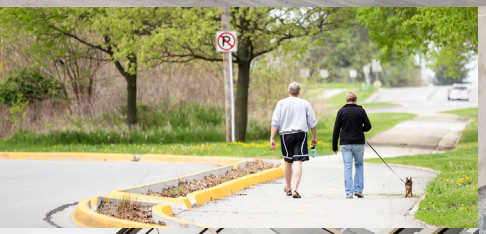


ames mobility 2040

Ames Area MPO 2015-2040 Long Range Transportation Plan

Executive Summary

September 2015

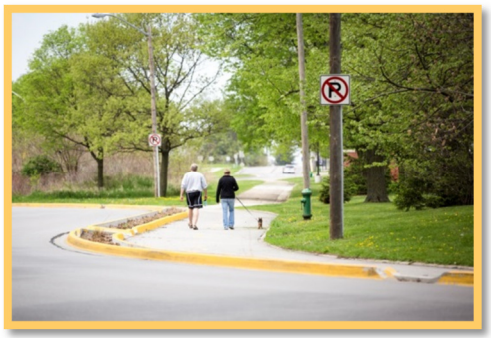
HDR

Executive Summary

The Ames Area Metropolitan Planning Organization (Ames Area MPO) Long Range Transportation Plan (LRTP) provides a comprehensive assessment of transportation in the Ames community and a vision to guide transportation planning through the year 2040. The Ames Area Metropolitan Planning Organization Long Range Transportation Plan, termed Ames Mobility 2040, is a 25-year plan to develop an integrated intermodal transportation system that facilitates the efficient movement of people and goods.

Every five years the plan is updated using a community-driven process to establish a vision for mobility within the Ames Area MPO Planning Area, which includes the City of Ames, portions of the City of Gilbert, Boone County and Story County, Iowa. The plan identifies community goals, needs, and priorities as to how the Ames community can best invest in the transportation system to accommodate the community as it continues to develop. Ames Mobility 2040 includes all modes of transportation including roadway, rail, air, public transit, freight, pedestrian and cycling.

Purpose of Long Range Transportation Plan



Federal regulations require a 20-year planning horizon for the LRTP to assist communities in the transportation decision-making process. LRTPs must be updated every 5 years and should include broad-based public involvement with specific elements that are

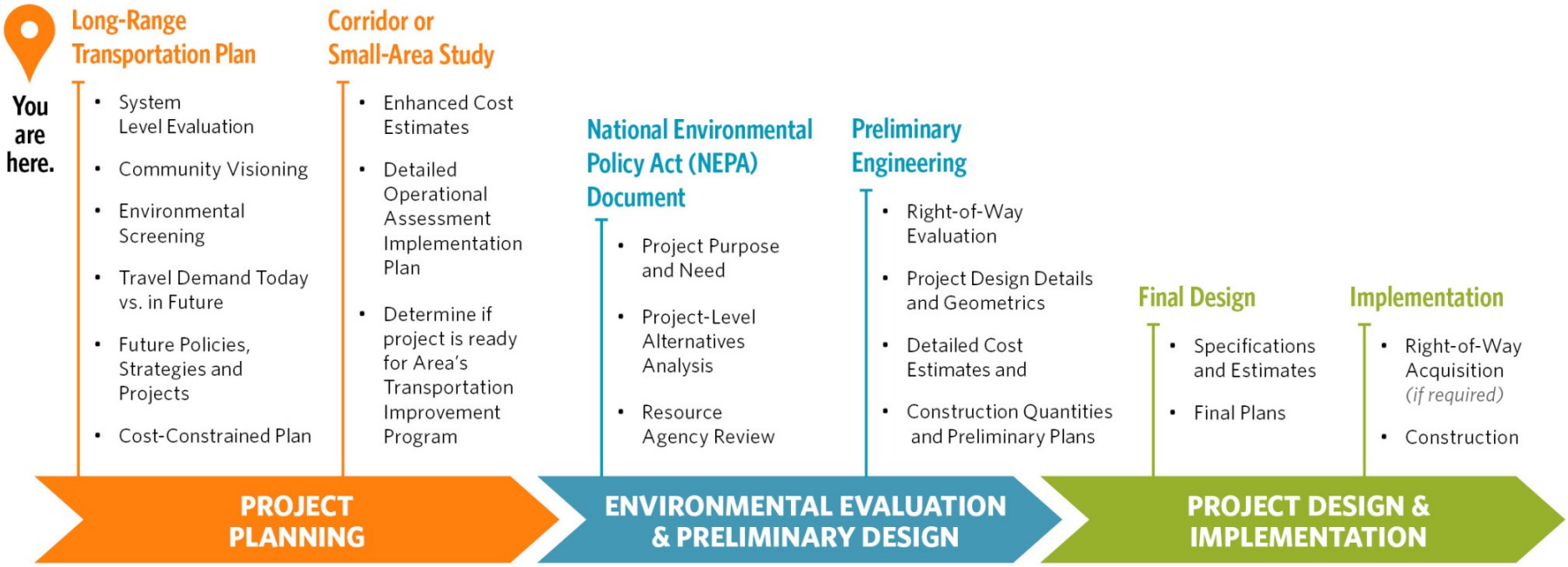
required for states and metropolitan areas. The final product in the LRTP process is a fiscally constrained set of transportation policies, projects, and programs to undertake over a time frame of at least the next 20 years.

Measuring transportation system performance is a significant component of transportation planning under the *Moving Ahead for Progress in the 21st Century Act* (MAP-21). Ames Mobility 2040 has incorporated performance measurement consistent with the available guidance from MAP-21. The requirements for ***performance measurement*** have been and are continuing to be established during the development of this transportation plan. Where possible, this plan has used the performance measurement perspectives that both reflect federal guidance provided and the community's transportation vision, and is providing a solid baseline for continued performance monitoring and assessment in the metropolitan area.

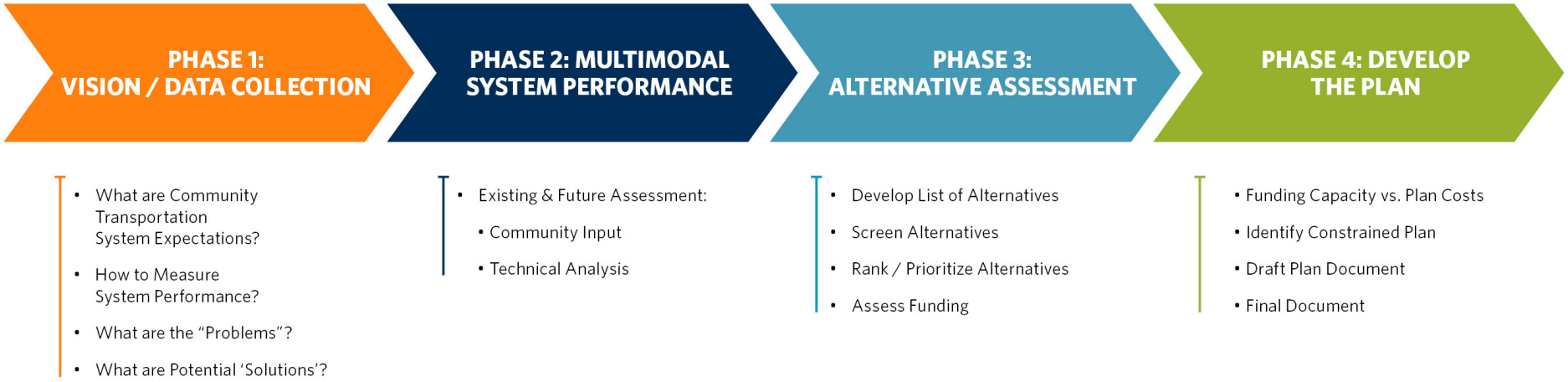
The ongoing last step in the performance-based planning process is monitoring system performance. Performance-based planning is the application of performance management techniques to transportation planning. Part of an effective performance-based planning approach is monitoring, an ongoing activity that this and future LRTP updates will use to evaluate how well the planning activities, programs, and projects implemented by the Ames Area MPO are meeting the metropolitan area, state, and federal goals.

Source: Model Long-Range Transportation Plans: A Guide for Incorporating Performance-Based Planning, FHWA

The Ames Mobility 2040 plan is the first step in identifying and implementing strategies, policies, and projects for implementation within the region. Projects that are included in the LRTP should fit with the community's transportation vision and should be reasonably implementable and fundable, but more details and analysis need to be completed in later stages of project development. Therefore, some of the project details that are shown in the LRTP will change by the time the project is designed and implemented.



Four major phases of this LRTP show the progression of how the Ames Mobility 2040 plan was developed:



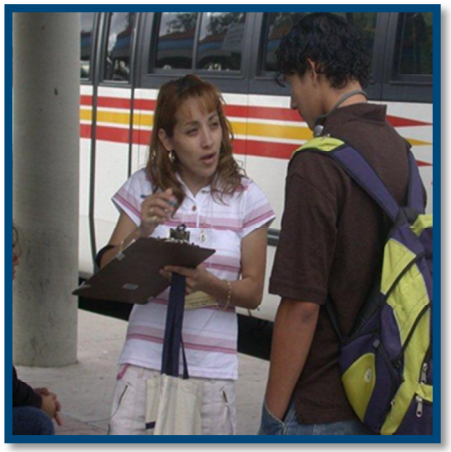
PHASE 1: VISION / DATA COLLECTION

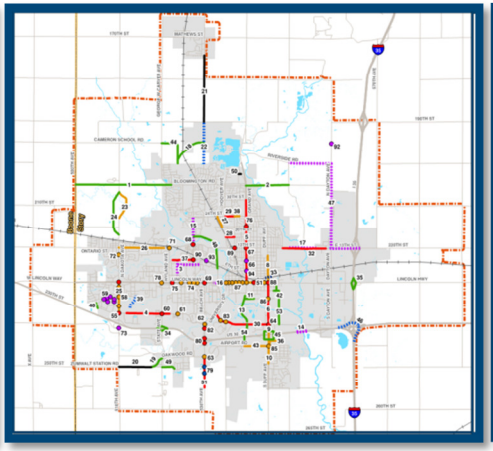
In this phase, the Ames community set a path to address its future transportation needs by first identifying its goals and vision. Goals provide general statements of plan direction and intent.

- ***Goal 1***- Provide a ***connected*** transportation system that offers ***efficient*** and ***reliable*** mobility options for all modes of travel.
- ***Goal 2***- Provide a ***safe*** transportation system.
- ***Goal 3***- Consider and mitigate the impacts of the transportation system on the natural and built ***environment***
- ***Goal 4***- Provide an ***accessible*** transportation system that fits within the context of its surroundings and preserves community character.
- ***Goal 5***- Provide a transportation system that supports the regional ***economy*** and efficiently moves goods.
- ***Goal 6***- ***Maintain*** transportation infrastructure in a state-of-good-repair.

Once the goals were established, project and regional performance measures were established in the form of performance objectives. These performance objectives were used to evaluate potential alternatives in later phases of the study.

A thorough public engagement process was used throughout the Ames Mobility 2040 process – in the form of a project website, social media and online public forums, public participation workshops at key project milestones, and an MPO-wide mail/phone household survey.

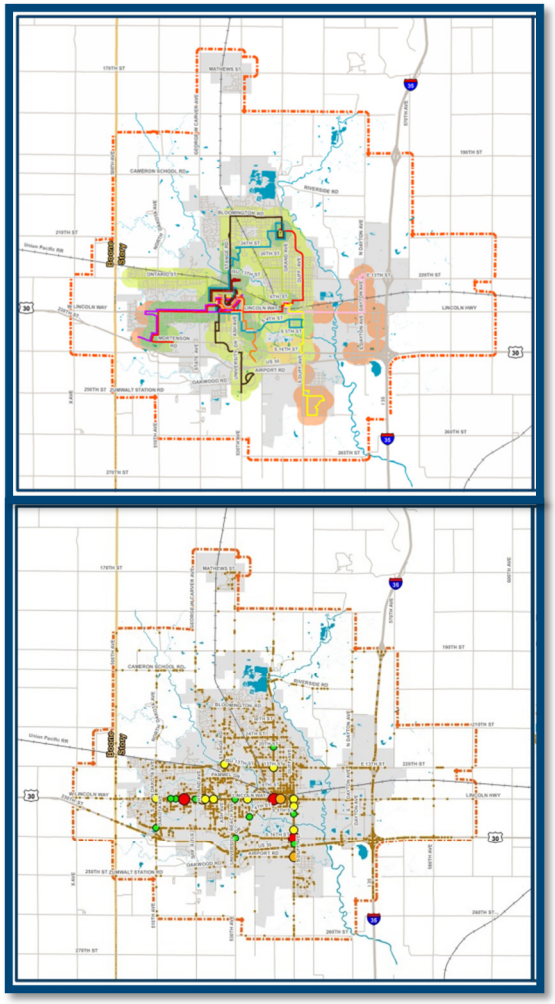




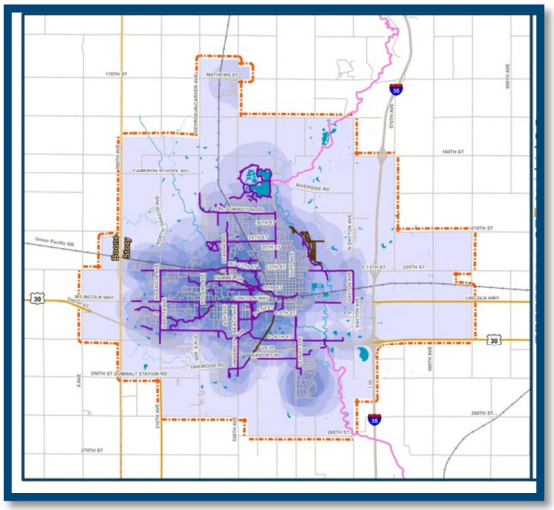
PHASE 2: MULTIMODAL SYSTEM PERFORMANCE

Land use and development trends influence transportation issues and how the region will grow in coming years. The population in Ames has grown 12 percent in the last decade (2000 to 2010), and the job growth in Ames also continues to grow, in the most recent year (2014 to 2015) at 4.9 percent. Ames is dominated by young adults centered around Iowa State University, with 58 percent of the community in the age range 15-34.

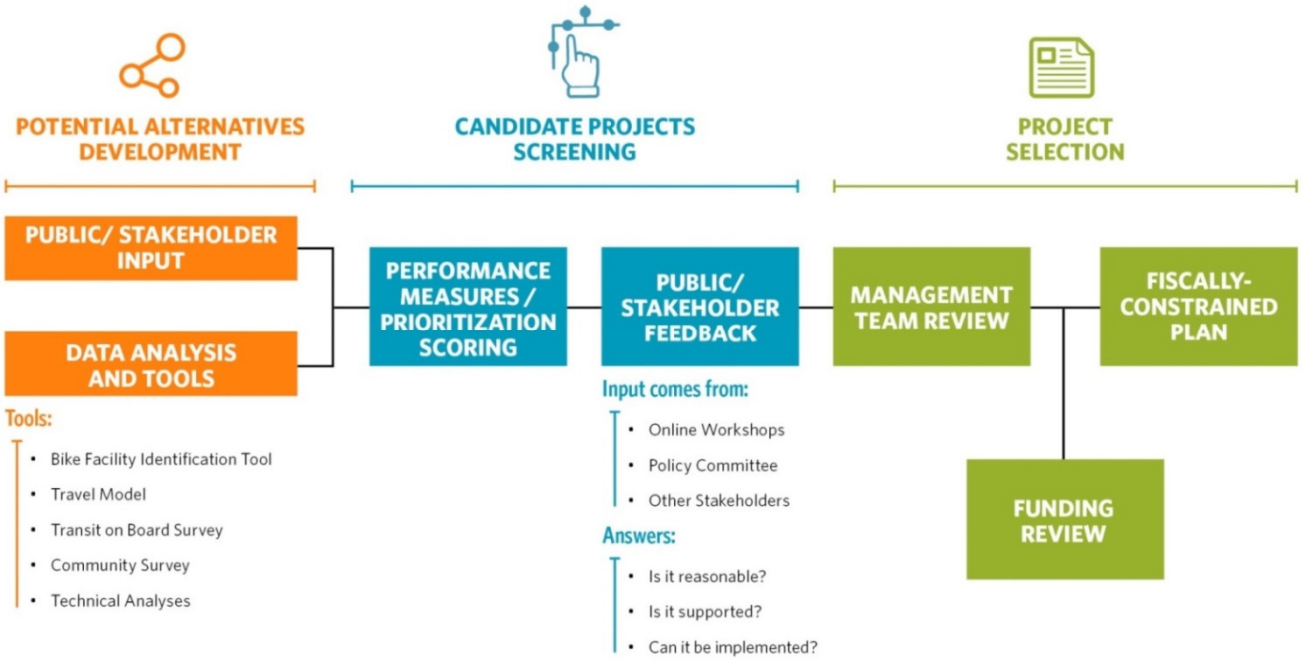
The forecasted population in the Ames Area MPO area is expected to growth by 35 percent to just over 85,000 by the year 2040. Similarly, employment is estimated to grow to over 38,000, a 39 percent increase over the current employment base. The demands on the transportation system are anticipated to grow in a similar fashion through 2040. A baseline of existing and 2040 conditions were assessed for the roadway, bicycle/pedestrian, and transit systems.



PHASE 3: ALTERNATIVE ASSESSMENT



Following the Alternatives Development (Phase 2) of the process, a list of ***Potential Alternatives*** was developed for each mode. Potential alternatives were based on feedback from the public/stakeholder group workshops, as well as the technical analyses and carryover projects from the previous 2035 LRTP. Potential Alternatives were later fine-tuned or eliminated based on consistency with transportation system goals, or fatal flaws. A range of ***candidate projects*** were developed and promoted for further consideration based on feedback from the Potential Alternatives phase, along with technical analyses (traffic operations, user safety, system connectivity, etc).



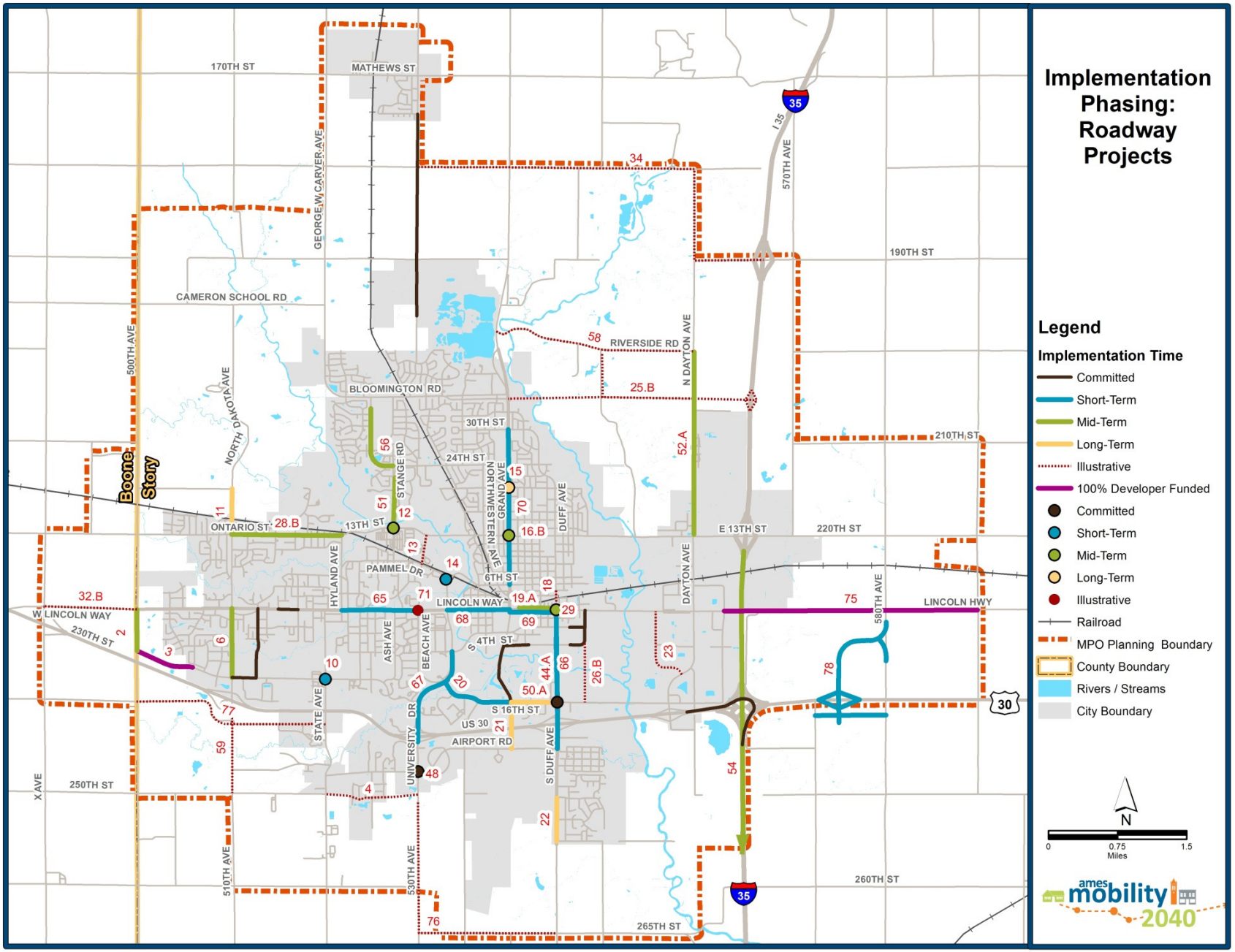
PHASE 4: DEVELOP THE PLAN

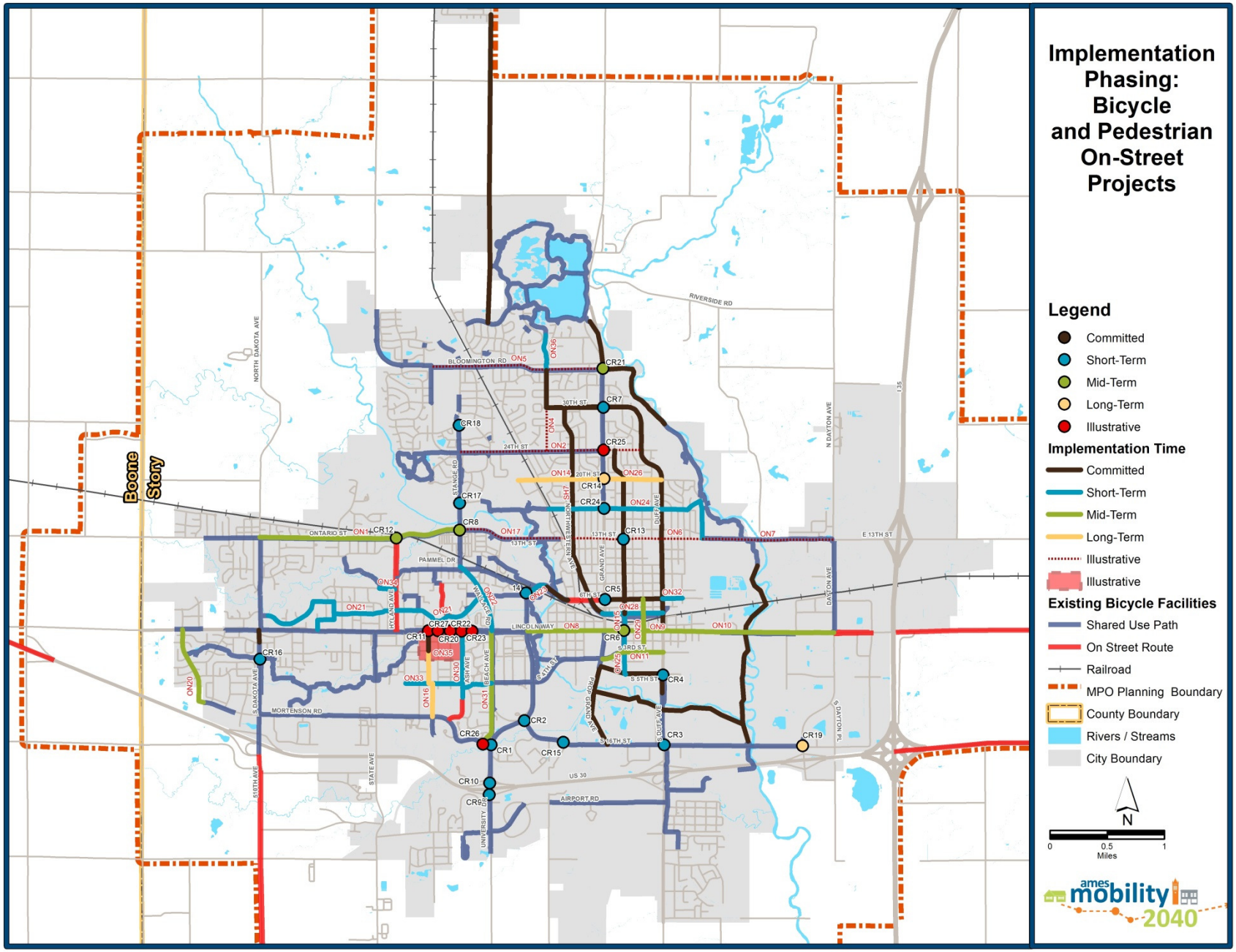
Projects included in the Fiscally Constrained Plan were selected based on:

- Degree to which candidate projects were complementary with other projects in creating a comprehensive set of transportation system improvements
- Feedback received from the public and stakeholders
- Level of performance benefits consistent with MAP-21 direction and Ames Mobility 2040 performance measure scoring
- Consideration of which candidate projects were implementable from a public support and project development perspective

Maps illustrating the fiscally constrained final plan projects are provided for the roadway, bicycle/pedestrian (on-street and off-street), and transit system in the following figures. The project time-frames fall into the following categories:

- ***Committed and Short-Term:*** Years 2016-2025 ***(10 Years)***
- ***Mid-Term***: Years 2026-2032 ***(7 Years)***
- ***Long-Term***: Years 2033-2040 ***(8 Years)***
- ***Illustrative:*** projects without an identified funding source, but still community priorities for implementation during the Ames Mobility 2040 planning horizon. Illustrative projects do not fit within the fiscal constraint based on identified funding sources, but may move up to one of the fiscally constrained implementation periods at a later date as a funding source is identified.


Implementation Phasing: Roadway Projects
Legend
Implementation Time
Committed
Short-Term
Mid-Term
Long-Term
Illustrative
100% Developer Funded
Committed
Short-Term
Mid-Term
Long-Term
Illustrative
Railroad
MPO Planning Boundary
County Boundary
Rivers / Streams
City Boundary
N
0
0.75
1.5
Miles
ames mobility 2040
170TH ST
MATHEWS ST
GEORGE W CARVER AVE
CAMERON SCHOOL RD
500TH AVE
NORTH DAKOTA AVE
BLOOMINGTON RD
RIVERSIDE RD
N DAYTON AVE
570TH AVE
190TH ST
210TH ST
220TH ST
30TH ST
24TH ST
STANGE RD
NORTHWESTERN AVE
GRAND AVE
DUFF AVE
ONTARIO ST
13TH ST
E 13TH ST
PAMMEL DR
6TH ST
HYLAND AVE
LINCOLN WAY
W LINCOLN WAY
230TH ST
ASH AVE
BEACH AVE
4TH ST
DAYTON AVE
580TH AVE
LINCOLN HWY
S 16TH ST
US 30
AIRPORT RD
STATE AVE
UNIVERSITY DR
S DUFF AVE
X AVE
250TH ST
510TH AVE
530TH AVE
260TH ST
265TH ST
Boone
Story
35
30
I 35


Implementation Phasing: Bicycle and Pedestrian On-Street Projects
Legend
Committed
Short-Term
Mid-Term
Long-Term
Illustrative
Implementation Time
Committed
Short-Term
Mid-Term
Long-Term
Illustrative
Illustrative
Existing Bicycle Facilities
Shared Use Path
On Street Route
Railroad
MPO Planning Boundary
County Boundary
Rivers / Streams
City Boundary
N
0
0.5
1
Miles
ames mobility 2040
Boone
Story
BLOOMINGTON RD
RIVERSIDE RD
ONTARIO ST
PAMMEL DR
LINCOLN WAY
MORTENSON RD
AIRPORT RD
US 30
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N DAYTON AVE
S DAYTON PL
NORTH DAKOTA AVE
S DAKOTA AVE
510TH AVE
STATE AVE
UNIVERSITY DR
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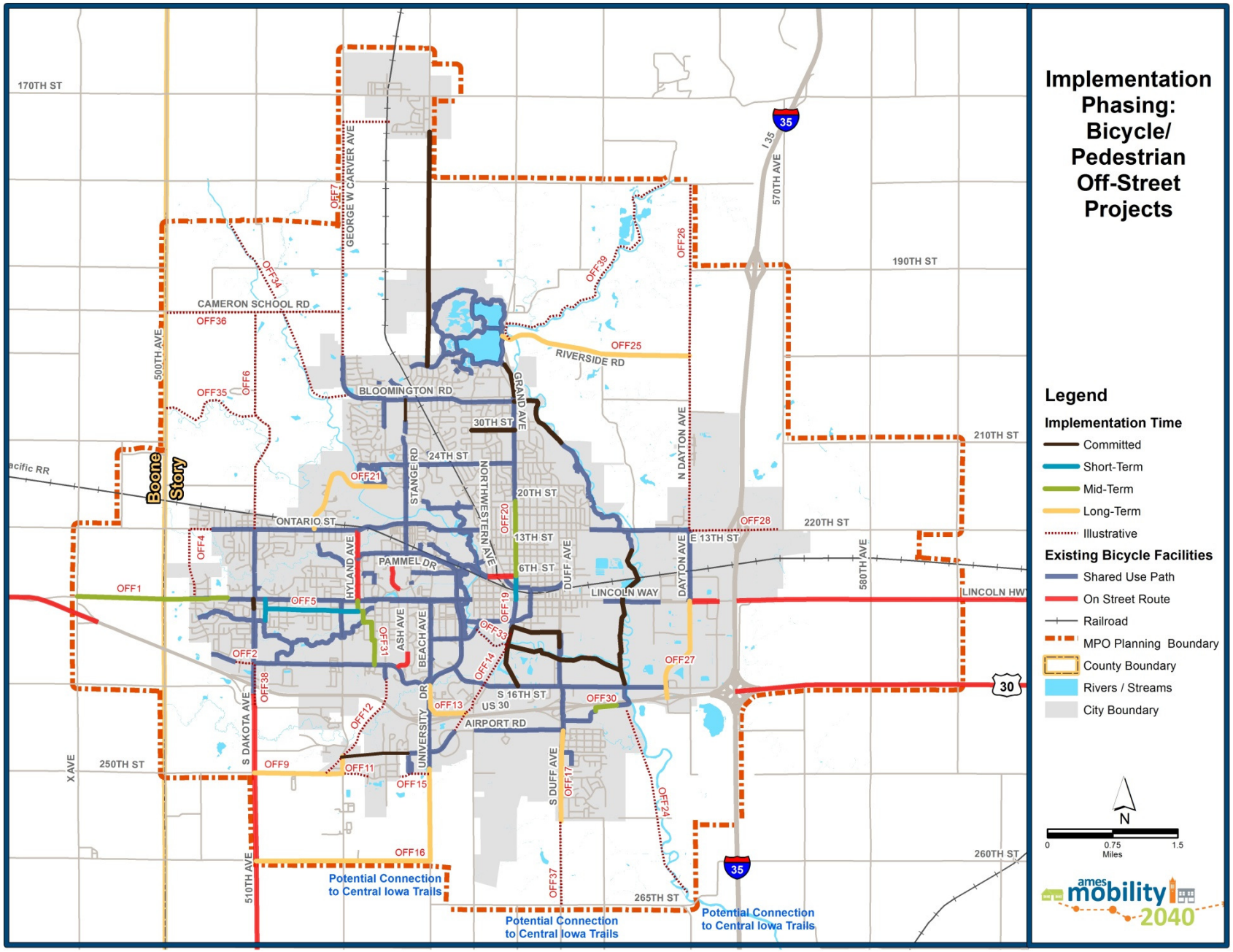
ON36


Implementation Phasing: Bicycle/ Pedestrian Off-Street Projects
Legend
Implementation Time
Committed
Short-Term
Mid-Term
Long-Term
Illustrative
Existing Bicycle Facilities
Shared Use Path
On Street Route
Railroad
MPO Planning Boundary
County Boundary
Rivers / Streams
City Boundary
N
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0.75
1.5
Miles
ames mobility 2040
170TH ST
190TH ST
210TH ST
220TH ST
260TH ST
265TH ST
250TH ST
CAMERON SCHOOL RD
BLOOMINGTON RD
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DUFF AVE
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HYLAND AVE
ASH AVE
BEACH AVE
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S DAKOTA AVE
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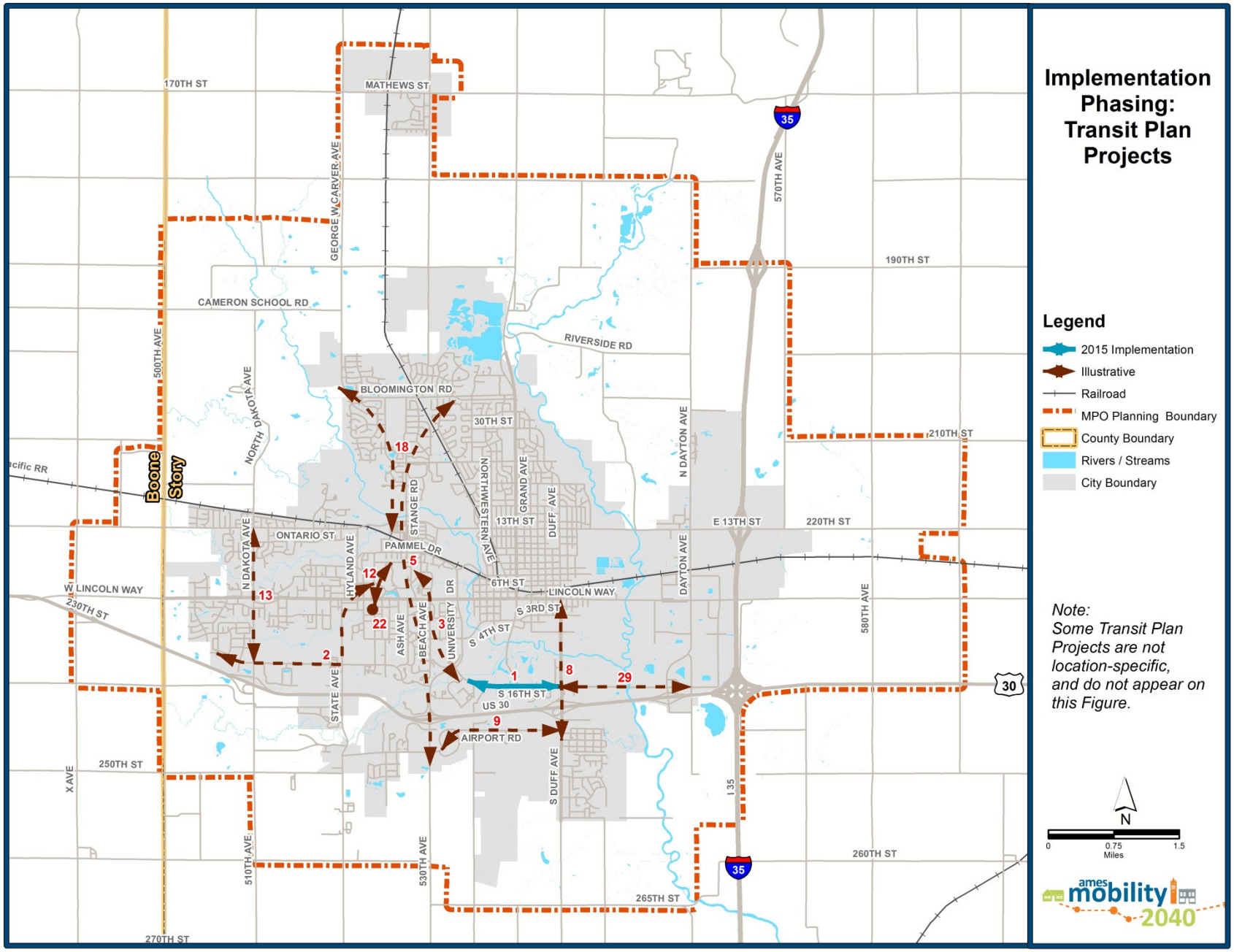
Story
Potential Connection to Central Iowa Trails
Potential Connection to Central Iowa Trails
Potential Connection to Central Iowa Trails


Implementation Phasing: Transit Plan Projects
Legend
2015 Implementation
Illustrative
Railroad
MPO Planning Boundary
County Boundary
Rivers / Streams
City Boundary
Note:
Some Transit Plan Projects are not location-specific, and do not appear on this Figure.
N
0
0.75
1.5
Miles
ames mobility 2040
MATHEWS ST
170TH ST
GEORGE W CARVER AVE
CAMERON SCHOOL RD
500TH AVE
RIVERSIDE RD
BLOOMINGTON RD
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