

The City of Ann Arbor

# INFRASTRUCTURE AGENDA

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102<sup>ND</sup> MICHIGAN LEGISLATURE
January 2023

Christopher Taylor, Mayor

Milton Dohoney Jr., City Administrator

John Fournier, Deputy City Administrator

## 2023 Infrastructure Agenda

## **Community Funding Request Opportunities**

#### **Projects in Support of Community Need, Goals, and Values**

In March of 2022, the City of Ann Arbor prepared an Infrastructure Agenda to detail pressing and unfunded capital needs. The following is an updated selection of projects reflecting new initiatives and priorities for the city.

In developing funding priorities for FY2024, several factors were taken into consideration.

#### **Mega Projects**

Ann Arbor has several large and ambitious projects on the horizon. Each requires more than \$100 million and will require participation from local, state, and federal partners to complete. They have been broken down into several smaller projects, to provide additional opportunities for funding so these priority projects advance while the city continues to seek additional resources.

#### Readiness

Several projects on this list are prepared for implementation and the city is only looking to close small funding gaps to begin work.

#### Urgency

These priorities take into account the urgency that surrounds some of these projects. Those that impact human health and safety, and protection of the environment are of the highest priority.

#### **Alignment**

Infrastructure funding priorities are strongly aligned and in support of the city's mission to provide a safe and equitable city, to protect our environment, and to limit our climate impact. Ann Arbor will achieve this by leveraging timely investments into priority projects.

# **Carbon Neutral Municipal Water Treatment Plant**

**Project phase: Design and Build**Health and Safety, Environmental Protection, Climate Resilience

This project ensures a future with high quality drinking water by replacing the aging facility that was constructed in the 1930s. A small-scale pilot plant is currently operating to test and analyze treatment alternative to assure the most efficient and effective strategy to treat drinking water. This treatment plant will feature rooftop solar and other on-site solutions to make it one of the first carbon neutral water treatment facilities in the country. A renovated water treatment plant will prepare Ann Arbor to be a resilient community in the face of climate change.

Full Project Funding: \$108.1 M

Requested funding: \$10 M to initiate design and build phase

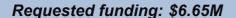


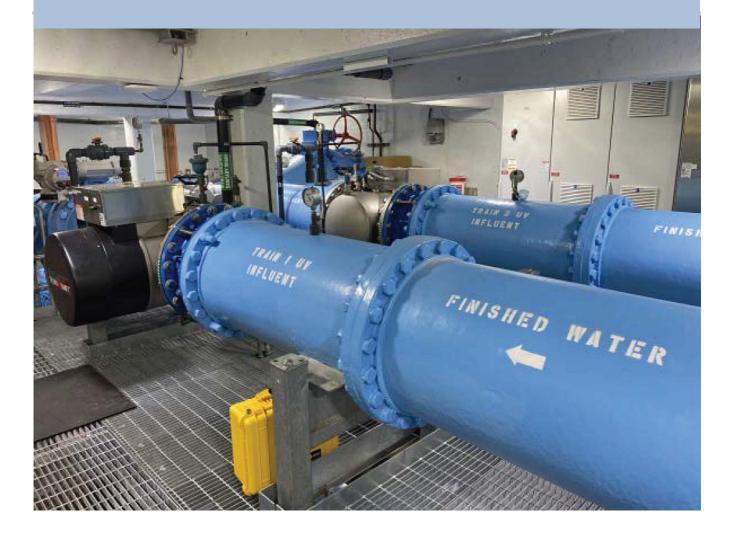
# **Drinking Water Filtration and Contaminant Removal**

Project phase: Ready to Build

Health and Safety, Environmental Protection, Climate

This project assures safe and reliable drinking water for Ann Arbor and surrounding areas for years to come. Modifying the existing depth of the filter media will improve removal of contaminants like PFAS, 1,4-dioxane, and cryptosporidium with greater efficiency. The city is partnering with the University of Michigan to test new technologies to address emerging contaminants of concern.





# **Galvanized Waterline Replacement**

Project phase: Ready to Build

**Health and Safety** 

Ann Arbor began replacing lead pipes and City-owned portion of the galvanized lines many decades ago as the public health concern became clear. This work was completed in 2016. The City estimates that there are around 1,000 additional private service lines in need of replacement and that the cost to complete this work will be around \$6.3 million dollars. Additional federal funding for private service line replacement would enable Ann Arbor to use its local capital monies for much needed repair and replacement of aging public water infrastructure like pipes and valves.

Requested funding: \$6.3M



# **Regional Recycling Drop-off Facility**

Project phase: Ready to Build

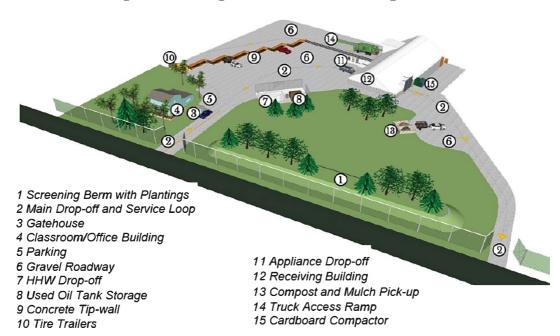
### Environment, Sustainability, Regional Solutions for a Circular Economy

The city has been awarded a state grant from EGLE to support building a new regional recycling and solid waste drop-off station, but the project costs will exceed the funding currently available. the City anticipates eventually securing reimbursements from partnerships with the County and surrounding Townships. The remaining project cost is \$4,750,000.

The project would replace the badly deteriorated facility that is sinking due to its position on a landfill site. EGLE's grant, plus township and county reimbursements also contribute to the regional facility that collects scrap metal, general waste, bulky waste, furniture, yard waste, and concrete.

Requested funding: \$4.75M

### Example Drawing of a Full-Scale Drop-Off Station



## Wheeler Center Solar Park

Project phase: Ready to Build

Climate, Environmental Protection, Resilience

The Wheeler Solar Park Project is a 20MW solar power plant ready to build on the City's closed landfill. Building this park would also serve as DTE's very first community solar offering. A portion of the project set aside for a potential low income offering, which would mean that shares of the community solar project could be offered to residents at a discounted rate, so they receive more of the benefit of the project with less of the total cost.

This project was fully funded and ready to bid when the Commerce Department investigation of the foreign manufacture of solar panels upended the domestic solar industry and pushed costs significantly up. We are looking for funding to close the gap on the \$40 million project.



# Ann Arbor Train Station

### Project phase: Design and Build

#### Transportation, Climate, Economic Development

The Ann Arbor Station project proposes to build a new train station in Ann Arbor, including platforms, an intermodal facility, and parking, that will be sized large enough to meet our current and future needs.

Ann Arbor is the highest volume train station in the state of Michigan in terms of annual passengers boarding but is among the smallest stations in the state - and demand is only expected to increase. Anticipated additional train service between Chicago and Detroit, and possibly Ann Arbor and Traverse City, and the potential for commuter rail services will only push ridership up. A larger station, built with strong connections to existing multi-modal transit services, will help meet current and future ridership demands, help Ann Arbor reduce vehicle miles travelled in the region, and move Ann Arbor closer to meeting its sustainability goals.

#### Full Project Funding Requirements: \$100+ M

#### Requested funding - \$4M Project Planning, Design, and Public Engagement

To best position the project to compete for federal transportation grant funding to build the station, the city must first complete a quality planning and design process. State support for this initial phase of the project will help unlock federal funding in future years.



### The Treeline Trail

### Project phase: Design, Purchase, and Build Transportation, Climate, Economic Development

More than just a recreational path, Treeline Trail is an urban trail concept that envisions a 2.75-mile non-motorized trail. The trail would allow even the most vulnerable people to safely move from the north end of the city to the south by providing a protected walking and biking route. This path would provide quality green and recreational spaces and increase non-motorized mobility connections along the path.

This facility will meet the needs of children, seniors, people with disabilities, and those who are simply not comfortable commuting by bike alongside cars. Additionally, the Treeline Trail's route is planned to serve up to two properties that are slated for affordable housing development. The project is being implemented through a partnership with a local non-profit called the Treeline Conservancy.

#### **Full Project Funding: \$110M**

#### Argo Pond to North Main - \$5 M

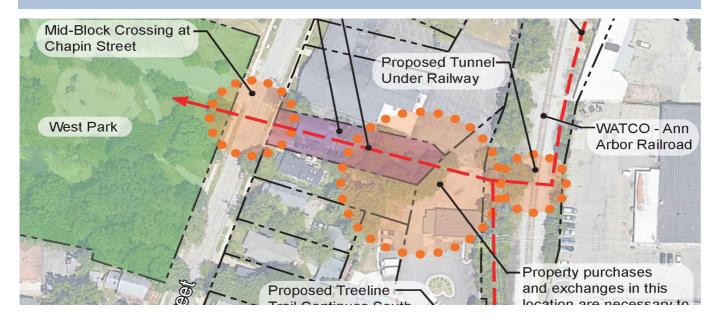
Property acquisition, planning and engineering for a safe, grade separated connection through the heavily traveled North Main Street Corridor.

#### West Park Connector - \$1.2 M

Property acquisition and planning for an essential tunnel to safely move the trail under the railroad to the west side of town.

#### Property Acquisition and Easement Funding - \$3 M

Purchase of private property in the south portion of the trail to assure trail alignment.



### Vison Zero

Project phase: Build

Transportation, Safety, Climate

Vision Zero is a data-driven approach to prioritizing street improvements in the interest of public safety and enhanced mobility for all. Implementation of this project plan makes Ann Arbor streets safer for non-motorized traffic as well as cars. The program requires regular annual investments to see upgrades throughout the city. These projects create safer transportation for all with more efficient road configurations, improved pedestrian infrastructure, better lighting, and better bike infrastructure, among other changes.

#### Safety Focused Corridors \$3M

Vision Zero uses data to target the biggest safety concerns. These funds would invest in safety improvements like roadway reconfiguration to reduce conflict points and improved corridor lighting.

#### Upgrade Pedestrian Signals and Evaluate Signal Timing \$2.15 M

To improve accessibility, the city will upgrade all signals by adding pedestrian signal heads and countdown timers; and add Accessible Pedestrian Signals (APS) with audible homing beacons, push buttons, and signal indicators to improve accessibility for the visually impaired. Evaluation of pedestrian signal timing.

#### Bike Infrastructure Improvements \$3M

This project provides a series of safety upgrades for those that opt to travel by bike. Protected bike lanes, high visibility pavement markings for intersections, bike boulevards on slower streets, and secure bike parking, and connection to regional trails.



# Creating a Carbon Neutral City of Ann Arbor

Project phase: Plan and Build Climate, Sustainability, Safety

This is a group of projects to bring the City's own facilities in line with its goal to be carbon neutral by 2030.

#### Full Project Funding Requirements: \$55 M

#### Net-Zero Fire Station 3 \$10 Million

Replace a 1966 facility that has outlived its planned lifespan and is a maintenance burden. Replacement would have sustainability and energy conservation features. It would also create gender equitable facilities. This would be the first fully carbon neutral facility and incorporate solar, geothermal, and other energy saving technologies.

#### Net-Zero Fire Station 4 \$10 Million

Replace an aging facility that is a maintenance burden. Replacement would have sustainability and energy conservation features. It would also create gender equitable facilities. This project would also have emergency power back-up as it currently has none. This would be the second fully carbon neutral facility and incorporate solar, geothermal, and other energy saving technologies.

#### Solar on City Facilities \$2.5 Million

Create solar installations on smaller, secondary city facilities. This would complement previous projects to solarize primary city facilities.

#### Fleet Electrification \$22.5 Million

Full electrification of all viable vehicles within the cities fleet. The city has made great strides and has electrified most of its passenger vehicles in the city fleet. These funds would allow electrification of medium, and heavy-duty vehicles and equipment.

#### City Facility Decarbonization \$10 Million

Implement energy efficiency, electrification, on-site renewal energy and other recommended solutions to achieve carbon neutrality in city facilities.



# Residential Stormwater Management Study

Project phase: Ready

Stormwater Management, Health and Safety, Flood Mitigation, Climate Resilience

Several Ann Arbor residential neighborhoods face regular flooding as antiquated stormwater management systems became overrun from increasingly large rain events. This project proposes to study all impacted neighborhoods and evaluate suitable options to alleviate flooding and property damage regularly experienced by residents on the 12.5 miles of unpaved roads city roads.

The city maintains systems to manage stormwater, sediment, and flood mitigation programs to protect water quality and reduce negative impacts on people, property, and infrastructure. However, climate change has impacted the frequency and intensity of storms and has impacted the City's ability to manage stormwater system particularly in areas with limited stormwater conveyance due to gravel roads.

#### Requested funding: \$1.5M

Cost of drainage study varies by neighborhood. Each is estimated to cost \$150,000 - \$200,00. The cost of covering all impacted residents with a drainage study to recommend stormwater management resolution strategies may exceed \$1,500,000.



# Sustainable Energy Utility Start-up

Project phase: Planning, Purchase, and Build Climate, Sustainability, Resilience

The development of a Sustainable Energy Utility (SEU) focuses on local energy generation and rigorous energy waste reduction. The Ann Arbor SEU would be the first of its kind supplemental public utility in the nation focused on generating clean, local, affordable, and resilient electricity. Over time it would deploy micro and nano grids and run parallel to existing service. The ability to rapidly deploy local renewable energy would allow a quick reduction in fossil fuel dependance. This local solution to energy need will keep equity at the center of the mission. It will allow access new technologies for the most vulnerable households and reduce hardships related to frequent power outages.

#### Requested funding - initial start-up \$10M

This initial investment allows the city to purchase equipment, management tools and staff to create the Sustainable Energy Utility and link micro grids. A pilot project in a single neighborhood would test the SEU function and reliability.

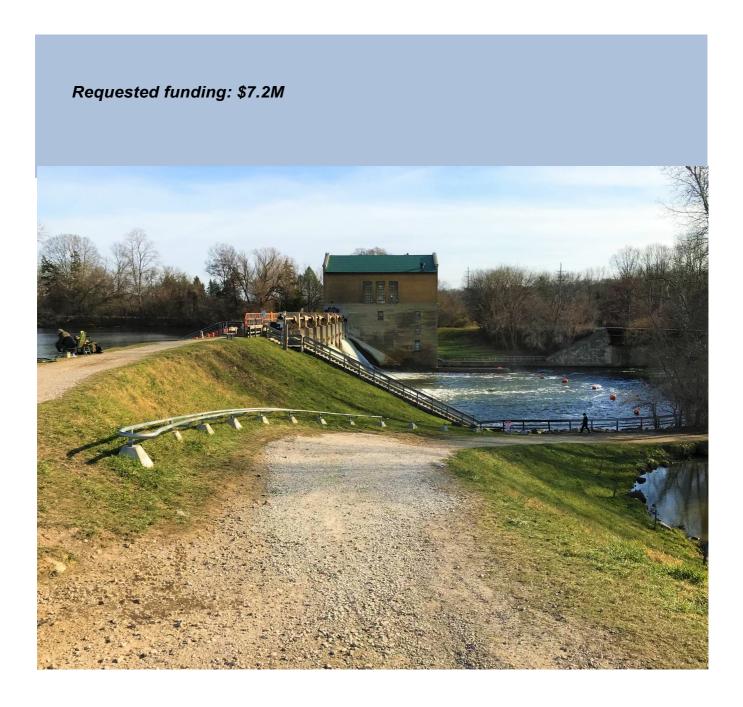


# Barton Dam Rehabilitation and Safety Improvements

Project phase: Plan and Build

Health and Safety, Drinking Water Supply and Safety

The Barton Dam embankment creates an impoundment along the Huron River that serves as the City of Ann Arbor's water supply and a source of renewable energy through hydropower production. Repairs to the Barton Pond embankment are required to address both the long-term stability and safety of the dam.



# Road Paving and Resurfacing Project phase: Build

Transportation, Safety, Economic Development

Road resurfacing is a constant need throughout the Ann Arbor community.

### Requested funding: Any amount

