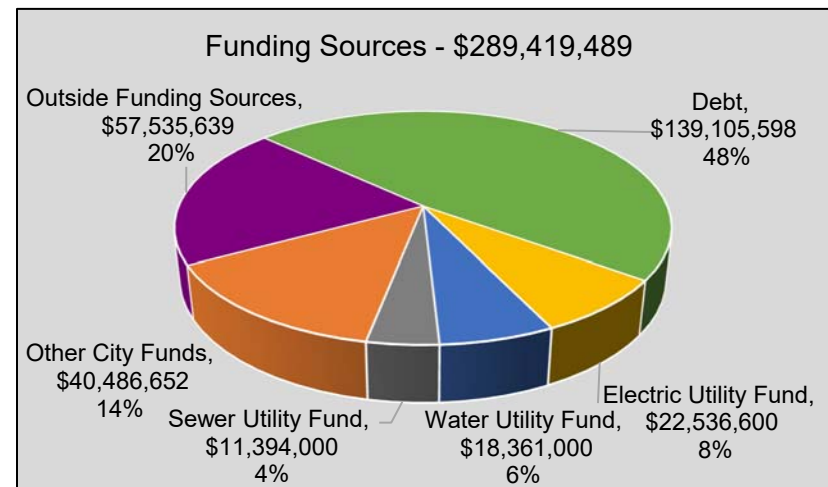
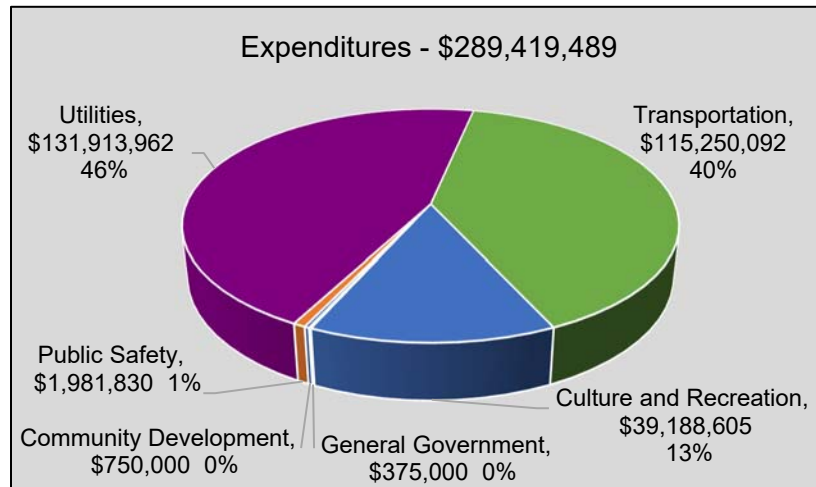


January 18, 2021

The Mayor and Ames City Council Members

I am attaching for your review and approval my recommended Capital Improvements Plan (CIP) for fiscal years 2022/23 through 2026/27. This Plan includes expenditures of \$289,594,489 supported by various funding sources over the next five years as reflected below.



The Capital Improvements Plan serves as a valuable long-range planning and fiscal management plan for the City focusing on physical improvements related to land, buildings, public infrastructure, and major equipment/vehicle expenditures. In order to assist you in better understanding the attached CIP, I am providing below major highlights reflected in this document.

**AMERICAN RESCUE PLAN ACT FUNDING TO IMPLEMENT THE
2040 COMPREHENSIVE PLAN - \$11,238,962**

The CIP earmarks \$11,689,459 out of the \$14,257,623 of federal American Rescue Plan Act (ARPA) funding allocated to the City to install seven major water and sanitary sewer lines that will serve to open development in all four of the first-tier growth areas reflected in the recently approved Comprehensive Plan.

This Comprehensive Plan gives direction where the city will expand over the next twenty years. Too often in the past when a land-use plan was adopted by the City Council, the viability of implementing the plan in a timely fashion was inhibited because expensive utility infrastructure improvements were needed.

The availability of the ARPA funding will allow us to complete the needed infrastructure expansions reflected in the **Ames Plan 2040 Water Utility Infrastructure** (page 68) and **Ames Plan 2040 Sewer Utility Infrastructure** (page 71) projects without needing to raise water and sanitary sewer rates.

PUBLIC SAFETY - \$1,981,830

Fire - \$1,981,830

We currently have a fleet of two pumper trucks and one ladder truck along with one reserve pumper truck. Our goal is to maintain these front-line fire apparatuses for at least fifteen years before replacing them. These vehicles are purchased with General Obligation bond proceeds. The five-year plan calls for the replacement of Engine #1 and Engine #2 along with refurbishing the existing Engine #2 to serve as the reserve unit in the **Fire Apparatus Replacement** program (page 9).

In addition, the deterioration of the driveway has persuaded us to include a new project, **Fire Station #3 Concrete Replacement** (page 10), in the CIP for the first time.

UTILITIES - \$131,913,962

Electric Utility – \$23,575,000

You will note that most of the projects planned for the Electric Utility have been continued in this CIP. However, there are a number of new projects introduced in this document that are worthy of note.

The upgrade to an **Advanced Metering Infrastructure** (page 15) will increase the functional capabilities of our current electric metering system in the following areas: 1) demand side management, 2) outage identification, 3) real-time feeder and transformer analysis, 4) remote disconnect, and 5) time-of-day usage tracking.

The Electric Utility previously installed five charging stations, one that can charge a car in 30 minutes (fast charger) and four that can charge a vehicle in three to four hours (L2 charger). These five stations can serve ten vehicles at a time. The CIP continues this commitment to support electric vehicle ownership with the additional installation of three fast chargers and six L2 chargers which will serve eighteen vehicles at a time with the inclusion of the **Electric Vehicle Infrastructure** project (page 16).

The Iowa Department of Transportation (IDOT) has an important highway project that will require us to relocate a portion of our Ames to Ankeny transmission line which was installed in their right-of-way. While this \$2,404,000 **161 kV Line Relocation** project (page 18) will be designed and constructed by a contractor hired by the City, IDOT will reimburse the City for the costs associated with this project.

In response to lessons learned from the Derecho, the **Critical Electric System Generators** project (page 32) will install a new diesel generator at the Power Plant to assure on-going operations of our SCADA system, DCS system, and oil pumps on the steam turbine generators during blackout conditions. In addition, our system restoration plan requires that a Combustion Turbine is capable of starting without any power from the grid. Therefore, this project also includes the installation of a diesel generator on Combustion Turbine #2. These improvements will allow a cold restart of our electric generation systems even when isolated from the transmission grid.

The **Electric Distribution Universal Locker Room** project (page 22) will result in the renovation of the locker rooms at the Electric Line Distribution work center that were built in 1979. The renovation will provide universal locker room space that will accommodate all genders.

Water Utility – \$35,222,000

The **North River Valley Well Field** project (page 45) involves the construction of three new wells, with the capability to construct three additional wells. This new field will increase of water capacity by 40% to accommodate the growth in customer demand and the loss of older wells.

New to the CIP is the **Physical and Cyber Security Improvements** project (page 50) that will help protect our water system. Of particular note is the work to segregate the Water Plant's SCADA network with a firewall from the access control and security camera system. The commitment to cyber security also is evidenced in the **Remote Sites Fiber Installation** project (page 49), where water utility data will be transmitted over City fiber optic cables rather than over a third party's lines to our Southwest Well Field, Youth Sports Complex Well Field, Bloomington Road water tower, Mortensen & County Line water tower, and State & Mortensen booster pump station.

The conversion to **Advanced Metering Infrastructure** (page 52) will be accomplished by the second year of the CIP. These new meters will allow for quicker reads, easier reads, and more efficient workflow. The new system is capable to be upgraded to a more sophisticated system that could provide more detailed data collection and remote readings.

The Derecho taught us a lesson in the water system as well. The **SAM Pump Station Improvements** project (page 51) will install a new standby generator at this critical point in our water distribution system to help assure that water pressure to the west and southwest portions of the city are maintained during an electric outage. Standby generators will also be included in the North River Valley Well Field and Youth Sports Complex Well Field projects.

Sanitary Sewer Utility - \$59,669,962

A significant project in the Sanitary Sewer Utility CIP is the **Nutrient Reduction Modifications** project (page 59). This five-year plan includes \$11,395,000 of the \$41,110,000 estimated total cost of this project, which will occur over the next twenty years. The work designated at the Water Pollution Control Plant in the first three years of this plan will involve the design and construction of back-up capacity for the existing trickling filters that are scheduled to be removed in FY 2027/28.

In addition to reconfiguring our Water Pollution Control Plant to improve the nutrient removal treatment technology, we remain committed to working with landowners who surround Ames in implementing best practices to accomplish **Watershed-Based Nutrient Reduction** (page 62). This effort will yield benefits in reducing flood risks, increasing recreational opportunities, and protecting our drinking water. Currently, we are working with the Iowa Soybean Association in planting cover crops, the Parks and Recreation Department to convert the western portion of Moore Memorial Park to prairie, Story and Polk County Conservation to promote edge-of-field practices, and Ducks Unlimited to create the Dotson Wetland to treat subsurface drainage from adjacent farmlands.

The **Cogeneration System Maintenance** project (page 60) includes the construction of a new fats, oils, and grease receiving station that will provide more unloading area, more appropriate pumping capabilities, and better ability to accept hauled food waste. It is hoped that this new system will result in more food waste being diverted from our Resource Recovery system.

Clarifier Maintenance (page 66) is the only new project added to the CIP. It is critical that we repaint the steel structures periodically since this coating protects these structures from the harsh conditions to which they are exposed.

The Sanitary Sewer System Improvements program (page 72) earmarks \$22,333,000 over the next five years to remove infiltration into our sanitary sewer system by repairing and replacing manholes and collection lines. This work will reduce clean water from entering our system and causing backups as well as improving our capacity to handle increased customer demand.

Stormwater Utility - \$12,050,000

Feedback from our annual citizen satisfaction survey indicates that the storm sewer projects reflected in the CIP are a high priority of our residents since they will reduce overland flooding and erosion that damage private property. Work planned for the various projects include construction of detention areas, replacement or repair of storm sewer pipes and intakes, and installation of permanent erosion control structures. These projects are reflected in the **Stormwater Erosion Control** program (page 75), **Low Point Drainage Improvements** program (page 76), and the **Stormwater Improvement Program** (page 77).

Protecting the water quality of our streams and rivers receives attention in this CIP with the **Stormwater Quality Improvements** program (page 78) and **Stormwater Detention/Retention Maintenance** program (page 80). These programs address the removal of sediment and nutrients before they enter our waterways by establishing bioretention cells, vegetated swales, native landscape, rain gardens as well as cleaning out regional detention facilities.

Resource Recovery Utility - \$1,397,000

As you know, we are engaged in a study to consider various options for continuing our waste-to-energy system into the future. Until a final decision is made regarding our path forward, the CIP includes the **Resource Recovery System Improvements** program (page 82) to perform preventive maintenance on our current facility by replacing various components and equipment at the plant.

TRANSPORTATION - \$115,210,092

Streets/Traffic/Shared Use Paths - \$89,959,980

Feedback from our annual Citizen Satisfaction Survey indicates that our residents place a high priority on investing in repairing the existing street system as well as constructing additional street segments that will facilitate more efficient traffic movements throughout the community. With this feedback in mind, the CIP reflects significant expenditures to satisfy these two objectives.

You will note that while many of the projects in this section were included in past documents, the projected costs to accomplish the same amount of work have grown to reflect inflationary increases related to current bidding conditions. This is particularly true with the **Alley Pavement Improvements** program (page 91), which is being increased in this CIP from \$150,000 per year to \$400,000 per year.

To emphasize its commitment to multi-modal transportation the City Council has established a goal of spending an average of \$1,200,000 per year to improving our shared use path system. The CIP being presented to you reflects expenditures of \$7,390,700 over the next five years, or an annual average of \$1,478,140. Of note is the **Shared Use Path Maintenance** program (page 102), which establishes for the first time a commitment to joint seal and seal coat these surfaces every five years before they are reconstructed.

The **Intelligent Transportation System** program (page 105) remains a priority in this CIP. This four-year project will result in the installation of adaptive systems that are able to perform real time optimization of traffic and pedestrian flow at signalized intersections thus improving efficient traffic flow and reduction in delays.

One of the City Council's goals is to assure a welcoming environment to those who live or visit our community. The **Accessibility Enhancement** program (page 108) is one way we help facilitate this goal by installing handicapped ramps at crosswalks, audible and vibrotactile push buttons on signalized traffic control devices, and public parking spaces to current accessible standards.

Funding has been included in the first year of the CIP for the **Main Street Sidewalk Pavement Replacement** project (page 115) to complete this \$995,000 Downtown beautification project with the final section of the paver installation from Kellogg Avenue to Duff Avenue.

A new project, **US Highway 69 Improvements** (page 117) has been included in this CIP. The Iowa Department of Transportation is planning to resurface Grand Avenue between Murray Drive and Lincoln Way and South Duff Avenue between Lincoln Way and Jewel Drive. The City will be responsible paying for curb, cutter, and stormwater intake repairs associated with this work.

Transit - \$19,397,112

With support from 80% federal grants, the CIP anticipates the purchase of fourteen 40' buses, five battery electric buses, five administrative vehicles, two 60' articulated buses, one Dial-A-Ride bus, and one Dial-A-Ride van in the **CyRide Vehicle Replacement & Rehabilitation** program (page 119).

The **CyRide Facility Improvements** (page 120) and **CyRide Shop and Office Equipment** (page 122) programs will assure the appropriate investment is made to maintain these critical facilities.

Upgrades will be made to interior signage, maintenance software, and demand response management software to improve efficiency and the riding experience for our passengers with the **CyRide Technology Improvements** program (page 121).

Airport - \$5,853,000

The **Airport Improvements program** (page 125) reflects the elements that were included in our recently approved Airport Master Plan. These elements call for the rehabilitation of the South apron, reconstruction of Runway 13/31, upgrades to the runway lighting, improvements to wildlife fencing, and crack sealing Runway 1/19.

Even though the City anticipates receiving 75% federal funding for these airport projects, the traditional source of our local match, the Airport Construction Fund, is not projected to have sufficient funds over the next five years to finance the projects. Therefore, at this time it appears G.O. Bond funding will be needed if we hope to move ahead with all of these projects.

CULTURE AND RECREATION - \$39,188,605

Parks & Recreation - \$ 38,891,173

The City has been long known for its expansive and high quality park system. More recently, we have focused on improving our facilities to complement our open public spaces. Towards this end, the previous budget included funding to construct a Ninja obstacle course, a soccer pitch, and a community splash pad. This CIP continues this focus with the addition of the new **Indoor Aquatics Center** (page 131), with its zero depth entry pool, lap pool, therapeutic pool, current channel, and slide, along with the **Downtown Plaza** (page 130), with its ice skating and water features. Other new facilities envisioned in this CIP include a renovated fishing pond and wetland overlook

in **Ada Hayden Heritage Park** (page 133), a new women's locker room at the **Ames/ISU Ice Arena** (page 138), and a new pedestrian bridge over loway Creek that will connect our shared path system through **Moore Memorial Park** with the Ontario Road segment (page 139).

The availability of Local Option Sales Tax revenues allows us to assure that our existing infrastructure and equipment in our park system are well maintained. For example, the **Playground Equipment Improvements** program (page 134) will allow us to replace the playground equipment throughout our park system in accordance with a newly established twenty-year schedule and the bridge on hole #9 will be reconstructed at **Homewood Golf Course** (page 137).

The development of one new park in our system is highlighted in the fifth year of the CIP. The **Hayden's Preserve Park Development** project (page 140) anticipates the Hayden's Preserve subdivision progressing as planned.

Other Culture and Recreation – \$297,432

Funding is also included in the Culture and Recreation program for the **Library Carpet Replacement** project (page 142), which will replace the carpet at the Ames Public Library over a two-year period. The **Cemetery Improvements** program (page 144) allocates funding for improvements at both the Ames Municipal Cemetery and the Ontario Cemetery.

COMMUNITY DEVELOPMENT - \$750,000

Neighborhood Improvements - \$750,000

The City Council's commitment to strengthening our neighborhoods will be realized through grants provided to owners making improvements to their properties through the **Downtown Façade** program (page 147), **Campustown Façade** program (page 148), and the **Neighborhood Improvement** program (page 149) along with the **Neighborhood Curb Replacement** program (page 114), highlighted in the Transportation Program of the CIP.

GENERAL GOVERNMENT - \$375,000

Facilities - \$375,000

The **City Hall Improvements** program (page 153) allocates funding for repairs and major maintenance projects for the City Hall building that are beyond the scope of the operating budget. Due to the age of the building and increased project costs, funding in this program has been increased from \$50,000 per year to \$75,000 per year.

PROJECTS NOT YET INCLUDED IN THE CIP

As in the past, I am highlighting a few projects that will be needed in the near future. However, because of the necessity for additional information and the fact that other projects have received a higher priority at this time, they have not yet been included in the CIP.

Now that the City Council has committed to moving ahead with a new indoor aquatics center, only three major projects remain on the list.

- With increased densities in Campustown, it has become more dangerous for pedestrians when fire trucks enter and leave Fire Station #2 on Welch Avenue. Because of this situation, the relocation of Fire Station #2 will need to be considered by the City Council. The City staff currently is working with Iowa State University administrators to identify alternative sites on University property along State Avenue to maintain adequate response times to the ISU campus as well as improve response times to other parts of the City.
- Because of inadequate space to 1) provide a healthy environment for the animals, 2) allow the staff to accomplish their work, and 3) accommodate the customers who wish to adopt animals, the construction of a new Animal Control Shelter is needed. City staff is currently working on finalizing construction estimates and learning how similar facilities have been financed.
- Now that the Comprehensive Plan has been adopted, it is time to finalize a Fire Station Location Plan to determine where a fourth fire station should be located to adequately address the response time needs to all four growth directions envisioned in the Plan. City staff is currently modeling response times to identify the optimal site for the fourth station as well as the availability of land for this purpose.

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While the new Comprehensive Plans tells us where we should grow during the next twenty years, we are very fortunate that our department heads and their leadership teams have identified projects in this CIP that will be required to get us there.

The formulation of the document itself is a difficult task. Therefore, special thanks need to go to Duane Pitcher, Finance Director; Nancy Masteller, Budget Manager; Amy Crabbs, Budget Analyst; Amanda Calbert, Finance Secretary; Deb Schildroth, Assistant City Manager; and Brian Phillips, Assistant City Manager, for their hard work in coordinating the development of the CIP document.

Sincerely,



Steven L. Schainker
City Manager