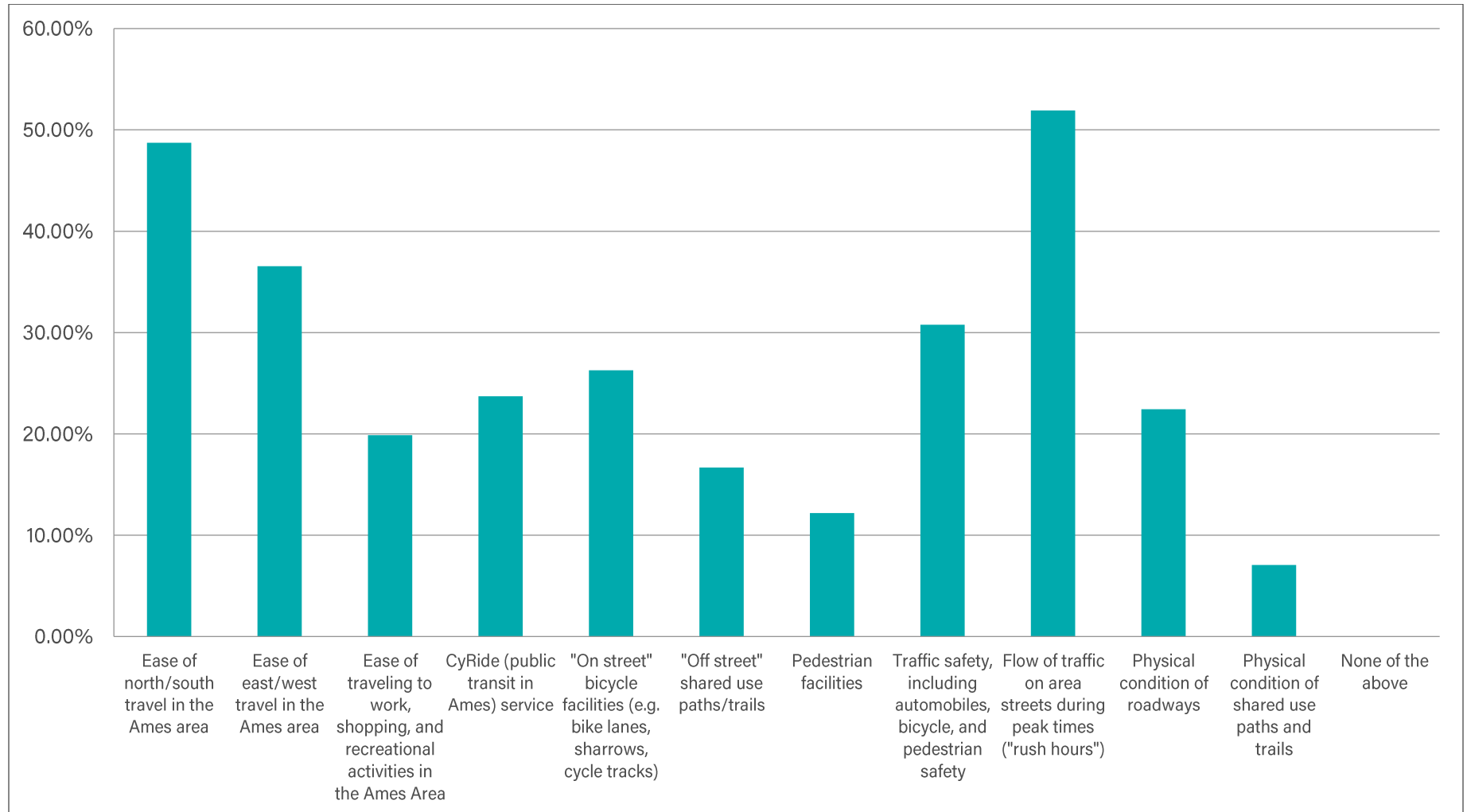
**Figure 9-5: Which THREE of the Following Would Encourage You to Use a Mode of Transportation Other than Driving a Personal Vehicle to Complete**



The survey also asked respondents to choose the top three transportation issues in Ames. The top three issues, as shown in **Figure 9-7** were roadway-centric, with respondents indicating that flow of traffic on area streets during peak times, ease of north/south travel in Ames and ease east/west travel in Ames were issues.



**Figure 9-7: Which THREE of the Items below Do You Think are the Most Important Transportation Issues?**

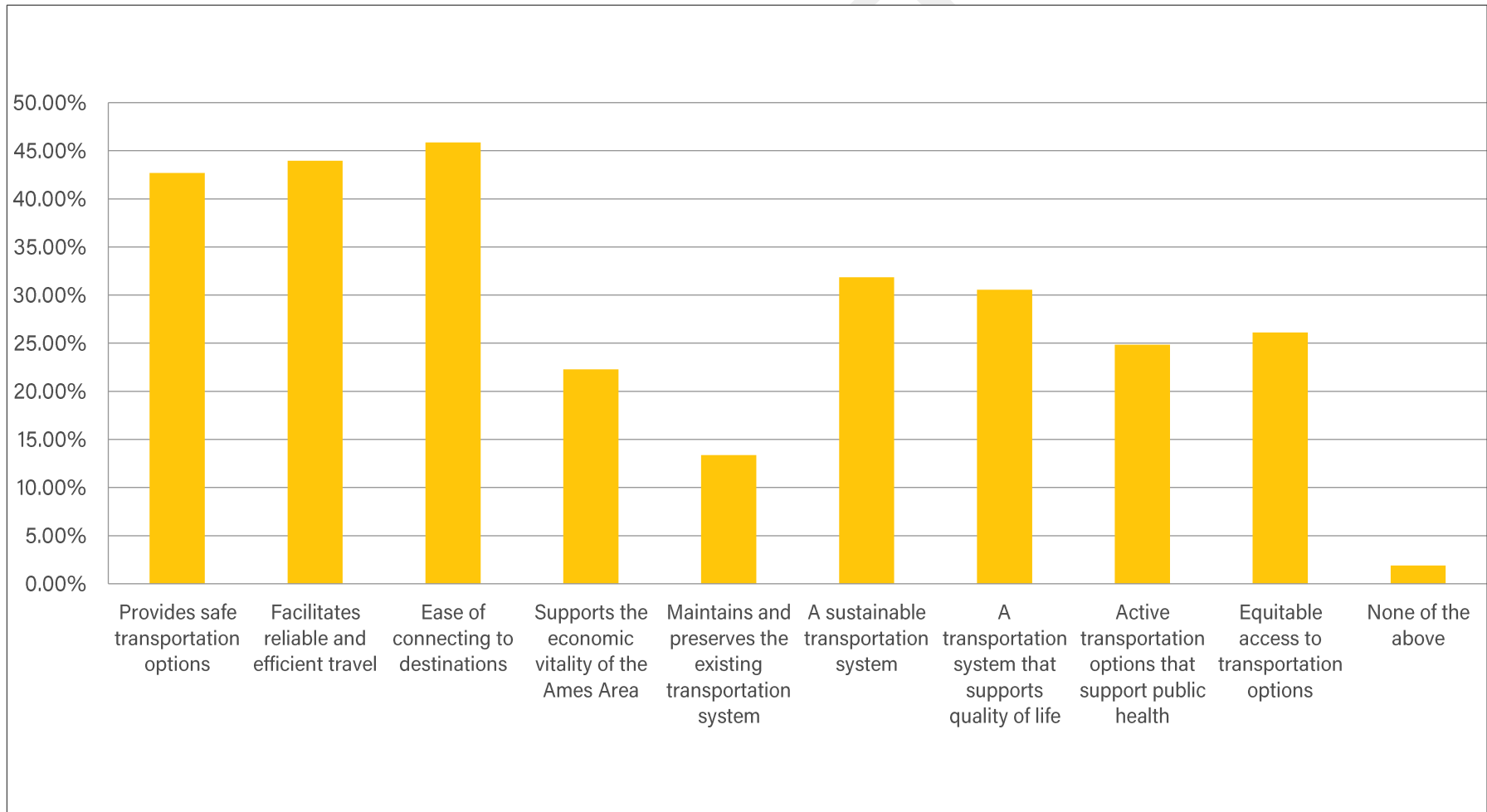


Respondents were then asked to focus on the future by identifying the top three characteristics they thought were most important for the future of the Ames area transportation system. The top three most important characteristics were ease of connecting to



destinations, reliable and efficient travel, and safe transportation options. These characteristics were reflected in the goal areas for the Forward 2045 MTP.

**Figure 9-8: Which THREE of the Following Characteristics of the Ames Area Transportation System Do You Think are Most Important for the Future**



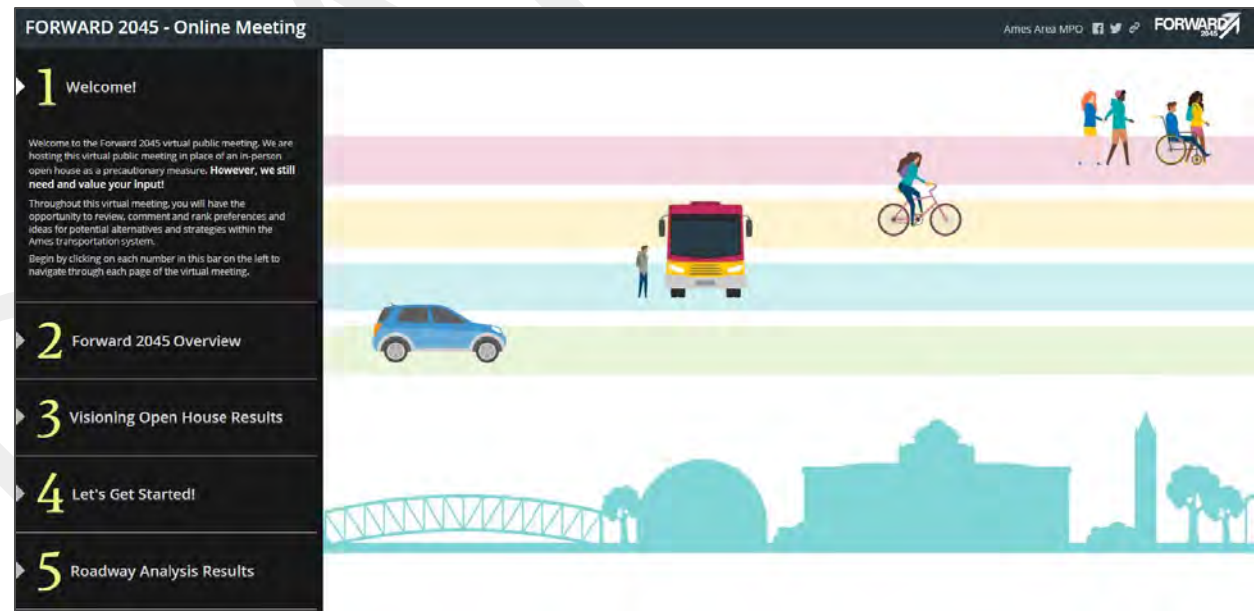


### Alternatives & Strategies Virtual Open House

The AAMPO planned a second in-person open house for March 2020 to allow the public and stakeholders a chance to review, comment and provide ideas on potential alternatives and strategies within the Ames transportation system. Due to the COVID-19 pandemic, the AAMPO cancelled the in-person event as a precautionary measure and opted to host a virtual meeting at [amesgisweb.city.ames.ia.us/forward45](https://amesgisweb.city.ames.ia.us/forward45) from March 31, 2020 through April 14, 2020.

The virtual meeting utilized the following interactive activities to engage the public and stakeholders in sharing their ideas for alternatives and strategies:

- **Mapping Exercises:** Participants were asked to select their preferred proposed roadway, bicycle and pedestrian and transit strategies and map them on an interactive online mapping tool. Participants could learn more about each proposed strategy by clicking on a reference sheet that provided an overview and pros and cons for each strategy. The purpose of this exercise was to solicit input on which strategies participants would like implemented in the Ames area.
- **Emerging Technologies Prioritization:** Participants were provided a reference sheet to learn more about the ten proposed emerging trends and technologies. They were then asked to rate how important it was to them that each technology is incorporated in Ames.





The virtual meeting received approximately 400 views while it was open for input. From the mapping exercises and surveys, AAMPO received over 200 unique comments.

#### *Online Alternatives and Strategies Open House Results*

The resulting input from the public during the Online Alternatives and Strategies Open House are shown in **Figure 9-9**, **Figure 9-10**, and **Figure 9-11**. **Figure 9-9** shows the results for the roadway strategies exercise. As indicated in the figure, roundabouts and signal timing projects were popular selections by the public. **Figure 9-10** displays the public comments for potential bicycle and pedestrian projects in the region; bike lanes, high-visibility crossings, and new/improved sidepaths were the most common responses from the public. **Figure 9-11** shows public comments for improvements to CyRide's fixed-route system. Most responses for this part of the online open house highlighted areas for new transit routes or extensions of current routes, especially in the Campustown and Southwestern areas of the City of Ames.

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Figure 9-9: Public Comments for Potential Roadway Strategies

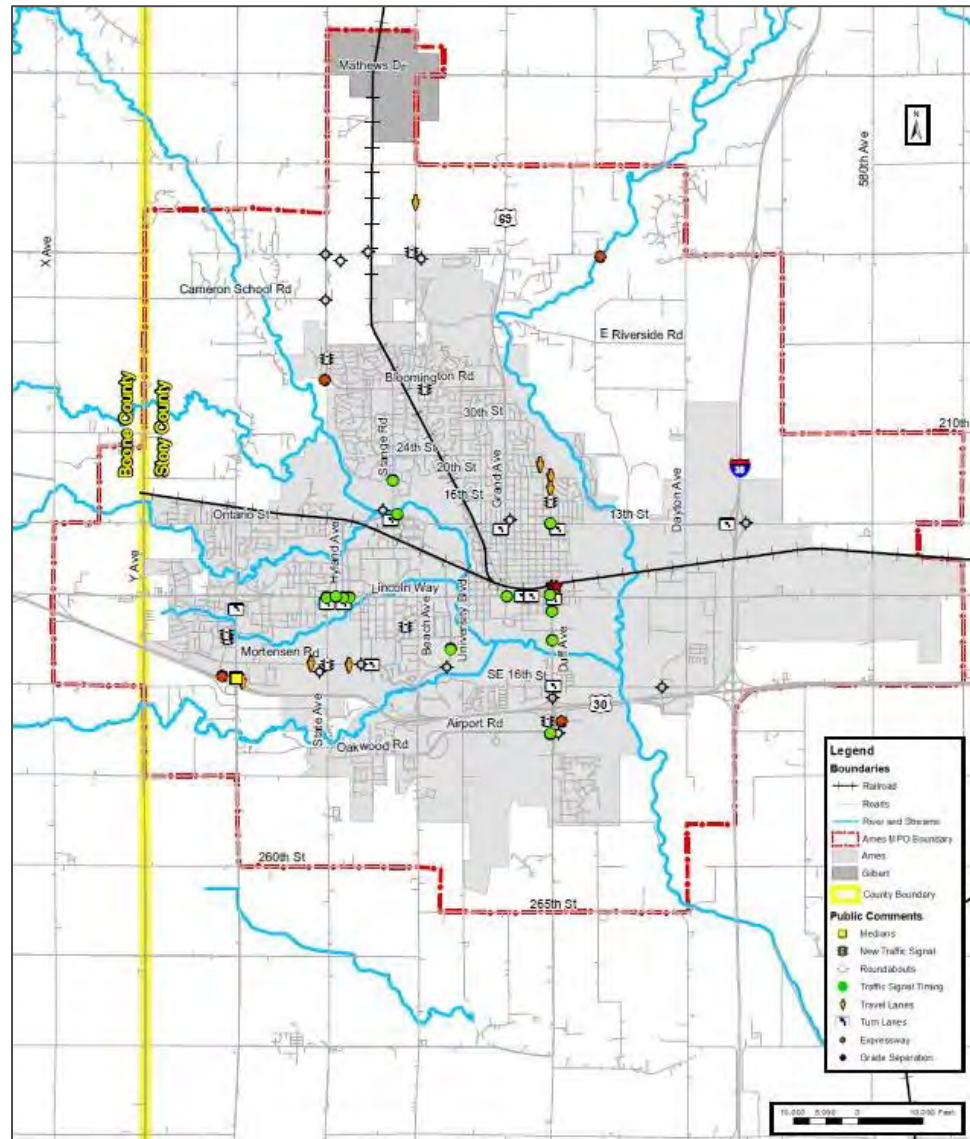




Figure 9-10: Public Comments for Potential Bicycle and Pedestrian Projects

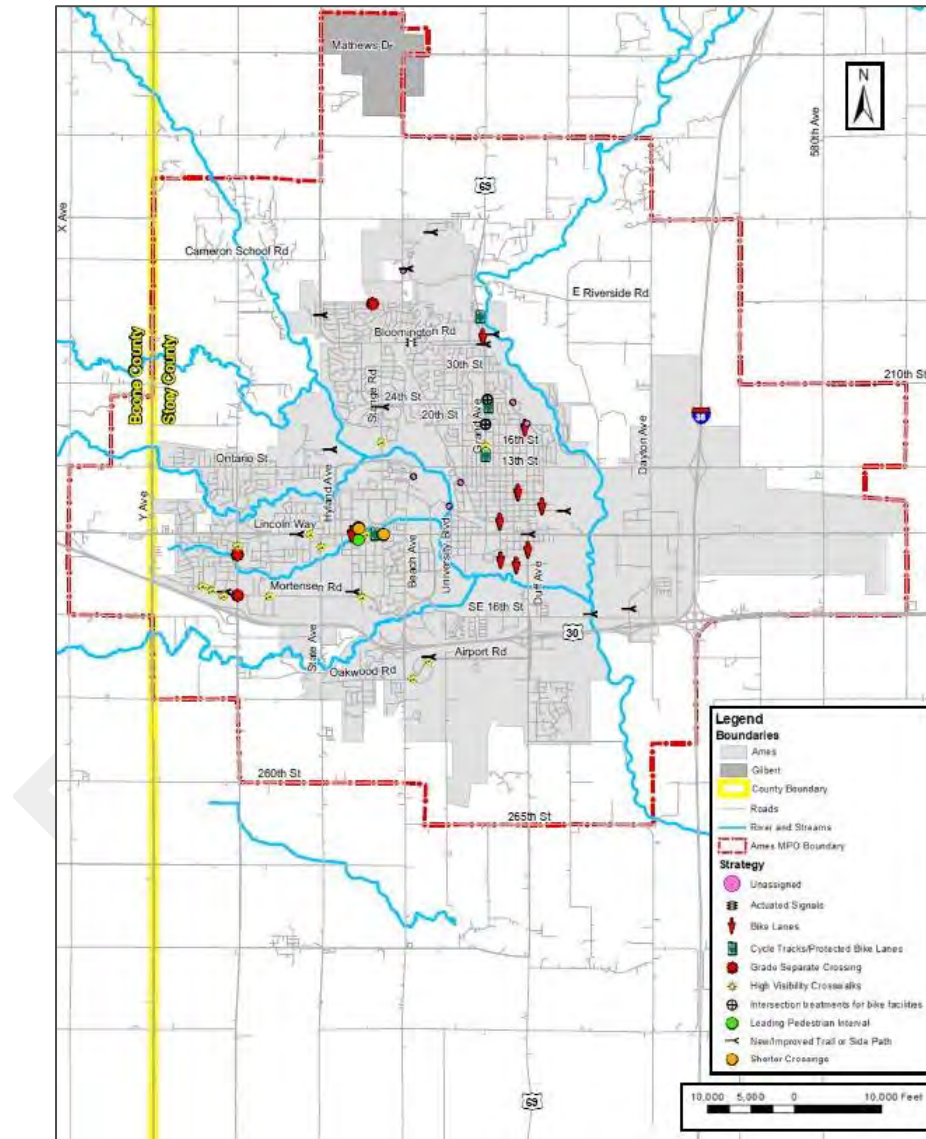
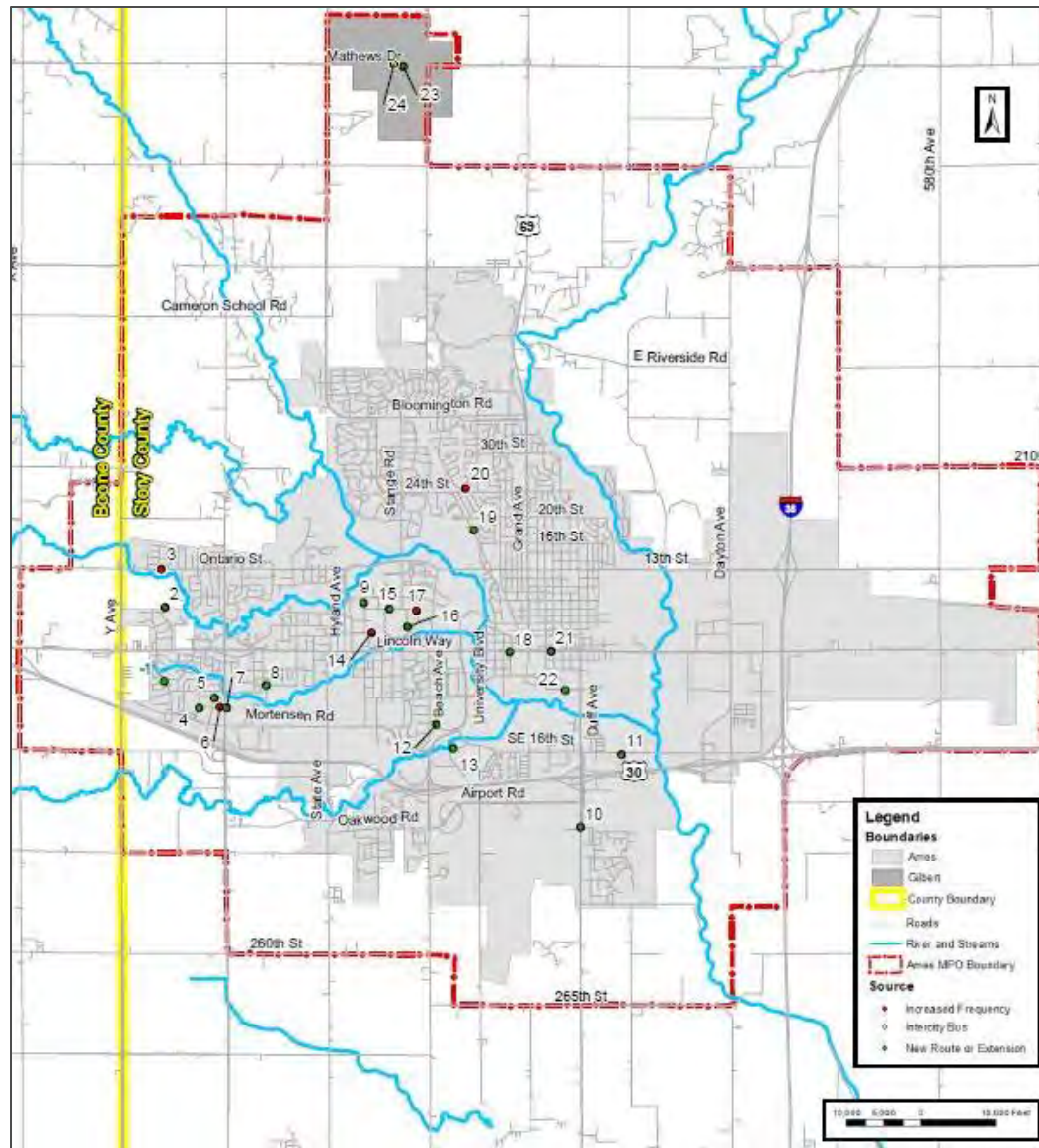




Figure 9-11: Public Comments for Potential Transit Projects





## Transportation Policy Committee Meetings

The AAMPO is governed by the Technical Policy Committee (TPC), which provides policy direction for the development of regional long-range transportation planning. The TPC is composed of representatives from the City of Ames, City of Gilbert, Boone County, CyRide and Story County. The Iowa DOT, FHWA, FTA and Iowa State University serve as advisory, non-voting members. The MTP team met with the TPC to provide updates at key milestones:

### July 14, 2020

- Issues/Visioning Process
- Vision, Goals, & Objectives Development
- Performance Based Planning Approach
- Alternatives Development

### September 8, 2020

- Alternative Evaluation
- Draft Fiscally Constrained Plan

### September 22, 2020

- Present draft Metropolitan Transportation Plan

### October 27, 2020

- Adopt Metropolitan Transportation Plan

Meeting agendas and minutes for TPC updates can be found at: <https://www.cityofames.org/government/aampo/about-the-mpo/transportation-policy-committee>.



## Chapter 10 FAST Act Compliance

Metropolitan transportation plans are Federally-required to be developed through a performance driven, outcome-based approach. The Forward 2045 plan has adopted this approach throughout, framing the overall vision through a combination of Federal, state, and locally-tailored performance objectives. This chapter demonstrates how the Forward 2045 plan supports the national transportation planning factors and the Federal requirements for Metropolitan Transportation Plans.

As noted in **Chapter 1**, there are 10 Federal metropolitan transportation planning factors. These planning factors were considered in the Forward 2045 planning process. **Table 10-1** shows how each of these planning factors into the Forward 2045 planning process from different perspectives:

- **Plan Goals and Objectives:** a detailed summary of how each plan objective fits with the national planning factors is provided in **Table 10-1**
- **System Performance Measures:** these are the Federal system performance measures the MPO reports and are included in this document, and the locally-developed system performance measures summarized for the fiscally-constrained plan in **Chapter 7 Project Scoring Metrics:** these are the scoring criteria outlined in **Chapter 6** that were used to identify those projects that best fit with the overall goal areas of the plan.



**Table 10-1: Forward 2045 Planning Element Consistency with National Planning Factors**

National Planning Factor	Forward 2045 Planning Element		
	Plan Goals and Objectives	System Performance Measures	Project Scoring Metrics
Economic Vitality	▲		▲
Safety	▲	▲	▲
Security	▲		▲
Accessibility and Mobility for People and Freight	▲		▲
Environment, Energy Conservation, Quality of Life and Economic Development	▲	▲	▲
System Integration and Connectivity for People and Freight	▲		▲
Efficient Operation and Management	▲	▲	▲
Preserve the Existing Transportation System	▲	▲	▲
System Resiliency and Reliability; Reduce or Mitigate Stormwater Impacts	▲	▲	▲
Enhance Travel and Tourism	▲		▲



The planning approach for this document supports 23 CFR § 450.322 Metropolitan transportation planning process for developing a Metropolitan Transportation Plan. Specific to those requirements, this document provides the Ames area with:

- A 20-Year planning horizon with both long-range and short-range multimodal strategies and actions.
- Forecasts of future person and goods demand.
- Congestion Management Strategies.
- Identification of existing and proposed multimodal facilities.
- Support for transportation and traffic management systems.
- Capital investment measures to preserve the transportation system and enhance regional mobility.
- Proposed transportation strategies and improvements in sufficient detail for cost estimates.
- A multimodal evaluation of the plan's transportation, socioeconomic, environmental, and financial impacts.
- Identification of projects that require further study.
- Consideration and reflection of local comprehensive plans and other national, state, and local plans, goals and objectives.
- Identification of transportation enhancement activities.
- A financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue.
- Consultation with state and local agencies responsible for other planning activities.
- Safety element that discusses priorities, goals, and countermeasures.



## MINUTES OF THE SPECIAL MEETING OF THE AMES CITY COUNCIL

AMES, IOWA

SEPTEMBER 1, 2020

The Special Meeting of the Ames City Council was called to order by Mayor Haila at 6:00 p.m. on the 1<sup>st</sup> day of September, 2020. The Mayor announced that due to the Governor of Iowa declaring a public health emergency because of the COVID-19 pandemic, City Council meetings are being held electronically, as allowed by Section 21.8 of the *Iowa Code*. He explained how the public could participate in the meeting via the internet or by phone. City Council members participating in the meeting electronically were Bronwyn Beatty-Hansen, Gloria Betcher, Amber Corrieri, Tim Gartin, Rachel Junck, and David Martin. *Ex officio* Member Nicole Whitlock was also present.

Mayor Haila commented that he had stated at the August 25, 2020, meeting that the Council would not be considering the first reading of the Mandatory Face Covering Ordinance until next week. He said that he had made that comment not knowing or anticipating how much could change in the course of a few days. However, the COVID-19 infection rate has skyrocketed, and the Governor has now closed bars. Reflecting on that, the Mayor felt it was important for the Council to consider the Ordinance earlier. A Press Release was issued and social media was used in an attempt to get notice of the Special Meeting out as soon as possible. Mayor Haila noted that he does not take lightly making changes to what has been told to people during Council meetings; however, it was an extraordinary situation that he believed warranted the calling of a Special Meeting. There is one item on this meeting's Agenda, which is the first reading of a Mandatory Face Covering Ordinance, as prepared by the City Attorney at the direction of the City Council.

**PUBLIC FORUM:** Mayor Haila opened Public Forum. There being no one indicating that they wished to speak, the Mayor closed Public Forum.

**MANDATORY FACE COVERING ORDINANCE:** Mayor Haila asked City Attorney Mark Lambert to provide highlights of the proposed Ordinance.

City Attorney Lambert explained that he had drafted the Ordinance with the recommendations made by the City Council members after they had reviewed the Draft at their meeting held August 25, 2020. He specifically noted that he had added language as directed, which was to:

1. Clarify that a childcare facility is not considered a public setting or a facility where the public is invited in.
2. Remove any penalties and replace with language saying that compliance with the Ordinance shall be obtained through education and encouragement only. There is no penalty for a violation of the Ordinance.

Moved by Junck, seconded Corrieri, to reconsider the motion made at the Council's last meeting, specifically the motion to approve the Draft Ordinance, but replace Section 4 with a statement explaining that there will be no penalty.

Roll Call Vote: 3-3. Voting aye: Beatty-Hansen, Corrieri, Junck. Voting nay: Betcher, Gartin, Martin. Motion failed.



Mayor Haila stated that the Council had received an email from a member of the public requesting clarification about members of a household being out walking around together. The Mayor felt the author's intent was to ask if it might be an exemption if a person was walking with someone they live with. He asked Attorney Lambert to comment. Mr. Lambert pointed out that under Section (1)a., it states, "Outside whenever the person cannot stay at least six (6) feet away from others." He felt the author of the email seemed to be suggesting to add to that "who are not family members."

Council Member Martin said that the suggestion was to modify Section (1)a. The Ordinance currently reads that every person must wear a face covering under the following circumstances:

"(1)a. Outside whenever the person cannot stay at least six (6) feet away from others;"

The proposal is to change that to read, "Outside whenever the person cannot stay at least six (6) feet away from others not in the person's household."

Moved by Martin, seconded by Corrieri, to modify Section (1)a. so that it reads "Outside whenever the person cannot stay six (6) feet away from others not in the person's household."

Council Member Gartin asked how someone would know who is in someone's household and how would they go about proving that. He believes people from the same household should be able to walk on the streets together. Mr. Gartin recognized that there is no enforcement at this time, but if there ever was an enforcement mechanism, it would make it very difficult for the Police to enforce. City Attorney Lambert stated that the idea is to put the rule in place and hope that people comply. He does not think the Police will be pulling people over to check to see if they are family members. Council Member Gartin questioned if that would include roommates. Mr. Lambert replied that it would include roommates.

Roll Call Vote: 6-0. Motion declared carried unanimously.

Moved by Martin, seconded by Gartin, to state that the Ordinance would sunset on December 31, 2020, unless the date is amended or the Ordinance is sooner repealed.

Roll Call Vote: 6-0. Motion declared carried unanimously.

Public Comment: Cynthia Paschen, 2117 Graeber Street, Ames, stated that she was married to Dr. Paschen, who is the Chair of Story County Board of Health. Ms. Paschen said that Dr. Paschen had gotten a lot of international press today about the opening up of football games at Iowa State; 25,000 people are expected at the first home football game on September 12, 2020. People were indicating in the comment sections of newspapers from Great Britain to Germany to New York what they thought about that decision; it mostly was not good. Ms. Paschen said she was speaking as a surrogate for her husband because he was at work taking care of patients. The question was asked by Ms. Paschen that, if the City Council passes an ordinance with no teeth (no penalty), how does that interface with an ordinance passed by the Story County Board of Supervisors, based on the recommendations of the Board of Health, that may have a penalty or may have a stronger recommendation than what is being considered by the Ames City Council. Mayor Haila advised that City Attorney Lambert will be asked to answer that question after all public input had been received.



Lissa Rosengren, 614 Hodge Avenue, Ames, asked if the role of government is to protect people from themselves; and at what point, is it to guard liberties. She questioned if government was more or less effective when it creates more laws. Ms. Rosengren indicated that she was opposed to the mask mandate, in general, but definitely as written. She also questioned if the purpose of masking was to have fewer positive cases or fewer hospitalizations. Ms. Rosengren said she would like to see parameters added to the Ordinance so that the decisions are based on data in context. It was also asked by Ms. Rosengren what else could be expected or anticipated in future ordinances regarding COVID, e.g., requiring eye wear. Ms. Rosengren stated that she would also like to see exemptions, in writing, for places of worship.

Vanessa Burnett, 2805 Northridge Parkway, #104, Ames, stated that she had sent, on March 27, 2020, a letter to every City Council member; however, had received no indication that any of them had read it with the exception of Mayor Haila. According to Ms. Burnett, her letter was full of information about how Ames could get ahead of the virus based on her experience as a disaster management professional. She alleged that the Council cannot even pass the most basic public health measure to mandate the wearing of masks in Ames with a penalty, which point she didn't even include in her March 27<sup>th</sup> letter because she assumed that was commonsense. Noting that it was now September and now Ames is a world's coronavirus hotspot because it took five months for the Council to get to this point. Ms. Burnett said that she moved to Ames from the Washington, D.C., area because she thought it would be the safest place to be in the case of a huge catastrophe, which she felt was likely to be inevitable; however, she believes she would be safer back in the D.C. area with 5.5 million people than she is back here "in the sticks" with a bunch of people who don't believe in science. Ms. Burnett commented that the Council members were elected to serve, which means to her trying to keep its residents alive, not trying to protect freedoms for people who are too selfish to help others by following even the most basic virus mitigation measures. She asked the Council to please take care of those living here.

Abbie Berger, 420 Ash Avenue, Ames, stated that she is against the Mask Ordinance in all forms. She believes it is an infringement of individual liberties that are very important. Ms. Berger commented that she does not believe it is healthy, specifically for children, but for all people to wear masks. She said she is not anti-science; however, science needs to look at actual facts and actual numbers in context, and she does not believe the virus necessitates the wearing of masks.

Dickson Jensen, 4611 Mortensen Road, Ames, Iowa, acknowledged the trauma, destruction, and even death that has been caused by the virus in Ames, in the State, Country, and World; the consequences have been overwhelming and have changed the world as it functions. He stated his belief that the City Council and the citizens of Ames all want the same thing: they want the virus to go away and life to be normal again; however, that is not going to happen in the near future. Medical experts are stating that to help lessen the spread of the virus, people should live differently by using higher hygiene standards and wearing face coverings. Mr. Jensen noted that the main goal of the Ordinance, according to the City Council, is to educate and encourage Ames citizens on how important face coverings are to slow the spread. The Ordinance has no penalty for violations for not wearing a mask. Mr. Jensen said he was offering an additional idea for educating citizens on social distancing and wearing face coverings. The idea is not to add a penalty for violation of the Ordinance, but instead, publicize through signage, social media, etc., the importance of the Ordinance. He also suggested offering rewards in the form of gift certificates to be handed out by the Police Department to those individuals abiding by the Ordinance. The safety and well-being of Ames citizens is of the utmost importance, but as stated by



the Council, so is a strong economy. Ames needs the students of Iowa State University (ISU) living in Ames, ISU football games played in Ames, and events and activities occurring in Ames. Mr. Jensen stated that Ames businesses are hurting, and some businesses are dying because of the virus. He offered to donate \$10,000 tonight to buy gift certificates from Ames restaurants and to start a strong campaign to educate citizens on the importance of wearing masks. Likewise, he wants the City to add to that fund to help pay for the education and for more gift certificates. He suggested that other contributions to the fund be made by the City in the amount of \$100,000; by ISU in the amount of \$100,000, as ISU needs Ames just like Ames needs ISU; other organizations, such as the Ames Chamber and Visitors Bureau, Mary Greeley Medical Center, McFarland Clinic, financial institutions, other large business owners, churches, and other concerned citizens, who should all give freely to help stop the spread and to keep the hospitality industry alive. Mr. Jensen believes an obtainable goal of \$500K or more is very realistic. He asked that Ames find a way to come together and be an example for other cities that is positive and encouraging, not negative. Mr. Jensen asked that the City “jump on board” and help get the community back to normal.

Ernie Brown, 1219-24th Street, Ames, asked if the houses of worship were going to be exempted from the mandate. He said he was not going to give his opinion on masks or no masks, but said he does have a concern about houses of worship.

Paige McGovern, 531 Crystal Street, Ames, expressed her disapproval of moving forward with a mask mandate. She asked the Council to implicitly describe the end goal and what numbers would be looked at in order to end the mandate. Ms. McGovern recalled that the Council had previously given three factors that would need to be present before they would move forward with a mask mandate, but none of those factors have been met and yet the Council decided to move forward with issuing the mandate. Ms. McGovern asked that the Council communicate the end goal to the citizens.

Mayor Haila noted that some of the Council members were having internet issues; however, they were all still participating in this meeting.

Sasha Aarsen, 3320 Weston Drive, Ames, stated that she is strongly against the mask mandate, face coverings, and masking on anyone who is healthy. She believes that those who are not can be protected, as has been done before. Ms. Aarsen commented that the virus can be passed around to the healthy people, who can get over it and build up their immunities; herd immunity is real. According to Ms. Aarsen, hospitalizations dropped a while ago, and she questioned why the City Council was even discussing a mask mandate now. She asked that she be sent what the Council is seeing to make these decisions. In all the material that she has searched, not one has shown that a mask prevents viral spread. According to Ms. Aarsen, the fear that is being pushed and the comments from a few in the medical field are being outweighed by the hundreds, and there are answers: Vitamin C, Vitamin D, and several other things that people who take care of themselves use on a regular basis. She doesn't believe she needs to wear a mask because she is not a sick person; she does everything to keep herself and her family healthy. She takes pride in her body, and if others are going to fast-food restaurants for every meal of the day, they are not taking pride in their health. Ms. Aarsen asked why she should have to wear a mask because others are making poor choices. To her, that makes no sense. She further commented that she has children, and she is not going to allow this to be normalized for them. Ms. Aarsen questioned who is looking at the social, emotional, and psychological damage being caused. It is her belief that her children should be in school, but she is home-schooling this year and she is not



a home-school parent. In Ms. Aarsen's opinion, this has gone too far; when fear is the driving force, decisions are not made correctly.

Naomi Maynes, 427-13th Street, Ames, said that she would like to know the metrics to show when the mandate is to be over, specifically, when is everyone going to get to stop wearing masks. She asked to see the science that is being used to make the decisions. All the research that she has done indicates that masks, especially those made of cloth, seem to spread the illness. Ms. Maynes has been told how much children, and adults as well, are touching their masks, adjusting them, and taking them on and off repeatedly. She has small children and requested to know how much research the Council has done in regards to the emotional, psychological, and even physical damage that could possibly be caused because there are no studies on that. Ms. Maynes stated that she was also greatly concerned about the lack of religious exemption. The ability to worship how and where people please is a source of pride for many Americans. According to Ms. Maynes, an article in the *New York Times* stated that there is concern over the COVID-19 tests as they are showing evidence of someone being infected, but in such a small amount that they are not actually spreading the virus. Ms. Maynes said that for people who are sick and think that they could be spreading the virus, it makes perfect sense to her that they should wear a mask and avoid contact with others if they are not able to stay home. However, to require people who are healthy and to require three-year-old child who is healthy to wear a mask and not be able to see people's faces or see people smile is wrong and is not acceptable.

Ashley Smith, 4144 Eisenhower Lane, Ames, spoke in favor of the mask mandate. She has seen some people taking this lightly and citing the low death rate as the reason; however, she thinks it is very important to note there is not a binary between "living happily after or dying from COVID." Ms. Smith commented that there is a lot that is unknown about the long-term effects: there is evidence now that people who recover from COVID have permanent neurological or heart damage. She recalled that there were some legal ramifications that prevented Council from moving forward with the mask mandate; however, she thinks that the federal and state governments have failed its people, and if city government is not willing to move forward with something to protect its people, there is no one left to provide that protection. Ms. Smith encouraged the Council to move forward with the mandate. She would like to see a penalty because she does not think people will comply without one. She noted that she has heard that grocery store workers have been assaulted when they have required shoppers to put on a mask. Even though she wants a penalty included, if it is the path of least resistance to do something with positive reinforcement, that would be helpful. Ms. Smith noted that a few of the speakers had commented that healthy people do not need to wear masks; however, that is exactly the issue: it is not known when they could be spreading the virus, so masks are needed at all times. If everyone is not compliant, it will not work. Noting the comments about places of worship, Ms. Smith said her personal opinion is that there should be no exemptions; the virus does not care where you are, especially if people are indoors.

Jon Rosengren, 614 Hodge, Ames, stated that he is very much against the mask mandate. He said that the thresholds for triggering a mandate have never been met and the thresholds for ending it have never been stated; however, if the Council is basing its decision on science, he believes there needs to be actual measurable triggers in place. At this point, it appears to him that actions are being taken out of fear, panicking to rush and get the Ordinance in place as soon as possible to deal with something that there is not a lot known about. Mr. Rosengren commented that Ames has been dealing with this for over five months. Statistics have shown that there are spikes, and Ames may be having a higher



percentage of positives at the moment, but the general trend is that this is on the downside; the virus is declining and death rates are declining. The rates of testing have changed because they are no longer testing those who are asymptomatic per CDC recommendations. Naturally, there are going to be higher positivity rates because the only people who are being tested are sick. In the opinion of Mr. Rosengren, the trigger that Ames is a hotspot is an artificial statistic; it should be a randomized statistic, not simply testing a group of people who are sick to find out how many people are sick with a particular disease. Mr. Rosengren reiterated that he is very much opposed to the mask mandate in any form.

Andrew Piltser Cowan, Somerville, Massachusetts, stated that his parents live at 2015 Clark Avenue in Ames, which is where he grew up. Mr. Piltser Cowan indicated that he had not intended to speak during this meeting; however, he has watched with alarm the rising number of cases in Story County over the past days and weeks. He shared his experience in living in the most dense city in New England where they have been under a mask mandate since April. His view, after living under that mask mandate for the past several months, is that it is the smallest of the impositions upon people's liberties and helps to save lives. Mr. Piltser Cowan stated that a range of civil penalties were included in the Massachusetts mask mandate; however, since April, the number of coercive enforcement actions of that mask mandate statewide has been in the tens. Their mask mandate has been enforced, like Ames is proposed to be done, by education and encouragement, and it has worked. Mr. Piltser Cowan encouraged the Council to adopt the proposed mask mandate.

Vivian Cook, 2316 Aspen Road, Unit #102, Ames, voiced her support for an enforceable mask mandate. She acknowledged that this is a City of Ames meeting, but pointed out that it, above all else, is due to the dangerous decisions of Iowa State University that have resulted in Ames' recent listing as the No. 1 worst COVID outbreak in the nation. However, Iowa State University Administrators have also informed the community that they had been in close conversation with the City of Ames in making these decisions. Ms. Cook pointed out that Iowa State University is not self-contained, and its actions will affect the entire community as a whole and is already doing so. She encouraged the Council to apply pressure to Iowa State University to discourage in-person gatherings of any kind. It is more than clear to Ms. Cook that the actions of the nation, Iowa, and ISU, are showing disregard for the scientific evidence and the lives of those in all communities. Ames has far exceeded the thresholds of other communities that have slowed the spread by taking actions such as mandating face coverings, and federal public health guidelines are being disregarded. Ms. Cook urged the Council members to do everything they can, including passing a face covering mandate, to mitigate the spread.

Reid Kruger, 1160 Oklahoma Drive, Ames, stated that he has been a small business owner in Ames since 1982. He is really concerned about the lack of consequences of the Ordinance. Mr. Kruger commented that he loved the idea of the gift certificates and would like to chip in some money himself. He noted that, in his own business, there are signs that ask people to wear masks; however, it is a daily battle with some of the people entering his shop. The same people who are touting their liberties don't even respect other people's own liberties to run their businesses how they want. He has heard of young people being berated in front of HyVee and Target because they are trying to enforce the store's policy. Mr. Kruger sees it as being hypocritical of these people to fight for only their own liberties. It is his opinion that those people who are so set against a mandate are still not going to wear masks. He noted that he personally cannot get sick because he is a small essential business owner with one employee, and if gets sick, he and his one employee will have to close down his business. On a personal level, his wife has a severe underlying condition and is at high risk; he can't bring the virus home. His family



has been social distancing and has basically sequestered in their home since March, hoping that other people will do the right thing and care for other people, but that hasn't happened in the past five months. The science is out there and it's not going away. He is tired of going to work scared out of his mind. Everyone wants it to be over. Mr. Kruger said he would like the Council to consider some kind of consequence in order to help for helping to enforce a mask mandate.

Leanne Wilson, 5326 Springbrook Drive, Ames, thanked the Council for holding this Special Meeting as she believes this is a decision that cannot be delayed. She pointed out that the number of active COVID cases was coming down until mid-August, but now it is rising rapidly due to spread inside Ames. According to Ms. Wilson, if there are no changes, about 2,500 more cases will be identified in Story County in the next two weeks. The lag between new cases and hospitalizations is about ten days; therefore, there will be a rise in hospitalizations. However, if the slope can be changed now, a much worse rise could be avoided. Ms. Wilson urged the City Council to pass the mandate in whatever form they can agree on as soon as possible to avoid a much worse situation; action is needed now.

Rebekah Bunting, 5247 Harvest Road, Ames, voiced her opposition to a mask mandate in any form. She asked those who are citing statistics and science to state where they are getting their statistics. Ms. Bunting said that she works in clinical trial drug development and management, specifically for fatty liver disease where she sees morbidly obese patients on a global level, but also in many sites in the United States. She manages 23,000 patients and has only seen six patients with COVID, and those six patients have recovered and continued on with their trial studies. Ms. Bunting believes that a lot of economic decisions and decisions regarding individual liberties are being based on a 2.4% positivity rate and out of fear. According to Ms. Bunting, Story County has a 2.4% positivity rate; statistically, that is an insignificant number. She clarified that she was not saying that it was insignificant if someone were to contract COVID and become severely ill or even die. There have been a lot of tests coming back positive, but it doesn't mean that those people are symptomatic and it doesn't even mean that these people are in the hospital. Ms. Bunting said that the numbers don't even show that Story County is having a "crazy" increase in numbers, but that is what the media is wanting people to think. She suggested that people look at the COVID website for information. Gift cards are a wonderful idea, but that would still be encouraging making decisions based on fear, rather than confidence. Ms. Bunting asked the Council to consider the consequences to children, families, churches, and businesses. She also noted that it is the owner's right to require people to wear masks in order to come into their businesses, which do need to be respected. That means she won't give her business to those establishments, just like she won't give her business to Wheatsfield because she's not welcome in that store now.

Yonas Michael, 3001 Heathrow Drive, Ames, said he was shocked to hear that people are so passionate about not wearing masks. He believes that the science is clear that wearing masks helps to slow the spread of the coronavirus. Mr. Michael commented that he kept hearing statements about acting out of fear, but he is fearful that the lack of responsibility as a community will not keep him and his neighbors safe. He is fearful that he will succumb to his underlying health condition if he contracts the virus. Mr. Michael said that what is being talked about is wearing a mask to help keep people healthy and alive. After hearing the last speaker talk about how they are not going to shop at certain places because masks are required, he commented that those are the places where he does shop and supports because he does feel comfortable and safe there. From an economics perspective, he now has turned to buying most of what he needs online because he is too worried about entering businesses because



he is afraid of being exposed to the virus. In Mr. Michael's opinion, there are so many reasons why the mask mandate is needed; however, the reality is that the science is clear: currently, the Ames community is not healthy. The positivity rate in Ames continues to go up, and to return to business as usual, everyone has to do their part now. He said he lacks faith in people using the commonsense that science has put out there. Mr. Michael encouraged the Council to support a mask mandate.

John Carter, 619 Duff Avenue, Ames, indicated that was speaking on behalf of himself and his wife, Chelcie. Mr. Carter indicated that they moved to Ames approximately a year ago from East Central, Indiana, for graduate school. He initially wasn't sure he wanted to live in a larger community, but he actually really loves Ames. The thing that has shocked him the most this evening is the disregard some community members seem to have for other members of the community. In his opinion, individual liberties stop where others can begin to be harmed. He is amazed at the lengths that people go to in order not wear a mask on their face. Mr. Carter urged the Council to not only pass a mask mandate, but to have one "with teeth." For him, it was really disheartening to know that there are so many community members who seem to not care about the impact of the virus on other people's lives, specifically that it can harm and kill people. He believes the psychological trauma that needs to be considered is that which will occur when friends or family members become sick, die, and or have life-long aftereffects.

Sehba Faheem, Ames, advised that she is in favor of the mask mandate. She wants to make sure that throughout this discussion they are not losing sight of the overall goal, which is to save people's lives. The CDC has said that masks will stop the spread of the virus; the CDC is the best source of information. Ms. Faheem pointed out that it is a novel coronavirus and some things are unknown; however, masks have been proven to reduce the spread of the virus as they form a barrier from droplets from the mouth of a person who might be carrying the virus to everyone else. Having everyone wear a mask will reduce the spread of the virus overall. Ms. Faheem believes that it is a simple ask to save lives. It should have been implemented months ago, but it is still being discussed. She wants to ensure that, if a mask mandate is implemented, it actually puts some enforcement behind it; it needs an actual penalty for not having a mask on. Ms. Faheem asked the Council to make the right decision to keep citizens safe. Citizens need the Council's help to keep them safe; the Governor has failed the citizens of Iowa, and it is on the Council's shoulders now to protect community members' lives.

Tim Sklenar, 320 S. 2<sup>nd</sup> Street, Ames, voiced his support of a mask mandate "with teeth." He has a compromising condition and is at risk. Mr. Sklenar noted that people do not have a personal liberty right to drink and drive because it endangers other people's lives, but he doesn't fear it because there are rules against it with penalties. Mr. Sklenar believes the same thing should apply to a mask mandate. According to Mr. Sklenar, it worked in the influenza outbreak in 1918. He would like to go out in the Ames community and not be worried that others are going to be selfish and potentially kill him. Mr. Sklenar added that he has been religiously wearing a mask since February, and wearing a mask has not affected him negatively or physically at all.

Lena Menefee-Cook, 3105 Bayberry Road, Ames, stated that she is in favor of enacting an enforceable mandate. She is deeply concerned about now many of her friends, family members, teachers, students, and other Ames community members are going to get COVID-19 and could possibly die, partially due to a lack of community-oriented safety measures. She asked the Council to please protect the people of Ames with an enforceable mandate.



Luke Gran, 65584-260th Street, Nevada, advised that he is a business owner in Story County and employs people who work in Ames. He has a company-wide mask mandate. Mr. Gran shared that one of his employee's roommates was infected with COVID. He had ridden in a car for over an hour with that employee, who could have potentially transmitted the virus to him. Mr. Gran specified that he had a mask on. According to Mr. Gran, he has now had two tests and both were negative. Of the three people who were riding in the vehicle, one person is at home for two weeks with terrible symptoms of the virus, but he is healthy and free of the virus. From his personal experience, Mr. Gran believes that masking works. He feels that it is very important to mandate masks be worn in public spaces, and the mandate needs to "have teeth" so people will do it.

Aditya Ramamoorthy, 2634 Somerset Drive, Ames, said he strongly supports a mask mandate "with teeth." Something that he knows as an academic, is that even though the 2.4% might currently be a low positivity rate, there is the possibility of exponential growth in the number of positive cases. Mr. Ramamoorthy cautioned that people need to be very, very careful, and having a mask mandate is not something that is extremely infringing on people's rights. As others have pointed out, if his wearing of a mask is helping someone else not get sick, he thinks he should be doing it. Mr. Ramamoorthy believes that Ames is in a situation of a pandemic and needs to learn from what countries around the world have done. He advised that Singapore, which has 5.7 million people, has had under 60,000 COVID cases because of extreme discipline by the people in wearing masks and strong contact tracing. While Ames cannot do contact tracing at that level, people can certainly wear masks; scientific evidence clearly shows that it helps. Mr. Ramamoorthy reiterated his support for a mask mandate. He noted that Ames is an extremely welcoming community; he has lived in Ames for over 14 years, and he has nothing but good things to say about Ames, as a whole. However, in this one aspect, he noted his disappointment. He believes that Ames should work together and have a mask mandate that helps everyone.

Serena Paulson, 3213 West Street, Ames, thanked some of the Council members for stepping up to fight for a mask mandate "with teeth." She said her level of disappointment in some of Ames' residents rises every day. Some are only concerned about themselves, not about protecting others, especially when they say that people with underlying health conditions don't deserve to be protected. If someone can save one life by wearing a mask, they should do so. Ms. Paulson believes that someone's right to freedom to not wear a mask does not supersede another person's right to live. Long-term consequences from the virus are still being discovered. She believes that an enforceable mandate would save lives. Adopting one "without teeth" does nothing. Ms. Paulson asked the Council to pass an enforceable mask mandate and to do it now.

Kiley Waite, 4231 Cartier Avenue, Ames, said she and her husband continue to stand in opposition to the Mask Ordinance. She stated that before that should be recommended, people need to understand whether masks are helpful or not. Ms. Waite read a CDC article called, "Effectiveness of Cloth Masks for Protecting Against Severe Acute Respiratory Syndrome - Coronavirus II." In summary, the article noted that cloth masks "may provide some protection if well-designed and used correctly...Multi-layer cloth masks designed to fit around the face and made of water-resistant fabric may provide protection." Ms. Waite commented that her conclusion after reading the article was that there is not enough clear evidence to support mandating masks in the City of Ames. She advised that the article also stated that only one randomized controlled study has been done to determine the efficacy of cloth masks. According to Ms. Waite, the study also stated that the risk for infection was higher for those wearing



cloth masks. She also alleged that citizens of Ames do not wear masks correctly. Wearers touch and adjust their masks repeatedly, and once the mask is touched by the wearer, it is contaminated. Ms. Waite commented that some people never wash their masks. Taking the mask on and off is high-risk because pathogens may be on the outer surface of the mask and may result in self-contamination. Ms. Waite questioned whether a three-year-old or a ten-year-old can wear a mask correctly if an adult cannot wear a mask correctly. She asked for the Council to strongly consider not including children ten and under in the Ordinance.

Julianna Starling, 1428 Walton Drive, #106, Ames, explained that she had moved to Ames from another country and has lived in Ames for ten years now. She was born in a communist country; it was shocking to her that this is being pushed on people at the local level. Ms. Starling said that she has a degree in Health Information Management. She stated her belief that the biggest thing out of this is that people are living in fear because of confusion and panic, and as a result, there is a lot of tension here. Ms. Starling asked that people take a look at the science that the Governor has provided, which very clearly states that there is no evidence that masks provide protection from the virus. She also noted that CDC has issued a statement saying that research indicates that masks may be helpful to those who are infected, but there is less information as to whether or not masks offer any protection to those exposed to anyone who is symptomatic or asymptomatic. Ms. Starling noted that the virus is spread by droplets; it can come from any fluid that the body excretes, not just from the nose or mouth. She believes that people should not be looking at positive tests, but at deaths. The number of deaths is decreasing, not only in the country, but in Iowa as well. Ms. Starling quoted Benjamin Franklin saying, "Those who would give up an essential liberty to purchase a little temporary safety deserve neither liberty nor safety." She believes that the job of Council members is not to protect people, but to ensure order in the City. It is the job of people to protect themselves and to take care of themselves. Ms. Starling said that they have chosen to home-school this year, not because they are scared of the virus, but because they are scared of the physical, emotional, and mental impact it is going to have on children because this doesn't affect them. According to Ms. Starling, it has been noted in scientific studies that it is very rare that children even spread the virus. In conclusion, Ms. Starling pointed out that there is so much that they don't know, and mask-wearing is really just an experiment on the American people because there is really nothing to prove that masks truly work on the majority of the population. She does not think that a mask mandate is the right thing to do, not only for the City, but for the whole country.

Jennifer Hill, 3807 Columbine Avenue, Ames, shared that her husband was in China in January 2020, and after he came home, they didn't get sick. She offered that her husband, her daughter, and she all have underlying health conditions. They have been mask-free the entire time, not because they don't care about society, but it was the decision that they made. Ms. Hill shared that she had ensured an horrific incident at the age of nine during which her mouth was covered. Every time she puts a mask on, she re-lives that traumatic incident. She now works at a school and has to put a mask on. It is very difficult for her to do so, but she does it because she loves teaching and she wants the students to be educated and feel the connection of personal teaching. People not wearing masks does not mean that they are selfish; like her, they may have other reasons. Ms. Hill said that it is very important for people to be in charge of themselves. She doesn't rely on the City Council to make her children behave; that is her responsibility. Ms. Hill asked the Council members to hear people on both sides before they make their decision.



Sarah Carney, 320 S. 2<sup>nd</sup> Street, Ames, stated her support for an enforceable mask mandate in Ames. She said that there is scientific consensus on the effectiveness of cloth face coverings in controlling the spread of the virus, and the sooner Ames comes together as a community and wears masks, the more lives and livelihoods can be saved. Ms. Carney thinks that a mask mandate will improve freedom of movement throughout Ames for all people. Taking measured precautions against the spread of the pandemic to protect the most-vulnerable people is not necessarily an act of fear, but an act of love. Ms. Carney urged the Council to pass the mask mandate.

Brandy Howe said she lives in Story County, but her daughter lives at 905 Dickinson Avenue in Ames and is a 21-year-old college student. Ms. Howe said that, in talking with her daughter this afternoon about this meeting, her daughter shared that six of her friends are not doing well mentally or emotionally because the CDC has recently released a study that showed that 25% of adults ages 18 to 24 have considered suicide in the last 30 days with everything that is associated with the pandemic. According to Ms. Howe, there is a .05 chance of dying from COVID and 90% of those who die of COVID are of an advanced age. She said that the average age of those dying from COVID is 78, which is also the average life span of people in the United States. She believes that children are not doing well. It is the belief of Ms. Howe that a mask mandate can be passed, but a week after the masks come off, there will be another spike in positive cases. According to Ms. Howe, the nature of a virus is that it mutates to become less deadly, but spreads faster. All people have thousands of viruses in their bodies every day, and she believes if tests for something are done, you will find it. Ms. Howe thinks that masks are very de-humanizing to especially children and young adults. It is extremely harmful, especially when you combine a mask mandate with not allowing people to gather in groups larger than ten. Ms. Howe asks the Council to keep in mind that everyone is responsible for their own health, and that includes their mental health.

Mayor Haila asked Ms. Howe to clarify whether the 18- to 24-year-olds who were contemplating suicide within the last 30 days was because of having to wear a mask. Ms. Howe answered that it was specific to the pandemic and everything that young people are faced with, whether that it is because they now can't gather in groups, and they can't go to college as they expected, as well as having to wear masks, which are de-humanizing; every aspect of their lives has been changed. Ms. Howe stated that she was 100% against the mask mandate.

April Finley, 4701 Todd Drive, Unit #205, Ames, said that the first thing she heard when she and her husband moved here from Alabama was "Iowa Nice" and that some of the people here are some of the nicest people. Ms. Finley said that truly "Iowa Nice" means to do whatever it takes to protect your fellow Iowa citizens. She pointed out that she is a neighbor, her husband is a neighbor, and they both have underlying health conditions. Ms. Finley commented that she and her husband are members of the Ames community and are both strongly in favor of the mask mandate. She believes that having a mask mandate is not living in fear; it is living in safety. Ms. Finley noted that Ames has a high positivity rate, but it also has an opportunity to correct that and be an example for the rest of the country to follow. She agreed that it is a little bit overdue, but encouraged Ames to be that example of how it corrected that through dynamic leadership. The mandate can be adapted as circumstances change. Ms. Finley shared that in her home state of Alabama, a mask mandate was implemented with a rolling deadline; it can be extended or lifted depending on the number of cases. According to Ms. Finley, it has dramatically taken down the number of cases in the entire state of Alabama; there are examples that



show that mask mandates do work. She urged the Council to pass the mask mandate for the safety of all Ames citizens.

Andrew Mizerak, 3306 Preston Circle, Ames, stated that he does support the wearing of masks, but does not support a mask mandate, and he is strongly opposed to a mask mandate “with teeth.” He believes that a mask mandate “with teeth” could cause unintended consequences, including, but not limited to, patients being less likely to be honest with their physicians about wearing a mask or sharing where they have been if they have had an exposure. Mr. Mizerak also thinks that putting the force of law behind a mask mandate could empower both sides to experience unintended consequences. He acknowledged that he is a front-line health care worker who has worked with COVID-positive patients. There are people who are going to be sick with COVID, and the most-vulnerable people should be protected. The most-vulnerable people are over the age of 60 with pre-existing health conditions. Those people should be wearing masks and others should be wearing masks around those people.

Jennifer Flugge, 1304 Alberta, Ames, voiced her strong support for a mask mandate. She still has lingering issues from having COVID in May. She was out in the community when she was positive and infected, and if she had not been wearing her mask, she would have spread it to others. Ms. Flugge said she can sleep at night because she knows that she was wearing her mask and not infecting others. She said she will continue to wear her mask because it is unknown whether she can get COVID again or be infectious again. She sees wearing a mask as the very least that a person can do for their community.

Katie Bents, 2147-160th Street, Ames, asked that the Council look at the people beyond COVID - those who have severe anxiety attacks every time they put on a mask, the people who can't wear them because it just sends them into a full-on meltdown. These people may have Asperger's Syndrome or autism or other conditions that other people can't see. Ms. Bents shared that her older two sons have conditions where they can't wear a mask. If people see them in public, they won't know that; the public won't know that wearing a mask will send them “into orbit” and will cause them physical pain to be restricted in that way. Ms. Bents said that if they are made to wear a mask, they won't be able to function. They are trying their hardest; they are washing their hands, using hand sanitizer, and social-distancing. Ms. Bents said that there are many people in this community who have underlying issues and won't be able to wear a mask. She also shared that she has younger children and pointed out that on every cartoon, “bad guys wear masks.” Small children have been conditioned that bad guys wear masks, and even if they are told that it is ok to wear masks now, it will be hard for them to understand. Ms. Bents is also concerned that children could actually be kidnapped and people are not going to know it because their mouths will be taped shut under their masks; those are the types of things that the Council needs to think about. She again urged the Council to take into consideration the fact that there are people with underlying conditions who cannot wear masks.

Dan Bell, 419-18th Street, Ames, said that after hearing a previous caller's horrific experience and from the most-recent caller about the issues that could occur if certain people are made to wear masks, he was reminded that what really needed to be focused on was compassion. He doesn't know what the answer is, but he believes it involves allowing some people to go out in public without a mask and additional guidelines. However, if the Ames community, which has to be one of the most-educated communities anywhere, can't figure this out, he doesn't know who can.



Jeremie Knutson, 2117 Stevenson Drive, Ames, wanted to address the effectiveness of cloth masks against acute respiratory syndrome - coronavirus. He noted that several people had quoted that study, but they had left out the part that said, “until cloth masks’ design is proven to be equally effective as the medical N95 masks, wearing cloth masks should not be mandated for healthcare workers. In community settings, however, cloth masks may be used to prevent community spread of infections by sick or asymptotically infected persons and the public should be educated about their correct use.” Mr. Knutson strongly encouraged that, if the Council chooses to implement a City-wide mandate, they should also engage in educating the community as a part of that. In closing, Mr. Knutson said he wanted to leave the Council with the number 16, which is the number of Story County residents who have died because of contracting COVID-19.

Mayor Haila asked Mr. Knutson to clarify what he was suggesting the community receive education on specifically. Mr. Knutson replied that it should be specifically on the proper wearing of masks and which cloth masks are most effective.

Dan Marks, 2307 Timberland Road, Ames, stated that he had written to the Mayor and Council repeatedly since early July asking for a mask mandate to keep Iowa from becoming another New York, Florida, Arizona, or Texas. Now Ames is ranked as having the third highest positive COVID cases in the world and first in the U. S. Mr. Marks believes that if a mask mandate would have been put in place before ISU opened, they wouldn’t have to be concerned about the University being shut down or with sending students home early; bars would not be shut down for a second time, and most people would be more comfortable going into businesses knowing that a mask mandate was in place. According to Mr. Marks, the Story County Board of Health is going to vote on a mask mandate with a fine, and it is his desire that the City Council include a fine in the mask mandate in Ames. He feels that that is the only way to get people who don’t wear a mask to do the right thing. In Mr. Marks’ opinion, if everyone would wear a mask, the virus would have a difficult time spreading. The CDC, WHO, IDPH, the Story County Board of Health, and nearly all epidemiologists and scientists agree that masks work. When Ames has a mask mandate, it will also help the University to succeed, and Ames needs the University to succeed, which in turn helps the Ames community to succeed. Mr. Marks strongly encouraged the Council to vote yes on the mandate.

Nick Paul, 1015 Curtis Avenue, Ames, advised that he had been a resident of Ames for 34 years. It was disheartening for him to hear some of the comments tonight, as he always thought that he lived in a community that cared. Mr. Paul said that he grew up with “No Shirt. No Shoes. No Service,” and there were no complaints about that because it made sense. Another example he gave was that people are not allowed to walk around in public naked. He hears people asking why masks work, and he thought the Ames community would be educated enough to understand it. Mr. Paul noted that surgeons have to wear a mask during surgeries, which can last many hours; however, you don’t hear them complaining. He also brought up an article that he had read about the Civil Rights Act of 1964 as some people are claiming it is their civil right to not wear a mask. Mr. Paul said that the author of the article pointed out that there is no civil right to do as you choose if, by doing so, you present a risk of harm which infringes on the rights of others. He encouraged the passing of a mask mandate. Mr. Paul noted that the number of cases in Ames is not being compared to other states; the number is being compared to other countries.

Mayor Haila closed public input.



The Mayor asked the City Attorney to comment on how the proposed Ames Ordinance would interface with one passed by the Story County Board of Supervisors should the Board decide to implement a mask mandate that may have different aspects or enforcement measures than the one proposed for Ames. City Attorney Lambert cited a provision in the *Iowa Constitution* that makes it clear that the City ordinance would supersede the County one within the City limits in Ames. The County's would be effective everywhere else within the County, but not in Ames. Also, the County's would be enforced by the County Sheriff's Department.

Mayor Haila asked whether there were any exceptions in the proposed face covering ordinance that would cover the type of concerns that were raised by Katie Bents regarding persons with Asperger's, autism, or other underlying issues. Mr. Lambert stated that the exemption noted in Section (3)d. would cover those concerns, which states, "Anyone who has been advised by a medical or behavioral health professional not to wear face coverings." If anyone had received that advice, they would be exempt from the Ordinance. Council Member Gartin asked what proof or documentation a person would have to carry with them of that advice. City Attorney Lambert stated that there is no requirement in the Ordinance that a person carry proof. If this was an ordinance with a penalty and a citation was issued, they would have to provide evidence and the prosecution of the citation would be dropped. Mr. Lambert said that since there will be no citations with the Ordinance in question, he did not believe that is even a real-world issue. Mr. Gartin noted that he felt the point is that there seems to be a stigma attached. He told of one of his clients being in a store yesterday. He did not have a mask on because he has difficulty breathing, and a store clerk berated him in front of a crowd, which was very embarrassing for him. Eventually, he was able to explain that he can't physically wear a mask, but it was long after the damage was done. Mr. Gartin recognized that people will be judging others based on whether they are wearing a mask or not.

Mayor Haila asked if any of the Council members wanted to follow-up after hearing from the 36 people who spoke earlier.

Council Member Junck noted that she had heard a lot of people talking about a mandate "with teeth," and she wanted to explain what had happened at the start of this meeting. She said that she had made a motion to reconsider the motion that the Council had approved at its meeting of August 25, which was to proceed with a mask mandate with no penalty. Ms. Junck said that she had voted in the affirmative for that on August 25, 2020, because she thought it would be better than nothing. However, after seeing the number of cases spike during the last week and getting more information from the Story County Board of Health, she wanted to bring it back up to be reconsidered. However, there were not enough votes to allow them to proceed with the reconsideration; so, right now, the Council will be voting on the Ordinance with no enforcement.

Council Member Martin commented that he had noticed people in the community felt very strongly about this issue. He noted that one of the things he heard was that people were afraid that a mandate without a penalty was not even worth doing, and there were a lot of people on the calls tonight who were feeling an enormous amount of pressure from a mandate without a penalty. Mr. Martin asked City Attorney Lambert to confirm that his advice to Council hadn't changed regarding whether adding penalties would be exceeding the City's authority. Mr. Lambert confirmed that it was still his advice that an ordinance that has a penalty would infringe upon the Governor's authority under the Emergency Management and Public Health Chapters of the *Iowa Code*. An ordinance with no penalties does not



infringe upon the Governor's authority, and he does not believe that there is any case that can be made that it does if it doesn't have penalties.

Mr. Martin also inquired about the possibility that a different type of ordinance would come down from Story County, which would then be displaced by a local ordinance in Ames, if the Council does pass the Ordinance in question. Council Member Martin stated that he had heard one of the Story County Attorneys offering similar advice to the Board of Supervisors or the Board of Health that Mr. Lambert was offering to the Council, i.e., the County, in his opinion, would not have the authority to issue a mandate, which Mr. Martin assumed it to mean a mandate with penalties, although that was unclear at the time. Mr. Martin asked if City Attorney Lambert had any opinions about whether Story County's abilities to pass an ordinance differ from Ames' abilities with respect to penalties being in the ordinance. Mr. Lambert replied that he did not have any indication that they do differ. Continuing, Mr. Lambert stated that the Assistant Attorney General's Opinion stated that County Boards of Health have authority to pass regulations, as provided in the *Iowa Code*, and those regulations have to be adopted by the County Boards of Supervisors; however, they would have the authority to do that only "if the Governor's Proclamations went away." If the Governor's Proclamations are still in effect, they would not have the authority to do that. Mr. Lambert said that he had not studied the issue beyond that.

It was also noted by Council Member Martin that the Council had actually earlier considered exempting houses of worship from the Draft Ordinance. He had made the motion, but it didn't get the votes, so he is not going to bring it up again.

Council Member Gartin said that he was struck by the division in the Ames community over this issue. He noted that the Council needs to recognize that people are in different spots on this. Mr. Gartin expressed his frustrations with people who are very dismissive of people's different perspectives on this. He feels it is very unfair to criticize people for having those very passionate positions; there is a lot of pain on both sides of this.

Council Member Betcher noted that there seems to be some misconception that she doesn't support an enforceable ordinance. Ms. Betcher clarified that she does support the Ordinance, as written, but she would also support an ordinance that actually had "teeth in it" that she thinks would deter people from breaking the Ordinance. Her vote last week was not because she doesn't support an enforceable ordinance, but it was because she doesn't think a \$50 penalty is going to change people's behavior, and it could result in the worst of all possible worlds, which is that there is a fine that doesn't change behavior and the police would be interacting with citizens because there is now an enforcement situation. She does not see that as a good situation; however, the Council has been advised that a penalty can be added to the Ordinance if it turns out that there is not compliance or if Story County decides that it is going to mandate masks with a different sort of enforcement mechanism. Council Member Betcher would like the Ordinance to be passed quickly, so they can begin educating the public. She is open to adding a penalty clause in the future.

Council Member Beatty-Hansen commented that she liked Dickson Jensen's suggestion about the positive reinforcement; however, that could be discussed separately from the Ordinance. She does want to revisit it, however.



Mayor Haila asked about the option of adding to the Ordinance in the future. City Attorney Lambert advised that it is always possible to amend an ordinance. The Council cannot pass two motions to reconsider the same topic at the same meeting; however, that doesn't mean that changes can't be made to the Ordinance in the future. He stated that the Council could come back at a future meeting to add penalties, if desired; however, it would not be allowed to consider penalties to the Ordinance at this meeting since the Council already decided not to reconsider the original motion made on August 25, 2020.

Moved by Betcher, seconded by Beatty-Hansen, to pass on first reading the Face Covering Ordinance, as amended as follows:

1. Modify Section (1)a. so that it reads, "Outside whenever the person cannot stay at least six (6) feet away from others "not in the person's household."
2. Change the sunset clause from May 31, 2021, to December 31, 2020.

Council Member Corrieri stated that she had been very strongly opposed to any sort of ordinance that did not include enforcement because she thinks that the times call for some significant action. However, she is going to support the Ordinance, as written, only because of the need to take some action to try to get back to some sort of normalcy in the community. Ms. Corrieri shared that she had taken her son to the doctor for a sports injury. The sports injury doctor went through a list of precautionary measures that her son should go through to stay healthy, and at the end, he asked her son if he knew the one thing that he could do to keep playing this season and into the winter. Her son had replied that he did not know, and the doctor told him that he needed to wear a mask, and if he wore a mask, it was likely that the season could continue. Ms. Corrieri pointed out that it is unknown yet what other consequences will occur because of the positivity rates and numbers, so she is going to support the Ordinance in the hopes that the Ames community will start to step up and do the right thing for one another, not just for the sake of public health, but for the sake of the Ames economy and community.

Council Member Gartin stated that he would not be supporting that motion because they would be doing it in the face of the City Attorney and in the face of the County Attorney, who have advised the Council not to do it because they don't have the authority, and in the face of the Attorney General who has stated that cities do not have the authority. He also stated that also does not nullify the fact that all Council members took an oath to uphold the *Constitution*, and that is being ignored. Mr. Gartin recognized that if a Council member is voting in favor of the Ordinance, he does respect that they are doing it for the right reasons: that they care about the community and they want to do what's best. He wanted to make it clear that even though they may disagree on the legal aspect of it, they all have his respect because they are doing it for the right reasons.

Council Member Junck pointed out that the City Attorney has made it very clear to the Council that an ordinance with no enforcement would not be in conflict with the Governor's orders.

Mr. Gartin replied that he doesn't know what a mandate without penalties does. He said that honestly what the Council will be doing is actually adopting a Resolution without any teeth to it. He indicated that he would have supported a Resolution, but instead they took a different path, perhaps to give it the



appearance of more importance, but it is difficult for him to understand the seriousness of this with no penalty.

Council Member Martin stated that there had been a discussion and the Council agreed that it was unusual to have an ordinance without a penalty, and legally speaking, it was more like a Resolution, so the Council could stop everything and change it to a Resolution. However, he felt that the Council did not want to do that. He said that is completely different than saying that the City Attorney has advised the Council members that they do not have the authority to do this; that is just not what is going on here. Council Member Martin has said that the point of this compromise is to get them to a place where they actually have faith in what the Ordinance says: that it is the intent and belief of the Ames City Council that the Ordinance does not conflict with provisions of the Governor of Iowa's Public Health Disaster Emergency Proclamation, which is currently in effect. He advised it was crucial to him to clarify that.

Roll Call Vote: 5-1. Voting aye: Beatty-Hansen, Betcher, Corrieri, Junck, Martin. Voting nay: Gartin. Motion declared carried.

Moved by Corrieri, seconded by Junck, to suspend the rules necessary for the passage of an ordinance. Roll Call Vote: 6-0. Motion declared carried unanimously.

Moved by Corrieri, seconded by Junck, to pass on second reading the Face Covering Ordinance, as amended.

Roll Call Vote: 5-1. Voting aye: Beatty-Hansen, Betcher, Corrieri, Junck, Martin. Voting nay: Gartin. Motion declared carried.

Moved by Corrieri, seconded by Junck, to pass on third reading and adopt the Face Covering ORDINANCE NO. 4420, as amended.

Roll Call Vote: 5-1. Voting aye: Beatty-Hansen, Betcher, Corrieri, Junck, Martin. Voting nay: Gartin. Ordinance declared adopted, signed by the Mayor, and hereby made a portion of these Minutes.

**DISPOSITION OF COMMUNICATIONS TO COUNCIL:** Mayor Haila noted that the first item that had been included in the Council's Non-Agenda Packet was a copy of his letter to landlords, property owners, and managers of rental housing units that he had sent on August 28, 2020. There was no action necessary to be taken by the Council.

The second item was an email from Brigitta Malczovich requesting that all ragweed types be added to the noxious weed list.

Moved by Beatty-Hansen, seconded by Corrieri, to request a memo from staff regarding the request. Vote on Motion: 6-0. Motion declared carried unanimously.

**COUNCIL COMMENTS:** Moved by Gartin, seconded by Corrieri, to request staff to look at the available balance in the Council Contingency account and propose an amount that could be used to purchase masks for the community and to follow the example of Des Moines in helping distribute the masks to the community.

Vote on Motion: 6-0. Motion declared carried unanimously.



Council Member Gartin indicated that he would like the privilege of working with Dickson Jensen's proposal in a way to find a positive reinforcement of the behavior that is being sought. Mr. Gartin asked for City Manager Schainker to comment on whether it should be referred to staff first. Mr. Schainker indicated that there would be a lot of logistics involved. Council Member Corrieri commented that Council needed to recognize whether the City should be asking some of its partners to contribute as she knows the Chamber and the ACVB, in particular because they were mentioned, are struggling like a lot of entities and have had to lay-off staff. She thinks that is important to keep in mind when they would be asking them to donate to something that just might not be realistic for them. Ms. Corrieri pointed out that they also have the United Way campaign starting next week, and she doesn't necessarily want the Council to fund-raise for something that would compete with the funds that support the human service agencies and all of the businesses that will be participating in that. Mr. Gartin asked Mr. Schainker if he had any thoughts on what the Council could do to accept Mr. Jensen's generous offer of \$10,000. Mr. Schainker replied that the Council would have to come up with some parameters as far as what amount would be on each card, where they want to get the cards from, who they want to give them to, etc.

Moved by Gartin, seconded by Beatty-Hansen, to direct staff to visit further with Dickson Jensen about his offer and come back to the Council at its next practicable meeting with additional details that they might move on.

Council Member Beatty-Hansen suggested that they ask who might be interested in chipping in if they have the means to.

Council Member Betcher said that, overall, she likes the motion and she appreciates Mr. Jensen's offer. She hopes that they can work something out even if it is not exactly what is proposed in the email.

Mayor Haila suggested that perhaps staff could check with a few of the people suggested by Mr. Jensen to see if they have resources available; all that would take would be a phone call.

Council Member Gartin thanked Dickson Jensen for his leadership and creative thinking.

Vote on Motion: 6-0.

Noting a recent article in *The Sun*, Council Member Martin recognized and thanked the First National Bank for its recent donation of \$10,000 to the Ames Public Library for the purchase of another 50 hotspots for the Ames community.

Moved by Martin, seconded by Betcher, to ask staff to design signage referring to the Ordinance for placement in businesses and to consider the possibility of paying for the production and delivery of the signs to interested businesses.

Vote on Motion: 6-0. Motion declared carried unanimously.

*Ex officio* Council Member Nicole Whitlock stated that she was glad that the Ordinance was adopted tonight.



Moved by Betcher, seconded by Martin, to request the City Manager to contact ISU Athletic Director Jamie Pollard to see if it is possible for messages to be sent to the season ticket-holders regarding the requirements of the new Ordinance, as was done with the new “Game Day” parking fines.

Vote on Motion: 6-0. Motion declared carried unanimously.

Mayor Haila noted that 36 people had addressed the Council this evening. He requested that the community pull together and work together and avoid division like the City pulled together on August 10 and thereafter after the derecho hit. Council was aware that there would be people who would be pleased and those who would not be pleased, but it was being done with the intent to do what is best for the community of Ames. The Mayor noted that one thing that was brought up was education. Tomorrow, he will be discussing with staff ways to try and publicize that there are exemptions. There is no intent to put people with certain conditions in a position that would cause them to have issues. Mayor Haila expressed that he was disheartened to hear about potential shaming going on. It is his hope that through encouragement and discussion, there would be embracing through partnership with individual entities, starting with the Chamber, Iowa State, Main Street, and others, to get the message out that we are in this together and shaming is not an appropriate way to approach the situation.

The Mayor reiterated that the Ordinance will be published on Friday, September 4, 2020, and be effective on that date.

**ADJOURNMENT:** Moved by Martin to adjourn the meeting at 8:42 p.m.

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Diane R. Voss, City Clerk

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John A. Haila, Mayor





CITY OF  
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*Caring People ♦ Quality Programs ♦ Exceptional Service*

# MEMO

**To:** Mayor and City Council

**From:** Diane Voss

**Date:** September 18, 2020

**Subject:** Item 4b: September 8, 2020, AAMPO/City Council Meeting Minutes

The Minutes of September 8, 2020, are still being prepared. They will be emailed to you on Monday.

Thank you.

/drv





## REPORT OF CONTRACT CHANGE ORDERS

Period:	<input checked="" type="checkbox"/>	1 <sup>st</sup> – 15 <sup>th</sup>
	<input type="checkbox"/>	16 <sup>th</sup> – End of Month
Month & Year:	September 2020	
For City Council Date:	September 22, 2020	

Department	General Description of Contract	Contract Change No.	Original Contract Amount	Contractor/ Vendor	Total of Prior Change Orders	Amount this Change Order	Change Approved By	Purchasing Contact (Buyer)
Water & Pollution Control	WPCF Methane Engine Generator Replacement Project	1	\$1,554,270.00	The Waldinger Corporation	\$0.00	\$(12,000.00)	J. Dunn	MA
Water & Pollution Control	Water Treatment Plant Handrails	1	\$63,510.58	Moultrie Manufacturing Company	\$0.00	\$1,356.39	J. Dunn	MA
Electric Services	Electrical Maintenance Services	1	\$149,800.00	Tri-City Electric Company	\$0.00	\$24,610.00	D. Kom	JN
			\$		\$	\$		
			\$		\$	\$		
			\$		\$	\$		



**Applicant License Application ( LE0000085 )**

<b>Name of Applicant:</b> <u>Hy-Vee, Inc.</u>		
<b>Name of Business (DBA):</b> <u>Hy-Vee Food Store #1</u>		
<b>Address of Premises:</b> <u>3800 W Lincoln Way</u>		
<b>City</b> <u>Ames</u>	<b>County:</b> <u>Story</u>	<b>Zip:</b> <u>5001400</u>
<b>Business</b> <u>(515) 292-5580</u>		
<b>Mailing</b> <u>5820 Westown Parkway</u>		
<b>City</b> <u>West Des Moines</u>	<b>State</b> <u>IA</u>	<b>Zip:</b> <u>50266</u>

**Contact Person**

<b>Name</b> <u>Kelly Palmer</u>	
<b>Phone:</b> <u>(515) 267-2949</u>	<b>Email</b> <u>kpalmer@hy-vee.com</u>

**Classification** Class E Liquor License (LE)

**Term:**12 months

**Effective Date:** 10/20/2020

**Expiration Date:**

**Privileges:**

Class E Liquor License (LE)

**Status of Business**

<b>BusinessType:</b> <u>Privately Held Corporation</u>	
<b>Corporate ID Number:</b> <u>XXXXXXXXXX</u>	<b>Federal Employer ID</b> <u>XXXXXXXXXX</u>

**Ownership**

**Randy Edeker**

<b>First Name:</b> <u>Randy</u>	<b>Last Name:</b> <u>Edeker</u>	
<b>City:</b> <u>Urbandale</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50322</u>
<b>Position:</b> <u>CEO, President</u>		
<b>% of Ownership:</b> <u>0.00%</u>	<b>U.S. Citizen:</b> <u>Yes</u>	

**Michael Skokan**

<b>First Name:</b> <u>Michael</u>	<b>Last Name:</b> <u>Skokan</u>	
<b>City:</b> <u>Waukee</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50263</u>
<b>Position:</b> <u>CFO, Treasurer</u>		
<b>% of Ownership:</b> <u>0.00%</u>	<b>U.S. Citizen:</b> <u>Yes</u>	

**Jeffrey Pierce**

<b>First Name:</b> <u>Jeffrey</u>	<b>Last Name:</b> <u>Pierce</u>	
<b>City:</b> <u>West Des Moines</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50265</u>
<b>Position:</b> <u>Asst. Treasurer, Financial Reporting</u>		
<b>% of Ownership:</b> <u>0.00%</u>	<b>U.S. Citizen:</b> <u>Yes</u>	



**Andrew Schroeder**

**First Name:** Andrew **Last Name:** Schroeder  
**City:** Johnston **State:** Iowa **Zip:** 50131  
**Position:** AVP, Assistant Controller  
**% of Ownership:** 0.00% **U.S. Citizen:** **Yes**

**Michael Jurgens**

**First Name:** Michael **Last Name:** Jurgens  
**City:** Des Moines **State:** Iowa **Zip:** 50312  
**Position:** Vice President, Secretary  
**% of Ownership:** 0.00% **U.S. Citizen:** **Yes**

**Insurance Company Information**

<b>Insurance Company:</b> <u>EMPLOYERS MUTUAL CASUALTY COMPANY</u>	
<b>Policy Effective Date:</b> <u>10/20/2019</u>	<b>Policy Expiration</b> <u>01/01/1900</u>
<b>Bond Effective</b> <u>2</u>	<b>Dram Cancel Date:</b>
<b>Outdoor Service Effective</b>	<b>Outdoor Service Expiration</b>
<b>Temp Transfer Effective Date:</b>	<b>Temp Transfer Expiration Date:</b>



**To:** Mayor John Haila and Ames City Council Members  
**From:** Lieutenant Tom Shelton, Ames Police Department  
**Date:** September 7, 2020  
**Subject:** Item No. 8: Beer Permits & Liquor License Renewal Reference City Council Agenda

The Council agenda for September 22, 2020 includes beer permits and liquor license renewals for:

- Class E Liquor License with Class B Wine Permit, Class C Beer Permit (Carryout Beer), and Sunday Sales - Hy-Vee Food & Drugstore #2, 640 Lincoln Way
- Class E Liquor License with Class B Wine Permit, Class C Beer Permit (Carryout Beer), and Sunday Sales - Hy-Vee Food Store #1, 3800 W Lincoln Way
- Class C Liquor License with Sunday Sales - Bullseye Restaurant Group LLC, 114 South Duff Avenue
- Class E Liquor License with Class B Wine Permit, Class C Beer Permit (Carryout Beer), and Sunday Sales - CVS/pharmacy #10452, 2420 Lincoln Way, #104
- Class C Beer Permit with Class B Wine Permit and Sunday Sales - Aldi Inc., #48, 108 South 5th Street
- Class B Liquor License with Catering, Outdoor Service, and Sunday Sales – Hilton Garden Inn, 1325 Dickinson Avenue
- Class B Beer with Sunday Sales - Macubana, 116 Welch Avenue

**A review of police records for the past 12 months found no liquor law violations for any of the above locations. The Ames Police Department recommends renewal of licenses for all the above businesses.**



# City of Ames Fireworks Permit Application



## PERMIT TO DISPLAY FIREWORKS APPLICATION

Name of Event	ISU 2020 Football - Flames & Pyrotechnic		
Date & Time of Event	See Attached	Rain Date & Time	TBD
Applicant Name	Nathan Terry	Phone	515.294.4653
Email	nterry@iastate.edu		
Organization Name	ISU Athletics Marketing		
Address	1800 S 4th St., Jacobson Athletics Bldg		
City	Ames	State	IA
		Zip Code	50011
Contact for Day of Display	Nathan Terry	Phone	515.451.4876
Exact location of shoot/display	Jack Trice Stadium - NW Endzone		
<input checked="" type="checkbox"/> Attach diagram of display location			
Size of shells and/or type of display	No Shells - Flames / Pyrotechnics		
<input checked="" type="checkbox"/> Attach effects list or schedule			
Name of Display Operator/Responsible Shooter	Kelm Brueschke		
<small>(This person is to be present on the day of the event.)</small>			
<input checked="" type="checkbox"/> Attach a resume showing pyrotechnic certification/qualifications			
Phone number for Display Operator/Responsible Shooter	515.321.2761		
Name of Insurance Company	Britton Gallagher - Everest Indemnity		
<small>See below for detailed information about insurance requirements.</small>			

Display sites are subject to examination by the City Fire Inspector or his/her designee. The Ames Fire Department has authority to cancel/postpone any display if it is determined that there are safety concerns.

DocuSigned by:

Applicant Signature

*Nathan Terry*

Date 8/24/2020

Display Operator Signature

*Kelm Brueschke*

Date 4/20/2020

City of Ames Insurance Requirements:

- Comprehensive General Liability limits in the amount of \$1,000,000 combined single limit and Excess Liability limits in the amount of \$5,000,000. Coverage shall be at least as broad as the ISO Form Number CG0001 covering commercial general liability written on an occurrence basis only.
- Applicant and/or Sponsor must be named as certificate holder(s).
- The City of Ames, its officers and employees must be named as additional insured.
- A copy of the current insurance certificate must be filed with the City Clerk.

**NOTE: This application not to be used for displays originating on Iowa State University property.**

Submit your completed permit application to: [rknutsen@city.ames.ia.us](mailto:rknutsen@city.ames.ia.us)

City of Ames  
City Clerk's Office  
PO Box 811  
Ames, IA 50010

For displays on property owned by Iowa State University, an alternate application must be submitted to ISU Risk Management at least six (6) weeks prior to the event. Please refer to forms and information found at: <http://www.riskmanagement.iastate.edu/events/fireworks> or contact the ISU Office of Risk Management at 515-294-7711.

### For Office Use Only

#### Documents Received

Date: \_\_\_\_\_

\_\_\_\_ Completed Application

\_\_\_\_ Sketch

\_\_\_\_ ISU Property

#### Fee

\_\_\_\_ Fee \$25.00

Date Fee Paid \_\_\_\_\_

#### Insurance

\_\_\_\_ Received \_\_\_\_\_

\_\_\_\_ Approved \_\_\_\_\_

#### Follow Up

\_\_\_\_ Application approved

\_\_\_\_ Fire Inspector approved

\_\_\_\_ Permits database updated

\_\_\_\_ Permit Letter prepared

\_\_\_\_ Letter copied and mailed

#### City Council Meeting

\_\_\_\_ Added to Agenda \_\_\_\_\_

\_\_\_\_ City Council Approved

Permit Number \_\_\_\_\_

#### Special Conditions:

#### Application Denial Reasons:



# ISU Fireworks Permit Application

## Fireworks, Pyrotechnics or Flame Effects Application Iowa State University of Science and Technology

### Applicant Information

Name of Event: Iowa State Football: Sept. 12 | Oct. 3 & 10 | Nov. 7 & 21 | Dec. 5  
Name of Organization Sponsoring Event: Athletics  
Address of Organization: 1800 South 4th Street, Jacobson Athletics Building  
Name of Applicant: Nathan Terry  
Phone: 515-294-4653 Fax: \_\_\_\_\_ E-Mail: nterry@iastate.edu

### Event Information

Event Location: Jack Trice Stadium Estimated attendance: 61,500  
Event Date: see above Time: TBD a.m./p.m. Alternate Date (rain date) for event: \_\_\_\_\_  
Organization's on-site manager or contact for day of Display: Nathan Terry  
Phone: 515-451-4876 Fax: \_\_\_\_\_ E-Mail: nterry@iastate.edu

### Firework Display Information: Attach a copy of the Display Operator credentials and applicable U.S. DOT requirement information for transportation with this application

Display Operator (company name): J&M Displays  
Address: 18064 170th Ave.  
City: Yarmouth State: IA Zip Code: 52660-9772  
Work-week Phone: 800-648-3890 Fax: 319-394-3265 E-Mail: main@jandmdisplays.com  
Operator Name for day of Display: Kelm Brueschke Cell Phone: 515-321-2761  
Other Contact for day of Display: Jake Amsden Cell Phone: 515.991.9719

### NOTE: Electronic firing ONLY

Type of Fireworks: G-Flame (propane)  
Length of Display: ~3 minutes  
Fireworks Supplier: NA  
Exact Location of Display: Jack Trice Stadium - player entrance

Attach Display Program

Attach Diagram of Display/Shoot Location

**Insurance Requirements:** Insurance coverage and certificate requirements are on the back of this form.

**Student Organizations Only:** Submit an Event Authorization and Notification Form with other event documents (including this application) at least 6 weeks prior to the event.

The display operator, EH&S and ISU Police will monitor weather conditions prior to and during the display event. EH&S, ISU Police or the Ames Fire Department have the authority to cancel or postpone any display if they determine there is not strict adherence to the approved application; or there is lightning, wind gusts or inclement weather that will cause risks to the crowd or surrounding property.

8/24/2020

Date

Nathan Terry

Sponsoring Organization Representative Signature

I have read and agree to the responsibilities stated in the ISU Fireworks, Pyrotechnics and Flame Effects Procedures and also agree that I will meet all insurance requirements listed on this application and that this insurance will be primary.

Kelm P Brueschke

Display Operator Representative Signature

DocuSigned by:

Troy Carey

Environmental Health and Safety

Michael Newton

DocuSigned by:

[Signature]

City of Ames Fire Inspector

Susie Johnson

Office of Risk Management

### APPROVAL SIGNATURES:

8/26/2020

Date

9/8/2020

Date

9/9/2020

Date

9/10/2020

Date

Submittal Instructions on Page 2

Page 1 of 2



**DISPLAY OPERATOR INFORMATION:**

The fireworks display company must carry fireworks display liability insurance with a company acceptable to Iowa State University. In accordance with the policies and procedures of Iowa State University, all event sponsors and participants must be adequately insured. An original Certificate of Insurance must be submitted with the Fireworks Application at least six (6) weeks prior to the event. Please share the following insurance requirements with your insurance agent to facilitate issuance of the certificate of insurance:

**1. The company must be at least A Class VII rated by A. M. Best Company.**

The insurance companies providing coverage must be of an acceptable financial rating as determined by Iowa State University Office of Risk Management.

Exceptions are possible; however, ISU retains the right to require the A rating. Unrated companies are not accepted.

**2. State of Iowa; Board of Regents, State of Iowa; and Iowa State University must be named as additional insureds.**

All legal entities referenced above must be individually listed on the certificate as an additional insured for liability coverage.

Additional insured status shall be on a primary and non-contributory basis.

**3. We require occurrence coverage.**

The certificates should be marked "occurrence." If there is no box marked "occurrence," we require the notation "occurrence form" in the Special Conditions box.

**4. The certificate must be complete.**

Certificates without limits, insurance company, or coverage indicated are not acceptable.

**5. Limit Requirements:**

- **General Liability**

The policy must provide the following coverage and limits as a minimum: \$1,000,000 combined single limit per occurrence for bodily injury including death, personal injury and property damage.

- **Automobile Liability**

The policy must provide the following limit for Automobile Liability: \$1,000,000 combined single limit each accident.

- **Worker's Compensation and Employer's Liability**

The policy must provide for the Statutory Limits of \$100,000/\$500,000/\$100,000. Also required under Worker's Compensation is a Waiver of Subrogation in favor of Iowa State University/State Board of Regents.

- **Excess Liability**

The policy must provide \$5,000,000 for Excess Liability coverage.

**6. The policy shall provide for thirty (30) days' written notice to Iowa State University in the event of any modification, cancellation, or termination.**

**7. Insurance policy term must be for the duration/term of contract or specific to the event date(s).**

**Certificate of Insurance**

Mail or fax the certificate to:

Office of Risk Management, Iowa State University  
3618 Administrative Services Bldg., Ames, Iowa 50011

Fax #: (515) 294-3105

For questions or concerns contact: Deb Keys, Insurance Coordinator, at (515) 294-7711

**Application Submittal**

The application must include the following attachments:

- ☐ Certificate of insurance for the Display Operator with appropriate limits and named insureds
- ☐ Copy of the Display Operator's license
- ☐ Diagram of the display location from the Display Operator
- ☐ Effects list/schedule from the Display Operator (must indicate electronic firing will be used for ignition)
- ☐ \$100.00 application processing fee (check made payable to Iowa State University)

Mail the completed application with attachments at least six (6) weeks prior to the event to:

Office of Risk Management, Iowa State University, 3618 Administrative Services Building, Ames, Iowa 50011

For questions, please contact the Office of Risk Management

Phone: (515) 294-7711 Fax: (515) 294-3105



## Show Details:

**Event Name:** Iowa State University – 2020 Football Season

**Organization:** Iowa State University Athletics Marketing

**Contact:** Mary Pink & Nathan Terry

**Address:** Intercollegiate Athletics Marketing Office, Jacobson Athletic Building  
Ames, IA 50011-1140

**Phone:** 515.294.1534      **Fax:** 515.294.2988      **Email:** [mpink@iastate.edu](mailto:mpink@iastate.edu)  
515.294.4653      **Fax:** 515.451.4876      **Email:** [nterry@iastate.edu](mailto:nterry@iastate.edu)

**Venue:** Jack Trice Stadium – See Attached Aerial View for Effects

**Responding Fire Department:** Ames Fire Department - Ames, IA

**Show Dates/Times:** Updated - 2020 Football Season Schedule

- ~~Game 1: Saturday September 12<sup>th</sup>, 2020 – TBA (Louisiana)~~
- Game 2: Saturday October 3<sup>rd</sup>, 2020 – TBA (Oklahoma)
- Game 3: Saturday October 10<sup>th</sup>, 2020 – TBA (Texas Tech)
- Game 4: Saturday November 7<sup>th</sup>, 2020 – TBA (Baylor)
- Game 5: Saturday November 21<sup>st</sup>, 2020 – TBA (Kansas State)
- Game 6: Saturday December 5<sup>th</sup>, 2020 – TBA (West Virginia)

**Duration of Show:** 60 – 90 Seconds

### **Lead Display Operator:**

Kelm Brueschke – Credentials – See Attached

- PGI Certified Shooter/Trainer
- Minnesota Fireworks License & Indoor - Close Proximity License
- Missouri Fireworks License & Indoor - Close Proximity License
- Nebraska Fireworks License
- Cell Phone: 515.321.2761

### **Back-up Display Operator:**

Jake Amsden – Credentials

- PGI Certified Shooter
- Cell Phone: 515.991.9719

### **Pyrotechnic Products Proposed – Games 1, 2, 3, 4, 5, & 6:**

Quantity	Type/Class	Description
4	Indoor/Outdoor	Flame Heads – 4 Galaxis G-Flame Propane/Canister Systems

### **Pyrotechnic Products Proposed – No Games identified, but will do this if a night game comes up:**

Quantity	Type/Class	Description
50	Close Prox (1.4g)	100mm Mines
50	Close Prox (1.4g)	48mm Mines
50	Close Prox (1.4g)	40mm Comets
50	Close Prox (1.4g)	30mm Comets
50	Close Prox (1.4g)	1 x 65' Gerbs
50	Close Prox (1.4g)	1 x 50' Gerbs



ITEM#: 10  
DATE: 09-22-20

**COUNCIL ACTION FORM**

**SUBJECT:**      **TITLE VI CIVIL RIGHTS COMPLIANCE AGREEMENT AND ASSURANCES**

**BACKGROUND:**

Title VI of the Civil Rights Act of 1964 prohibits discrimination in providing government services. Every five years, the City is subject to a compliance review by the Iowa Department of Transportation Title VI /Civil Rights Bureau to ensure the City meets all requirements of Title VI. This review was conducted in November 2019 and the City was deemed to be in compliance.

Recently, the Civil Rights Bureau randomly queried its Local Public Agencies (LPAs) database and the City of Ames was selected for verification of its Administrative Head and Title VI Coordinator on the following documents:

- U.S. Department of Transportation Standard Title VI/Non-Discrimination Assurances
- Title VI Non-Discrimination Agreement

By approving and signing the Assurances and Agreement documents, the City is ensuring that its contractors will comply with Title VI and that a Title VI Coordinator is appointed to oversee the implementation and compliance of the City's Title VI plan.

**ALTERNATIVES:**

1. Approve the Standard Title VI/Non-Discrimination Assurances and Agreement.
2. Do not approve the Standard Title VI/Non-Discrimination Assurances and Agreement.

**CITY MANAGER'S RECOMMENDED ACTION:**

The City is required to comply with Title VI regulations and was deemed in compliance following the review conducted last year. Upon random selection this year, the City is being asked to verify the Administrative Head and Title VI Coordinator.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.



## The United States Department of Transportation (USDOT)

### Standard Title VI/Non-Discrimination Assurances

#### DOT Order No. 1050.2A

The \_\_\_\_\_ (herein referred to as the “Recipient”), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the United States Department of Transportation (DOT), through the **Federal Highway Administration (FHWA)**, is subject to and will comply with the following:

#### Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled *Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation—Effectuation Of Title VI Of The Civil Rights Act Of 1964*);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the “Acts” and “Regulations,” respectively.

#### General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

*“No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity,” for which the Recipient receives Federal financial assistance from DOT, including the **FHWA**.*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973) by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

#### Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted **Federal Highway Program**:

1. The Recipient agrees that each “activity,” “facility,” or “program,” as defined in §§ 21.23 (b) and 21.23 (e) of 49 C.F.R. § 21 will be (with regard to an “activity”) facilitated, or will be (with regard to a “facility”) operated, or will be (with regard to a “program”) conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.



2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all **Federal Highway Programs** and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

*“The \_\_\_\_\_, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”*

3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
  - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
  - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
  - a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
  - b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal



financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.

10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, aaaaaaaaaaaaaaaaaa also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the **FHWA** access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by the **FHWA**. You must keep records, reports, and submit the material for review upon request to **FHWA**, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

\_\_\_\_\_ gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the **Federal Highway Program**. This ASSURANCE is binding on **Iowa**, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the **Federal Highway Program**. The person (s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

\_\_\_\_\_  
(Name of Recipient)

by \_\_\_\_\_  
(Signature of Authorized Official)

DATED \_\_\_\_\_



## APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.



## APPENDIX B

### CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

**NOW, THEREFORE**, the Department of Transportation as authorized by law and upon the condition that the \_\_\_\_\_ will accept title to the lands and maintain the project constructed thereon in accordance with laws of the state of Iowa, the Regulations for the Administration of **Federal Highway Program**, and the policies and procedures prescribed by the **Federal Highway Administration** of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the \_\_\_\_\_ all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

#### (HABENDUM CLAUSE)

**TO HAVE AND TO HOLD** said lands and interests therein unto \_\_\_\_\_ and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the \_\_\_\_\_, its successors and assigns.

The \_\_\_\_\_, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]\* (2) that the \_\_\_\_\_ will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)



## APPENDIX C

### CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the \_\_\_\_\_ pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add “as a covenant running with the land”] that:

1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, \_\_\_\_\_ will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.\*

C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the \_\_\_\_\_ will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the \_\_\_\_\_ and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)



## APPENDIX D

### CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/ agreements entered into by \_\_\_\_\_ pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, “as a covenant running with the land”) that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, \_\_\_\_\_ will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.\*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, \_\_\_\_\_ will there upon revert to and vest in and become the absolute property of \_\_\_\_\_ and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)



## APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).



**Title VI Non-Discrimination Agreement**  
**Iowa Department of Transportation**  
**and**  
**CITY of AMES, IOWA**

**Agency Information**

Name and title of administrative head:

Name: City of Ames, Iowa Title: Mayor, City of Ames, IA

Address: 515 Clark Avenue

City: Ames State: IA ZIP Code: 50010 County: Story County

Phone/FAX: 515-239-5101/239-5142 Email: john.haila@cityofames.org

Name and title of designated Title VI coordinator:

Name: Deb Schildroth Title: Title VI Coordinator/Assistant City Manager

Address: 515 Clark Avenue

City: Ames State: IA ZIP Code: 50010 County: Story County

Phone/FAX: 515-239-5202/239-5142 Email: deb.schildroth@cityofames.org

\*If the Title VI coordinator changes, please contact the Iowa DOT Title VI specialist.

**Title VI Program**

**I. Organization and staffing**

Pursuant to 23 C.F.R. § 200, CITY of AMES, IOWA  
has appointed a Title VI coordinator identified above, who is responsible for implementing and monitoring the local public agency's (LPA's) Title VI program per this agreement, and is the representative for issues and actions pertaining to this agreement. The LPA will provide the Iowa Department of Transportation with a copy of the LPA's organizational chart that illustrates the level and placement of the Title VI coordinator.

The LPA will notify the Iowa DOT in writing of any changes to the LPA's organization chart, Title VI coordinator or Title VI coordinator contact information.

**II. Assurances required**

Pursuant to 49 C.F.R. § 21.7, every application for federal financial assistance or continuing federal financial assistance must provide a statement of assurance and give reasonable guarantee that the program is (or, in the case of a new program, will be) conducted in compliance with all requirements imposed by or pursuant to 49 C.F.R. § 21 (Nondiscrimination in Federally Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964). Fully executed standard DOT Assurances (including Appendices A, B and C) are attached to this agreement.



### III. Implementation procedures

This agreement shall serve as the LPA's Title VI plan pursuant to 23 C.F.R. § 200 and 49 C.F.R. § 21. For the purpose of this agreement, "federal assistance" shall include all of the following.

- Grants and loans of federal funds.
- The grant or donation of federal property and/or interest in property.
- The detail of federal personnel.
- The sale and lease of, and permission to use (on other than a casual or transient basis), federal property or any interest in such property without consideration or at a nominal consideration, or at a consideration that is reduced for the purpose of assisting the LPA, or in recognition of the public interest to be served by such sale or lease to the LPA.
- Any federal agreement, arrangement or other contract that has as one of its purposes the provision of assistance.

The LPA shall:

1. Issue a policy statement, signed by the head of the LPA, which expresses its commitment to the nondiscrimination provisions of Title VI. The policy statement shall be circulated throughout the LPA's organization and to the public. Such information shall be published where appropriate in languages other than English.
2. Take affirmative action to correct any deficiencies found by the Iowa DOT, Federal Highway Administration or U.S. Department of Transportation (USDOT) within a reasonable time period, not to exceed 90 days, to implement Title VI compliance in accordance with this agreement. The head of the LPA shall be held responsible for implementing Title VI requirements.
3. Designate a Title VI coordinator who has a responsible position in the organization and easy access to the head of the LPA. The coordinator shall be responsible for implementing and monitoring Title VI activities and preparing required reports.
4. Develop and implement a public involvement plan that includes low-income and minority community outreach and ensures those persons who are limited-English proficient (LEP) can access services.
5. Process complaints of discrimination consistent with the provisions contained in this agreement. Investigations shall be conducted by civil rights personnel trained in discrimination complaint investigations. Identify each complainant by race, color, national origin or gender, the nature of the complaint, date the complaint was filed, date the investigation was completed, disposition, date of disposition, and other pertinent information. A copy of the complaint, together with a copy of the LPA's report of investigation, shall be forwarded to the Iowa DOT's civil rights coordinator within 60 days of the date the complaint was received by the LPA.
6. Collect statistical data (race, color, national origin, age, gender, disability, LEP and income of populations in service area) of participants in, and beneficiaries of, the programs and activities conducted by the LPA.
7. Conduct Title VI self-assessment of the LPA's program areas and activities, and of second-tier sub-recipients, contractor/consultant program areas and activities. Where applicable, revise policies, procedures and directives to include Title VI requirements. Ensure that programs, policies, and other activities do not have disproportionate adverse effects on minority and low-income populations.
8. Conduct training programs on Title VI and related statutes.
9. Prepare a yearly report of Title VI accomplishments and changes to the program covering the prior year, and identify goals and objectives for the coming year.
  - o **Annual work plan:** Outline Title VI monitoring and review activities planned for the coming year; and indicate a target date for completion.
  - o **Accomplishment report:** List major accomplishments made regarding Title VI activities. Include instances where Title VI issues were identified and discrimination was prevented. Indicate activities and efforts the Title VI coordinator and program area personnel have undertaken in monitoring Title VI. Include a description of the scope and conclusions of any special internal and external reviews conducted by the Title VI coordinator. List any major problem(s) identified and corrective action(s) taken. Include a summary and status report on any Title VI complaints filed with the LPA. Include a listing of complaints received against second-tier sub-recipients, if any, as well as a summary of complaints and actions taken.
10. Include Title VI compliant language in all contracts to second-tier sub-recipients.



**IV. Discrimination complaint procedures – allegations of discrimination in federally assisted programs or activities**

The LPA adopts the following discrimination complaint procedures for complaints relating to federally assisted transportation-related programs or activities.

1. **Filing a discrimination complaint:** Any person who believes that he or she, or any class of individuals, or in connection with any disadvantaged business enterprise, has been or is being subjected to discrimination prohibited by Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d; the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq.; Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §§ 701 et seq.; and the Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, 102 Stat. 28, has the right to file a complaint.

Any individual wishing to file a discrimination complaint must be given the option to file the complaint with the LPA, or directly with the Iowa DOT, FHWA, USDOT and U.S. Department of Justice. Complaints may be filed with all agencies simultaneously.

No individual or agency shall refuse service, discharge or retaliate in any manner against any persons because that individual has filed a discrimination complaint, instituted any proceeding related to a discrimination complaint, testified, or is about to testify, in any proceeding or investigation related to a discrimination complaint, or has provided information or assisted in an investigation.

2. **Complaint filing time-frame:** A discrimination complaint must be filed within 180 calendar days of one of the following.
  - (a) The alleged act of discrimination.
  - (b) Date when the person(s) became aware of the alleged discrimination
  - (c) Date on which the conduct was discontinued, if there has been a continuing course of conduct.

The LPA or their designee may extend the time for filing or waive the time limit in the interest of justice, specifying in writing the reason for so doing.

3. **Contents of a complaint:** A discrimination complaint must be written. The document must contain the following information.
  - a) The complainant's name and address, or other means by which the complainant may be contacted.
  - b) Identification of individual(s) or organization(s) responsible for the alleged discrimination.
  - c) A description of the complainant's allegations, which must include enough detail to determine if the LPA has jurisdiction over the complaint and if the complaint was filed timely.
  - d) Specific prohibited bases of alleged discrimination (i.e., race, color, gender, etc.)
  - e) Apparent merit of the complaint.
  - f) The complainant's signature or signature of his/her authorized representative.

In the event that a person makes a verbal complaint of discrimination to an officer or employee of the LPA, the complainant shall be interviewed by the LPA's Title VI coordinator. If necessary, the Title VI coordinator will assist the complainant in reducing the complaint to writing and then submit the written version of the complaint to the person for signature.

4. **Complaints against the LPA:** Any complaints received against the LPA should immediately be forwarded to the Iowa DOT for investigation. The LPA shall not investigate any complaint in which it has been named in the complaint. The contact information for the Iowa DOT's Title VI program is:

Iowa Department of Transportation  
Office of Employee Services – Civil Rights  
800 Lincoln Way  
Ames, Iowa 50010  
515-239-1422  
515-817-6502 (fax)  
[dot.civilrights@iowadot.us](mailto:dot.civilrights@iowadot.us)



5. **Notice of Receipt:** All complaints shall be referred to the LPA's Title VI coordinator for review and action. Within 10 days of receipt of the discrimination complaint, the coordinator shall issue an initial written Notice of Receipt that:
- a) Acknowledges receipt of the discrimination complaint.
  - b) Advises the complainant of his/her right to seek representation by an attorney or other individual of his or her choice in the discrimination complaint process.
  - c) Contains a list of each issue raised in the discrimination complaint.
  - d) Advises the complainant of the timeframes for processing the discrimination complaint and providing a determination.
  - e) Advises the complainant of other avenues of redress of their complaint, including the Iowa DOT, FHWA, USDOT and USDOJ.
6. **Notification of the Iowa DOT of a complaint:** The LPA shall advise the Iowa DOT within 10 business days of receipt of the complaint. Generally, the following information will be included in every notification to the Iowa DOT.
- a) Name, address and phone number of the complainant.
  - b) Name(s) and address(es) of alleged discriminating official(s).
  - c) Basis of complaint (i.e., race, color, national origin, gender).
  - d) Date of alleged discriminatory act(s).
  - e) Date of complaint received by the LPA.
  - f) A statement of the complaint.
  - g) Other agencies (state, local or federal) where the complaint has been filed.
  - h) An explanation of the actions the LPA has taken or proposed to resolve the issue identified in the complaint.
7. **Processing a complaint and time-frame:** The total time allowed for processing the discrimination complaint is 90 calendar days from the date the complaint was filed. There is no extension available at this level. This time-frame includes 60 calendar days at the LPA level and 30 days for review at the state level, if needed.

If the complainant elects to file a complaint with both the LPA and Iowa DOT, the complainant shall be informed that the LPA has 90 calendar days to process the discrimination complaint and the Iowa DOT shall not investigate the complaint until the 90 calendar-day period has expired.

Immediately after issuance of the Notice of Receipt to the complainant (step four), the LPA's Title VI coordinator shall either begin the fact-finding or investigation of the discrimination complaint, or arrange to have an investigation conducted.

Based on the information obtained during that investigation, the coordinator shall render a recommendation for action in a Report of Findings to the head of the LPA.

8. **Alternative dispute resolution/mediation process:** The complainant must be given an invitation to participate in mediation to resolve the complaint by informal means. The LPA's Title VI coordinator shall include an invitation to mediation with the Notice of Receipt, offering the opportunity to use the alternative dispute resolution/mediation process.

If the complaint selects mediation, it allows disputes to be resolved in a less adversarial manner. With mediation, a neutral party assists two opposing parties in a dispute come to an agreement to resolve their issue. The mediator does not function as a judge or arbiter, but simply helps the parties resolve the dispute themselves.

Upon receiving a request to mediate, the LPA's Title VI coordinator shall identify or designate a mediator who must be a neutral and impartial third party. The mediator must be a person acceptable to all parties and who will assist the parties in resolving their disputes.

If the complainant chooses to participate in mediation, she or he or the designee must respond in writing within 10 calendar days of the date of the invitation. This written acceptance must be dated and signed by the complainant and must also include the relief sought.



After mediation is arranged, a written confirmation identifying the date, time and location of the mediation conference shall be sent to both parties. If possible, the mediation process should be completed within 30 calendar days of receipt of the discrimination complaint. This will assist in keeping within the 90 calendar-day time-frame of the written Notice of Final Action if the mediation is not successful.

If resolution is reached under mediation, the agreement shall be in writing. A copy of the signed agreement shall be sent to the Iowa DOT's Title VI program coordinator. If an agreement is reached, but a party to it believes his/her agreement has been breached, the non-breaching party may file another complaint. If the parties do not reach resolution under mediation, the LPA's Title VI coordinator shall continue with the investigation.

9. **Notice of Final Action:** A written Notice of Final Action shall be provided to the complainant within 60 days of the date the discrimination complaint was filed. It shall contain:
- a) A statement regarding the disposition of each issue identified in the discrimination complaint and reason for the determination.
  - b) A copy of the mediation agreement, if the discrimination complaint was resolved by mediation.
  - c) A notice that the complainant has the right to file a complaint with the Iowa DOT, FHWA, USDOT or USDOJ within 30 calendar days after the Notice of Final Action, if she or he is dissatisfied with the final action on the discrimination complaint.

The LPA's Title VI coordinator shall provide the Iowa DOT's Title VI program coordinator with a copy of this decision, as well as a summary of findings upon completion of the investigation. Should deficiencies be noted in the implementation of these discrimination complaint procedures by the LPA, the Iowa DOT's Title VI program coordinator will work in conjunction with the LPA's Title VI coordinator to review the information and/or provide technical assistance in the discrimination complaint process, mediation process, and/or investigation.

10. **Corrective action:** If discrimination is found through the process of a complaint investigation, the respondent shall be requested to voluntarily comply with corrective action(s) or a conciliation agreement to correct the discrimination.
11. **Confidentiality:** LPA and Iowa DOT Title VI program coordinators are required to keep the following information confidential to the maximum extent possible, consistent with applicable law and fair determination of the discrimination complaint.
- a) The fact that the discrimination complaint has been filed.
  - b) The identity of the complainant(s).
  - c) The identity of individual respondents to the allegations.
  - d) The identity of any person(s) who furnished information relative to, or assisting in, a complaint investigation.
12. **Record keeping:** The LPA's Title VI coordinator shall maintain a log of complaints filed that alleged discrimination. The log must include:
- a) The name and address of the complainant.
  - b) Basis of discrimination complaint.
  - c) Description of complaint.
  - d) Date filed.
  - e) Disposition and date.
  - f) Any other pertinent information.

All records regarding discrimination complaints and actions taken on discrimination complaints must be maintained for a period of not less than three years from the final date of resolution of the complaint.



**V. Sanctions**

In the event the LPA fails or refuses to comply with the terms of this agreement, the Iowa DOT may take any or all of the following actions.

- a) Cancel, terminate or suspend this agreement in whole or in part.
- b) Refrain from extending any further assistance to the LPA under the program from which the failure or refusal occurred, until satisfactory assurance of future compliance has been received from the LPA.
- c) Take such other action that may be deemed appropriate under the circumstances, until compliance or remedial action has been accomplished by the LPA.
- d) Refer the case to the USDOJ for appropriate legal proceedings.

**IOWA DEPARTMENT OF TRANSPORTATION**

**CITY of AMES, IOWA**

\_\_\_\_\_  
Signature

Team Leader, Bureau of Civil Rights, IA DOT

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

John Haila, Mayor, City of Ames, IA

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
Date



## Title VI Non-discrimination Policy Statement

The CITY of AMES, IOWA, hereinafter referred to as the LPA, hereby assures that no person shall on the grounds of race, color, national origin, gender, age or disability, as provided by Title VI of the Civil Rights Act of 1964, 42 U.S.C. §2000d, and the Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, 102 Stat. 28, be excluded from participation in, be denied the benefits of or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance. The LPA further assures every effort will be made to ensure nondiscrimination in all of its programs and activities, regardless of whether those programs and activities are federally funded.

It is the policy of the LPA to comply with Title VI of the Civil Rights Act of 1964; Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e; Age Discrimination Act of 1975, 42 U.S.C. §§ 6101-6107; Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. §§ 4601-4655; 1973 Federal Aid Highway Act, 23 U.S.C. § 324; Title IX of the Education Amendments of 1972, Pub. L. No. 92-318, 86 Stat. 235; Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §§ 701 *et seq*; Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, 102 Stat. 28; Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 *et seq.*; Title VIII of the Civil Rights Act 1968, 42 U.S.C. §§ 3601-3631; Exec. Order No. 12898, 59 Fed. Reg. 7629 (1994) (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations); and Exec. Order No. 13166, 65 Fed. Reg. 50121 (2000) (Improving Access to Services for Persons with Limited English Proficiency).

The Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, 102 Stat. 28, broadened the scope of Title VI coverage by expanding the definition of terms "programs or activities" to include all programs or activities of federal-aid recipients, subrecipients and contractors/consultants, regardless of whether such programs and activities are federally assisted.

Pursuant to the requirements of Section 504 of the Rehabilitation Act of 1973, Pub. L. No. 93-112, 87 Stat. 355, the LPA hereby gives assurance that no qualified disabled person shall, solely by reason of disability, be excluded from participation in, be denied the benefits of or otherwise be subjected to discrimination, including discrimination in employment, under any program or activity that receives or benefits from this federal financial assistance.

The LPA also assures that every effort will be made to prevent discrimination through the impacts of its programs, policies and activities on minority and low-income populations. In addition, the LPA will take reasonable steps to provide meaningful access to services for persons with LEP. The LPA will, where necessary and appropriate, revise, update and incorporate nondiscrimination requirements into appropriate manuals, directives and regulations.

In the event the LPA distributes federal-aid funds to a second-tier subrecipient, the LPA will include Title VI language in all written agreements.

The LPA's Deb Schildroth, Ass't City Manager, City of Ames, Iowa, is responsible for initiating and monitoring Title VI activities, preparing reports and performing other responsibilities, as required by 23 C.F.R. § 200 and 49 C.F.R. § 21.

\_\_\_\_\_  
Signature

John Haila, Mayor, City of Ames, IA

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
Date



ITEM # 11  
DATE: 09-22-20

**COUNCIL ACTION FORM**

**SUBJECT:** APPROVAL OF FY 2019/20 ANNUAL STREET FINANCE REPORT

**BACKGROUND:**

Section 312.14 of the Code of Iowa requires each city receiving allotments of Road Use Tax funds to annually prepare and submit to the Iowa Department of Transportation (IDOT) by September 30 a Street Finance Report of expenditures and receipts for the fiscal year then ended. Those cities not complying with this section of the Code of Iowa will have Road Use Tax funds withheld until the city complies.

The report to be submitted is for the fiscal year ended June 30, 2020.

**ALTERNATIVES:**

1. Approve the 2020 Street Finance Report.
2. Do not approve the 2020 Street Finance Report.

**CITY MANAGER'S RECOMMENDED ACTION:**

In order for the City of Ames to continue to receive Road Use Tax funds, it is necessary to submit an annual Street Finance Report to the IDOT. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the 2020 Street Finance Report.



ITEM#: 12  
DATE: 09-22-20

### **COUNCIL ACTION FORM**

**SUBJECT: THE DISASTER RECOVERY CENTER LICENSE/USE AGREEMENT  
BETWEEN THE FEDERAL EMERGENCY MANAGEMENT AGENCY  
(FEMA) AND THE CITY OF AMES**

#### **BACKGROUND:**

Story County residents affected by the August 10<sup>th</sup> derecho storm event may be eligible for Individual Assistance grant funds offered through the Federal Emergency Management Agency (FEMA). Assistance can be used to help individuals and business owners recover from the effects of the disaster. Examples of assistance include temporary housing, home repairs, medical expenses, legal services, and low-cost loans to cover uninsured property losses. Application can be made electronically as well as by regular mail and FAX. **In addition to these options, FEMA also wants to establish a temporary Disaster Recovery Center (DRC) in Story County. The purpose of the DRC is to offer Ames and Story County residents the option to submit their FEMA applications and supporting documentation in person. The DRC will be staffed with FEMA personnel who can answer questions about disaster assistance programs and scan application documents.**

On September 18, 2020, FEMA conducted a site inspection at North River Valley Park, 725 E. 13<sup>th</sup> Street, along with Keith Abraham, Parks and Recreation Director, and Story County Emergency Management staff. As a result of that inspection, FEMA wants to proceed with using the parking lot and concession building at North River Valley Park and has supplied the City with their License/Use Agreement. The Agreement has been reviewed by Legal, Risk Management, and Parks and Recreation. It is important to note that due to COVID-19, the DRC will offer drive-through service only. Residents will be expected to stay in their vehicles when visiting, and face coverings are required.

#### **ALTERNATIVES:**

1. Approve the FEMA License/Use Agreement for a temporary Disaster Recovery Center serving Ames and Story County.
2. Do not approve the FEMA License/Use Agreement.

#### **CITY MANAGER'S RECOMMENDED ACTION:**

The DRC is an important option for residents and businesses impacted by the derecho storm event. It will provide in-person service to help address questions and submit FEMA



applications for assistance. If Council approves the agreement, the anticipated opening date of the DRC is September 28, 2020.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.





**FEMA**

## LICENSE/USE AGREEMENT

1. **Parties.** The Parties to this Agreement are the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), as Licensee and the City of Ames, Iowa (Licensor).

2. **Authority.** This Agreement is authorized under the provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207, et seq.

3. **Purpose.** FEMA desires to use, and the Licensor agrees to license and permit FEMA to use the following described property (hereinafter referred to as the "Premises") at no cost to FEMA:

North River Valley Park, 725 E 13th Street, Ames, IA 50010. FEMA will utilize the concession building and the parking lot, to set up cones for 2 lanes to register applicants and drop off documentation. Hours are Monday-Saturday from 0700 to 1900. The Mobile Communications Operation Vehicle (MCOV) will be placed in the same parking lot. FEMA will hire security for 24 hours, 7 days a week surveillance. American Disabilities Act (ADA) portable restroom(s) will be placed on the Premises and will be utilized during hours of operation.

4. **Scope.** The Licensor will authorize FEMA the use of the premises identified above for the following purposes:

Disaster Recovery Center Document Dropoff center utilizing a Mobile Communications Operating Vehicle (MCOV) to support applicant registrations.

5. **Duration.** This Agreement shall become effective upon execution and expire no later than 30 days from execution date, unless, terminated prior to that date with 10 calendar days' notice from either party. The Agreement may be extended by mutual consent of the parties.

### 6. **Duties and Responsibilities.**

a. Licensor shall:

- 1) At no cost to FEMA, maintain the premises in good repair and condition;
- 2) Provide FEMA with any keys or other instruments necessary to access the Premises, as needed by FEMA, and coordinate with FEMA to assist with limiting the access of third parties;
- 3) Maintain at Licensor's own expense existing electrical service and any existing lighting for the duration of this Agreement;



- 4) Permit FEMA to install, if necessary: Fencing, portable toilets, additional lighting, generators, temporary guard shelters, signage and other removable property necessary to carry out the intended use of the Premises; and,
- 5) Maintain insurance for liability, and for loss of or damage to the property, arising from the wrongful or negligent acts or omissions of third parties.

b. FEMA shall:

- 1) Maintain the Premises in clean and orderly condition;
- 2) Surrender the Premises in the same state and condition as it was in at the commencement of FEMA use and occupancy, including the removal of any items installed in accordance with 6a (4) above;
- 3) Provide for any required security or cleaning services under separate contract at FEMA expense; and,
- 4) Permit the Licensor to enter the Premises with approval of the designated FEMA Point of Contact, or as otherwise coordinated for routine entry or shared use, as described in paragraph 3 of this Agreement.

7. **Non-Fund Obligor Agreement.** Nothing in the Agreement shall authorize FEMA to obligate or transfer any funds in connection with FEMA's use and occupancy of the Premises. Any additional work or activity that would require the transfer of funds or the provision of goods or services among the parties will require execution of a separate agreement and will be contingent upon the availability of appropriated funds. Such activity must be independently authorized by appropriate statutory authority. This Agreement does not provide such authority.

8. **Liability.** Licensor and the United States each agree to be responsible for the negligent or wrongful acts or omissions of their respective employees arising under this agreement. The parties agree -- subject to any limitations imposed by law, rule, or regulation -- to cooperate in good faith to resolve any claims promptly and, whenever appropriate, without litigation. For all claims or suits arising under this agreement, each party's designated legal representatives will, within (7) calendar days of receipt, provide each other's designated legal representatives copies of any documents memorializing such claims. Nothing in this Agreement shall be construed as a waiver of any sovereign immunity of the United States. The Federal Tort Claims Act (FTCA), 28 U.S.C. §§ 1346 (b), 2671-2680 provides the exclusive monetary damages remedy for allegedly wrongful or negligent acts or omissions by federal employees within the scope of their employment.

9. **Compliance with Applicable Law.** The Licensor shall comply with all Federal, State and local laws applicable to the Licensor as owner, or Licensor, or both of the Premises, including, without limitation, laws applicable to construction, ownership, alteration or operation of both or either thereof, and will obtain and maintain all required and permits, licenses and similar items, at no cost to FEMA. United States law will be applied to resolve any dispute or claim.

10. **Proper Use of Premises.** Licensor warrants that the Premises may be used for the purposes intended by FEMA as described in this Agreement. Nothing in this Agreement shall be construed to



create a duty on FEMA to inspect for toxic material or latent environmental conditions which could be affected by FEMA's intended use of the Premises. Any known environmental conditions which could affect FEMA's use of the Premises, known to the Licensor, must be disclosed to FEMA.

11. **Integrated Agreement:** This Agreement contains the entire agreement of the parties. No agreement outside of this document can alter these provisions. Any changes to this Agreement must be made in writing with the mutual consent of the parties.

12. **Points of Contact.**

- a. The FEMA Point of Contact is:  
Fayne Knobbe  
Logistics Section Chief  
11224 Holmes Rd, Kansas City, MO 64131  
816-304-9651, [fayne.knobbe@fema.dhs.gov](mailto:fayne.knobbe@fema.dhs.gov)
- b. The Licensor's Point of Contact is:  
Keith Abraham  
City of Ames Parks and Recreation Director  
1500 Gateway Hills Park Drive  
Ames, IA 50010  
515-239-5349, [Keith.abraham@cityofames.org](mailto:Keith.abraham@cityofames.org)

13. **Other Provisions.** Nothing in this agreement is intended to conflict with current law or regulations or the directives of DHS/FEMA. If a term of this agreement is inconsistent with any such authority, then that term shall be invalid, but the remaining terms and conditions of this agreement shall remain in full force and effect.

14. **Effective Date.** The terms of this agreement will become effective on the date of signature of the authority representatives of all parties.

15. **Modification.** This agreement may be modified upon the mutual written consent of the parties.

APPROVED BY:

\_\_\_\_\_  
Keith Abraham  
City of Ames Parks and Recreation Director  
City of Ames Iowa

\_\_\_\_\_  
Fayne Knobbe  
Logistics Section Chief  
Federal Emergency Management Agency

Date: \_\_\_\_\_

Date: \_\_\_\_\_



**COUNCIL ACTION FORM**

**SUBJECT: PRELIMINARY PLANS AND SPECIFICATIONS FOR BAKER  
SUBDIVISION GEOTHERMAL HEAT PUMP SYSTEM**

**BACKGROUND:**

On August 5, 2020 the City of Ames signed a professional services contract with Design Engineers P.C. to design a Geothermal Heat Pump System for the Baker Subdivision. The subdivision consists of 26 single-family lots and one multi-family lot along Tripp Street between Wilmoth Avenue and State Avenue. The geothermal system would provide space heating and cooling and boost water heating efficiency for all the homes in the subdivision. Ames Electric Services would install, own, and operate the well field and distribution piping to serve customer-owned appliances in the homes.

The construction costs are estimated at \$290,000, with a project life of over 50 years. A monthly customer charge would be based on the size of the customer's system. The average charge would start at \$5.25, with Council-approved rate increases as appropriate, resulting in a payback time of around 27 years. One goal of the project would be to keep the utility costs of homes in the neighborhood comparable to or lower than those with more traditional heating and cooling systems.

**This project proposal was motivated by an effort to advance environmental sustainability of the subdivision developed by the City, while maintaining affordable utility costs for the mixed-income neighborhood. Ground source heat pumps are highly efficient and reduce both emissions and operating costs of home heating, cooling, and water heating.**

Despite their advantages, ground source heat pumps have seen slow adoption because they have a high up-front cost and provide a return on investment over many years (10-25-year ROI, with system lifetimes of 50+ years). That is a difficult investment model for most individuals, and especially difficult for low-income, first-time homeowners.

With the utility-provided well field and distribution system proposed with this project, homeowners can connect to the system with no greater up-front costs than traditional heating and cooling systems. The operating costs are also similar, at today's natural gas prices. (The cost comparison would favor geothermal with the projected increase in natural gas prices and changes to regional climate.) Greenhouse gas emissions are expected to be 10-14% lower than traditional HVAC systems and water heaters. As Ames' energy portfolio adds more renewable energy sources, emissions could be reduced even further.



The system would reduce the electric demand of cooling homes during the electric system's peak hours compared to standard efficiency air conditioners. It would also help to balance the seasonal load and utilization of existing electric infrastructure.

The Baker Subdivision is a unique opportunity for a district geothermal model because the City is acting as the developer of this neighborhood. This allows City departments to coordinate in the installation of this innovative application of a reliable, proven technology.

**The system would also serve as a demonstration of the performance of geothermal heat pumps and introduce more local contractors and residents to the technology. This could encourage further adoption of geothermal heat pumps, which would further reduce summer peak loads and community greenhouse gas emissions. Customer-owned geothermal systems have been supported with rebates for many years for those reasons.**

The approved Operation and Maintenance budget for Demand Side Management contains \$405,756 carried forward from the FY 2019/20 budget to cover these costs.

#### **ALTERNATIVES:**

1. Approve the preliminary plans and specifications for the Baker Subdivision Geothermal Project and set October 14, 2020, as the bid due date and October 27, 2020, as the date of hearing and award of contract.
2. Do not approve the preliminary plans and specifications, and delay the Baker Subdivision project.

#### **CITY MANAGER'S RECOMMENDED ACTION:**

A district geothermal system will provide highly efficient, affordable, and sustainable space heating and cooling to the new development. The project would reduce greenhouse gas emissions of the homes by 10-14%, without increasing costs to the homeowners. This application of geothermal heating and cooling would introduce more local contractors and residents to the technology and model an innovative project structure for other communities.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.





CITY OF  
ames™

*Caring People ♦ Quality Programs ♦ Exceptional Service*

# MEMO

**TO:** Mayor and City Council

**FROM:** City Clerk's Office

**DATE:** September 18, 2020

**SUBJECT:** Contract and Bond Approval

There is no Council Action Form for Item Nos. 14 and 15. Council approval of the contract and bond for these projects is simply fulfilling a Code of Iowa requirement.

/drv



**COUNCIL ACTION FORM**

**SUBJECT:**     **MOTOR REPAIR CONTRACT FOR POWER PLANT– CHANGE  
ORDER NO. 1**

**BACKGROUND:**

The City's Power Plant has two natural gas-fired, high-pressure steam turbine electric generating units which are referred to as Units No. 7 and 8. These units require regular professional maintenance and repair. The units operate under environmental conditions with high heat and high pressure. Due to these operational conditions, numerous motors are necessary to safely and reliably operate the Power Plant. All this equipment must be professionally maintained, serviced, adjusted, repaired, and rebuilt.

On May 26, 2020, Council approved the contract renewal with Electrical Engineering and Equipment Company, Windsor Heights, Iowa, for the Motor Repair Contract for Power Plant for the one-year period from July 1, 2020, through June 30, 2021 in the amount not to exceed \$23,000.

This year there was a failure on one of the large 100hp DC motors at the RDF bin. Repair quote for this motor alone is \$26,570.24. Therefore, a Change Order is needed before repairs can be made.

**The action being requested is to approve Change Order No. 1 to the Motor Repair Contract. This change order will add an additional \$20,000 to the current contract for FY2020/21. This will bring the total contract amount to \$43,000 which will allow for the repair of this motor and provide funding for additional motor failures that might occur.**

Invoices will be based on contract rates for time and materials for services that are actually received.

**ALTERNATIVES:**

1. Approve contract Change Order No. 1 with Electrical Engineering and Equipment Company, Windsor Heights, Iowa for the Motor Repair Contract for Power Plant in the not-to-exceed amount of \$20,000. This will bring the total FY2020/21 contract value to a not-to-exceed amount of \$43,000.
2. Do not approve the change order. This action will require separate quotes for future repairs.



**CITY MANAGER'S RECOMMENDED ACTION:**

This change order is necessary to properly maintain motors and to carry out emergency and scheduled repairs resulting from equipment failures. This contract should achieve a consistent, high quality diagnosis, repair, and/or overhaul of a motor to assure the good operating condition of the equipment with minimum delay and cost.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative #1 as stated above.



**COUNCIL ACTION FORM**

**SUBJECT:** PLAT OF SURVEY (BOUNDARY LINE ADJUSTMENT) FOR 4000 COCHRANE PARKWAY AND 600 BELLFLOWER DRIVE

**BACKGROUND:**

The City's subdivision regulations found in Chapter 23 of the *Ames Municipal Code* include the process for creating or modifying property boundaries and for determining if any improvements are required in conjunction with the platting of property. The regulations also describe the process for combining existing platted lots or conveyance parcels in order to create a parcel for development purposes. A plat of survey is allowed by Section 23.309 for the consolidation of conveyance parcels and for boundary line adjustments.

**This proposed plat of survey (see *Attachment C*) is for a boundary line adjustment to consolidate two existing lots, Lots 3 and 4, South Fork Sixth Addition, to create one 1.52-acre parcel, labeled as Parcel 'A.'** These lots are located at 4000 Cochrane Boulevard and 600 Bellflower Drive and are currently vacant (see *Attachments A & B*). The property is zoned FS-RL (Suburban Residential Low Density). The existing lots were approved as part of the Final Plat for South Fork Sixth Addition in August 2014.

**The consolidation of the existing lots is necessary to create a legal lot (Parcel 'A') for construction of a new single-family detached dwelling.** Sidewalk and street trees must be installed prior to occupancy of the new dwelling, as part of the subdivision improvements required for South Fork Sixth Addition.

Approval of this plat of survey (Attachment B) will allow the applicant to prepare the official plat of survey and submit it to the Planning and Housing Director for review. The Director will sign the plat of survey confirming that it fully conforms to all conditions of approval. The prepared plat of survey may then be signed by the surveyor, who will submit it for recording in the office of the Story County Recorder.

**ALTERNATIVES:**

1. Approve the proposed plat of survey.
2. Deny the proposed plat of survey on the basis that the City Council finds that the requirements for plats of survey as described in Section 23.309 have not been satisfied.
3. Refer this request back to staff and/or the owner for additional information.



**CITY MANAGER'S RECOMMENDED ACTION:**

Staff has determined that the proposed plat of survey satisfies all Subdivision Code requirements for a boundary line adjustment of existing lots and has made a preliminary decision of approval. No conflict exists with the existing FS-RL zoning standards as a result of the boundary line adjustment. Completion of sidewalk and street tree installation will be required for the new Parcel 'A,' as part of improvements required for South Fork Subdivision.

Therefore, it is the recommendation of the City Manager that the City Council accept Alternative #1, thereby adopting the resolution approving the proposed plat of survey.



## ADDENDUM

### PLAT OF SURVEY FOR 4000 COCHRANE PARKWAY & 600 BELLFLOWER DRIVE

Application for a proposed plat of survey has been submitted for:

- ☐ Conveyance parcel (per Section 23.307)
- ☒ Boundary line adjustment (per Section 23.309)
- ☐ Re-plat to correct error (per Section 23.310)
- ☐ Auditor's plat (per Code of Iowa Section 354.15)

The site is located at:

Owner: Hunziker Construction Services, Inc.

Existing Street Addresses: 4000 Cochrane Boulevard  
600 Bellflower Drive

Assessor's Parcel #: 0908196070 (4000 Cochrane Blvd.)  
0908196080 (600 Bellflower Dr.)

#### Legal Description:

Survey Description-Parcel A: "All of Lot 3 and also all of Lot 4, of South Fork  
Subdivision to the City of Ames, Story County,  
Iowa

#### Public Improvements:

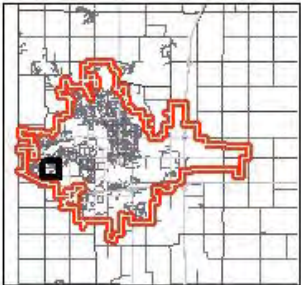
The preliminary decision of the Planning Director finds that approval requires all public improvements associated with and required for the proposed plat of survey be:

- ☐ Installed prior to creation and recordation of the official plat of survey and prior to issuance of zoning or building permits.
- ☐ Delayed, subject to an improvement guarantee as described in Section 23.409.
- ☒ Not Applicable. (No additional improvements required other than sidewalk and street trees that are required as part of South Fork Subdivision.)

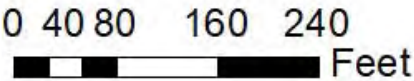
Note: The official plat of survey is not recognized as a binding plat of survey for permitting purposes until a copy of the signed and recorded plat of survey is filed with the Ames City Clerk's office and a digital image in Adobe PDF format has been submitted to the Planning & Housing Department.



Attachment A- Location Map

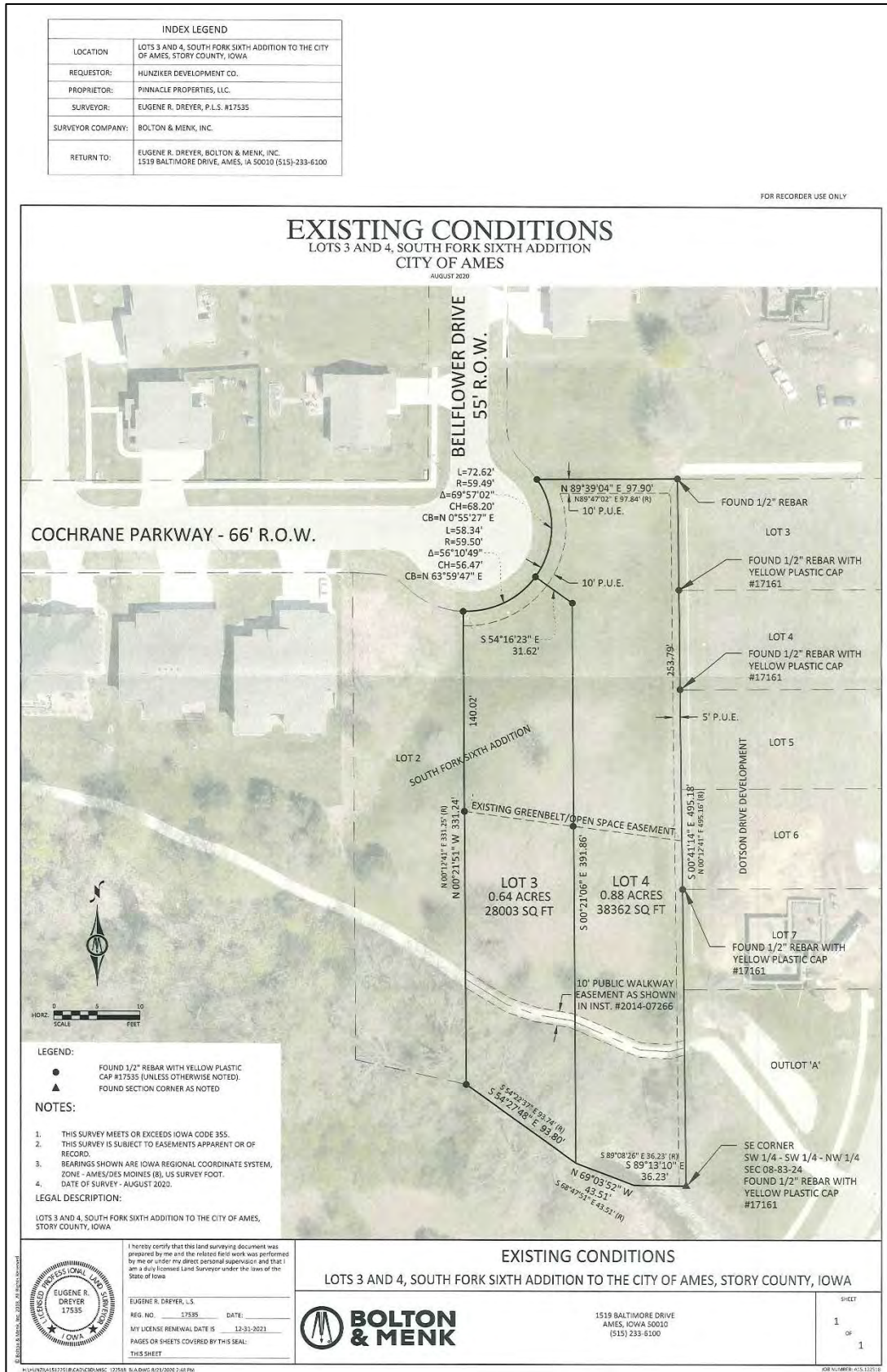


Location Map  
4000 Cochrane Parkway  
& 600 Bellflower Drive





## Attachment B - Existing Conditions





## Attachment C- Plat of Survey

# INDEX LEGEND

LOCATION	LOTS 3 AND 4, SOUTH FORK SIXTH ADDITION TO THE CITY OF AMES, STORY COUNTY, IOWA
REQUESTOR:	HUNZIKER DEVELOPMENT CO.
PROPRIETOR:	HUNZIKER CONSTRUCTION SERVICES
SURVEYOR:	ELUGER R. DREYER, P.L.S., #17535
SURVEYOR COMPANY:	BOLTON & MENK, INC.
RETURN TO:	ELUGER R. DREYER, BOLTON & MENK, INC. 1519 BALTIMORE DRIVE, AMES, IA 50010 (515) 233-6100

FOR RECORD/USE ONLY

## BOUNDARY LINE ADJUSTMENT

LOTS 3 AND 4, SOUTH FORK SIXTH ADDITION  
CITY OF AMES

COCHRANE PARKWAY - 66' R.O.W.

BELLFLOWER DRIVE  
55' R.O.W.

THE AMES CITY COUNCIL APPROVED THIS  
PLAN OF SURVEY ON \_\_\_\_\_, 20\_\_\_\_, WITH RESOLUTION NUMBER \_\_\_\_\_  
I CERTIFY THAT IT CONFORMS TO ALL CONDITIONS OF APPROVAL.

**PLANNING & HOUSING DIRECTOR**

**NOTES**

1. ADDRESS OF PARCEL 'A' WILL BE 4000 COCHRANE PARKWAY
2. PARCEL 'A' LIES WITHIN THE SPECIAL FLOOD HAZARD AREA AS SHOWN ON THE FIRM PANEL 1916C0143E - FIRM DATE 10/16/2014
3. GREENBELT EASEMENT CONTAINS 34614 SQ. FT.
4. PUBLIC UTILITY EASEMENT CONTAINS 462 SQ. FT.
5. SIDEWALK EASEMENT CONTAINS 1638 SQ. FT.
6. THIS SURVEY MEETS OR EXCEEDS IOWA CODE 355.
7. THIS SURVEY IS SUBJECT TO EASEMENTS APPARENT OR OF RECORD.
8. BEARINGS & DISTANCES ARE IN THE IOWA STATE COORDINATE SYSTEM, ZONE 14N.
9. DATE OF SURVEY - AUGUST 2020.

**LEGEND:**

- FOUND 1/2" REBAR WITH YELLOW PLASTIC CAP #17161 (UNLESS OTHERWISE NOTED)
- ▲ FOUND SECTION CORNER AS NOTED
- (R) RECORDED DIMENSION
- P.U.E. PUBLIC UTILITY EASEMENT

**PARCEL 'A' DESCRIPTION:**

ALL OF LOT 3 AND ALSO ALL OF LOT 4, OF SOUTH FORK SIXTH ADDITION TO THE CITY OF AMES, IOWA.

BOUNDARY LINE ADJUSTMENT

LOTS 3 AND 4, SOUTH FORK SIXTH ADDITION TO THE CITY OF AMES, STORY COUNTY, IOWA

**BOLTON & MENK**

1519 BALTIMORE DRIVE  
AMES, IOWA 50010  
(515) 233-6100

SHEET

1

OF 1



**COUNCIL ACTION FORM**

**SUBJECT: FINAL COMPLETION OF EAST HIGHWAY 30 FORCE MAIN IMPROVEMENT PROJECT**

**BACKGROUND:**

On March 24, 2020, City Council awarded a contract to Synergy Contracting, LLC in the amount of \$234,655 for the replacement of the East Highway 30 force main. The project was bid as a unit price contract; one change order was issued to reconcile the final quantities. The change order was for \$960, bringing the final contract amount to \$235,615.

All work under this contract was completed in accordance with the plans and specifications. A copy of the Engineer's Certificate of Completion is attached. The revised project expenses and project budget are shown below.

Project Expenses:

Engineering Fees	18,500
Original Contract	234,655
<u>Change Order #1</u>	<u>960</u>
Total Project Cost	254,115

Project Budget:

FY 15/16 CIP	212,000
<u>Savings from Clarifier Drive Replacement</u>	<u>108,340</u>
Total Available Funding	320,340

**ALTERNATIVES:**

1. Accept final completion of the East Highway 30 Force Main Improvement Project and authorize final payment, in accordance with the contract, to Synergy Contracting, LLC.
2. Do not accept completion of the project.

**CITY MANAGER'S RECOMMENDED ACTION:**

Work for the project has been completed in accordance with plans and specifications. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.



## Staff Report

**EAST UNIVERSITY IMPACT AREA URBAN REVITALIZATION AREA**

September 22, 2020

**BACKGROUND:**

At its August 25<sup>th</sup> meeting, the City Council received a staff report regarding the status of Urban Revitalization Areas and programs across the City. After discussion of potential changes to the East University Impact Area URA (Attachment A), City Council directed staff to reach out to the Greek community to gain input about potential projects that could be impacted by changes. City Council also requested additional background information regarding the value of tax abatements that have been approved previously in the area.

Staff identified four projects that are in process to varying degrees and may be eligible for future partial property tax abatement.

- 2125 Greely (Alpha Delta PI) - Approved Minor Site Development Plan completed 2020
- 224 Ash (TKE) - Approved Minor Site Development Plan for an addition 2021
- 138 Gray (Acacia) - Approved Demolition and Minor Site Development Plan, to be completed in 2020
- 120 Lynn (Kappa Kappa Gamma) - Approved Demolition and Minor Site Development Plan, planned construction in 2021

Staff received correspondence back from Steve Jones of Delta Tau Delta (See Attachment C) describing their experience and the value received to the area from the program. From his experience he believes significant projects take 3+ years to plan and execute and the abatement helps to smooth out financial changes as a result of increases in property taxes as a result of the increased value of the property. In addition, Staff discussed the potential changes with representatives of Kappa Kappa Gamma. Their concern is whether or not the City Council decides to eliminate the tax abatement incentive prior to them completing the construction of their new house. No other feedback was received about planned projects for the next two to three years or about the possibility of eliminating the tax abatement incentive.

Staff also collected data from the past ten years for 15 projects that have received property tax abatement. Attachment B includes a table identifying the project location and estimated value of abatements. The estimated value of the abated property taxes (across all levying authorities) for these 15 projects is \$1,140,359. This estimate is based upon the initial year of abatement with state rollback and levy rates. Rollback and levies



vary over time which means the abated value would be slightly more or less than what is estimated. Approximately 36% of the Greek Houses in the URA have taken advantage of the program in the past ten years. This does not include the four potential projected identified above.

### **OPTIONS RELATED TO EAST UNIVERSITY IMPACTED URA:**

Originally the eligibility criteria were designed to encourage preservation and expansion of existing Greek houses by incentivizing reinvestment in the area and supporting the Greek system to maintain its presence near campus. During the rapid expansion of ISU enrollment during the past decade, several things started to occur more frequently than were anticipated in the early 2000's. Staff saw a steady increase in the size of Greek houses due to a reduction in required parking as a result of 2014 zoning text amendment along with the desire to upgrade and add amenity space, even if there is little or no increase in the bed capacity of the facility. Additional new chapters decided to locate in the area due to its location near campus. There have been three approved demolitions and new construction approvals in the past five years.

**With the change to the URA criteria in 2018 to allow for either additions or new construction to be eligible for tax abatement, the City created somewhat opposing policies between its current restrictive demolition standards in the Zoning Ordinance and its financial incentives for Greek homes in the URA. With the potential Kappa Kappa Gamma house at 120 Lynn approved for new construction in December 2019, there would be four new construction Greek homes that would receive partial property tax abatement. City Council directed staff to address this difference with proposed adjustments to the URA criteria to not allow for new construction to be eligible for tax abatement.** Council has noted the intent was to allow for the Kappa Kappa Gamma house at 120 Lynn to proceed under the current rules as it was approved for demolition in December 2019.

Rather than solely amend the criteria for new construction, it is also possible the Council could conclude that incentives for Greek house expansions are no longer necessary either due to the desirability of the area for locating Greek houses or the lack of a need to support expansion of amenity space. There does not appear to be a push to locate in other areas that are less costly or easier to develop than these areas adjacent to campus.

### **Option 1 – “New construction” be eliminated for the tax abatement eligibility.**

The change in focus of the URA from preserving existing Greek houses in this area to the greatest extent possible to now allowing tax abatement after demolition and new construction, will over time eliminate some of the historic characteristics of the area that once made it distinctive. Although the URA criteria do not include specific historic preservation standards, it was one of the reasons for the initial standards for only addressing expansions. **Eliminating new construction as an eligibility criterion restores tax abatement as an incentive to encourage and support reuse of**



**buildings or adaptive reuse of Greek houses** (some of which are likely to be historically and architecturally significant).

**Even though demolition must be approved based upon financial hardship, concern has been expressed that the City might be incentivizing the demolition of historic buildings, contrary to city goals, objectives and policies for cultural resources. Additionally, with an incentive available to start afresh (with new construction), the motivation to renovate an existing structure is severely reduced.**

This option returns the URA to the former eligibility criteria:

- The building is an existing or former residence recognized by the Iowa State University as part of the Greek residence system; and
- 70% of the area of the existing exterior walls of the structure will remain.
- Construction of a new Greek residence recognized by Iowa State University as part of the Greek residence system if built on a site that was formerly a Greek residence with an approved Minor Site Development Plan and demolition approved by City Council prior to January 1, 2021.
- ***Note this language provides a three month window for additional demolition requests to be approved. In addition, since Kappa Kappa Gamma House already has received approval for demolition, they will be able to proceed with construction of the new home in 2021 as anticipated.***

#### **Option 2 – Eliminate the East University Impacted URA altogether.**

Since the inception of the URA, 14 different properties have received tax abatement with one property receiving a second approval for a subsequent abatement. Approximately 36% of the eligible properties have benefitted from the program through 2020.

**The URA could be eliminated based upon the success of the program in solidifying the neighborhood with Greek housing and the clear market demand for this type of housing to be in areas adjacent the ISU campus.** Some of the improvements incentivized by the program have been increases in amenity space more than an increase in capacity or renovation of the existing facilities to maintain their presence in the area.

Staff believes allowing for improvements completed prior to December 31, 2022 to be eligible for property tax abatement would allow for planned projects to be completed over the next two years. **This option would set an automatic repeal date of the URA for April 1, 2023 to accommodate improvements completed through 2022.** Under this option, all approved tax abatement would continue despite the repeal of the URA.

#### **Option 3 – Determine that no changes are needed to meet the City Council's desired goals for the East University Impacted URA.**

This option leaves the current eligibility criteria as amended in 2017, in place.



- *5% increase in assessed value*
- *Properties must be located within the designated East University Impacted Urban Revitalization Area.*
- *Existing or former residences recognized by Iowa State University as part of the Greek residence system, and which, following rehabilitation, 70% of the area of existing exterior walls of the structure will remain; OR*
- *Construction of a new Greek residence recognized by Iowa State University as part of the Greek residence system if built on a site that was formerly a Greek residence.*

**STAFF COMMENTS:**

Staff believes the conflicting policy of demolition and incentives for new construction should be eliminated. The incentive for new construction did not exist when the recent new Greek Houses were approved for demolition and started new construction. The feasibility of the projects originally was based upon no financial incentive. It is only in the past two years that incentives have affected the financial feasibility of the projects.

**It should be understood that if City Council chooses to change the URA as reflected in Options #1 or #2, all current tax abatements would continue to the end of their approved abatement schedules.**



## Attachment A

**East University Impacted URA** – Purpose: Greek Housing  
established 04-25-2006 by ORD # 3880;  
amended criteria 12-19-2017 by RES # 17-716; NO EXPIRATION

The value-added requirement is a 5% increase in value. Since its establishment, 13 different properties have received tax abatement:

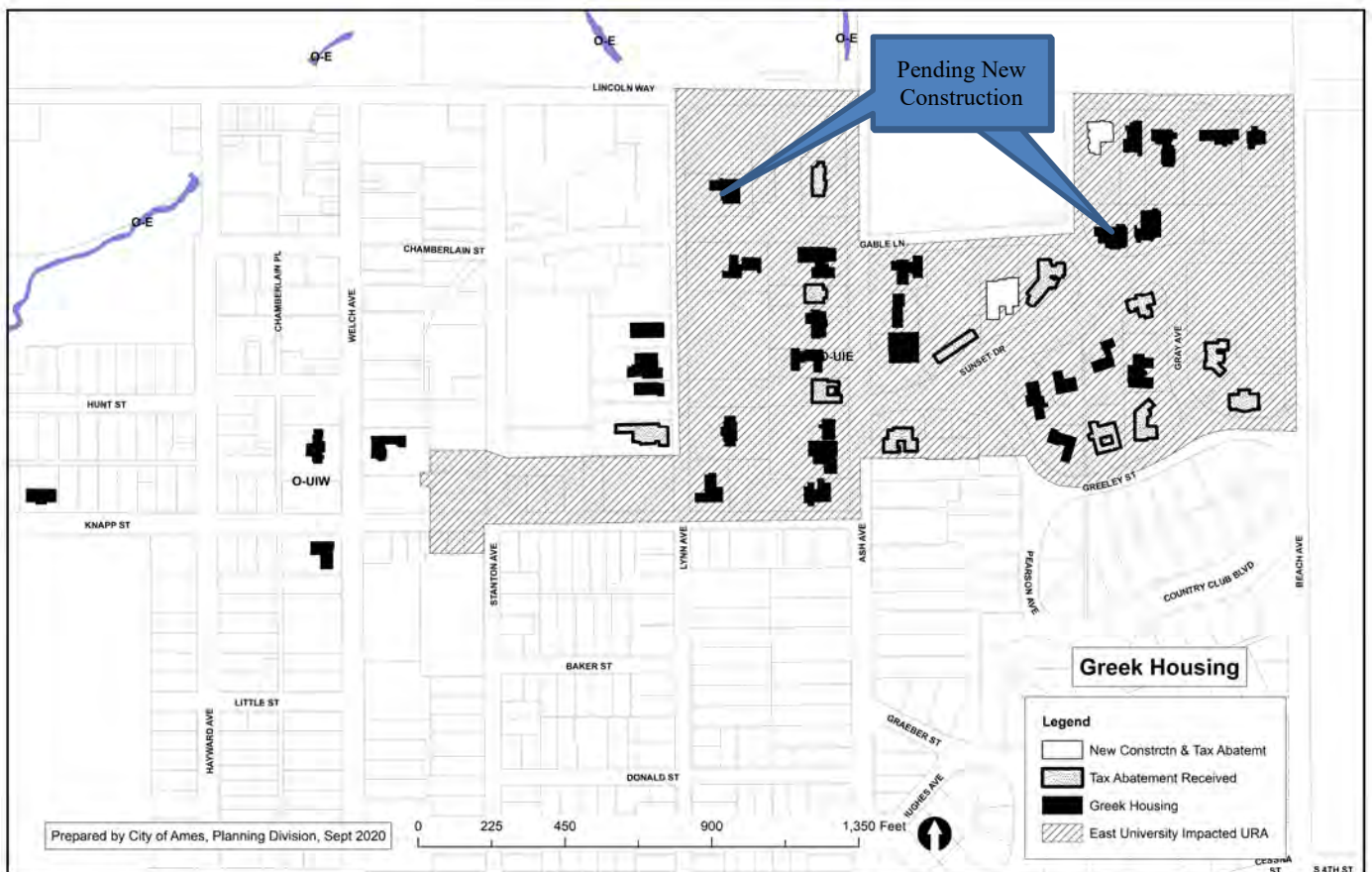
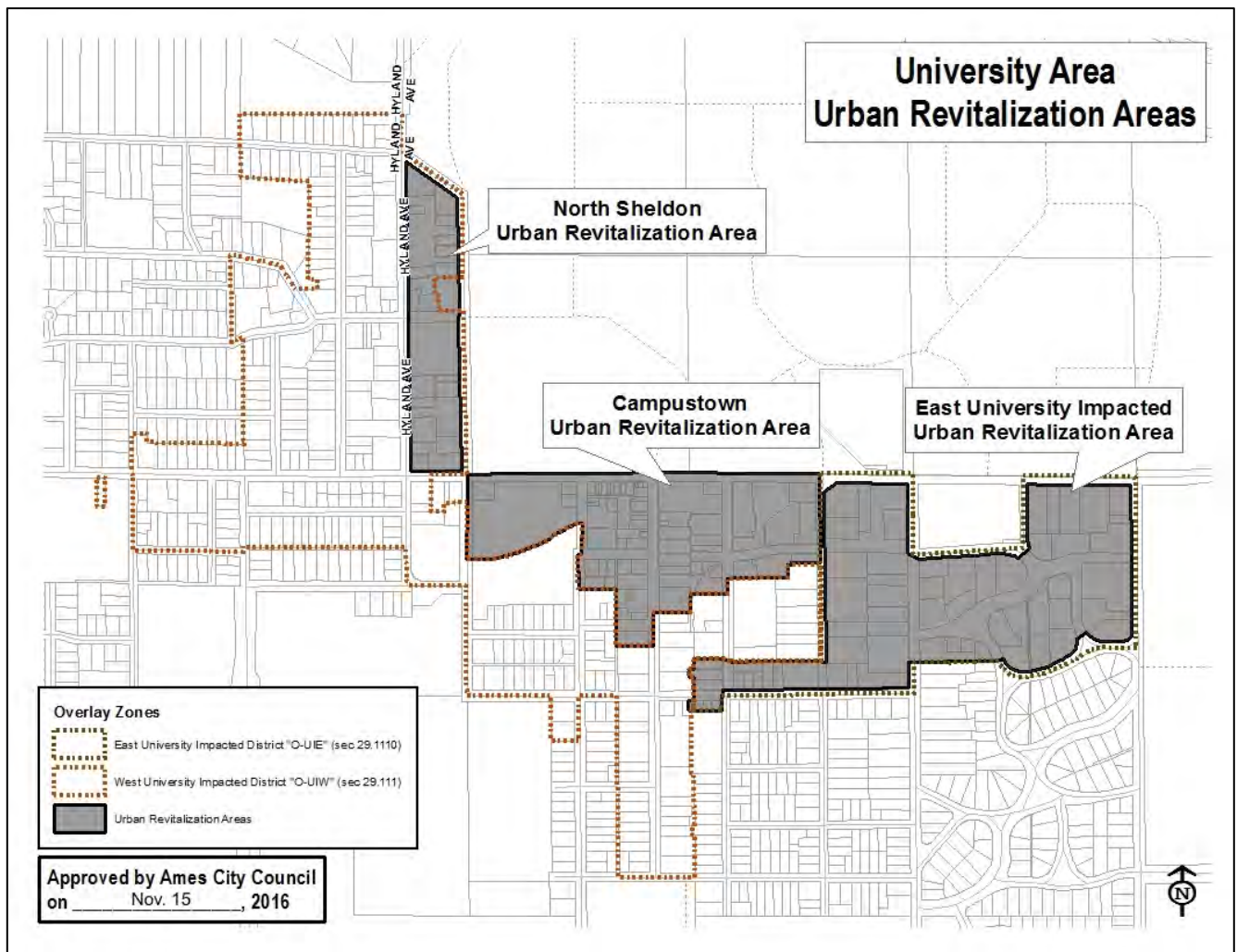
- 201 Gray Ave [Alpha Gamma Rho] in 2020;
- 313 Lynn Ave [Delta Gamma] in 2018;
- 2136 Lincoln Way [Sigma Chi] in 2018 (demolition & new construction);
- 2121 Sunset Dr [Delta Tau Delta] in 2018 (demolition & new construction);
- 117 Ash Ave [Delta Upsilon] in 2013;
- 325 Ash Ave [Phi Gamma Delta] in 2012;
- 228 Gray Ave [Sigma Phi Epsilon] in 2012;
- 2125 Greeley St [Alpha Delta Pi] in 2011;
- 2102 Sunset Dr [Kappa Delta] in 2011;
- 233 Gray Ave [Sigma Kappa] in 2011;
- 302 Ash Ave [Delta Delta Delta] in 2010;
- 2007 Greeley St [Alpha Omicron Pi] in 2010;
- 201 Gray Ave [Alpha Gamma Rho] in 2010; and
- 227 Gray Ave [Chi Omega] in 2008.

Current Eligibility Criteria:

- *Properties must be located within the designated East University Impacted Urban Revitalization Area.*
- *Existing or former residences recognized by Iowa State University as part of the Greek residence system, and which, following rehabilitation, 70% of the area of existing exterior walls of the structure will remain; OR*
- *Construction of a new Greek residence recognized by Iowa State University as part of the Greek residence system if built on a site that was formerly a Greek residence.*

See Map entitled, *University Area Urban Revitalization Areas Map*







**Attachment B**

	Address	Total Amount Exempted	Initial Year	Period	First Year Rollback %	Rollback Value	First Year Tax Rate	Est. Total Abated Taxes	Est. City Share of Abated Taxes
Alpha Gamma Rho	201 Gray Avenue	\$13,917,200	2020	10 yr	0.550743	\$7,664,800	0.031487	\$241,343	\$76,844
Delta Gamma	313 Lynn Avenue	\$7,235,000	2018	10 yr	0.556209	\$4,024,172	0.031523	126,852	\$40,345
Sigma Chi	2136 Lincoln Way	\$6,252,400	2018	8 yr	0.556209	\$3,477,641	0.031634	110,013	\$34,865
Delta Tau Delta	2121 Sunset Drive	\$14,349,100	2018	8 yr	0.556209	\$7,981,099	0.031634	252,478	\$80,015
Colonials Club House	217 Ash Avenue	\$7,042,420	2017	10 yr	0.569391	4,009,891	0.031404	125,928	\$40,201
Alpha Phi	307 Ash Ave	\$2,948,000	2016	10 yr	0.556259	1,639,852	0.031634	51,876	\$16,440
Phi Delta Theta	2035 Sunset Dr	\$1,361,400	2014	10 yr	0.544002	740,604	0.032236	23,874	\$7,425
Delta Upsilon	117 Ash Ave	\$2,430,000	2013	3 yr	0.528166	1,283,443	0.032255	41,397	\$12,867
Sigma Phi Epsilon	228 Gray Avenue	\$4,969,000	2012	10 yr	0.507518	2,521,857	0.032401	\$81,710	\$25,283
Alpha Delta Pi	2125 Greeley Street	\$450,000	2011	3 yr	0.485299	218,385	0.032360	\$7,067	\$2,189
Kappa Delta	2102 Sunset Drive	\$1,042,800	2011	10 yr	0.485299	506,070	0.032360	\$16,377	\$5,074
Sigma Kappa	233 Gray Avenue	\$589,600	2011	10 yr	0.485299	286,132	0.032360	\$9,259	\$2,869
Delta Delta Delta	302 Ash Avenue	\$909,000	2010	5 yr	0.485299	441,137	0.032300	\$14,249	\$4,423
Alpha Omicron Pi	2007 Greeley Street	\$568,000	2010	10 yr	0.485299	275,650	0.032300	\$8,904	\$2,764
Alpha Gamma Rho	201 Gray Avenue	\$1,852,100	2010	10 yr	0.485299	898,822	0.032300	\$29,032	\$9,011
<b>TOTAL</b>		<b>\$65,916,020</b>						<b>\$1,140,359</b>	<b>\$360,615</b>



**COUNCIL ACTION FORM**

**SUBJECT:** REMOTE PARKING AGREEMENT FOR 700 DOUGLAS AVENUE

**BACKGROUND:**

UT Prosim Revocable Family Trust owns the properties at 700 Douglas and 708 Douglas Avenue. Each property contains a small apartment building (*see Attachment A - Location Map*). **The property owner is requesting approval of a remote parking agreement to provide six required parking stalls at 708 Douglas Avenue to fulfill the parking needs of the existing four-unit apartment complex located at 700 Douglas Avenue.**

This request for remote parking requires both: 1) a variance, because the RM zoning district does not permit remote parking, and 2) City Council approval, as all remote parking agreements are subject to City Council approval per Municipal Code.

**The Zoning Board of Adjustment (ZBA) approved a Variance at its June 10<sup>th</sup> meeting to allow for parking needed for 700 Douglas to be located off-site (remote parking) on the 708 Douglas site.** The existing building at 700 Douglas is a nonconforming apartment building due to the lack of any on-site parking and the applicant was unable to construct required parking on the 700 Douglas lot outside of the front yard or as covered parking.

The request was initially motivated by converting one of the apartment units to guest lodging, which triggered parking improvements for the nonconforming apartment building. Since the approval by ZBA of the variance and Special Use Permit for a guest lodging unit, the state has eliminated local licensing and zoning requirements that distinguish short term rental from other residential uses. However, the applicant desires to complete the remote parking process because it would create legal parking for the apartment building at 700 Douglas regardless of its use as guest lodging. **Although a Variance was approved to construct the parking, remote parking is subject to Council approval of an agreement for the use.**

The current apartment building at 700 Douglas includes four units. These four units require six parking spaces based on the zoning standards for apartments. The parking required for the neighboring property at 708 Douglas is proposed on site with the parking required for 700 Douglas. This will create a 13-stall parking lot with eight of the stalls in garages and five located outside. The required ADA van-accessible stall has also been provided. The provision of parking stalls for these apartments necessitates the review of the parking and the need for approval of the requested remote parking agreement as a result of the granting of the Variance. A Minor Site Development Plan was approved for the parking improvements and is included as Attachment C.



Ames *Municipal Code* Section 29.406(18) only allows for remote parking to satisfy required parking offsite, subject to City Council approval. **The Municipal Code requires that parking be within 300 feet of the subject site and a written agreement be signed that identifies the required amount of parking for the principal use.** The approved variance does not preempt Council authority of approving an agreement. When reviewing the proposal for remote parking, the City has traditionally assessed the convenience and use of the area for remote parking as meeting the City's development standards.

The proposed remote parking site abuts 700 Douglas Avenue. The parking is physically located 12 feet from the subject property. The applicant proposes to pave the current gravel parking lot at 708 Douglas Avenue. The current gravel parking lot is non-conforming in terms of its layout and landscaping. The Minor Site Development Plan submitted by the owner proposes a compliant parking layout, paving plan, and landscaping.

Both properties are owned by UT Prosim Revocable Family Trust. (see *Attachment B - Site Plan/Remote Parking at 700 & 708 Douglas Ave.*). The applicant has signed the Remote Parking Agreement that specifies the location of the spaces, number of spaces, and the terms of the Agreement.

#### **ALTERNATIVES:**

1. Approve the "Remote Parking Agreement" to provide the required six parking stalls at 708 Douglas Avenue for the existing four-unit apartment complex at 700 Douglas Avenue.
2. Deny the "Remote Parking Agreement" to provide the required 6 parking stalls at 708 Douglas Avenue for the apartment complex and Guest Lodging use at 700 Douglas Avenue.
3. Refer this item to staff or the applicant for further information.

#### **CITY MANAGER'S RECOMMENDED ACTION:**

The subject sites are zoned RM with the Single-Family Conservation Overlay District, which allows for apartment, one-family, and two-family dwellings on existing lots and subject to development standards. However, remote parking is not an allowed activity for these lots. The ZBA granted the variance by finding that all the criteria had been met for a variance to allow for remote parking on 708 Douglas for the existing apartment buildings at 700 and 708 Douglas subject to compliance with all parking lot and landscaping standards.

The two properties currently are licensed rental properties and their status of conformity with the Rental Code is unaffected by the proposed remote parking. The addition of parking does improve the condition of the site at 708 Douglas, which informally, has served as parking for both sites while they have been under common ownership. With



approval of the remote parking agreement, the use of the parking is exclusive to these two properties and it is limited in benefit to the existing configuration of the apartment buildings. Neither the approved variance nor proposed remote parking would allow for redevelopment of the site with new apartment buildings that did not meet site development standards for on-site parking.

Therefore, it is the recommendation of the City Manager that the City Council approve Alternative #1, thereby approving the attached Remote Parking Agreement to provide required parking at 708 Douglas Avenue for the apartment complex and Guest lodging use at 700 Douglas Avenue.







## Attachment B- Remote Parking Agreement & Site Plan

S P A C E   A B O V E   R E S E R V E D   F O R   O F F I C I A L   U S E

Legal Description: Lots 4 and 5 and the South 15 feet of Lot 6 all in Block 1, Original Town of Ames, Story County, Iowa

Return document to: City Clerk, 515 Clark Avenue, Ames IA 50010

Document prepared by: Jane Chang, City of Ames Legal Department, 515 Clark Ave., Ames, IA 50010 – 515-239-5146

### REMOTE PARKING AGREEMENT

SUSAN IRENE HURD, as TRUSTEE of the UT PROSIM REVOCABLE FAMILY TRUST dated June 12, 2014 (“UT Prosim”) makes this Remote Parking Agreement (the “Agreement”) in favor of the City of Ames, Iowa (the “City”) effective September 11, 2020.

#### RECITALS

- A. UT Prosim holds title to the real estate located at 700 Douglas Avenue in the City of Ames, Story County, Iowa legally described as follows:  
  
Lot 4 in Block 1, Original Town, Ames, Story County Iowa.
- B. UT Prosim also holds title to the real estate located at 708 Douglas Avenue in the City of Ames, Story County, Iowa legally described as follows:  
  
Lot 5 and the South 15 feet of Lot 6 in Block 1, Original Town, Ames, Story County Iowa.
- C. UT Prosim is required to provide sufficient parking for rental housing and guest lodging uses at the parcel located at 700 Douglas Avenue. The parcel at 700 Douglas Avenue does not have sufficient parking for these uses as required by the City’s regulations.
- D. To meet the City’s off-street parking requirements for the 700 Douglas Avenue parcel, UT PROSIM desires to provide six (6) parking spaces on the parcel located at 708 Douglas Avenue. (See attached site plan.)



- E. The City is willing to allow UT Prosim to utilize the parking spaces located on the 708 Douglas Avenue parcel to meet the City's off-street parking requirements for the 700 Douglas Avenue parcel due to the common ownership of both properties.

For good and valuable consideration, the receipt and sufficiency of which UT Prosim acknowledges, UT Prosim agrees as follows:

1. **Exclusive Parking.** The six (6) parking spaces provided will be for the exclusive use of the 700 Douglas Avenue parcel for the parking of motor vehicles and for no other use without the City's prior consent. The six (6) parking spaces provided shall at all times be clearly marked. UT PROSIM shall maintain the six (6) spaces and access routes to and from the spaces in a passable and usable condition, clear of snow accumulations, ponded water, brush, weeds, or other conditions that could impede or discourage use of the spaces.
2. **Termination.** No party shall terminate this Agreement without the prior written consent of the City of Ames. The City of Ames shall not consent to termination of this Agreement unless both parcels are under common ownership. Should this Agreement terminate, the use of the parcel at 700 Douglas Avenue for either guest lodging or rental housing may be revoked by the City.
3. **Nature of Agreement.** This Agreement shall run with the land and shall be binding upon UT Prosim and its successors and assigns.
4. **Authority.** The undersigned Trustee has the full and lawful authority to grant the rights herein and there are no facts or legal claims that might impair the validity of the trust.

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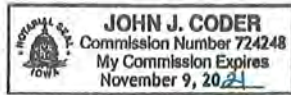


UT PROSIM REVOCABLE FAMILY TRUST

By: Susan Irene Hurd  
Susan Irene Hurd, Trustee

STATE OF Iowa )  
 ) SS  
COUNTY OF Story )

On this day of September 11, 2020, before me, the undersigned, a Notary Public in and for said state, the foregoing Agreement was sworn to (or affirmed) and subscribed by Susan Irene Hurd, as Trustee for the UT Prosim Revocable Family Trust.



John J. Coder  
Notary Public



## LENDER'S CONSENT TO REMOTE PARKING AGREEMENT

**VISION BANK, Ames, Iowa**, has an interest in certain Real Property described in the Remote Parking Agreement by virtue of a Mortgage dated January 28, 2002, filed January 29, 2002, and recorded as Instrument No. 02-01756 in the office of the Recorder of Story County, Iowa. The Mortgagee has been requested to subordinate its rights under said Mortgage to the rights of the grantee of said Remote Parking Agreement, its successors and assigns, under the said Remote Parking Agreement and deems it advisable to do so. Now, therefore the Mortgagee, for good and valuable consideration, agrees that whatever right, title, lien, estate, or interest the Mortgagee now has or may hereafter acquire in said Real Property by virtue of the aforesaid Mortgage, the same shall be subordinate to the rights of the grantee, its successors and assigns, under said Remote Parking Agreement.

In Witness Whereof, the Mortgagee has caused this instrument to be executed on September 11, 2020.

**VISION BANK, AMES, IOWA 50010**

By: [Signature] 9/11/20  
Signature Date

John J. Coder

Printed Name

Senior Vice President

Title of Authorized Signer

STATE OF Iowa )  
 ) SS  
COUNTY OF Story )

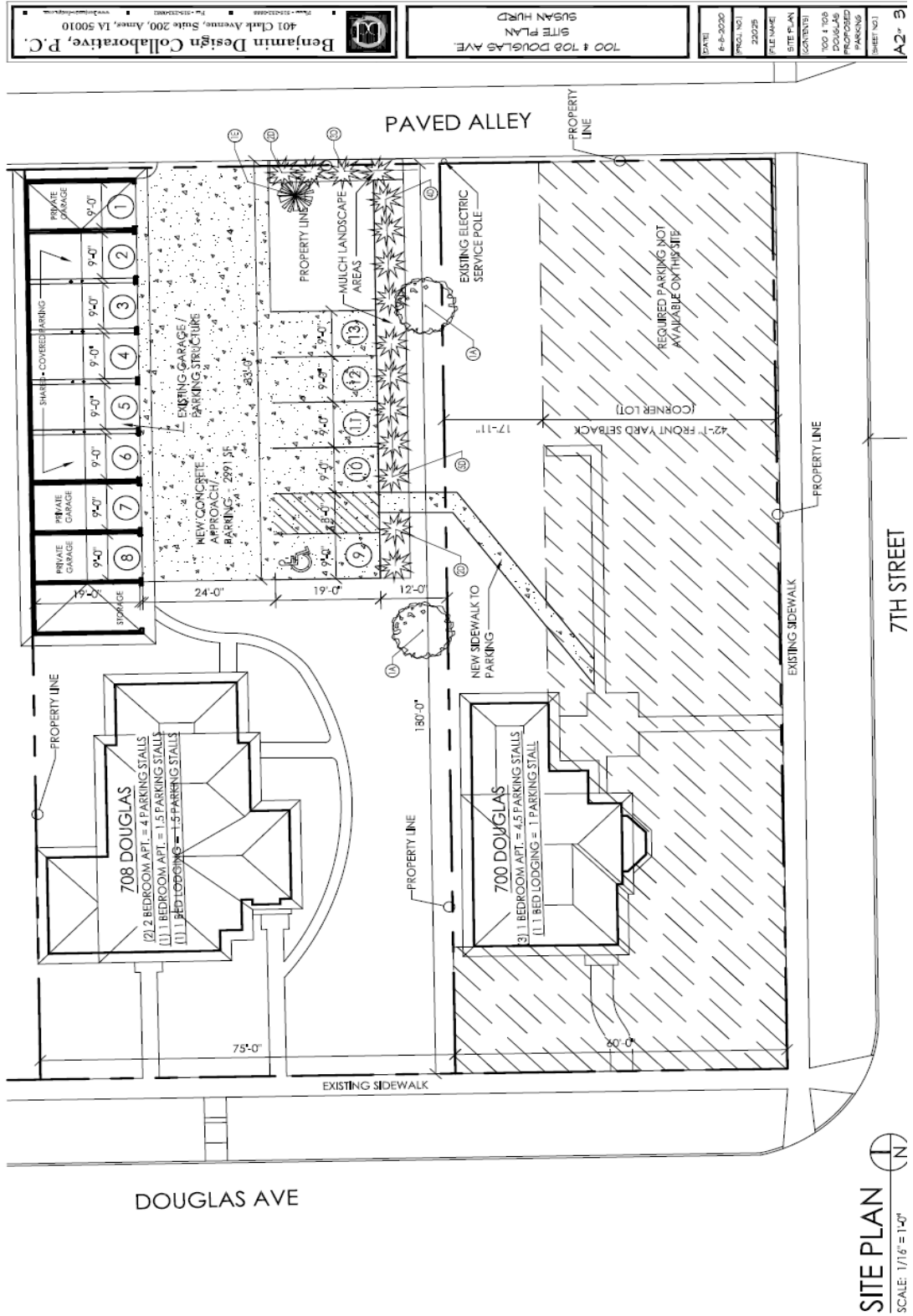
On this day of September 11, 2020, before me, the undersigned, a Notary Public in and for said state, the foregoing Agreement was sworn to (or affirmed) and subscribed by John J. Coder, SVP for Vision Bank, Ames, Iowa 50010.



  
Notary Public



# Attachment C- Minor Site Development Plan





# Gamma Pi of Delta Tau Delta Inc.



September 16, 2020

Kelly Diekmann  
Planning and Housing Director  
City Hall, 515 Clark Ave.  
Ames, IA 50010

Re: East University Impacted Area Urban Revitalization Area – Potential Changes

Dear Kelly:

I am writing in response to your 15 September 2020 communication to the Iowa State Greek community regarding potential changes to the property tax abatement program in the East University Impacted Area. We would strongly encourage the City to keep the current program in place.

As you may remember, the Delta Tau Delta fraternity building located at 2121 Sunset Drive, and located in the East University Impacted Area and the Historic Greek Neighborhood, was the first demolition and new construction under the current program. In 2013 and 2014, we worked with the Ames Planning and Zoning department to finalize the site plan for a new structure as well as parking variances to comply with current zoning requirements. The site plan was approved and the zoning variances (parking) were approved in early 2014. We received approval from the City Council in February 2014 to demolish the existing structure and construct a new building for the fraternity on the same site. Construction was completed in November 2015 and a final occupancy permit was granted on January 7, 2016.

You may also remember the extended time and discussion it required (2-1/2 years) with your office as well as the City Council to get our final property tax abatement approved for the project. That extended time to get the new construction policy approved eventually cost us 2-years of abatement removed for the original 10-year abatement program. We are currently in the second year of our 8-year abatement schedule.

The Land Use Policy Plan (LUPP) and subarea plan for the University Impacted Area (UIA), has supported other Greek housing corporations that have invested in remodeling of existing structures or the construction of entirely new structures. The UIA establishes a basis for the City to support investments that preserve or enhance the neighborhood through property tax abatement (Page 8, UIA, 2005). The current version of the University Area Urban Revitalization Program for the East University Impacted Area (Historic Greek neighborhood) grants consideration of tax abatement for “existing or former residences recognized by Iowa State University as part of the Greek Residence system” AND an additional criteria for “seventy percent (70%) of the area of the existing exterior walls of the structure to remain” (Page 6, Application packet for the UIA Urban Revitalization Program).



As noted in your letter a number of Greek Housing corporations have invested in remodeling or new construction of aging facilities. Many of the existing fraternity and sorority buildings are over 80-years old and it requires a substantial investment to remodel and or construct new buildings to meet the current building and accessibility codes and standards, as well as modern-day living and programming space for today's students. I would estimate that about 50% of the current facilities in the Greek system still require some level of upgrade through an new addition, complete demoltion and rebuild, or extensive building infratstructure repair. In our case in 2012, the Gamma Pi of Delta Tau Delta house corporation conducted a feasibility study with RDG Planning and Design in Ames on options for either an extensive remodeling of our former 1952 building or starting over with a completely new building on the same site. That analysis lead us to a decision for demolition of the existing structure and constructing a new building as the most economic viable alternative. The Delta Tau Delta chapter was the first fraternity to be established on the Iowa State campus in 1875 and the organization has had a continous presence on campus since 1911. As with many of the Greek chapter facilities, our previous building was constructed in the late 1940's to mid 1950's (1952), and housed 32 students and a 1971 addition increased residency to 56. However, when considering current building codes, a remodel of an exising structure can be cost prohibitive when compared with a new structure. New buildings and extensive remodels of current buildings can bring a facility to 100% compliance with the current building code (IBC 2012), and provide opportunities for investment in improved energy efficient features (Ames Smart Energy program), and icompliance with the ADA.

The current policy in effect (Page 6 – East UIA Revitalization Plan) limits tax abatement for situations in which:

- a. Existing or former residences recognized by Iowa State University as part of the Greek Residence system.
- AND
- b. Seventy percent (70%) of the area of the existing exterior walls of the structure will remain.

This was amended by action of the City Council in 2015-17 to include demolition and new construction on a site meeting the first of two criteria above.

A new addition, extensive remodel, or a completely new building is a serious, long-term investment for a Greek housing corporation. Most all of these projects require a minimum of 50% capital investment from the chapter alumni and the balance on mortgages from commercial banks. The Greek housing corporations operate as non-profit corporations, 501.c.7, and their business model must operate competitively with the other housing options for students including the University residence hall system and private, for-profit, apartment complexes. The university residence hall system does not include property taxes or property insurance in their budget model even though they do include repayment of long-term debt on the bonds used to construct the facilities. While the private, for profit housing options do pay property taxes and insurance, there have been other incentives provided in some cases for these projects. For example, the private (non-Greek) Sunset View and Beach View Condominium developments at the intersection of Sunset Drive and Beach Avenue, and within the East University Impacted Area, are also under a 10-year property tax abatement program.



A program to provide some degree of incentive for older Greek housing facilities to complete major upgrade projects through either new construction or additions has two benefits:

- a. Provides an immediate financial buffer for the housing corporation during the early post-construction period to support their annual business model and rate structure as the final project expenses and funding take effect. A five-year to ten-year tax abatement period provides that early financial buffer and helps to transition the project to full implementation. The financial incentive of the property tax abatement does help to get the projects off the ground, and does make a difference when developing a financial business model for presentation to a commercial lender for long-term mortgage financing.
- b. There is a longer-term incentive for the City as the increased property valuations support higher tax revenues after the abatement period has ended.

In the individual case of Delta Tau Delta, the property valuation in 2015 on our former facility, constructed in 1952 with an addition in 1971, was \$515,708. The new facility is now valued at \$5,875,000, an approximate 10-fold increase in valuation. The property tax revenue to the City increased from \$16,326.00 in 2015 to \$104,161.40 in 2017 (w/o abatement). That is a 640% increase in the property tax revenue to the City from that facility over the 50-year life of the property. In addition, even with the tax abatement schedule, there is an immediate increase in the property valuation and increase in tax revenues to the City. For Delta Tau Delta, the annual taxes in the first year of the eight year schedule was \$51,527.54, 3-times greater than the annual taxes in 2015. From the above discussion, it appears there are advantages for both the Greek community and the City of Ames to keep the current policy in effect.

We would strongly recommend the City of Ames keep the tax abatement program in place. The typical timeline for planning a new project, developing and completing a capital campaign, and finalizing building permits, bank financing, and construction contracts is typically 3-4 years. There are also some limitations for alumni investors seeking tax deductions for contributions to non-profit 501.c.7 projects depending on the scope of the project. With the COVID epidemic right now, most housing corporations, even with planning completed, may be in a holding pattern until at least 2022.

We believe a new building, or an addition to an outdated facility, is a great addition to the Greek neighborhood and a great facility for the young men who will reside there over the next 80-years. It most certainly contributes to the "Historic" cultural attributes of the Greek Neighborhood in the East University Impacted Area.

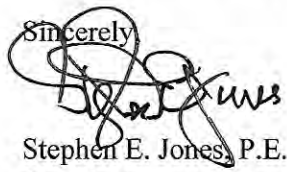
My contact information, as well as our corporate address, are included below. We would welcome an opportunity to discuss and/or present any additional information with the council members as you progress with your future plans for the tax abatement program for the East University Impacted Area.

Stephen E. Jones, P.E.  
President, Gamma Pi Delta Tau Delta Inc.  
30530 Doe Circle  
Huxley, IA 50124  
515-450-0311; [sejones1149@gmail.com](mailto:sejones1149@gmail.com)

Charles Safris  
Gamma Pi Delta Tau Delta, Inc.  
4107 Greenview (corporate address)  
Urbandale, IA 50322  
515-276-2996; [safris@mac.com](mailto:safris@mac.com)



Thank you for the opportunity to provide comment on the proposal.

Sincerely  


Stephen E. Jones, P.E.

President

Gamma Pi of Delta Tau Delta, Inc.

Cc: Billy Boulden, Director for Sorority and Fraternity Engagement, Iowa State University



**COUNCIL ACTION FORM**

**SUBJECT: ASSET MANAGEMENT AGREEMENT / PIPELINE SERVICES  
FOR POWER PLANT**

**BACKGROUND:**

This contract is to hire a firm to provide energy management services. These services include managing the City's natural gas transactions and gas pipeline transportation contracts. The company will serve as a bridge between the natural gas commodity already under contract, the delivery services already under contract, and the load management of the City's actual gas needs.

This contract is to provide Asset Management Agreement (AMA)/Pipeline Services for the period from October 1, 2020 through September 30, 2023. The contract includes a provision that would allow the City to renew the contract for up to two additional one-year terms.

On May 29, 2020, a Request for Proposals (RFP) was issued to thirteen firms. The RFP was advertised on the Current Bid Opportunities section of the Purchasing webpage and was also sent to three plan rooms. On June 26, proposals were received from three firms. Members of an evaluation committee independently evaluated and scored each proposal in two separate steps.

**STEP 1:**

In the first step, all three proposals were scored with respect to the following criteria:

- Experience in the electric generation and natural gas markets
- Customer Service (i.e. hours of operation)
- Ability to make adjustments when needed that will hold the City of Ames harmless
- Assets to provide services
- EMA terms of vendor's agreement
- Cost to provide base services for managing the City of Ames' natural gas needs
- Cost, if any, to provide additional services

Overall, there were 1,000 possible points available, with overall weighted scores being a function of the aforementioned evaluation factors. Based on the results of the committee members' evaluations, the average scores for Step 1 were as follows:



Offerors	Averaged Scores
Alliant Energy Madison, WI	758
BP Canada Energy Marketing Corp Omaha, NE	488
Tenaska Omaha, NE	753

## STEP 2:

The evaluation team next invited the three firms from Step 1 to participate in a virtual interview. Each company included as many key members of their teams (especially the team leader or project manager) as possible in the interview. The presentations were evaluated and scored utilizing the following criteria:

- Knowledge and relevant experience of the team
- Commitment for the project
- Understanding of the scope of work that was provided required to manage the City of Ames' gas needs
- Quality and thoroughness of the presentation

Based on the results of the committee members' evaluations, the scores for Step 2 are as shown in the table below:

Offerors	Averaged Scores
Alliant Energy Madison, WI	82
BP Canada Energy Marketing Corp Omaha, NE	79
Tenaska Omaha, NE	78

Scores were assigned following the same process and formula described for the previous phase, with a maximum possible cumulative score of 100 points.

**Based on the average scores and a unanimous decision by the evaluation committee, staff is recommending that the contract be awarded to Alliant Energy, Madison, WI.**

To accomplish the City's needs, Alliant Energy has provided three separate agreements, each providing a different service. These are (1) North American Energy Standards Board (NAESB) agreement with Interstate Power and Light (Alliant's Iowa-based company), (2) North American Energy Standards Board (NAESB) agreement Special Provisions with Interstate Power and Light, and (3) an Asset Management Agreement. Each agreement is attached and is described in further detail below.



### **North American Energy Standards Board (NAESB)**

This agreement is with the parent company which is Interstate Power and Light (IPL). The NAESB is a standard contract which controls all transaction within the natural gas industry.

### **North American Energy Standards Board (NAESB) Special Provisions**

The special provisions allow each party to make specific changes to the wording of the NAESB. Typically, the changes are based around the details of IPL procedure to transactions (i.e. billing and gas transactions).

### **Asset Management Agreement (AMA)**

This agreement manages (1) the pipeline capacity the City has under contract with Northern Natural Gas Company, (2) the natural gas supply the City purchased from Macquarie, and (3) the scheduling and balancing of our natural gas. "Balancing" involves matching the amount scheduled with the amount consumed. Alliant (IPL's parent company) will charge the City of Ames \$18,000 per year for the basic services.

It also outlines the terms and conditions when the actual amount of natural gas burned in a day is less than 12,000 dekatherms. This can typically occur at times when Unit #8 is down for maintenance. For these events, Alliant will sell or store the excess gas on behalf of the City and credit the City the revenue.

Along with the terms and conditions when the actual amount of natural gas burned in a day is greater than 12,000 dekatherms. For these events, Alliant will purchase both additional natural gas **and additional natural gas transport service** on behalf of the City and charge the City for the gas plus their adder. This can typically occur at peak times in the summer when Unit #8 is operated at higher generation levels or when both Unit #7 and Unit #8 are operating at the same time.

Under the AMA agreement, services are charged based on the price of the natural gas at the time of purchase plus a fee. It is unclear at this time how much of these services will be required each day. Therefore, staff is requesting that an amount not to exceed \$300,000 be approved so that staff, together with Alliant, can manage the daily gas needs over the coming year. If the net purchases of additional gas approach this limit, staff will return to City Council for additional purchasing approval at that time.

The approved FY 2020/21 operating budget currently includes \$16,500,000 for the purchase of natural gas to operate the power plant. The FY 2020/21 Electric Services budget will include appropriate funding to cover these contracts.



**ALTERNATIVES:**

1. Award the three contracts described above to Alliant Energy, Madison, WI beginning October 1, 2020 through September 30, 2023 with two additional one year renewals, for AMA/Pipeline Services for the City of Ames in an amount not to exceed \$18,000 for the base services. In addition, authorize an amount not to exceed \$300,000 for the purchase of additional natural gas plus delivery as needed to manage the day-to-day fuel needs of the power plant.
2. Approve one of the other companies who provided bids.
3. Reject all proposals and direct staff to coordinate the nominating and balancing of the natural gas.

**CITY MANAGER'S RECOMMENDED ACTION:**

These three contracts provide Electric Services with a crucial service that will manage the natural gas needed to operate the power plant and burn refuse derived fuel.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.



**COUNCIL ACTION FORM**

**SUBJECT: AMENDMENT TO FISCAL YEAR 2020/21 ADOPTED BUDGET FOR CARRYOVERS FROM FISCAL YEAR 2019/20**

**BACKGROUND:**

**The Code of Iowa requires that city spending by program not exceed Council approved budget amounts at any time during the fiscal year.** To maintain this level of compliance, the City's budget is typically amended three times during the fiscal year. The first amendment is submitted in the fall for carryovers of uncompleted projects from the prior fiscal year. A second amendment is approved with the new fiscal year budget in March, and a final amendment is prepared in May.

At this time, the fall amendment has been prepared for City Council approval. Each year the City has capital projects and specific operating projects that either span fiscal years or are delayed due to unforeseen circumstances. A summary is attached describing the carryovers, which total \$89,536,895.

**Please note that all the projects and associated budgeted expenditures and funding sources were approved by City Council as part of the fiscal year 2019/20 budget, but were not completed during the year. This amendment provides formal Council authority to carry forward the appropriation for projects and other work that will not be spent until fiscal year 2020/21.**

Amending the budget for carryover amounts improves the ability of departments to monitor project spending and for Finance staff to track budget compliance.

**ALTERNATIVES:**

1. Adopt a resolution amending the fiscal year 2020/21 budget upwards by \$89,536,895 for carryover amounts from fiscal year 2019/20.
2. Refer this item to staff for information or adjustments to the amendments.

**CITY MANAGER'S RECOMMENDED ACTION:**

**Amending the FY 2020/21 budget for carryover amounts from the FY 2019/20 budget early in the fiscal year will provide for improved budget monitoring and tracking. It will also provide assurance that Council-approved projects and work not completed in the prior year will not be delayed for spending authority.**

Therefore it is recommended that City Council approve Alternative No. 1, thereby adopting a resolution amending the fiscal year 2020/21 budget upwards by \$89,536,895 for carryover amounts from fiscal year 2019/20.



**CITY OF AMES, IOWA**

**2020/21**

**FALL BUDGET AMENDMENT  
SUMMARY**



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## EXPENDITURE CHANGES BY PROGRAM

<i>Program:</i>	<b>2020/21 Adopted</b>	<b>2019/20 Carryover</b>	<b>2020/21 Adjusted</b>	<b>Percentage Change from Adopted</b>
<b><i>Public Safety:</i></b>				
Law Enforcement	10,596,148	71,595	10,667,743	0.7%
Fire Safety	7,814,863	40,443	7,855,306	0.5%
Building Safety	1,670,718	-	1,670,718	0.0%
Animal Control	533,845	80,645	614,490	15.1%
Other Public Safety	917,344	-	917,344	0.0%
Public Safety CIP	1,375,000	1,350,750	2,725,750	98.2%
<b>Total Public Safety</b>	<b>22,907,918</b>	<b>1,543,433</b>	<b>24,451,351</b>	<b>6.7%</b>
<b><i>Utilities:</i></b>				
Electric Services	59,507,515	1,637,110	61,144,625	2.8%
Water and Pollution Control	8,555,217	25,450	8,580,667	0.3%
Water Distribution System	1,579,364	-	1,579,364	0.0%
Sanitary Sewer System	1,010,513	-	1,010,513	0.0%
Storm Water Management	835,795	-	835,795	0.0%
Resource Recovery	4,033,384	-	4,033,384	0.0%
Utility Customer Service	1,804,394	-	1,804,394	0.0%
Utilities CIP	32,456,100	43,913,026	76,369,126	135.3%
<b>Total Utilities</b>	<b>109,782,282</b>	<b>45,575,586</b>	<b>155,357,868</b>	<b>41.5%</b>
<b><i>Transportation:</i></b>				
Streets/Traffic System	6,410,670	165,322	6,575,992	2.6%
Transit System	12,085,908	-	12,085,908	0.0%
Parking System	1,006,263	-	1,006,263	0.0%
Airport Operations	154,021	-	154,021	0.0%
Transportation CIP	25,089,173	34,464,972	59,554,145	137.4%
<b>Total Transportation</b>	<b>44,746,035</b>	<b>34,630,294</b>	<b>79,376,329</b>	<b>77.4%</b>
<b><i>Community Enrichment:</i></b>				
Parks and Recreation	4,950,550	98,140	5,048,690	2.0%
Library Services	4,995,871	-	4,995,871	0.0%
Human Services	1,551,213	50,835	1,602,048	3.3%
Art Services	229,898	55,940	285,838	24.3%
Cemetery	187,793	-	187,793	0.0%
Housing Programs	1,088,778	-	1,088,778	0.0%
Economic Development	2,729,772	-	2,729,772	0.0%
Community Enrichment CIP	1,219,750	4,566,617	5,786,367	374.4%
<b>Total Community Enrichment</b>	<b>16,953,625</b>	<b>4,771,532</b>	<b>21,725,157</b>	<b>28.1%</b>



## EXPENDITURE CHANGES BY PROGRAM, continued

<i>Program:</i>	<b>2020/21 Adopted</b>	<b>2019/20 Carryover</b>	<b>2020/21 Adjusted</b>	<b>Percentage Change from Adopted</b>
<b><i>General Government:</i></b>				
City Council	471,481	304,887	776,368	64.7%
City Clerk	443,797	20,000	463,797	4.5%
City Manager	782,757	-	782,757	0.0%
Public Relations	223,216	10,000	233,216	4.5%
Media Production Services	185,501	5,334	190,835	2.9%
Planning Services	887,461	111,032	998,493	12.5%
Financial Services	2,065,888	10,770	2,076,658	0.5%
Legal Services	849,598	6,976	856,574	0.8%
Human Resources	617,953	22,000	639,953	3.6%
Facilities	459,548	41,421	500,969	9.0%
General Government CIP	100,000	810,951	910,951	811.0%
<b><i>Total General Government</i></b>	<b>7,087,200</b>	<b>1,343,371</b>	<b>8,430,571</b>	<b>19.0%</b>
<b><i>Debt Service:</i></b>				
General Obligation Bonds	12,519,230	-	12,519,230	0.0%
Electric Revenue Bonds	969,306	-	969,306	0.0%
SRF Loan Payments	4,763,894	-	4,763,894	0.0%
<b><i>Total Debt Service</i></b>	<b>18,252,430</b>	<b>-</b>	<b>18,252,430</b>	<b>0.0%</b>
<b><i>Internal Services:</i></b>				
Fleet Services	4,739,095	884,603	5,623,698	18.7%
Information Technology	2,801,532	496,117	3,297,649	17.7%
Risk Management	2,577,215	-	2,577,215	0.0%
Health Insurance	10,036,440	-	10,036,440	0.0%
Internal Services CIP	-	291,959	291,959	
<b><i>Total Internal Services</i></b>	<b>20,154,282</b>	<b>1,672,679</b>	<b>21,826,961</b>	<b>8.3%</b>
<b><i>Total Expenditures Before Transfers</i></b>	<b>239,883,772</b>	<b>89,536,895</b>	<b>329,420,667</b>	<b>37.3%</b>
<b><i>Transfers</i></b>	<b>23,637,203</b>	<b>-</b>	<b>23,637,203</b>	<b>0.0%</b>
<b><i>Total Expenditures</i></b>	<b>263,520,975</b>	<b>89,536,895</b>	<b>353,057,870</b>	<b>34.0%</b>



## 2020/21 AMENDMENTS BY PROGRAM

### Public Safety Program \$1,543,433

Public Safety operating expenses are being increased by \$192,683 for delayed equipment and capital purchases for the Police Department (\$71,595), the Fire Department (\$40,443), and Animal Control (\$80,645).

Funding of \$1,350,750 is being carried over in the Public Safety CIP for the following projects:

- |                                |           |
|--------------------------------|-----------|
| • Fire station improvements    | \$238,692 |
| • City-Wide Radio System       | 1,053,022 |
| • Outdoor Storm Warning System | 59,036    |

### Utilities Program \$45,575,586

Operating expenses of \$1,662,560 are being carried over in the Utilities program. Of this amount, \$1,637,110 is for delayed equipment purchases or projects at the Power Plant, Electric Distribution, and Electric Engineering. The \$25,450 balance in Utility operating carryovers is for a delayed furniture replacement project at the Water Pollution Control Facility.

A total of \$43,913,026 of Utility CIP project funds are being carried over for the following projects:

- |   |             |
|---|-------------|
| • Electric Utility CIP projects (\$16,560,445): |             |
| ○ <i>Unit 8 superheat replacement</i>           | \$5,099,455 |
| ○ <i>Unit 8 turbine/generator overhaul</i>      | 2,960,823   |
| ○ <i>Ash pond modifications</i>                 | 2,128,775   |
| ○ <i>Street light/line Relocations</i>          | 1,030,404   |
| ○ <i>Unit 8 precipitator reconstruction</i>     | 983,405     |
| ○ <i>Other Electric CIP projects</i>            | 4,357,583   |
| • Water Utility CIP projects (\$7,867,649):     |             |
| ○ <i>Water distribution improvements</i>        | 1,803,704   |
| ○ <i>Old Water Plant demolition</i>             | 1,756,540   |
| ○ <i>East Ames water line extension</i>         | 998,944     |
| ○ <i>N River Valley well field</i>              | 758,384     |
| ○ <i>Other Water Utility CIP projects</i>       | 2,550,077   |
| • Sewer Utility CIP projects (\$12,628,248):    |             |
| ○ <i>Sanitary sewer system improvements</i>     | 5,436,069   |
| ○ <i>East Ames sewer system extension</i>       | 3,657,989   |
| ○ <i>WPC cogeneration system</i>                | 1,764,081   |
| ○ <i>WPC residuals handling improvements</i>    | 637,188     |
| ○ <i>WPC digester improvements</i>              | 479,551     |
| ○ <i>Other Sewer Utility CIP projects</i>       | 653,370     |
| • River flooding mitigation project             | 1,411,765   |
| • Homewood slope stabilization project          | 1,100,859   |
| • Other Storm Water Utility CIP projects        | 4,308,580   |
| • Resource Recovery improvements                | 35,480      |



## **Transportation Program   \$34,630,294**

Operating expenses of \$165,322 are being carried over in the Transportation program. The carryover amount includes funding to upgrade software and equipment in Public Works Engineering and Traffic Operations (\$64,050) and for the Emerald Ash Borer (EAB) program (\$101,272) in Right-of-Way Maintenance.

Transportation CIP funding carryovers total \$34,464,972 and consist of the following programs and projects:

- Street improvement projects (\$26,032,233):
  - *Grand Avenue extension* \$15,207,630
  - *Concrete pavement improvements* 2,115,226
  - *ISU Research Park Phase IV* 2,078,728
  - *Arterial Street improvements* 1,841,500
  - *Campustown improvements* 1,312,654
  - *Asphalt pavement improvements* 1,181,612
  - *Other street improvement projects* 2,294,883
- Shared use path projects 3,426,322
- Street rehabilitation projects 1,134,709
- Traffic improvement projects 997,475
- Transit system improvements 2,939,314

Airport improvement CIP projects will be reduced by \$65,081 from the FY 2020/21 adopted budget. Funding of \$7,659 is being carried over to complete the Airport Master Plan, but the budget is being reduced by \$72,740 for expenses incurred in FY 2019/20 for the early start of the Airport electrical vault project, which wasn't scheduled to begin until FY 2020/21.

## **Community Enrichment Program   \$4,771,532**

Community Enrichment operating expenses of \$204,915 are being carried forward. Of this amount, \$98,140 is for Parks and Recreation projects and equipment, primarily funded through donations (\$89,860). The remaining \$8,280 in Parks and Recreation operating carryovers is for equipment for the Community Center and the Auditorium. Funding of \$50,835 is also being carried forward in Human Services for University Community Childcare (\$7,985) and Youth and Shelter Services (\$42,850). The Public Art program is also carrying over \$55,940 in funding from FY 2019/20.

Funding of \$4,566,617 is being carried over for the following Community Enrichment CIP projects:

- Parks and Recreation CIP projects (\$4,374,316):
  - *Homewood clubhouse* \$1,462,117
  - *Downtown Plaza* 1,100,000
  - *Emma McCarthy Lee bridge* 248,819
  - *Bandshell improvements* 178,724
  - *Municipal Pool improvements* 172,380
  - *Brookside Park restrooms* 152,768
  - *Inis Grove Park restrooms* 136,345
  - *Hira Park development* 129,138
  - *Other park and facility improvements* 794,025
- Cemetery improvements 78,300
- Downtown Façade program 80,001
- Campustown Façade program 34,000



Funding of \$21,000 has also been shifted in Parks and Recreation's CIP budget from the Carroll Marty Disc Golf Course improvement project to Homewood Golf Course to replace the pump for the irrigation system. A budget of \$54,000 still remains for improvements at the disc golf course.

**General Government Program \$1,343,371**

Operating expenses of \$532,420 are being carried forward in the General Government program. Of this amount, \$111,032 is funding to allow the Planning Department to hire outside professional assistance for projects such as the Comprehensive Plan update. Funding is also being carried over in the City Council budget for the Climate Action Plan (\$130,000), the Internet Improvement Study (\$125,000), and to complete the Greenhouse Gas Inventory (\$1,800). Unspent contingency funds of \$32,587 are being carried forward, while another \$10,000 in contingency funds have been shifted to the Public Relations program for the Cyclones Care campaign. Unspent allocations to Main Street Cultural District (\$4,500) and Campustown Action Association (\$11,000) have also been carried over to FY 2020/21. Savings of \$22,000 have been carried over in the Human Resources budget for diversity training, as well as \$20,000 in the City Clerk's Office to upgrade the record management system. The remaining balance of \$64,501 in carryover funds is for delayed equipment purchases and special projects for Media Production Services, Financial Services, Legal Services, and the Facilities program.

The General Government CIP carryover of \$810,951 is for the following projects:

• Auditorium HVA system	\$400,000
• City Hall security	274,515
• City Hall improvements	136,436

**Internal Services: \$1,672,679**

Internal Services has \$1,380,720 in operating carryovers consisting of the following:

• Fleet equipment purchases	\$884,603
• Information Technology equipment	496,117

There is also an Internal Services CIP carryover of \$291,959 for improvements at the Fleet Maintenance facility.

**Total Carryovers \$89,536,895**



## 2020/21 CARRYOVERS BY FUND

<b>Fund:</b>	<b>2020/21 Adopted</b>	<b>2019/20 Carryover</b>	<b>2020/21 Adjusted</b>	<b>Percentage Change from Adopted</b>
<b>General Fund</b>	39,892,553	2,862,682	42,755,235	7.2%
<b>Special Revenue Funds:</b>				
Local Option Sales Tax	9,199,216	4,817,109	14,016,325	52.4%
Hotel/Motel Tax	2,330,800	125,000	2,455,800	5.4%
Road Use Tax	8,573,296	2,872,363	11,445,659	33.5%
Public Safety Special Revenues	90,800	60,116	150,916	66.2%
City-Wide Housing Programs	25,603	-	25,603	0.0%
CDBG Program	581,207	-	581,207	0.0%
HOME Program	481,968	-	481,968	0.0%
Employee Benefit Property Tax	2,241,742	-	2,241,742	0.0%
Police/Fire Retirement	75,000	-	75,000	0.0%
Parks & Rec Grants/Donations	15,150	178,225	193,375	1176.4%
Library Direct State Aid	14,500	-	14,500	0.0%
Library Friends Foundation	186,011	-	186,011	0.0%
Library Grants/Donations	6,121	-	6,121	0.0%
Utility Assistance	15,500	-	15,500	0.0%
Miscellaneous Donations	-	8,289	8,289	
Developer Projects	-	-	-	
Economic Development	-	-	-	
Tax Increment Financing (TIF)	1,393,681	-	1,393,681	0.0%
<b>Total Special Revenue Funds</b>	<b>25,230,595</b>	<b>8,061,102</b>	<b>33,291,697</b>	<b>32.0%</b>
<b>Capital Project Funds:</b>				
Special Assessments	315,559	-	315,559	0.0%
Street Construction	6,219,700	9,649,946	15,869,646	155.2%
Airport Construction	397,600	(65,081)	332,519	-16.4%
Park Development	-	800,102	800,102	
General Obligation Bonds	13,189,909	19,793,556	32,983,465	150.1%
<b>Total Capital Project Funds</b>	<b>20,122,768</b>	<b>30,178,523</b>	<b>50,301,291</b>	<b>150.0%</b>
<b>Permanent Funds:</b>				
Cemetery Perpetual Care	-	-	-	
Furman Aquatic Center Trust	5,250	-	5,250	0.0%
<b>Total Permanent Funds</b>	<b>5,250</b>	<b>-</b>	<b>5,250</b>	<b>0.0%</b>



## 2018/19 CARRYOVERS BY FUND, continued

<i><b>Fund:</b></i>	<b>2020/21 Adopted</b>	<b>2019/20 Carryover</b>	<b>2020/21 Adjusted</b>	<b>Percentage Change from Adopted</b>
<i><b>Enterprise Funds:</b></i>				
Water Utility/Construction	26,741,906	8,045,707	34,787,613	30.1%
Sewer Utility/Construction	12,090,655	12,771,628	24,862,283	105.6%
Electric Utility/Sinking	75,407,842	18,197,555	93,605,397	24.1%
Parking/Parking Reserve	1,128,987	-	1,128,987	0.0%
Transit	19,036,581	2,939,314	21,975,895	15.4%
Storm Water Utility/Construction	5,362,331	4,700,617	10,062,948	87.7%
Ames/ISU Ice Arena	584,508	-	584,508	0.0%
Ice Arena Capital Reserve	100,000	61,608	161,608	61.6%
Homewood Golf Course	298,485	10,000	308,485	3.4%
Resource Recovery	4,845,002	35,480	4,880,482	0.7%
<i><b>Total Enterprise Funds</b></i>	<b>145,596,297</b>	<b>46,761,909</b>	<b>192,358,206</b>	<b>32.1%</b>
<i><b>Debt Service</b></i>	<b>12,519,230</b>	<b>-</b>	<b>12,519,230</b>	<b>0.0%</b>
<i><b>Internal Service Funds:</b></i>				
Fleet Services	2,402,395	-	2,402,395	0.0%
Fleet Reserve	2,336,700	1,176,562	3,513,262	50.4%
Information Technology	2,062,416	25,000	2,087,416	1.2%
Technology Reserve	468,092	471,117	939,209	100.7%
Shared Communications	271,024	-	271,024	0.0%
Risk Insurance	2,577,215	-	2,577,215	0.0%
Health Insurance	10,036,440	-	10,036,440	0.0%
<i><b>Total Internal Service Funds</b></i>	<b>20,154,282</b>	<b>1,672,679</b>	<b>21,826,961</b>	<b>8.3%</b>
<i><b>Total Expenditures</b></i>	<b>263,520,975</b>	<b>89,536,895</b>	<b>353,057,870</b>	<b>34.0%</b>



**NOTICE OF PUBLIC HEARING  
AMENDMENT OF FY2020-2021 CITY BUDGET**

Form 653.C1

The City Council of Ames in STORY County, Iowa  
will meet at City Hall, 515 Clark Avenue, Ames, IA  
at 6:00 PM on 9/22/2020  
(hour) (Date)

,for the purpose of amending the current budget of the city for the fiscal year ending June 30, 2021  
(year)

by changing estimates of revenue and expenditure appropriations in the following programs for the reasons given. Additional detail is available at the city clerk's office showing revenues and expenditures by fund type and by activity.

		Total Budget as certified or last amended	Current Amendment	Total Budget after Current Amendment
<b>Revenues &amp; Other Financing Sources</b>				
Taxes Levied on Property	1	31,743,937	0	31,743,937
Less: Uncollected Property Taxes-Levy Year	2	0	0	0
Net Current Property Taxes	3	31,743,937	0	31,743,937
Delinquent Property Taxes	4	0	0	0
TIF Revenues	5	1,713,308	0	1,713,308
Other City Taxes	6	11,205,339	0	11,205,339
Licenses & Permits	7	1,646,077	0	1,646,077
Use of Money and Property	8	14,377,142	0	14,377,142
Intergovernmental	9	35,097,915	0	35,097,915
Charges for Services	10	304,687,658	0	304,687,658
Special Assessments	11	0	0	0
Miscellaneous	12	593,193	0	593,193
Other Financing Sources	13	25,638,650	0	25,638,650
Transfers In	14	17,104,285	0	17,104,285
Total Revenues and Other Sources	15	443,807,504	0	443,807,504
<b>Expenditures &amp; Other Financing Uses</b>				
Public Safety	16	21,515,574	192,683	21,708,257
Public Works	17	6,597,535	165,322	6,762,857
Health and Social Services	18	1,551,213	50,835	1,602,048
Culture and Recreation	19	9,704,493	154,080	9,858,573
Community and Economic Development	20	4,891,512	111,032	5,002,544
General Government	21	2,982,823	421,388	3,404,211
Debt Service	22	12,519,230	0	12,519,230
Capital Projects	23	23,841,259	40,006,967	63,848,226
Total Government Activities Expenditures	24	83,603,639	41,102,307	124,705,946
Business Type / Enterprises	25	318,972,254	48,434,588	367,406,842
Total Gov Activities & Business Expenditures	26	402,575,893	89,536,895	492,112,788
Transfers Out	27	17,104,285	0	17,104,285
Total Expenditures/Transfers Out	28	419,680,178	89,536,895	509,217,073
Excess Revenues & Other Sources Over (Under) Expenditures/Transfers Out for Fiscal Year	29	24,127,326	-89,536,895	-65,409,569
Beginning Fund Balance July 1	30	744,281,241	0	744,281,241
Ending Fund Balance June 30	31	768,408,567	-89,536,895	678,871,672

Explanation of increases or decreases in revenue estimates, appropriations, or available cash:

This is the Council-approved amendment per the City Manager's recommendation.

There will be no increase in tax levies to be paid in the current fiscal year named above. Any increase in expenditures set out above will be met from the increased non-property tax revenues and cash balances not budgeted or considered in this current budget. This will provide for a balanced budget.

Diane R. Voss  
City Clerk/Finance Officer



**COUNCIL ACTION FORM**

**SUBJECT:** VACATION OF ALL EASEMENTS AT 5521 ALLERTON DR. (OUTLOT P, SUNSET RIDGE SUBDIVISION 5TH ADDITION)

**BACKGROUND:**

A Final Plat for Sunset Ridge Subdivision 10<sup>th</sup> Addition will be presented for approval by City Council on September 22, 2020. The 10<sup>th</sup> Addition includes Outlot S, which is a replatting of Outlot P, Sunset Ridge Subdivision 5<sup>th</sup> Addition (5521 Allerton Dr.). Outlot P has a number of easements over the entire Outlot (public utility, storm sewer, surface water flowage, shared use path, and open space) that must be vacated prior to approval of the 10<sup>th</sup> Addition due to the change in configuration of this outlot with the proposed 10<sup>th</sup> Addition. The new 10<sup>th</sup> Addition plat will include dedicating easements across all of Outlot S to continue accommodating the needs provided by the current easements. **From staff's initial assessment, there appears to be no utility users in the outlot. Prior to the public hearing on September 22, 2020, staff will verify that all needs and potential easement users are covered with the new Outlot S easements. A Location Map showing Outlot P is attached.**

**ALTERNATIVES:**

1. Set the date of public hearing as September 22, 2020 for the vacation of the public utility, storm sewer, surface water flowage, shared use path, and open space easements at Outlot P, Sunset Ridge Subdivision 5<sup>th</sup> Addition (5521 Allerton Dr.).
2. Reconsider the vacation of the easements.

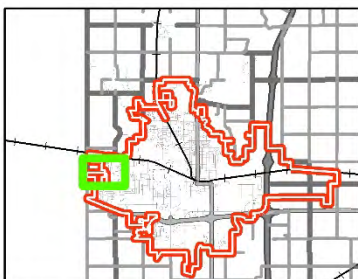
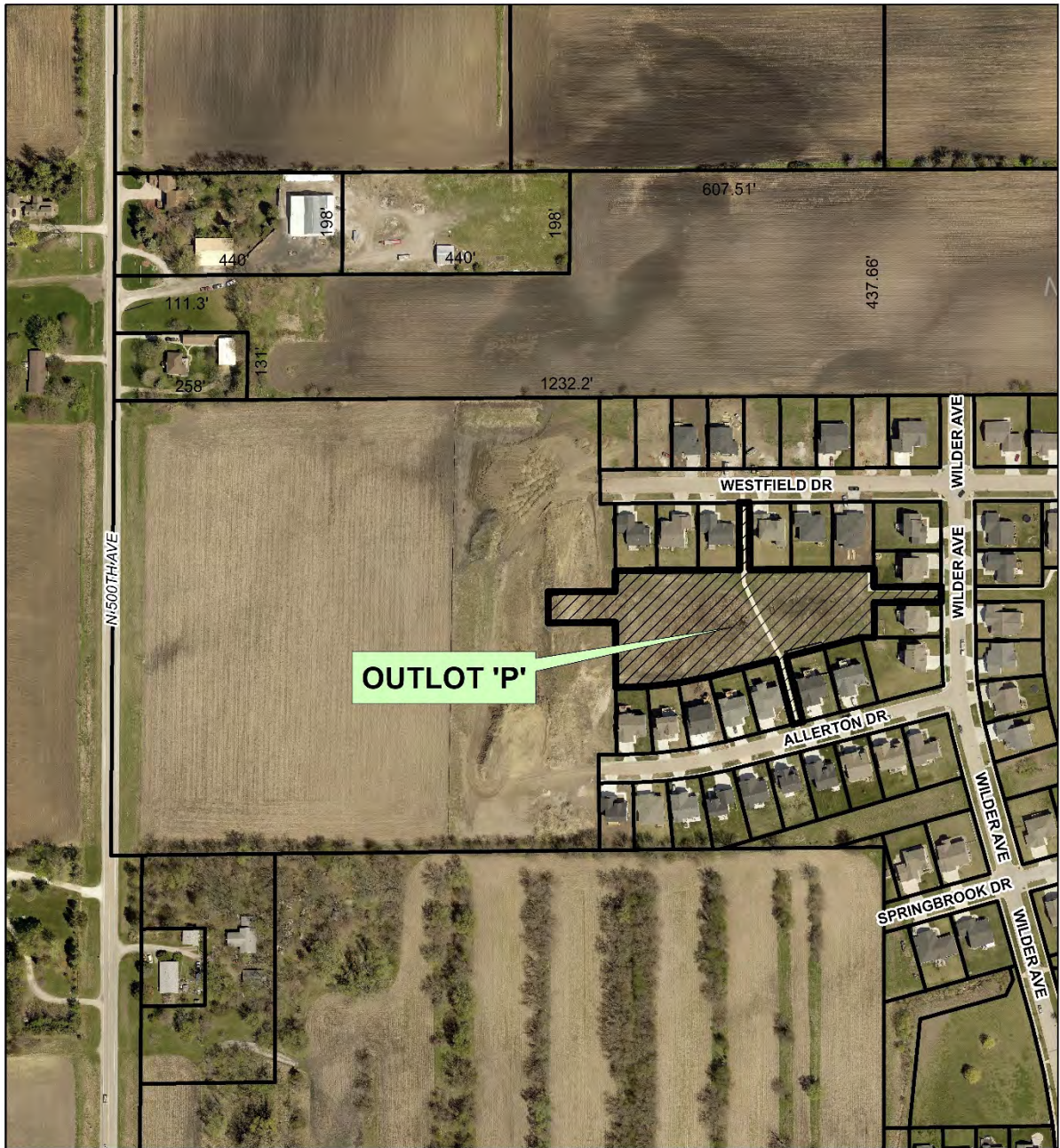
**CITY MANAGER'S RECOMMENDED ACTION:**

Vacating these easements will allow the developer to proceed with approval of the Final Plat for Sunset Ridge Subdivision 10<sup>th</sup> Addition. Newly dedicated easements will assure the continuing rights and uses of the current easements.

**Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as noted above.**



**ATTACHMENT 'A'**  
**Location Map of Outlot 'P'**



**LOCATION MAP**  
**Sunset Ridge Subdivision Outlot 'P'**

0 155 310 620 Feet

**Legend**

-  OUTLOT 'P'
-  PARCELS





**COUNCIL ACTION FORM**

**SUBJECT: MAJOR FINAL PLAT FOR SUNSET RIDGE SUBDIVISION TENTH ADDITION**

**BACKGROUND:**

The City's subdivision regulations are included in Chapter 23 of the *Municipal Code*. The Subdivision Code includes the process for creating or modifying property boundaries and specifies whether any improvements are required in conjunction with the platting of property. The creation of new lots is classified as either a major or minor subdivision, with a major subdivision requiring a two-step platting process to finalize the creation of new lots. The "Preliminary Plat" is first approved by the City Council and identifies the layout of the subdivision and any necessary or required public improvements.

Once the applicant has completed the necessary requirements, including provision of required public improvements or provision of financial security for their completion, a "final plat application" may then be submitted for City Council approval. After City Council approval of the final plat, it must then be recorded with the County Recorder to become an officially recognized subdivision plat. The final plat must be found to conform to the ordinances of the City and any conditions placed upon the preliminary plat approval.

**Hunziker Land Development, LLC and Sunset Ridge Property Owners Association are requesting approval of a Major Final Plat for Sunset Ridge Subdivision, Tenth Addition.** The Sunset Ridge Subdivision is located north of Lincoln Way along the western corporate limits of the city. The subject property is located north and west of Allerton Road as shown on *Attachment 1– Location Map*.

The proposed subdivision includes 21 single-family lots and the replatting of "Outlot P" in Sunset Ridge Subdivision Fifth Addition and "Outlot KK" in Sunset Ridge Subdivision Sixth Addition which contains 21.71 acres (including 1.21 acres of existing public right-of-way). "Outlot P" is owned by Sunset Ridge Property Owners Association; "Outlot KK" is owned by Hunziker Land Development, LLC. Outlot "P" is the subject of a separate easement vacation item on this same agenda.

Twenty-one (21) lots are proposed in the subdivision for single-family detached dwellings as shown on *Attachment 3 – Final Plat of Sunset Ridge Subdivision Tenth Addition*. **The applicant is proposing two more lots along Allerton Avenue than what was illustrated on the Preliminary Plat and Master Plan for the Subdivision.** *Attachment 2* illustrates the Preliminary Plat and Master Plan for the Subdivision. The placement of the additional lots has been accomplished by narrowing the proposed single-family lots and the connection from Ellston Avenue to Outlots "S" and "T", thereby reducing the area of open space. The proposed lot widths meet zoning standards and the small reduction in open space does not affect the minimum 10% requirements of FS-RL.



However, the addition of the two lots does not align with the Preliminary Plat and Master Plan documents and could be considered a Major Amendment per the standards of Chapter 23. A Major Amendment triggers a new Preliminary Plat and compliance with current subdivision standards. Notably, the sidewalk for the this and subsequent additions would need to be widened from four feet to five feet. The applicant has agreed to widen the sidewalk widths to 5 feet for the 10<sup>th</sup> Addition starting with Ellston Drive and extending to the west. Staff supports deferring the processing of the Preliminary Plat for a Major Amendment until the next addition due to the agreement of incorporating wider sidewalks as would be required with a new Preliminary Plat. The applicant indicates that the Preliminary Plat and Master Plan will be revised to reflect the layout change and change in lot count at the time of submittal of the Eleventh Addition.

The development includes “Lot A” (1.21 acres) and “Lot B” (1.97 acres) which will be dedicated to the City for public right-of-way:

- Lot A increases the width of the existing N. 500<sup>th</sup> Avenue right-of-way by 60 feet.
- Lot B includes:
  - Allerton Drive extension westward with a 55’ right-of-way;
  - Westfield Drive extension westward with a 66’ right-of-way;
  - Ellston Avenue is a new north-south 55’ right-of-way that extends between and past Westfield Drive and Allerton Drive.

Street extensions connect with existing streets and will *not* require additional temporary access and turnaround areas on the end of the streets during the construction phase of the development.

The existing blanket easement over all of “Outlot P” must be vacated before the Final Plat is approved. “Outlot S” (2.44 acres) and “Outlot T” (1.78 acres) contain *new* blanket easements which include: public utility, storm sewer, surface water flowage, shared use path, open space, storm water detention, and storm water conveyance. “Outlot LL” (9.40 acres) is reserved for future development. The City will *not* be responsible for maintenance of any of the outlots; “Outlot S” will be conveyed to the Sunset Ridge Property Owners Association and the other properties will remain under Hunziker’s ownership for the time being. Prior to the conveyance of “Outlot S,” Sunset Ridge Property Owners Association must deed back “Outlot P” to Hunziker, or at least that portion of Outlot P that is now included in Lot 3.

The Sunset Ridge Subdivision is bound by several Developer’s Agreements with Hunziker Land Development Company, LLC, including a 2005 Agreement, a 2010 Amendment, and a 2012 Agreement. Staff believes that the developer has complied with the terms of these agreements as they relate to the proposed parcels.



The Public Works Department confirms that existing public utilities, including water, sanitary sewer, and storm water are currently being installed in the proposed subdivision in compliance with the approved preliminary plat. Easements are provided with the final plat, as required for public utility mains that will serve multiple lots and fire hydrants.

*An Agreement for Public Improvements*, and an *Agreement for Sidewalk and Street Trees* have been prepared for City Council approval with the Final Plat. The *Agreement for Public Improvements* identifies the need for financial security for the completion of certain improvements and utilities including: erosion control (COSESCO), water mains, sanitary sewers and drains, storm sewers and drains, manhole adjustments, pavement, pedestrian ramps, street lights, landscaping, and subgrade preparation.

Financial security, in the form of a Letter of Credit, has been submitted to the City in the amount of \$696,002.55, which covers the cost of the remaining improvements, in the event the developer does not install the required improvements. Sidewalks and street trees must be installed prior to the issuance of a Certificate of Occupancy for an individual lot; however, within three years after final plat approval, all sidewalks must be installed per the *Agreement for Sidewalk and Street Trees*. Financial security can be reduced by the City Council as the required infrastructure is installed, inspected, and accepted by the City.

Given that the preliminary plat will be revised for this Addition, the sidewalk width for Ellston Avenue and west of Ellston Avenue on Westfield Drive and Allerton Drive must meet the current subdivision standard of five feet. The five-foot sidewalk width is included in the financial security schedule.

### **ALTERNATIVES:**

1. Approve the Final Plat of Sunset Ridge Subdivision Tenth Addition based upon the findings that the Final Plat conforms to relevant and applicable design standards, ordinances, policies, and plans with a signed *Agreement for Public Improvements* and *Agreement for Sidewalk and Street Trees* with financial security and the requirement to provide five foot sidewalks for the 10<sup>th</sup> Addition starting at Ellston Avenue and to complete a revised Preliminary Plat and Master Plan reflecting the layout change and change in lot numbers prior to approval of the 11<sup>th</sup> Addition.
2. Deny the Final Plat for Sunset Ridge Subdivision Tenth Addition, and direct the applicant to proceed with a Major Amendment due to the increased lots or because the development creates a burden on existing public improvements or creates a need for new public improvements that have not yet been installed.
3. In the event the proposed easement vacation for Outlot P of the 5<sup>th</sup> Addition is not approved, this Final Plat should be tabled to update the final plat or complete the vacation process.



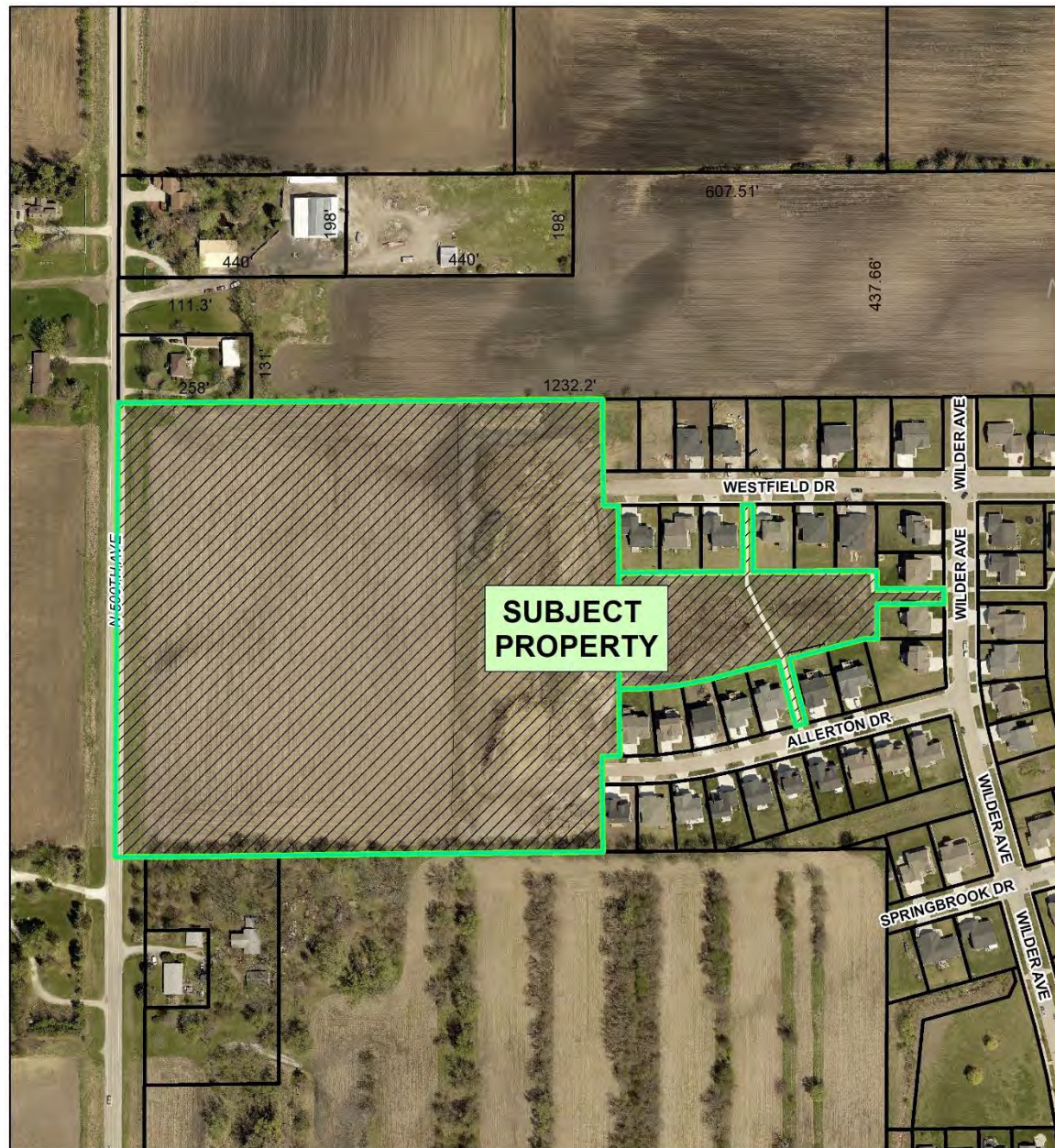
**CITY MANAGER'S RECOMMENDED ACTION:**

City staff has evaluated the proposed final subdivision plat and determined that the Final Plat for Sunset Ridge Tenth Addition conforms to the adopted ordinances and policies of the City as required by Chapter 23 of the *Ames Municipal Code* with the agreed upon widening of sidewalks and proposal to process a preliminary plat prior to the 11th Addition. Additionally, the proposal can move forward with required changes to the master plan and preliminary plat with the submittal of the planned next and final phase (Sunset Ridge Eleventh Addition).

Therefore, it is the recommendation of the City Manager that the City Council accept Alternative #1, thereby approving the Final Plat for Sunset Ridge Subdivision Tenth Addition.

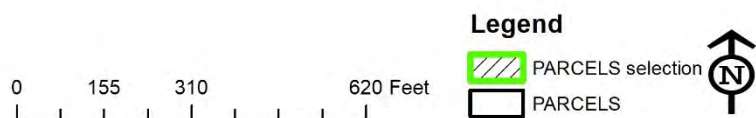
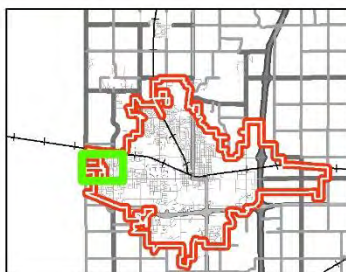


## ATTACHMENT 1: LOCATION MAP



## LOCATION MAP

### Sunset Ridge Subdivision 10th Addition

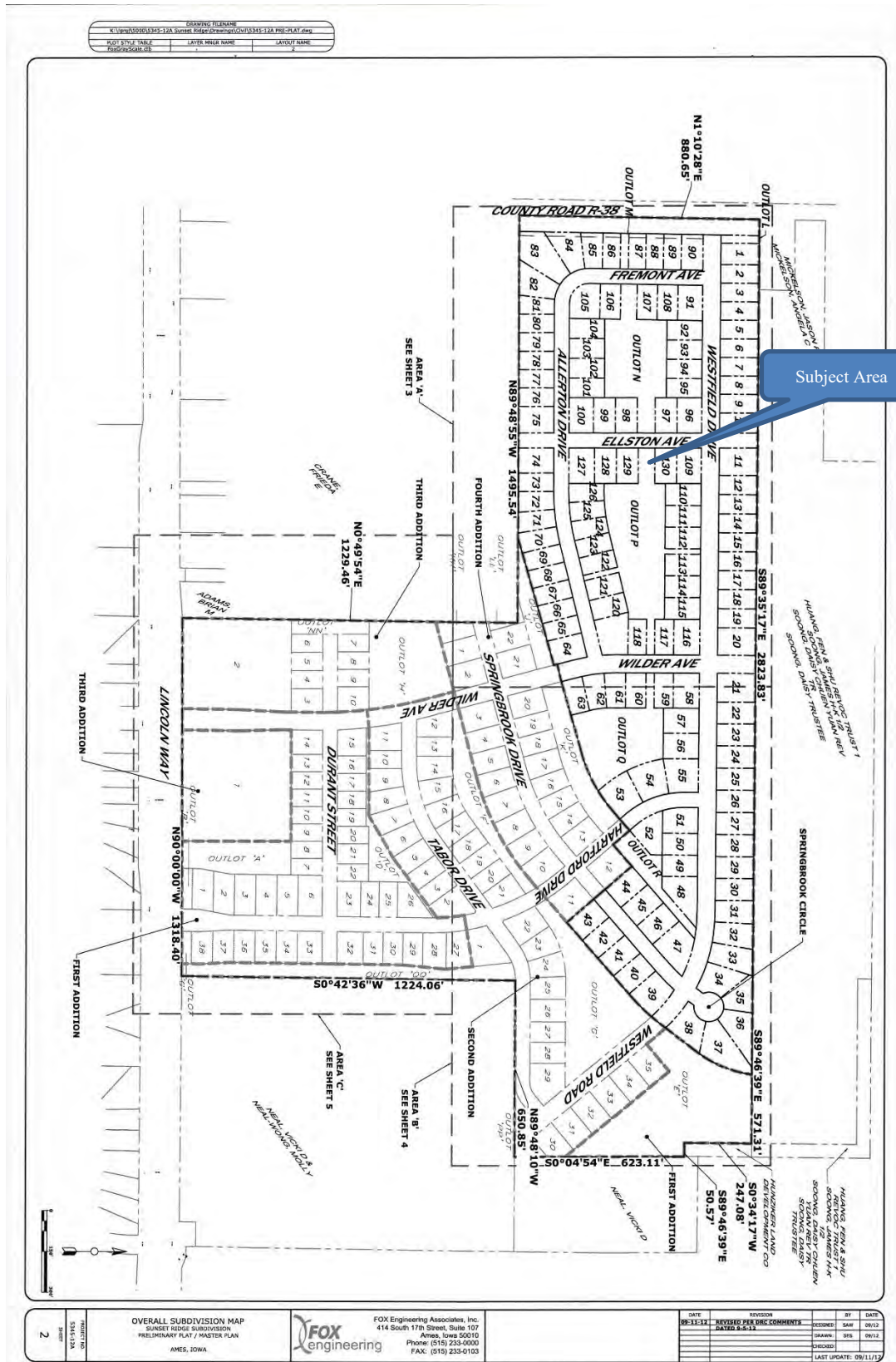




## **ATTACHMENT 2: SUNSET RIDGE PRELIMINARY PLAT & MASTER PLAN**



# (OVERALL SUBDIVISION PLAN)





[illegible]



## **ATTACHMENT 4: Applicable Laws and Policies Pertaining to Final Plat Approval**

Adopted laws and policies applicable to this case file include, but are not limited to, the following:

### *Ames Municipal Code Section 23.302*

(10) City Council Action on Final Plat for Major Subdivision:

(a) All proposed subdivision plats shall be submitted to the City Council for review and approval. Upon receipt of any Final Plat forwarded to it for review and approval, the City Council shall examine the Application Form, the Final Plat, any comments, recommendations or reports examined or made by the Department of Planning and Housing, and such other information as it deems necessary or reasonable to consider.

(b) Based upon such examination, the City Council shall ascertain whether the Final Plat conforms to relevant and applicable design and improvement standards in these Regulations, to other City ordinances and standards, to the City's Land Use Policy Plan and to the City's other duly adopted plans.

(c) The City Council may:

(i) deny any subdivision where the reasonably anticipated impact of such subdivision will create such a burden on existing public improvements or such a need for new public improvements that the area of the City affected by such impact will be unable to conform to level of service standards set forth in the Land Use Policy Plan or other capital project or growth management plan of the City until such time that the City upgrades such public improvements in accordance with schedules set forth in such plans; or,

(ii) approve any subdivision subject to the condition that the Applicant contribute to so much of such upgrade of public improvements as the need for such upgrade is directly and proportionately attributable to such impact as determined at the sole discretion of the City. The terms, conditions and amortization schedule for such contribution may be incorporated within an Improvement Agreement as set forth in Section 23.304 of the Regulations.

(d) Prior to granting approval of a major subdivision Final Plat, the City Council may permit the plat to be divided into two or more sections and may impose such conditions upon approval of each section as it deems necessary to assure orderly development of the subdivision.

(e) Following such examination, and within 60 days of the Applicant's filing of the complete Application for Final Plat Approval of a Major Subdivision with the Department of Planning and Housing, the City Council shall approve, approve subject to conditions, or disapprove the Application for Final Plat Approval of a Major Subdivision. The City Council shall set forth its reasons for disapproving any Application or for conditioning its approval of any Application in its official records and shall provide a written copy of such reasons to the developer. The City Council shall pass a resolution accepting the Final Plat for any Application that it approves.

*(Ord. No. 3524, 5-25-99)*



**COUNCIL ACTION FORM**

**SUBJECT:** 2018/19 SHARED USE PATH SYSTEM EXPANSION (TRAIL CONNECTION SOUTH OF LINCOLN WAY)

**BACKGROUND:**

This program provides for the construction of shared-use paths on street rights-of-way, adjacent to streets, and through greenbelts. **This project will construct a path from Beedle Drive to Franklin Park along an alignment that was approved by the Ames Bicycle Coalition.** Staff has been working with WHKS of Ames, Iowa, on this project to complete plans and specifications, with a total estimated construction cost of \$218,116.

Because this project funding source includes Iowa Department of Transportation (DOT) Transportation Alternatives Program (TAP) funds, the project must follow Iowa DOT letting policies and be let by the Iowa DOT. On September 15, 2020, bids for the project were received as follows:

<i><b>Bidder</b></i>	<i><b>Bid Amount</b></i>
<i>Engineer's Estimate</i>	<i>\$218,116.00</i>
Howrey Construction, Inc.	\$264,834.60
Elder Corporation	\$272,000.00
Absolute Concrete Construction, Inc.	\$285,542.60
TK Concrete, Inc.	\$300,067.05
Con-Struct, Inc.	\$306,557.70
Caliber Concrete, LLC	\$325,361.58
Boulder Contracting, LLC.	\$347,006.10

The table below shows the revenues and expenses for this project:

	Revenue	Expenses
Local Option Sales Tax	\$ 421,000	
AAMPO TAP Funds	\$ 159,000	
Permanent Easements		\$ 48,790.00
<b>Construction</b>		<b>\$ 264,834.60</b>
Engineering and Administration (Estimated)		\$ 109,000.00
	\$ 580,000	\$ 422,624.60



Staff has evaluated the low bid from Howrey Construction, Inc., and determined that it is acceptable. Although this low bid exceeds the Engineer's Estimate for construction costs, sufficient funding exists in the project budget to proceed with this construction contract.

**ALTERNATIVES:**

1. a. Accept the report of bids for the 2018/19 Shared Use Path System Expansion (Trail Connection south of Lincoln Way).  
b. Approve the final plans and specifications for this project.  
c. Award the 2018/19 Shared Use Path System Expansion (Trail Connection south of Lincoln Way) to Howrey Construction, Inc. of Rockwell City, Iowa, in the amount of \$264,834.60, contingent upon receipt of Iowa DOT concurrence.
2. a. Accept the report of bids for the 2018/19 Shared Use Path System Expansion (Trail Connection south of Lincoln Way).  
b. Reject award and direct staff to modify the project for a future Iowa DOT bid letting.
3. Do not proceed with the project at this time.

**CITY MANAGER'S RECOMMENDED ACTION:**

By awarding this project, it will be possible to provide an important multimodal connection for residents in the area. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.





SW Greenbelt Trail  
 2018/19 Shared Use Path System Expansion (Trail Connection south of Lincoln Way)  
 TAP-U-0155(699)--8I-85



1 inch = 583 feet