

AMES AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION TECHNICAL COMMITTEE

SUBJECT: DRAFT FFY 2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

BACKGROUND:

In order to receive funds for transportation improvement projects, it is necessary for the projects to be part of the approved statewide plan. The initial step in this process is for the Ames Area MPO to develop a Transportation Improvement Plan (TIP). The TIP includes four-years of programming and a new document is created annually. The Ames Area MPO was provided the following targets for regional MPO funds by the Iowa DOT:

- STBG : \$1,725,427
- STBG-TAP : \$86,770
- STBG-TAP-Flex: \$66,179

In spring 2020, the Ames Area MPO distributed applications for new funding for Surface Transportation Block Grant (STBG) and Transportation Alternative Program (STBG-TAP) projects.

STBG (Surface Transportation Block Grant)

Two (2) applications were received for regional STBG funds.

TPMS #	Project Sponsor	Project Name	Federal Fund Request	Total Project Cost	Year
(NEW) -	City of Ames	Lincoln Way Pavement Improvements (Dotson Dr – Franklin Ave)	\$1,686,000	\$2,400,000	FFY23
(NEW) -	CyRide	Vehicle Replacement	\$225,000	\$850,000	FFY24

Total New STBG Requests: \$1,911,000

	2021	2022	2023	2024
Unobligated Balance (Carryover)	\$3,564,337	\$1,640,943	\$601,943	\$442,943
STBG/SWAP target	\$1,725,427	\$1,686,000	\$1,686,000	\$1,686,000
STBG-TAP-Flex target	\$66,179	\$0	\$66,000	\$0
Subtotal	\$5,355,943	\$3,326,943	\$2,353,943	\$2,128,943
Programmed funds	\$3,715,000	\$2,725,000	\$1,911,000	\$225,000
Balance	\$1,640,943	\$601,943	\$442,943	\$1,903,943

STBG-TAP (Transportation Alternatives Program)

The Ames Area MPO has established a March 31 application deadline for STBG-TAP applications, which provides 4-weeks for the Iowa DOT to review applications for eligibility. The MPO received zero (0) new project applications for regional STBG-TAP funds.

TPMS #	Project Sponsor	Project Name	Federal Fund Request	Total Project Cost	Year
-	-	<i>none</i>	-	-	-

Total New STBG-TAP Requests: \$0

	2021	2022	2023	2024
Unobligated Balance (Carryover)	\$483,988	\$11,758	\$5,758	\$92,758
STBG-TAP target	\$86,770	\$87,000	\$87,000	\$87,000
STBG-TAP-Flex target	\$0	\$66,000	\$0	\$66,000
Subtotal	\$570,758	\$164,758	\$92,758	\$245,758
Programmed funds	\$559,000	\$159,000	\$0	\$0
Balance	\$11,758	\$5,758	\$92,758	\$245,758

DEVELOPMENT SCHEDULE:

The development schedule for the FY 2021 - 2024 TIP is as follows:

- May 20, 2020 – Technical Committee reviews draft and makes recommendation
- May 21, 2020 – Public meeting for comment
- May 26, 2020 – Policy Committee sets public hearing
- June 1, 2020 – Draft submitted to DOT for review
- July 14, 2020 – Policy Committee holds public hearing and takes action
- July 15, 2020 – Final approved TIP due to DOT
- October 1, 2020 – TIP is effective and included in State TIP

ALTERNATIVES:

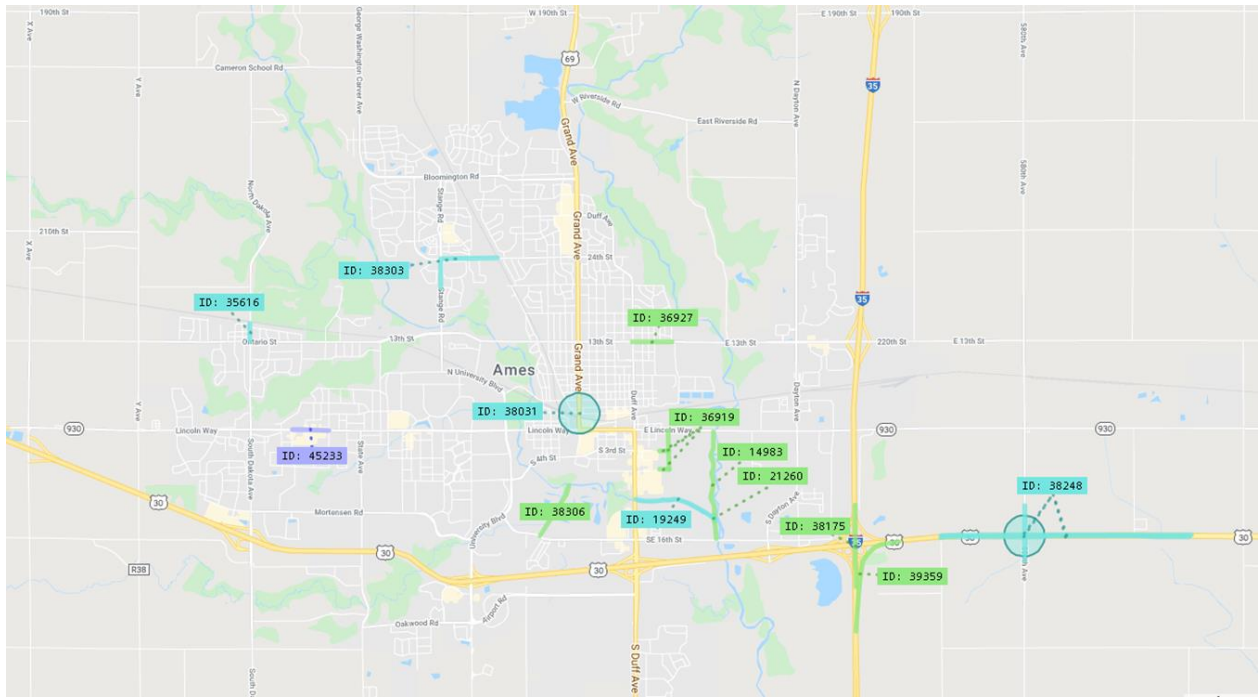
1. Recommend the Draft FFY 2021 - 2024 Transportation Improvement Program to the Transportation Policy Committee for formal approval.
2. Recommend the Draft FFY 2021 - 2024 Transportation Improvement Program with Transportation Technical Committee modifications to the Transportation Policy Committee for formal approval.

ADMINISTRATOR'S RECOMMENDATION:

It is recommended by the Administrator that the Transportation Technical Committee adopt Alternative No. 1, thereby recommending the Draft FFY 2021 – 2024 Transportation Improvement Program to the Transportation Policy Committee for formal approval.

Exhibit A

FFY 2021 – 2024 Transportation Improvement Program Project Locations



DRAFT

Federal Fiscal Years 2021 – 2024 Transportation Improvement Program

Ames Area Metropolitan Planning Organization

The Ames Area MPO prepared this report with funding from the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration, and in part through local matching funds of the Ames Area Metropolitan Planning Organization member governments. These contents are the responsibility of the Ames Area MPO. The U.S. government and its agencies assume no liability for the contents of this report or for the use of its contents. The Ames Area MPO approved this document on July 14, 2020. Please call (515) 239.5160 to obtain permission to use.

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INTRODUCTION

The Federal Fiscal Year 2021 - 2024 Transportation Improvement Program is the short-range implementation program for Federally funded and regionally significant transportation projects. The TIP is a requirement of 23 CFR 450.326 for metropolitan planning organizations to develop a program reflecting the investment priorities established in the long-range transportation plan covering at least four (4) years. The Ames Area MPO develops a new TIP annually in cooperation with the Iowa Department of Transportation and CyRide. The Ames Area TIP is included in the State Transportation Improvement Program (STIP), which is developed by the Iowa Department of Transportation.

The TIP can be found online at:

<https://www.cityofames.org/government/aampo/tip>

The STIP can be found online at:

https://iowadot.gov/program_management/statewide-transportation-improvement-program-stip

Role of the TIP

The Transportation Improvement Program (TIP) is a public document developed of planned transportation improvements within the Ames Area MPO planning boundary that are expected to utilize Federal-aid funds or are considered regionally significant. Each project must include specific information detailing the project including the scope, year-of-expenditure cost, funding sources, and location. Local projects not using Federal funds to construct them may not be listed in the program.

The TIP is a short-range plan and is considered a tool for implementing the long-range transportation plan. Projects must be identified in the long-range plan prior to being listed in the TIP, and a project cannot receive Federal funds unless it is contained in the TIP.

Ames Area MPO Organization

The Ames Area MPO was officially designated the MPO of the Ames urbanized area by the Governor of Iowa in March 2003. This designation was the result of the Ames urbanized area having a population of greater than 50,000 in the 2000 census. As a result of the 2010 Census, the urbanized areas of Ames and Gilbert were combined into one urbanized area, therefore requiring the Metropolitan Planning Area to be expanded to encompass this area in its entirety. The Ames Area MPO approved the current Metropolitan Planning Area boundary on November 13, 2012. The City of Gilbert and Iowa State University were added to the Transportation Policy Committee on March 26, 2013.

Ames is located in central Iowa and is served by Interstate 35, U.S. Highway 30, and U.S. Highway 69. Surface transportation needs are met through over 249 centerline miles of streets. The community has a very progressive transit system, CyRide, which carries over six million bus passengers per year. While the majority of transit users have Iowa State University ties, CyRide serves the entire Ames community.

The Ames Area MPO area includes the Ames Municipal Airport, which serves general aviation needs for business, industry, and recreation users. On average 93 aircraft operations occur per day at the Ames

Municipal Airport. Railroad provides freight service to the area by dual east-west mainline tracks and a northern agricultural spur.

The Ames Area MPO provides continuity of various transportation planning and improvement efforts throughout the Ames urban area. The City of Ames serves as the fiscal agent for the Ames Area MPO.

The Ames Area MPO consists primarily of two standing committees: The Transportation Policy Committee and the Transportation Technical Committee.

TRANSPORTATION POLICY COMMITTEE

The Transportation Policy Committee (TPC) is the policy setting board of the MPO and the membership consists of local officials. Voting membership on the committee includes city and county governments located, wholly or partially, in the Ames Area MPO planning boundary as well as the local transit agency. Currently the TPC membership includes: City of Ames, City of Gilbert, CyRide, Boone County, and Story County. The Iowa Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, and Iowa State University serve as advisory, non-voting, representatives.

TRANSPORTATION TECHNICAL COMMITTEE

The Transportation Technical Committee (TTC) consists of technical personnel from various agencies involved in transportation issues within the planning area. The Transportation Technical Committee formulates the procedural details of the Transportation Planning Work Program. The committee reviews and monitors the output of various MPO activities identified in the work program and makes recommendations to the policy committee. The committee is also responsible for assisting in developing the short and long-range transportation plans. The Iowa Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration serve as advisory, non-voting, representatives.

Public Participation in the Planning Process

This document was developed in coordination with MPO member agencies, regional stakeholders, and members of the public. The MPO planning process includes strategies to disseminate information about the project selection process and provides opportunities for interested parties to provide information to the policy committee.

EDUCATION AND INFORMATION

WEBSITE

The Ames Area MPO utilizes the MPO website at <https://www.aampo.org> to make draft documents, maps, and other materials accessible anytime of any day in a format that is adaptable to mobile devices and website text which can be translated into any language available through translation services.

E-NOTIFICATION

Anyone with an e-mail address may sign-up for receiving notifications of news and events published from the MPO with our e-notification system. During the development of this program, approximately 160 users receive e-notifications, including announcements of FFY 2021-2024 TIP public meetings, public comment periods, and draft documents.

PUBLIC INVOLVEMENT OPPORTUNITIES

PUBLIC OPEN HOUSE

An open house provides members of the public the opportunity to drop-in to view projects, meet with staff, and leave comments on the proposed program. The event hosted on May 21, 2020, was held virtually via a Microsoft Teams meeting due to COVID-19 restrictions. No formal presentation was given allowing for visitors to come and go at any time during the event.

PUBLIC COMMENT PERIOD

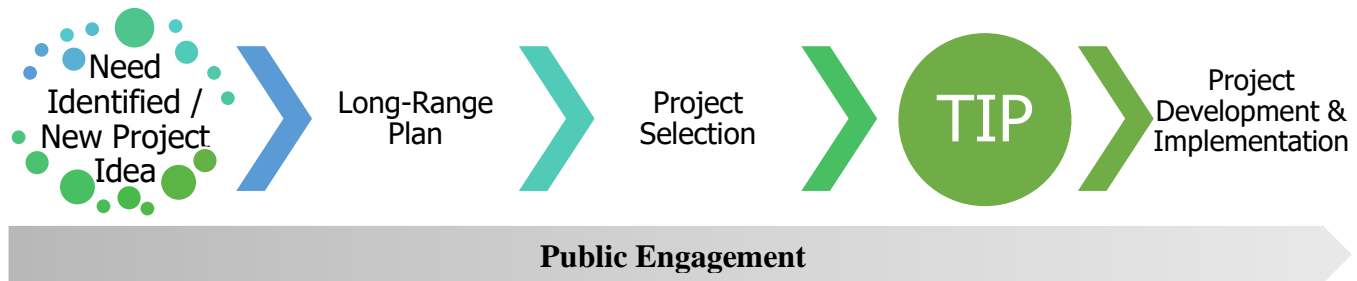
During the comment period, the draft document and maps of the proposed projects are available online or in hardcopy at the Ames Area MPO office.

TRANSPORTATION POLICY COMMITTEE HEARINGS

The Transportation Policy Committee hearings provide time for anyone of the public to address the committee prior to consideration of the program. The meetings are livestreamed on Ames Channel 12 and on Facebook. Meetings are also made available on-demand on the City of Ames website, on the City of Ames Facebook page, and on the City of Ames YouTube channel.

PROGRAM DEVELOPMENT

The Transportation Improvement Program (TIP) serves as a list of DOT and locally sponsored federal-aid eligible and Swap surface transportation improvements within the Ames-Gilbert region. Projects in the Ames Area TIP must be consistent with the long-range transportation plan, known as Ames Mobility 2040. The final document, approved by the Transportation Policy Committee, will be consolidated into the State Transportation Improvement Program (STIP) along with the other 26 planning agencies in the State of Iowa.



Performance Based Planning and Performance Management

Performance based planning and performance management became a focus for 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 a seven national goals through MAP-21, and maintained in subsequent Federal legislation, with the purpose of improving decision-making through performance-based planning and programming.

The Ames Area MPO must establish and use a performance-based approach to transportation decision making to support the national goals.

KEY TERMS:

- Goal:** a broad statement the describes a desired end state
- Objective:** a specific, measurable statement that supports achievement of a goal
- Performance Measures:** metric used to assess progress towards meeting an objective
- Target:** specific level of performance that is desired to be achieved within a certain timeframe

National Goals

- Safety
- Infrastructure Condition
- Congestion Reduction
- System Reliability
- Freight Movement and Economic Vitality
- Environmental Sustainability
- Project Delivery

Regional Goals

- Connected, Efficient, and Reliable
- Safety
- Environment
- Accessibility
- Economy and Goods Movement
- Asset Management

ROAD SAFETY

Goal: Significant reduction in traffic fatalities and serious injuries on all public roads.

Performance Measures

Goal Area	Road Safety
Performance Measures	<ul style="list-style-type: none"> • Number of Fatalities • Rate of Fatalities per 100 million VMT • Number of Serious Injuries • Rate of Serious Injuries per 100 million VMT • Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries

Performance Targets

Rather than setting its own safety targets, the Ames Area MPO has chosen to support the Iowa DOT's safety targets as published in the most recent Iowa Highway Safety Improvement Program Annual Report. The MPO supports those targets by reviewing and programming all Highway Safety Improvement Program (HSIP)¹ projects within the MPO boundary that are included in the DOT's Transportation Improvement Program.

Any Iowa DOT Sponsored HSIP projects within the MPO area were selected based on the strategies included in the Strategic Highway Safety Plan and safety performance measures and were approved by the Iowa Transportation Commission. The Iowa DOT conferred with numerous stakeholder groups, including the Ames Area MPO, as part of its target setting process. Working in partnership with local agencies, Iowa DOT safety investments were identified and programmed which will construct effective countermeasures to reduce traffic fatalities and serious injuries. The Iowa DOT projects chosen for HSIP investment are based on crash history, roadway characteristics, and the existence of infrastructure countermeasure that can address the types of crashes present. The Iowa DOT continues to utilize a systemic safety improvement process rather than relying on "hot spot" safety improvements.

Performance Measure	Five Year Rolling Averages	
	2014-2018 Baseline	2016-2020 Target ²
Number of Fatalities	337.4	345.8
Fatality Rate – per 100 million VMT	1.046	1.011
Number of Serious Injuries	1,499.1	1,396.2
Serious Injury Rate – per 100 million VMT	4.497	4.083
Non-Motorized Fatalities and Serious Injuries	134.2	138.1

*Ames Area MPO Targets adopted September 24, 2019

¹ <https://safety.fhwa.dot.gov/hsip/reports/pdf/2019/ia.pdf>

² Methodology for Iowa DOT FHWA Safety Targets https://iowadot.gov/systems_planning/fpmam/Iowa-2016-2020-safety-targets.pdf

TRANSIT SAFETY

Goal: Improve safety of all public transportation systems, specifically in the areas of fatalities, injuries, safety events (ex.: collisions, derailments), and system reliability.

Performance Measures

Goal Area	Transit Safety
Performance Measures	<ul style="list-style-type: none"> • Number of Fatalities • Number of Serious Injuries • Safety Events • System Reliability

Performance Targets

CyRide's Safety Plan, due by December 31, 2020 (deadline extended from July 20, 2020 due to COVID-19), will include processes and procedures to implement Safety Management Systems (SMS) at CyRide to anticipate future risks and detect problems before safety issues occur. This plan, which will be re-certified each year thereafter, will include strategies for minimizing the exposure of the public, personnel, and property to unsafe conditions and again include safety performance targets. SMS will support a data-based framework to identify and analyze safety hazards and risks to prioritize resources towards the mitigation of these issues. As CyRide's Safety Plan and safety performance targets are established for FY2021, this information will be shared annually with the Ames Area MPO as projects are prioritized within the Ames Area MPO's LRTP, TPWP and TIP.

PAVEMENT AND BRIDGE

Goal: Maintain the condition of pavement and bridges in a state of good repair.

Performance Measures

Goal Area	Pavement and Bridge
Performance Measures	<ul style="list-style-type: none"> • Percent of Interstate pavements in Good condition • Percent of Interstate pavements in Poor condition • Percent of non-Interstate NHS pavements in Good Condition • Percent of non-Interstate NHS pavements in Poor condition • Percent of NHS bridges classified as in Good condition • Percent of NHS bridges classified as in Poor condition

Performance Targets

Rather than setting its own pavement and bridge targets, the Ames Area MPO has chosen to support the Iowa DOT's pavement and bridge targets as submitted in the most recent baseline

period performance report³. The MPO supports those targets by reviewing and programming all Interstate and National Highway System projects within the MPO boundary that are included in the DOT's Transportation Improvement Program.

Any Iowa DOT sponsored pavement and bridge projects within the MPO area were determined in alignment with the Iowa Transportation Asset Management Plan (TAMP) and the pavement and bridge performance measures. The TAMP connects Iowa in Motion 2045 and system/modal plans to Iowa DOT's Five-Year Program and the STIP. Iowa in Motion 2045 defines a vision for the transportation system over the next 20 years, while the Five-Year Program and STIP identify specific investments over the next four to five years. The TAMP has a 10-year planning horizon and helps ensure that investments in the Five-Year Program and STIP are consistent with Iowa DOT's longer-term vision. Starting in 2019, the TAMP began to integrate the pavement and bridge performance targets.

The Iowa DOT conferred with numerous stakeholder groups, including the Ames Area MPO and local owners of NHS assets, as part of its target setting process. The methodology used to set targets used current and historical data on condition and funding to forecast future condition. Asset management focuses on performing the right treatment at the right time to optimize investments and outcomes. Management systems are utilized to predict bridge and pavement needs and help determine the amount of funding needed for stewardship of the system. The TAMP discusses the major investment categories that the Commission allocates funding through. Once the Commission approves the funding for these categories, Iowa DOT recommends the allocation of the funds to specific projects using the processes described in the TAMP. Pavement and bridge projects are programmed to help meet the desired program outcomes documented in the TAMP.

Performance Measure	2017 Baseline	4 Year Targets ⁴
Percentage of pavements of the Interstate System in Good condition	N/A	49.4%
Percentage of pavements of the Interstate System in Poor condition	N/A	2.7%
Percentage of pavements of the non-Interstate NHS in Good condition	50.9%	46.9%
Percentage of pavements of the non-Interstate NHS in Poor condition	10.6%	14.5%
Percentage of NHS bridges classified as in Good condition	48.9%	44.6%
Percentage of NHS bridges classified as in Poor condition	2.3%	3.2%

*Ames Area MPO Targets adopted September 25, 2018

³ 2018 Baseline Performance Period Report https://iowadot.gov/systems_planning/fpmam/2018-Baseline-Performance-Period-Report.pdf

⁴ Methodology Iowa DOT Pavement and Bridge Performance Measures https://iowadot.gov/systems_planning/fpmam/2018-2021-Pavement-Bridge-Targets.pdf

TRANSIT ASSET MANAGEMENT

Goal: Maintain the condition of public transit assets in a state of good repair.

Performance Measures

Goal Area	Transit Asset Management
Performance Measures	<ul style="list-style-type: none"> • Equipment: Percent of non-revenue vehicles met or exceeded Useful Life Benchmark • Rolling Stock: Percentage of revenue vehicles met or exceeded Useful Life Benchmark • Facilities: Percentage of assets with condition rating below 3.0 on FTA TERM scale • Infrastructure: (Not applicable)

Performance Targets

Public transit capital projects included in the STIP align with the transit asset management (TAM) planning and target setting processes undertaken by the Iowa DOT, transit agencies, and MPOs. The Iowa DOT establishes a group TAM plan and group targets for all small urban and rural providers while large urban providers establish their own TAM plans and targets. Investments are made in alignment with TAM plans with the intent of keeping the state’s public transit vehicles and facilities in a state of good repair and meeting transit asset management targets. The Iowa DOT allocates funding for transit rolling stock in accordance with the Public Transit Management System process. In addition, the Iowa DOT awards public transit infrastructure grants in accordance with the project priorities established in Iowa Code chapter 924. Additional state and federal funding sources that can be used by transit agencies for vehicle and facility improvements are outlined in the funding chapter of the Transit Manager’s Handbook. Individual transit agencies determine the use of these sources for capital and operating expenses based on their local needs.

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 TAM targets. The infrastructure performance measure element which FTA requires is limited to rail fixed guideway assets of which there is not any rail passenger service with Ames.

Class	2019 Target	2019 Year-End Results	2020 Performance Target	2021	2022	2023	2024
Rolling Stock 40'-60' Buses	35%	36%	33% of fleet exceeds CyRide's ULB of 15 yrs.	33%	33%	31%	33%
Rolling Stock Cutaways	67%	67%	67% of fleet exceeds FTA ULB of 8 yrs.	89%	89%	0%	0%
Equipment Shop Trucks	0%	50%	0% of fleet exceeds CyRide's ULB of 10 yrs.	0%	0%	0%	0%
Facilities Admin./Maint.Facility	0%	0%	0% of facilities rated under 3.0 on TERM scale	0%	0%	0%	0%
Facilities Ames Intermodal Facility	0%	0%	0% of facilities rated under 3.0 on TERM scale	0%	0%	0%	0%

*Ames Area MPO Targets adopted March 24, 2020

SYSTEM AND FREIGHT RELIABILITY

Goal: Achieve a significant reduction in congestion on the National Highway System.

Performance Measures

Goal Area	System and Freight Reliability
Performance Measures	<ul style="list-style-type: none"> • Percent of person-miles traveled on the Interstate that are reliable • Percent of person-miles traveled on the non-Interstate NHS that are reliable • Truck Travel Time Reliability Index

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 report⁵. The MPO supports those targets by reviewing and programming all Interstate and National Highway System projects within the MPO boundary that are included in the DOT's Transportation Improvement Program.

The Iowa DOT conferred with numerous stakeholder groups, including the Ames Area MPO, as part of its target setting process. Variability within the existing travel time dataset was used to forecast future condition. Projects focused on improving pavement and bridge condition also often help improve system reliability and freight movement. Additional projects focused specifically on improving these areas of system performance are developed in alignment with the target-setting process for related performance measures, and the freight improvement strategies and freight investment plan included in the State Freight Plan. This plan includes a detailed analysis and prioritization of freight bottlenecks, which are locations that should be considered for further study and possibly for future improvements. The process also involved extensive input from State, MPO, RPA, and industry representatives. State projects identified in the freight investment plan and programmed in the STIP were highly-ranked freight bottlenecks.

Performance Measure	2017 Baseline	4 Year Targets ⁶
Percent of the person-miles traveled on the Interstate that are reliable	100%	99.5%
Percent of the person-miles traveled on the non-Interstate NHS that are reliable	N/A	95.0%
Truck Travel Time Reliability (TTTR) Index	1.12	1.14

*Ames Area MPO Targets adopted September 25, 2018

⁵ 2018 Baseline Performance Period Report https://iowadot.gov/systems_planning/fpmam/2018-Baseline-Performance-Period-Report.pdf

⁶ Methodology Iowa DOT System Performance and Freight Measures https://iowadot.gov/systems_planning/fpmam/2018-2021-System-Performance-Freight-Targets.pdf

Air Quality

The Clean Air Act requires the United States Environmental Protection Agency (EPA) to set limits on how much of a particular pollutant can be in the air anywhere in the United States. National Ambient Air Quality Standards (NAAQS) are the pollutant limits set by the Environmental Protection Agency; they define the allowable concentration of pollution in the air for six different pollutants: Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter, Ozone, and Sulfur Dioxide.

The Clean Air Act specifies how areas within the country are designated as either “attainment” or “non-attainment” of an air quality standard and provides the EPA the authority to define the boundaries of nonattainment areas. For areas designated as non-attainment for one or more National Ambient Air Quality Standards, the Clean Air Act defines a specific timetable to attain the standard and requires that non-attainment areas demonstrate reasonable and steady progress in reducing air pollution emissions until such time that an area can demonstrate attainment.

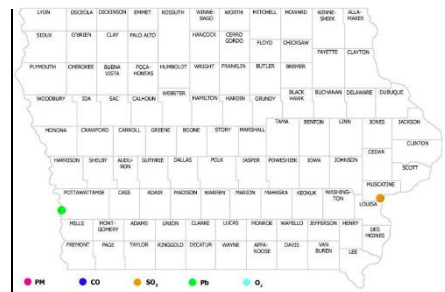


Figure 1. Iowa Non-Attainment Areas (2015)⁷

The Ames Area MPO does not exceed the National Ambient Air Quality Standards and is considered an attainment area.

No part of the Ames Area is within Nonattainment; therefore, it is not subject to air quality conformity requirements. However, the Ames Area MPO will perform activities to monitor and promote air quality issues in the region. The State of Iowa provides grant opportunities through the Iowa Clean Air Attainment Program (ICAAP) to promote air quality in Iowa’s transportation system.

Counties Designated "Nonattainment" or "Maintenance" for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *

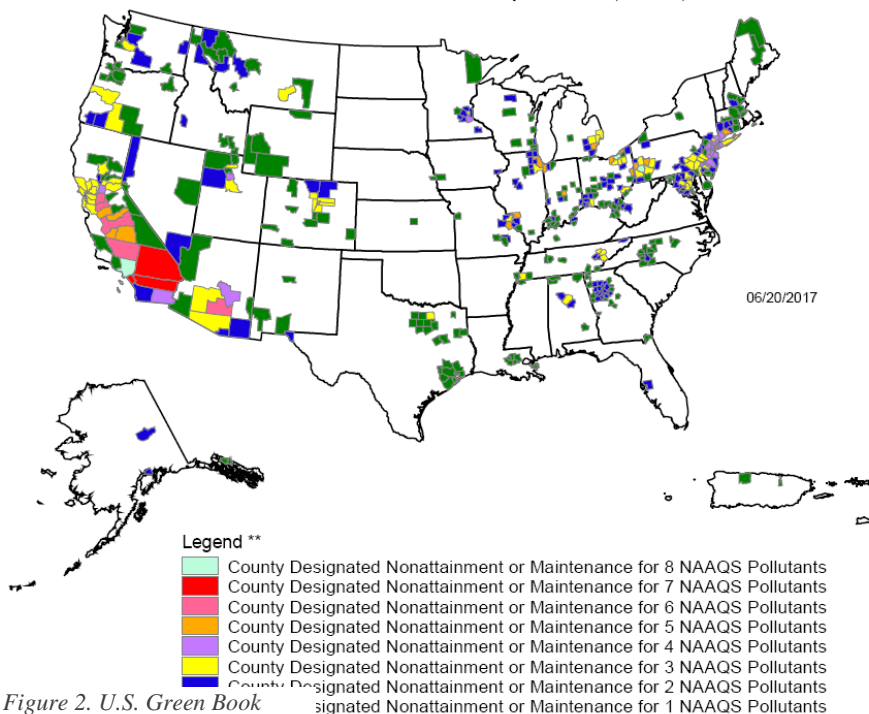


Figure 2. U.S. Green Book

⁷ Iowa Department of Natural Resources, Ambient Air Quality Improvements in Iowa, <https://www.iowadnr.gov/airmonitoring>

Regional Transportation Goals

During the planning process of the Ames Mobility 2040 Long Range Transportation Plan, the community identified six goals to guide the plan. Each goal had a number of objectives identified along with a measure to rank the effectiveness of the project towards reaching the regional goals.



A baseline was identified for each per performance measure for both 2015, the year of the plan, and 2040, the planning horizon year of the plan. The baseline served as the measure to evaluate potential projects to determine if the project would contribute to reaching the regional target.

CONNECTED, EFFICIENT, AND RELIABLE

Goal: Provide a connected transportation system that offers efficient and reliable mobility options for all modes of travel

Performance Measures

Goal Area	Connected, Efficient, and Reliable
Performance Measures	<ul style="list-style-type: none"> System Reliability / Reliability Index 80 (RI₈₀) Miles of On-Street Bicycle Facilities

Performance Targets

Performance Measure	2015 Baseline	2040 E+C Baseline	2040 Targets
System Reliability / Reliability Index 80 (RI ₈₀)	Arterial System: RI ₈₀ = 1.20 Freeway System: RI ₈₀ = 1.03	N/A	Address reliability issues at the two (2) NHS segments with poorest reliability
Miles of On-Street Bicycle Facilities	3.9 Miles On-Street Lanes / Paved Shoulders 57 Miles Shared-Use Paths / Sidepaths	11.1 Miles On-Street Lanes / Paved Shoulders 66 Miles Shared-Use Paths / Sidepaths	Increase the segment-mileage of on-street bicycle facilities by 100% compared to current levels

SAFETY

Goal: Provide a safe transportation system

Performance Measures

Goal Area	Safety
Performance Measures	<ul style="list-style-type: none"> Serious Injury / Fatal Crashes

Performance Targets

Performance Measure	2015 Baseline	2040 E+C Baseline	2040 Targets
Serious Injury / Fatal Crashes	< 2.6 fatal crashes/year < 20 major injury crashes/year	N/A	Address safety issues at five (5) locations with highest crash rates or most serious injury / fatal crashes.

ENVIRONMENT

Goal: Consider and mitigate the impacts of the transportation system on the natural and built environment

Performance Measures

Goal Area	Environment
Performance Measures	<ul style="list-style-type: none"> • VMT per Household • VHT per Household • Transit Mode Share

Performance Targets

Performance Measure	2015 Baseline	2040 E+C Baseline	2040 Targets
VMT per Household	41.6 daily VMT per household	49.7 daily VMT per household	2040 VMT per household grows by 10% or less compared to 2010 levels.
VHT per Household	1.00 daily VHT per household	1.28 daily VHT per household	2040 VHT per household grows 20% or less compared to 2010 levels.
Transit Mode Share	12.5% of all modeled (auto and transit) trips	12.0% of all modeled (auto and transit) trips	2040 transit mode share is higher than 2010 transit mode share.

ACCESSIBILITY

Goal: Provide an accessible transportation system that fits within the context of its surroundings and preserves community character

Performance Measures

Goal Area	Accessibility
Performance Measures	<ul style="list-style-type: none"> • Household and Employment Proximity to Transit • EJ Proximity to Transit • Household and Employment Proximity to Bicycle Facilities • EJ Proximity to Bicycle and Pedestrian Facilities

Performance Targets

Performance Measure	2015 Baseline	2040 E+C Baseline	2040 Targets
Household and Employment Proximity to Transit	Households: 74% Access; Employment: 77% Access	Households: 63% Access; Employment: 65% Access	Maintain housing and jobs proximity (¼ mile walk distance) within 5% of 2010 levels.
EJ Proximity to Transit	82% of EJ households	82% of EJ households	Maintain levels of transit proximity (within ¼ of a route) to EJ households within 5% of non-EJ households.
Household and Employment Proximity to Bicycle Facilities	Households: 75% Access; Employment: 67% Access	Households: 73% Access; Employment: 67% Access	Increase the percentage of employment and households within ¼ mile of bicycle facilities by 25%.
EJ Proximity to Bicycle and Pedestrian Facilities	88% of EJ households	88% of EJ households	Provide higher levels of bicycle facility proximity (within ¼ mile of a facility) to EJ households than non-EJ households.

ECONOMY AND GOODS MOVEMENT

Goal: Provide a transportation system that supports the regional economy and efficiently moves goods

Performance Measures

Goal Area	Economy and Goods Movement
Performance Measures	<ul style="list-style-type: none"> LOS / Congested Miles of Primary Freight Corridors

Performance Targets

Performance Measure	2015 Baseline	2040 E+C Baseline	2040 Targets
LOS / Congested Miles of Primary Freight Corridors	0.5 Miles	2.0 Miles	2040 congested miles of NHS lower than 2010

ASSET MANAGEMENT

Goal: Maintain transportation infrastructure in a state-of-good-repair

Performance Measures

Goal Area	Asset Management
Performance Measures	<ul style="list-style-type: none"> Pavement Condition Index (PCI) Bridge Condition (NBI Ratings) Transit State of Good Repair

Performance Targets

Performance Measure	2015 Baseline	2040 E+C Baseline	2040 Targets
Pavement Condition Index (PCI)	105 lane miles of state and Arterial/Collector Roads rated “poor”	N/A	Reconstruct federal-aid roadways rated poor.
Bridge Condition (NBI Ratings)	3 Structurally Deficient Bridges	N/A	Reconstruct structurally deficient bridges.
Transit State of Good Repair	10.9 years avg. vehicle age	35.9 years avg. vehicle age	Maintain avg. fleet age at 15 years old or newer.

Project Selection

Projects are selected from the Ames Mobility 2040 plan for awarding regional transportation funding. Projects identified for in the short-term (years 2016-2025) are prioritized for regional funds. The MPO solicits two applications for the two primary transportation programs: Surface Transportation Block Grant and Iowa's Transportation Alternatives Program.

SURFACE TRANSPORTATION BLOCK GRANT

The Surface Transportation Block Grant (STBG) is generally awarded to regional projects which improve capacity through construction, reconstruction and rehabilitation of the highway network. Projects are evaluated in the long-range plan based on the six goals of the plan.

IOWA'S TRANSPORTATION ALTERNATIVES PROGRAM

Iowa's Transportation Alternatives Program (TAP) projects mainly consist of greenbelt trails. TAP projects are evaluated with the following criteria:

- Connectivity with existing facilities
- Cost in relation to public benefit
- Enhancement to existing transportation system
- Identified in the long-range transportation plan.

Applications for both STBG and TAP are made available on the Ames Area MPO website and distributed to MPO member agencies and to a publicly available e-mail distribution list.

Other programs include bridge projects consisting of necessary repairs recommended by the biennial Iowa Department of Transportation (Iowa DOT) bridge inspections. The Iowa DOT requires these inspections for bridges within the local jurisdiction of the Ames Area MPO. A candidate list is created by the Iowa DOT Office of Local Systems based on priority points ranking. Local agencies and the Ames Area MPO work with the Iowa DOT on programming necessary bridge projects based on priority and available funding.

APPLICATIONS FOR SUBMITTING PROJECTS

Instructions for submitting projects for STBG or TAP regional funds are posted by the first of the year on the MPO website. A news notification is distributed to members of the Transportation Technical Committee along with anyone who has signed up for e-notifications on the MPO website. In January 2020, 153 e-notifications were distributed for the STBG application announcement and the TAP application announcement.

Federal Transit Administration Planning Process

In addition to FHWA program projects, the TIP includes all projects which Federal Transit Administration (FTA) funding may be utilized. A portion of Federal fuel tax revenue is placed in the mass transit account of the Federal Highway Trust Fund. These funds, along with General Fund appropriations, are reserved for transit purposes and are administered by the Federal Transit Administration. The transit portion of the TIP was developed in cooperation with CyRide, the urban transit operator in the Ames Area MPO planning area. The following transit projects identified in the FFY 2021-2024 TIP were included within the Passenger Transportation Plan (PTP), meeting the requirement to have the Enhanced Mobility for Seniors and Individuals with Disabilities formulated Federal funding within an approved PTP prior to TIP approval. The following narrative describes the projects within the initial year of the plan.

FFY 2021 PROJECT JUSTIFICATION

GENERAL OPERATIONS (5307/STA)

This funding supports the day-to-day transit operations of the Ames Transit Authority from Ames' urbanized area formula apportionment, Small Transit Intensive Cities (STIC), and State Transit Assistance (STA) funding.

CONTRACTED PARATRANSIT (DIAL-A-RIDE) SERVICES (5310)

According to Federal regulations, public transit agencies providing fixed-route transit service in their community must also provide door-to-door transportation services within a ¾ mile area of that fixed-route service. Therefore, CyRide purchases transportation service for its Dial-A-Ride service operation in order to meet this American Disability Act (ADA) requirement. This service has been expanded to provide services beyond ADA to the entire city limits of Ames.

AUTOMATED VEHICLE ANNUNCIATOR LED SIGNAGE (5310)

In the fall 2019, CyRide integrated automated vehicle annunciator (AVA) system synced with voice annunciators (audible announcements only) to help keep all passengers, disability or not, better informed of where the bus is located along the bus route(s). This system was in response to a request from Iowa State University's Alliance for Disability Awareness group which communicated their desire to have more bus stops announced throughout the Ames' community. Bus drivers must comply with the Americans with Disability Act (ADA) laws and manually announce major transit locations along transit routes along with any stops the public request. While the annunciators were installed for audible announcements, there wasn't enough funding at time of implementation to deploy the visual LED signage within each bus. CyRide plans to install the visual signage for announcements in FY2021. This project is over and beyond ADA requirements.

ANNUNCIATOR ANNUAL SERVICE FEES (5310)

CyRide plans to utilize portions of its elderly & disabled funding towards its annual service fees for the automatic annunciator system to ensure compliance with its ADA announcement requirements. This is a non-traditional project but will allow compliance with the ADA law and improve awareness of where the bus is within the community for passenger's knowledge.

LIGHT DUTY BUS REPLACEMENTS (5310)

Two light duty 176” wheelbase buses have exceeded FTA guidelines for useful life. Bus numbers are: 00390 and 00391. These units will be replaced with light duty 176” wheelbase low-floor buses, equipped with cameras. These replacement vehicles will be ADA accessible.

HEAVY DUTY BUS REPLACEMENTS (5339)

Nine large forty-foot buses have exceeded FTA guidelines for useful life. Bus numbers are: 00957, 07125, 01140, 07132, 07123, 01141, 00958, 00956, 00955. These units will be replaced with 40’ heavy-duty buses, equipped with cameras. These replacement vehicles will be ADA accessible.

HEAVY DUTY ARTICULATED BUS EXPANSION (5307-STBG)

Currently, CyRide has six articulated buses within its bus fleet with a goal to attain a total of ten to operate on its #23 Orange Route. Specifically, this transit route carries the highest number of passengers of any route in the State of Iowa at nearly 1.8 million passengers. Over the next few years, CyRide will add Surface Transportation Block Grant (STBG) funding to an already approved contract for a 40-foot bus (federally funded with either CMAQ or 5339) awarded through the Iowa DOT and upgrade the purchase to an articulated (60-foot) bus expansion. The Ames Area Metropolitan Planning Organization has approved funding at \$225,000 for FY2021.

HEATING, VENTILATION AND AIR CONDITIONING FACILITY PROJECTS (PTIG)

CyRide is requesting phase two of its heating, ventilation and air conditioning projects from the Iowa DOT under its public transit infrastructure grant (PTIG) program specifically for:

- Maintenance Bay Ventilation Improvements
- Southwest Bus Storage HVAC Replacement.

These updates will provide substantial benefits to employees by providing better heating/cooling as well as ventilation and fresh air throughout the maintenance facility as recommended through a “Diesel Particulate Exposures at CyRide Bus Garage” study conducted in 2006. At that time, the study noted that the ventilation rates needed to be increase throughout the facility to decrease diesel particulate exposures and concentrations by a factor of four. CyRide plans to continue additional HVAC work into FY2022 for a final improvement project under phase three.

The request includes the following areas:

- #1 Multi-stack Unit Replacement (14 years old)
- #2 Bus Wash HVAC Equipment Replacement (17 years old)
- #3 Southwest Bus Storage HVAC Replacement (30 years old)
- #4 Shop Area Office HVAC Improvements (expansion)
- #5 Restroom/Storage 1983 RTU-12 Replacement (36 years old)

MAINTENANCE FACILITY EXPANSION

CyRide will be requesting BUILD funding to proceed with planning requirements towards readying itself toward construction of a second bus maintenance/storage facility to accommodate a total bus fleet of 125 buses – 65 at the new facility with the remainder at the present location. Currently, buses are parking outside the facility which is contrary to CyRide’s lease with Iowa State University.

Additionally, CyRide is landlocked and needing more space to store (park) and maintain buses and allow for future expansion of transit service within the Ames community. One of the critical issues is that maintenance (shop) stops servicing buses at 5 p.m. even though service is continued until midnight . The shop area is located directly in the middle of the facility and once buses are fueled and serviced for the evening, they are stored, i.e. parked, in the facility until service begins the next morning. Parked buses, after being fueled and serviced for the evening; restrict access to the shop and any mechanical issues are deferred until the next day due to not being able to access the shop to be fixed. Therefore, even though CyRide's services continue until midnight or beyond on most days throughout the year, buses cannot be repaired until the majority of buses are carefully unpacked from the facility the following day. Therefore, if there is a mechanical breakdown on a bus during night service, the bus is towed back to the facility and not serviced until the following day when the mechanics can drive the bus into the shop for repair. The BUILD planning request will be for real estate market analysis, environmental (NEPA) and historical analysis, land purchase on a preferred site and preliminary building design.

FINANCIAL ANALYSIS

Forecasts of Available Revenue

Projects in the Transportation Improvement Program are fully funded projects using Federal transportation funds or are regionally significant transportation projects. The TIP must demonstrate that all projects are within available funding amounts. The Ames Area MPO allocates regional transportation funds through the STBG, Iowa's TAP, and STBG-TAP-Flex programs. However, projects may also receive Federal or State funds through competitive grants.

REGIONAL TRANSPORTATION FUNDING

The Iowa Department of Transportation Office of Program Management provides the Ames Area MPO estimated STBG/STBG-Swap, Iowa's TAP, and STBG-TAP-Flex funding targets for each of the four years in the program. The MPO is also provided DOT statewide revenue estimates.

The FFY 2021 programming targets are \$1,725,427 for STBG, \$86,770 for Iowa's TAP, and \$66,179 for STBG-TAP-Flex. The project costs shown in the TIP are in year-of-expenditure (YOE) dollars. This is accomplished by developing an estimate of costs in the current bidding environment and then applying an inflation factor of 4 percent per year.

The Ames City Council has programmed city sponsored projects in the City of Ames 2020-2025 Capital Improvements Plan (CIP) for the local funding allocation. These funds are generated from the City of Ames annual Road Use Tax Fund (RUTF) distribution, Local Option Sales Tax, and General Obligation (GO) bonds.

The transit program does not have targets; therefore, the requests involve significant costs in the anticipation of maximizing the amounts received.

OTHER FEDERAL AND STATE FUNDING PROGRAMS

Transportation projects within the Ames region may also receive funding through Federal or State grant programs.

FEDERAL GRANT PROGRAMS

- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Demonstration funding (DEMO)
- Highway Safety Improvement Program (HSIP)
- Metropolitan Planning Program (PL)
- National Highway Performance Program (NHPP)
- State Planning and Research (SPR)
- Federal Lands Access Program (FLAP)
- Tribal Transportation Program (TTP)

- National Highway Freight Program (NHFP)

STATE ADMINISTERED GRANT PROGRAMS

- City Bridge Program
- Highway Safety Improvement Program – Secondary (HSIP-Secondary)
- Iowa Clean Air Attainment Program (ICAAP)
- Recreational Trail Program
- Iowa's Transportation Alternatives Program

FEDERAL AND STATE TRANSIT FUNDING PROGRAMS

- Metropolitan Transportation Planning Program (Section 5303 and 5305)
- Statewide Transportation Planning Program (Section 5304 and 5305)
- Urbanized Area Formula Grants Program (Section 5307)
- Bus and Bus Facilities Program (Section 5339)
- Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310)
- Nonurbanized Area Formula Assistance Program (Section 5311)
- Rural Transit Assistance Program (RTAP) (Section 5311(b)(3))
- TAP Flexible Funds
- State Transit Assistance (STA)
 - STA Special Projects
 - STA Coordination Special Projects
- Public Transit Infrastructure Grant Fund

IOWA DEPARTMENT OF TRANSPORTATION REVENUE ESTIMATES

Each year prior to development of the Iowa DOT's Five-Year Program and the Statewide Transportation Improvement Program both state and Federal revenue forecasts are completed to determine the amount of funding available for programming. These forecasts are a critical component in the development of the Five-Year Program and as such are reviewed with the Iowa Transportation Commission. The primary sources of state funding to the DOT are the Primary Road Fund and TIME-21 Fund. These state funds are used for the operation, maintenance and construction of the Primary Road System. The amount of funding available for operations and maintenance are determined by legislative appropriations. Additional funding is set aside for statewide activities including engineering costs. The remaining funding is available for right of way and construction activities associated with the highway program.

Along with the state funds, the highway program utilizes a portion of the Federal funds that are allocated to the state. A Federal funding forecast is prepared each year based on the latest apportionment information available. This forecast includes the various Federal programs and identifies which funds are allocated to the Iowa DOT for programming and which funds are directed to locals through the MPO/RPA planning process, Highway Bridge Program and various grant programs. Implementation of a Federal aid swap will increase the amount of Federal funds that are utilized by the Iowa DOT.

More information about the Program Management Bureau's Five-Year Program can be found online at:

https://iowadot.gov/program_management/five-year-program

Fiscal Constraint Tables

Table 1 Summary of Costs and Federal Aid

PROGRAM	2021		2022		2023		2024	
	Total Cost	Federal Aid	Total Cost	Federal Aid	Total Cost	Federal Aid	Total Cost	Federal Aid
PL	\$125,000	\$100,000	\$125,000	\$100,000	\$125,000	\$100,000	\$125,000	\$100,000
STBG	\$850,000	\$225,000	\$850,000	\$225,000	\$850,000	\$225,000	\$850,000	\$225,000
TAP	\$1,856,000	\$559,000	\$681,000	\$159,000	\$0	\$0	\$0	\$0
NHPP	\$0	\$0	\$10,404,000	\$8,324,000	\$9,141,000	\$7,313,000	\$0	\$0
CMAQ	\$1,470,685	\$1,176,548	\$0	\$0	\$0	\$0	\$0	\$0
STBG-HBP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SWAP-HBP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
STBG-SWAP	\$4,900,000	\$3,490,000	\$5,700,000	\$2,500,000	\$2,400,000	\$1,686,000	\$0	\$0

Table 2 STBG/STBG-Swap Fiscal Constraint

	2021	2022	2023	2024
UNOBLIGATED BALANCE (CARRYOVER)	\$3,564,337	\$1,640,943	\$601,943	\$442,943
STBG/SWAP TARGET	\$1,725,427	\$1,686,000	\$1,686,000	\$1,686,000
STBG-TAP-FLEX TARGET	\$66,179	\$0	\$66,000	\$0
SUBTOTAL	\$5,355,943	\$3,326,943	\$2,353,943	\$2,128,943
PROGRAM FUNDS	\$3,715,000	\$2,725,000	\$1,911,000	\$225,000
BALANCE	\$1,640,943	\$601,943	\$442,943	\$1,903,943

Table 3 STBG-TAP Fiscal Constraint

	2021	2022	2023	2024
UNOBLIGATED BALANCE (CARRYOVER)	\$483,988	\$11,758	\$5,758	\$92,758
SYSTEMTAP TARGET	\$86,770	\$87,000	\$87,000	\$87,000
STBG-TAP-FLEX TARGET	\$0	\$66,000	\$0	\$66,000
SUBTOTAL	\$570,758	\$164,758	\$92,758	\$245,758
PROGRAM FUNDS	\$559,000	\$159,000	\$0	\$0
BALANCE	\$11,758	\$5,758	\$92,758	\$245,758

Table 4 Forecasted Operations and Maintenance (O&M) Costs on the Federal-Aid System

SOURCE: 2019 CITY STREET FINANCE REPORT	2021	2022	2023	2024
CITY OF AMES TOTAL OPERATIONS	\$3,559,129	\$3,690,949	\$3,822,768	\$3,954,588
CITY OF AMES TOTAL MAINTENANCE	\$6,573,301	\$6,816,757	\$7,060,212	\$7,303,668
CITY OF GILBERT TOTAL OPERATIONS	\$33,386	\$34,623	\$35,859	\$37,096
CITY OF GILBERT TOTAL MAINTENANCE	\$43,192	\$44,792	\$46,392	\$47,992
IOWA DOT TOTAL OPERATIONS AND MAINTENANCE	\$718,852	\$742,106	\$765,973	\$789,431
TOTOAL O&M	\$10,927,861	\$11,329,226	\$11,731,205	\$12,132,774

Table 5 Forecasted Non-Federal Aid Revenue

SOURCE: 2019 CITY STREET FINANCE REPORT	2021	2022	2023	2024
CITY OF AMES TOTAL RUTF RECEIPTS	\$8,226,831	\$8,531,528	\$8,836,226	\$9,140,923
CITY OF AMES TOTAL OTHER ROAD MONIES RECEIPTS	\$6,031,137	\$6,254,512	\$6,477,888	\$6,701,263
CITY OF AMES TOTAL RECEIPTS SERVICE DEBT	\$16,590,742	\$17,205,214	\$17,819,686	\$18,434,158
CITY OF GILBERT TOTAL RUTF RECEIPTS	\$150,961	\$156,552	\$162,144	\$167,735
CITY OF GILBERT TOTAL OTHER ROAD MONIES RECEIPTS	\$24,675	\$25,589	\$26,503	\$27,416
CITY OF GILBERT TOTAL RECEIPTS SERVICE DEBT	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL NON-FEDERAL AID ROAD FUND RECEIPTS	\$31,024,346	\$32,173,396	\$33,322,445	\$34,471,495

Table 6 Iowa DOT Five-Year Program Funding

	(\$ MILLIONS)			
REVENUES	2021	2022	2023	2024
PRIMARY ROAD FUND	\$708.60	\$719.00	\$721.20	\$725.80
TIME-21	\$135.00	\$135.00	\$135.00	\$135.00
MISCELLANEOUS	\$25.00	\$25.00	\$25.00	\$25.00
FEDERAL AID	\$393.80	\$365.70	\$365.70	\$365.70
TOTAL	\$1,262.40	\$1,244.70	\$1,246.90	\$1,251.50
STATEWIDE ALLOCATIONS	2021	2022	2023	2024
OPERATIONS & MAINTENANCE	\$352.40	\$363.80	\$375.50	\$387.00
CONSULTANT SERVICES	\$85.00	\$85.00	\$85.00	\$85.00
CONTRACT MAINTENANCE	\$35.40	\$35.40	\$35.40	\$35.40
RAILROAD CROSSING PROTECTION	\$5.00	\$5.00	\$5.00	\$5.00
MISCELLANEOUS PROGRAMS	\$45.30	\$45.30	\$45.30	\$45.30
TOTAL	\$523.10	\$534.50	\$546.20	\$557.70
FUNDS AVAILABLE FOR ROW/CONSTRUCTION	2021	2022	2023	2024
TOTAL	\$739.30	\$710.20	\$700.70	\$693.80

FFY 2020 PROJECT STATUS REPORT

	TPMS	Location	In \$1,000s		Status	Sponsor
			Awarded	Total		
STBG	16032	In Ames, S Grand Ave from Squaw Creek Dr South 0.1 mile to S 5 th St., and S 5 th St. from S Grand to S Duff	2,396	3,040	Authorized (Let Date: 7/16/19)	City of Ames
STBG	36986	In Ames, S Grand Ave. from 0.1 miles north of S 16 th St North 0.54 miles to S 5 th Street	5,300	12,500	Authorized (Let Date: 2/18/20)	City of Ames
STBG	35617	CyRide: Vehicle Replacement	225	800	Authorized	CyRide
TAP	37446	In Ames, SW greenbelt trail from Beedle Dr. east 0.94 miles to Intermodal Facility	159	400	Authorized (Est. Sep. Letting)	City of Ames
TAP	14983	In Ames, Skunk River Trail from SE 16 th St to East Lincoln Way	160	521	Rolled over to FFY 2021	City of Ames
TAP	21260	In Ames, Skunk River Trail from SE 16 th St to East Lincoln Way	240	835	Rolled over to FFY 2021	City of Ames
PL	34214	Transportation Planning Funds	100	125	Ongoing	City of Ames

CHANGING AN APPROVED TIP

Often after development and subsequent adoption of the TIP, changes may need to be made to the list of programmed projects. Examples of changes might be adding or deleting projects, moving a project between years in the TIP, adjusting project cost, or changing the vehicle numbers of transit vehicles.

A major requirement of a project receiving Federal transportation funds is for the project to be included in the TIP and Statewide Transportation Improvement Program (STIP). Once a project has received Federal Authorization for construction it does not need to be included in the TIP. This is one of two major reasons for adding or deleting a project from the TIP. The other major reason for adding a project is the awarding of a grant for a project, which can happen throughout the year. Projects programmed through the STBG-SWAP program will be included in the TIP as informational items and modifications to these projects will be pursued using the following revision processes as outlined.

Changes to the TIP are classified as either **amendments** or **administrative modifications** and are subject to different AAMPO Transportation Policy Committee and public review procedures.

Amendments

Amendments are major changes involving the following:

Project Cost: Projects in which the recalculated project costs increase Federal aid by more than 30 percent or increase the Federal aid by more than \$2 million from the original amount.

Schedule Changes: Projects added or deleted from the TIP.

Funding Source: Projects receiving additional Federal funding sources.

Scope Changes: Changing the project termini, project alignment, the amount of through traffic lanes, type of work from an overlay to reconstruction, or a change to include widening of the roadway.

Amendments are presented to the Transportation Policy Committee and a public comment period is opened, which lasts until the next policy committee meeting (the Transportation Policy Committee meets on an as needed basis, giving a 3-4 week public comment period). Public comments are shared with the Transportation Policy Committee and action is taken on the amendment.

Administrative Modifications

Administrative Modifications are minor changes involving the following:

Project Cost: Projects in which the recalculated project costs do not increase Federal aid by more than 30 percent or does not increase the Federal aid by more than \$2 million from the original amount.

Schedule Changes: Changes in schedule for projects included in the first four years of the TIP.

Funding Source: Changing funding from one source to another.

Scope Changes: All changes to the scope require an amendment.

Administrative modifications are processed internally and are shared with the Transportation Policy Committee and the public as information items.

HIGHWAY PROGRAM (FFY 2021-2024)

STBG-TAP

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
14983	TAP-U-0155(SE16th)--8I-85	In Prep	Total	\$521,000				\$521,000
Ames	In the City of Ames, Skunk River Trail: From SE 16th Street to East Lincoln Way		Federal Aid	\$160,000				\$160,000
	9509 - Ped/Bike Grade & Pave		Regional	\$160,000				\$160,000
			Swap					
DOT Note: Project eligible for FHWA TAP funding								
21260	TAP-U-0155(SE16TH)--8I-85	In Prep	Total	\$835,000				\$835,000
Ames	Skunk River Trail: From SE 16th Street to East Lincoln Way		Federal Aid	\$240,000				\$240,000
	9510 - Ped/Bike Structures, 9511 - Ped/Bike Miscellaneous		Regional	\$240,000				\$240,000
			Swap					
38306	TAP-U-0155()-8I-85	In Prep	Total	\$500,000				\$500,000
Ames	In the city of Ames, On Vet Med Trail, from S Grand Ave South .53 Miles to S 16th St,		Federal Aid	\$159,000				\$159,000
	9509 - Ped/Bike Grade & Pave		Regional	\$159,000				\$159,000
			Swap					
19249	TAP-U-0155()-8I-85	In Prep	Total		\$681,000			\$681,000
Ames	Squaw Creek: From Skunk River to S. Duff Avenue		Federal Aid		\$159,000			\$159,000
	9509 - Ped/Bike Grade & Pave		Regional		\$159,000			\$159,000
			Swap					

PL

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
34214	RGPL-PA22(RTP)--PL-85	In Prep	Total	\$125,000	\$125,000	\$125,000	\$125,000	\$500,000
MPO 22 / AAMPO	Trans Planning		Federal Aid	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
	9514 - Trans Planning		Regional					
			Swap					

STBG

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
36918	RGTR-0155()--ST-85	In Prep	Total	\$850,000				\$850,000
MPO 22 / AAMPO	CyRide: Vehicle Replacement		Federal Aid	\$225,000				\$225,000
	9513 - Transit Investments		Regional	\$225,000				\$225,000
			Swap					
38304	RGTR-0155()--ST-85	In Prep	Total		\$850,000			\$850,000
MPO 22 / AAMPO	CyRide: Vehicle Replacement		Federal Aid		\$225,000			\$225,000
	9513 - Transit Investments		Regional		\$225,000			\$225,000
			Swap					
37442	RGTR-0155()--ST-85	In Prep	Total			\$850,000		\$850,000
MPO 22 / AAMPO	CyRide Vehicle Replacement		Federal Aid			\$225,000		\$225,000
	9513 - Transit Investments		Regional			\$225,000		\$225,000
			Swap					
45238	RGTR-0155()--ST-85	In Prep	Total				\$850,000	\$850,000
MPO 22 / AAMPO	CyRide: Vehicle Replacement		Federal Aid				\$225,000	\$225,000
	9513 - Transit Investments		Regional				\$225,000	\$225,000
			Swap					

SWAP-STBG

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
36919	STBG-SWAP-0155()-SG-85	In Prep	Total	\$2,400,000				\$2,400,000
Ames	In the city of Ames, On Cherry Avenue, from E Lincoln Way South .4 Miles to Southeast 5th Street, 1001 - Grade and Pave		Federal Aid					
			Regional	\$1,890,000				\$1,890,000
			Swap	\$1,890,000				\$1,890,000
36927	STBG-SWAP-0155()-SG-85	In Prep	Total	\$2,500,000				\$2,500,000
Ames	In the city of Ames, On East 13th Street, from Duff Avenue East .4 Miles to Meadowlane Avenue, 1509 - Pavement Rehab		Federal Aid					
			Regional	\$1,600,000				\$1,600,000
			Swap	\$1,600,000				\$1,600,000
35616	STBG-SWAP-0155()-SG-85	In Prep	Total		\$1,500,000			\$1,500,000
Ames	In the city of Ames, On North Dakota Avenue, from Ontario Street North 0.17 Miles to Union Pacific Railroad Tracks 1005 - Pave		Federal Aid					
			Regional		\$900,000			\$900,000
			Swap		\$900,000			\$900,000
38303	STBG-SWAP-0155()-SG-85	In Prep	Total		\$4,200,000			\$4,200,000
Ames	In the city of Ames, On Stange Rd and 24TH ST, from Blankenburg Dr North .4 Miles to 24th ST and East .8 Miles to RR, 1001 - Grade and Pave		Federal Aid					
			Regional		\$1,600,000			\$1,600,000
			Swap		\$1,600,000			\$1,600,000
45233	STBG-SWAP-0155()-SG-85	In Prep	Total			\$2,400,000		\$2,400,000
Ames	In the city of Ames, on Lincoln Way, from Dotson Dr to S Franklin Ave 1001 - Grade and Pave		Federal Aid					
			Regional			\$1,686,000		\$1,686,000
			Swap			\$1,686,000		\$1,686,000

PRF

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
38175	STPN-35()-2J-85	In Prep	Total	\$950,000				\$950,000
Iowa Department of Transportation	I-35: US 30 INTERCHANGE IN AMES		Federal Aid					
	4521 - Erosion Control, 5062 - Traffic Signs		Regional					
			Swap					
39359	IMN-35()-0E-85	In Prep	Total	\$76,000				\$76,000
Iowa Department of Transportation	I-35: SE RAMP OF THE US 30 INTERCHANGE		Federal Aid					
	3511 - Grading, 6031 - Right of Way		Regional					
			Swap					
38031	BRFN-69()-39-85	In Prep	Total		\$265,000			\$265,000
Iowa Department of Transportation	US 69: GRAND AVE IN AMES 0.1 MI N OF LINCOLN WAY		Federal Aid					
	2521 - Bridge Deck Overlay		Regional					
			Swap					

NHPP

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
38248	NHSX-30()-3H-85	In Prep	Total		\$10,404,000	\$9,141,000		\$19,545,000
Iowa Department of Transportation	US 30: 0.5 MI E OF I-35 TO E OF 590TH AVE		Federal Aid		\$8,324,000	\$7,313,000		\$15,637,000
	3511 - Grading, 6031 - Right of Way		Regional					
			Swap					

SWAP-CMAQ

Project ID	Project Number	Approval Level		2021	2022	2023	2024	Totals
Sponsor	Location	Letting Date						
STIP ID	Work Codes							
45239	ICAAP-SWAP-0155(702)--SH-85	In Prep	Total	\$1,470,685				\$1,470,685
Ames	First Phase Deployment Ames Traffic Signal Master Plan		Federal Aid					
	5041 - Traffic Signals		Regional	\$1,176,548				\$1,176,548
			Swap	\$1,176,548				\$1,176,548

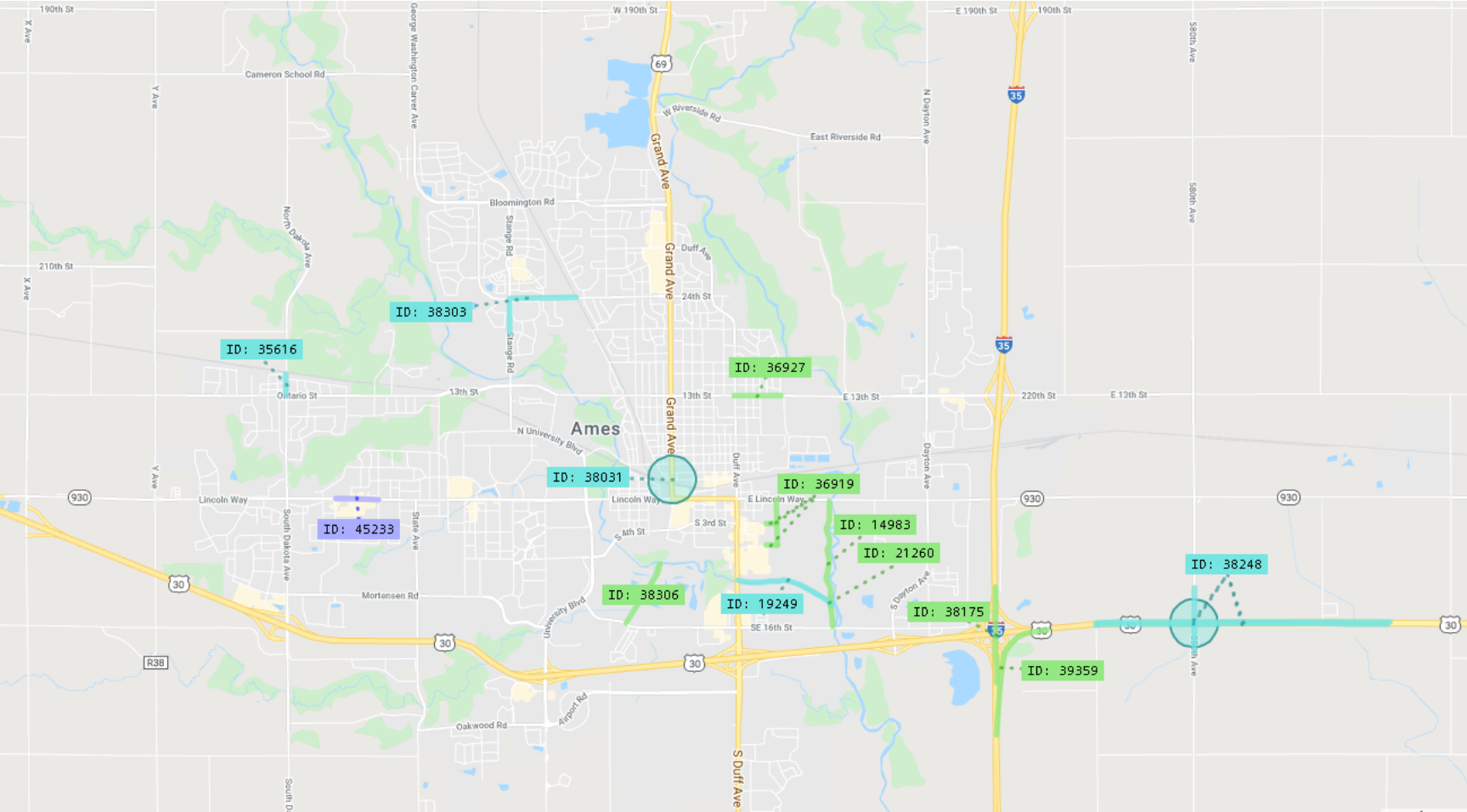
TRANSIT PROGRAM (FFY 2021-2024)

Fund	Sponsor	Transit # Expense Class Project Type	Desc / Add Ons / Addnl Info		FY21	FY22	FY23	FY24
5307	Ames	5575 Capital Expansion	Heavy Duty Articulated Bus Diesel, UFRC, VSS, Low Floor, BioDiesel	Total	281,250	281,250	281,250	
				FA	225,000	225,000	225,000	
				SA				
5339	Ames	6010 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00957	Total	513,032			
				FA	436,077			
				SA				
5310	Ames	6012 Operations Misc	Annunciator Annual Service Fees	Total	82,146	94,000	94,000	94,000
				FA	65,714	75,200	75,200	75,200
				SA				
PTIG	Ames	6013 Capital Rehabilitation	Maintenance Bay Ventilation Improvements	Total	281,346			
				FA				
				SA	225,077			
PTIG	Ames	6014 Capital Rehabilitation	HVAC Rehabilitation	Total	187,574	307,329		
				FA				
				SA	150,059	245,863		
5310	Ames	5100 Capital Expansion	Annunciators LED Signage	Total	126,720			
				FA	101,376			
				SA				
5339	Ames	4044 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 07125	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4045 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 01140	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4046 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 07132	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4047 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 07123	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4048 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 01141	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4049 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00958	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4660 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00956	Total	513,032			
				FA	436,077			
				SA				
5339	Ames	4662 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00955	Total	513,032			
				FA	436,077			
				SA				
STA, 5307	Ames	914 Operations Misc	General Operations	Total	12,086,406	12,569,863	13,072,657	13,595,563
				FA	2,593,894	2,697,650	2,805,556	2,917,778
				SA	809,363	841,738	875,407	910,423

Fund	Sponsor	Transit # Expense Class Project Type	Desc / Add Ons / Addnl Info		FY21	FY22	FY23	FY24
5310	Ames	919 Capital Misc	Contracted Paratransit Service	Total	175,000	187,500	187,500	187,500
				FA	140,000	150,000	150,000	150,000
				SA				
5310	Ames	5570 Capital Replacement	Light Duty Bus (176" wb) UFRC, VSS, Low Floor Unit #: 00390	Total	156,198			
				FA	124,958			
				SA				
5310	Ames	5571 Capital Replacement	Light Duty Bus (176" wb) UFRC, VSS Unit #: 00391	Total	156,198			
				FA	124,958			
				SA				
PTIG	Ames	6034 Capital Rehabilitation	Bus Vehicle Exhaust Modifications	Total		168,708		
				FA		134,966		
				SA				
5310	Ames	920 Capital Replacement	Associated Transit Improvements	Total		50,000	50,000	50,000
				FA		40,000	40,000	40,000
				SA				
5339	Ames	4663 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00954	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	4664 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00953	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	4665 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00972	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	4666 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00974	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	5097 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00970	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	5098 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00971	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	5099 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00977	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	4661 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00975	Total		517,615		
				FA		439,973		
				SA				
5339	Ames	5555 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00973	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	5563 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00976	Total			538,320	
				FA			457,572	
				SA				

Fund	Sponsor	Transit # Expense Class Project Type	Desc / Add Ons / Addnl Info		FY21	FY22	FY23	FY24
5339	Ames	5564 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00950	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	5565 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00952	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	5566 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00951	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	5567 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00949	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	5568 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00504	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	5569 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00502	Total			538,320	
				FA			457,572	
				SA				
5339	Ames	3314 Capital Expansion	Maintenance Facility Expansion	Total			6,300,166	
				FA			5,000,000	
				SA				
5339	Ames	6015 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00501	Total				559,853
				FA				475,875
				SA				
5339	Ames	6016 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00503	Total				559,853
				FA				475,875
				SA				
5339	Ames	6017 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00188	Total				559,853
				FA				475,875
				SA				
5339	Ames	6018 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00186	Total				559,853
				FA				475,875
				SA				
5339	Ames	6019 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00189	Total				559,853
				FA				475,875
				SA				
5339	Ames	6020 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00187	Total				559,853
				FA				475,875
				SA				
5339	Ames	6021 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00785	Total				559,853
				FA				475,875
				SA				
5339	Ames	6022 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor, BioDiesel Unit #: 00762	Total				559,853
				FA				475,875
				SA				

Project Location Map



SELF-CERTIFICATION OF THE MPO PLANNING PROCESS

AMES AREA METROPOLITAN PLANNING ORGANIZATION ANNUAL SELF-CERTIFICATION

In accordance with 23 CFR 450.334, the STATE DEPARTMENT OF TRANSPORTATION and the Ames Area Metropolitan Planning Organization for the Ames, Iowa urbanized area(s) hereby certify that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

- (1) 23 U.S.C. 134, 49 U.S.C. Section 5303, and 23 CFR Part 450;
- (2) In nonattainment and maintenance areas, Sections 174 and 176(c) and (d) of the Clean Air Act as amended (42 U.S.C. 7504, 7506(c) and (d) and 40 CFR 93);
- (3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- (4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex or age in employment or business opportunity;
- (5) Section 1101(b) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Pub. L. 109-59) regarding the involvement of Disadvantaged Business Enterprises in FHWA and FTA funded planning;
- (6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- (7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27,37, and 38, and USDOT implementing regulation;
- (8) Older Americans Act, as amended (42 U.S.C. 6101);
- (9) 23 U.S.C. 324, regarding prohibition of discrimination based on gender; and
- (10) Section 504 of the Rehabilitation Act of 1973 and 49 CFR Part 27, regarding discrimination against individuals with disabilities.

For AAMPO:



John Haila, Chair
Transportation Policy Committee

3-24-2020
Date

RESOLUTION OF APPROVAL

[INSERT RESOLUTION OF APPROVAL]



AMES AREA METROPOLITAN PLANNING ORGANIZATION SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG) APPLICATION

General Information

MPO: Ames Area MPO e-mail: tracy.warner@cityofames.org

Sponsor/Applicant Agency: City of Ames

Contact Person (Name & Title): Tracy Warner, Municipal Engineer

Complete Mailing Address: Public Works Department; 515 Clark Avenue

	Street Address and/or Box No.		
Ames	IA	50010	515-239-5163
City	State	Zip	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.)*

Applicant Agency: _____ e-mail: _____

Contact Person (Name & Title): _____

Complete Mailing Address: _____

	Street Address and/or Box No.		
City	State	Zip	Daytime Phone

Project Information

Project Title: 22/23 CyRide Route Pavement Improvements (Lincoln Way – Dotson Dr to Franklin Ave)

Project Description (including length if applicable) required: Pavement improvements of Lincoln Way from Dotson Drive to Franklin Avenue. This roadway was widened to 5 lanes a few years ago. The pavement for both the roadway and shared use path need rehabilitated and/or reconstructed.

Project in Long Range Transportation Plan?: Yes No If Yes, LRTP ID: _____

If this project includes land acquisition, how many acres? _____

Project Category **Check all boxes that apply to indicate the categories that best describe your project.**

- | | |
|---|--|
| <input type="checkbox"/> Preserve or improve conditions and performance on:
<input type="checkbox"/> Any federal-aid highway
<input type="checkbox"/> Bridges on any public road | <input checked="" type="checkbox"/> Facilities for nonmotorized transportation
<input type="checkbox"/> Transit capital projects
<input checked="" type="checkbox"/> Public bus terminals and facilities |
|---|--|

Estimated Project Costs

	Land Cost	\$ <u>0</u>
	Preliminary Design / Engineering	\$ <u>200,000</u>
	Utility Relocation	\$ <u>0</u>
	Construction Engineering	\$ <u>200,000</u>
	Construction Cost	\$ <u>2,000,000</u>
	In-Kind Cost	\$ <u>400,000 (Engineering)</u>
	Indirect Cost (if applicable)	\$ <u>N/A</u>
Other (please specify) _____		\$ <u>N/A</u>
	Total Cost	\$ <u>2,400,000</u>
	STBG Fund Request	\$ <u>1,686,000</u>
	Applicant Match (20% Minimum)	\$ <u>714,000</u>

	Match Source	Amount	Assured or Anticipated (Date Anticipated)
1.	G.O. Bonds	\$714,000	7/1/2022
2.			
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 _____

Will this project be open to the public? Yes No

Estimated Project Development Schedule

Design	Start Date	<u>7/1/2022</u>	Completion Date	<u>12/1/2022</u>
Land Acquisition	Start Date	<u>N/A</u>	Completion Date	<u>N/A</u>
Construction	Start Date	<u>5/8/2023</u>	Completion Date	<u>8/11/2023</u>
Noninfrastructure	Start Date	_____	Completion Date	_____

Has any part of this project been started? Yes No

If yes, explain: _____

Documentation and Narrative Information

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

- A. A NARRATIVE assessing existing conditions, outlining the concept of the proposed project, and providing adequate project justification. Surface Transportation Program projects must have a direct relationship to the intermodal transportation system, either as it exists or as it is planned. Assess your project in regard to the transportation system relative to its functional relationship, proximity, or impact to an existing or planned transportation facility. Assess the value of this project from a regional perspective and how it will be a functional addition to the transportation system and the region as a whole if no additional development funds are received.
- B. A DETAILED MAP identifying the location of the project.
- C. A SKETCH-PLAN of the project, including cross sections of roadways.
- G. A NARRATIVE discussing the public input process that was followed and the extent to which adjacent property owners and others have been informed of the proposed project and an assessment of their acceptance.



The award of STBG funds; any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; or the furnishing of materials shall not involve direct or indirect interest, prohibited by Iowa Code Sections 314.2, 362.5, or 331.342, of any state, county, or city official, elective or appointive. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of 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 that, although this information is sufficient to secure a commitment of funds, an executed contract between the applicant and the Iowa Department of Transportation is required prior to the authorization of funds.

Representing the City of Ames

Signature

3-31-2020
Date

Tracy L. Warner, P.E., Municipal Engineer
Typed Name and Title

3-31-2020
Date

Please send one copy of the application with the supportive documentation to:

Ames Area Metropolitan Planning Organization
515 Clark Avenue
Ames, Iowa 50010

ATTACHMENT A

Itemized breakdown of total project costs guidelines.

Construction Costs – these may be based on historical averages for entire projects of similar size and scope. Examples include:

- Typical cost / mile of trail (i.e. \$200,000 per mile for moderate terrain and limited number of structures)
- Typical cost / square foot of bridge deck
- Typical cost / traffic signal upgrade (i.e. \$163,000 per lump sum signal bid item)
- Typical cost / lineal foot of sidewalk

Design / Inspection Costs – these may be estimated based on the following typical percentages of construction costs:

- 8-10% for preliminary up through final design and letting activities
- 12-15% for construction inspection activities

Right-of-way Acquisition Costs – these may be estimated based on the following:

- Impact and description of impact
- Typical cost / square foot for permanent right-of-way
- Typical cost / square foot for temporary easements

Utility and Railroad Costs – these may be estimated based on the following:

- Impact and description of impact
- Typical cost / linear foot of relocated or reconstructed facility (track, pipe, electrical lines, etc.)
- Typical cost / installation (RR switches, utility poles, transformers, control boxes, etc.)

Indirect Costs -- if indirect costs are involved, e.g., wages:

- Estimated hours
- Estimated hourly rate, salary
- Estimated fringe, direct
- Other direct cost estimate
- Other indirect cost estimate

A. A NARRATIVE assessing existing conditions, outlining the concept of the proposed project, and providing adequate project justification. Surface Transportation Program projects must have a direct relationship to the intermodal transportation system, either as it exists or as it is planned. Assess your project in regard to the transportation system relative to its functional relationship, proximity, or impact to an existing or planned transportation facility. Assess the value of this project from a regional perspective and how it will be a functional addition to the transportation system and the region as a whole if no additional development funds are received.

The corridor of Lincoln Way from Dotson Drive to Franklin Avenue is in need of pavement rehabilitation/reconstruction. This area is a 5-lane arterial roadway in the west part of the Ames community with sidewalk along the north side and a shared use path along the south side. The project section is adjacent to multi-family rental housing, medical and commercial, including McFarland Clinic, Hy-Vee, Fareway Meat Market, and McDonalds. Lincoln Way is a high-travelled east/west corridor with CyRide transit service stopping every 15 minutes when Iowa State University classes are in session. This project area is through three different CyRide routes (Red, Purple, and Cherry).

Investment in this corridor's pavement conditions where new pavement will benefit pedestrians, cyclists, vehicles, and CyRide is of substantial importance in the community and region.

B. A DETAILED MAP identifying the location of the project.

See attached.

C. A SKETCH-PLAN of the project, including cross sections of roadways.

See attached.

G. A NARRATIVE discussing the public input process that was followed and the extent to which adjacent property owners and others have been informed of the proposed project and an assessment of their acceptance.

This project has first appeared in the City of Ames Capital Improvements Plan (CIP). In January 2020, the CIP projects were presented to the Ames City Council for consideration of the 5-year plan. This and subsequent meetings are advertised and open to the public. The CIP was opened for public comment during the next City Council meeting and then the CIP was amended/adopted during their late February 2020 meeting.

Once funding becomes available, Ames Public Works (PW) Engineering staff will commence the outreach process. Civic engagement is a very high priority to the City of Ames and is part of each project in our community. After gathering topographic and boundary survey data, we host a public open house where residents, property managers, and business owners can learn about the project and ask questions. We have conversations with attendees about special access needs, deliveries, construction phasing, construction schedule, drainage issues, and multi-modal transportation. Staff also meets with CyRide staff to coordinate construction with transit schedules. At this time, it is anticipated that Lincoln Way will remain open to traffic so there should not be significant delays for CyRide during construction.

During construction, PW Engineering delivers construction notices, posts project updates on Facebook, publishes Construction Updates on City's webpage (www.cityofames.org/construction). Adjacent property owners are provided with contractor, inspector and engineer's phone numbers to use if they have any concerns or questions. In general, construction causes inconveniences, yet City staff are dedicated to working closely with those impacted to minimize complaints and concerns. We have a long-standing positive reputation of providing information to our residents during design and construction. It is anticipated that this would be another successful project in our community.



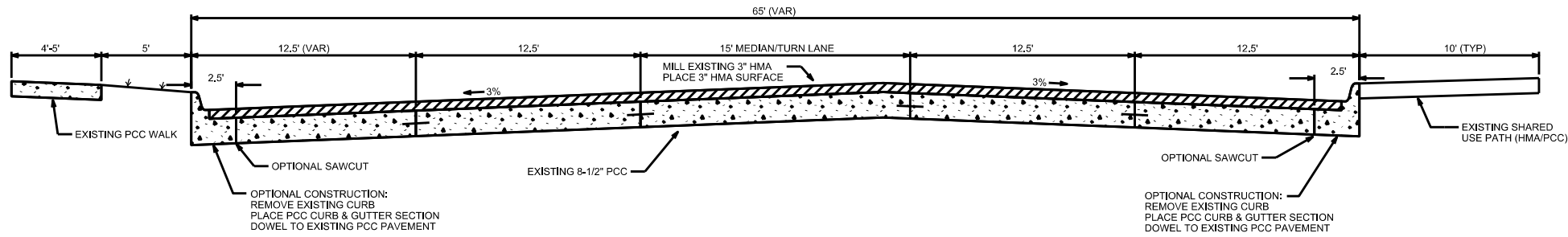
ArcGIS Web Map



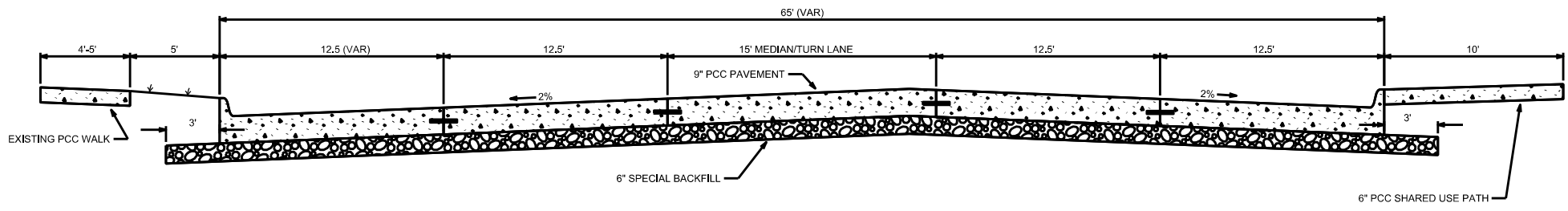
© City of Ames, Iowa makes no warranties, expressed or implied, including without limitation, any warranties of merchantability or fitness for a particular purpose. In no event shall the City of Ames be liable for lost profits or any consequential or incidental damages caused by the use of this map.

Date: 3/30/2020

1 inch = 376 feet



TYPICAL SECTION
MILL & OVERLAY OPTION
LINCOLN WAY (DOTSON - FRANKLIN)



TYPICAL SECTION
9" PCC (REMOVE & REPLACE) OPTION
LINCOLN WAY (DOTSON - FRANKLIN)

ENGINEER'S ESTIMATE

CYRIDE ROUTE PAVEMENT IMPROVEMENTS (LINCOLN WAY: FRANKLIN - DOTSON) PCC OPTION

PUBLIC WORKS DEPT.- ENGINEERING DIV.

CITY OF AMES, IA

03/30/2020

Item	Item Code	Description	Unit	Unit Price	Est Quant	Amount
<i>Division 1 - General</i>						
(Not Used)						
<i>Division 2 - Earthwork</i>						
2.1	2010-108-D-2	Topsoil, 8" Depth	cy	75.00	200	\$ 15,000.00
2.2	2010-108-E-0	Excavation, Class 10, 6" Depth	cy	50.00	2011.1	\$ 100,555.00
2.3	2010-108-G-0	Subgrade Prep, 12" Depth	sy	5.00	12066.6	\$ 60,333.00
2.4	2010-108-I-0	Special Backfill, 6" Depth	sy	15.00	12066.6	\$ 180,999.00
<i>Division 3 - Trench, Backfill and Tunnelling</i>						
(Not Used)						
<i>Division 4 - Sewers and Drains</i>						
4.1	4020-108-A-1	Storm Sewer Pipe, 15" RCP	lf	85.00	300	\$ 25,500.00
4.2	4040-108-A-0	Perforated Subdrain and Fittings, 4" dia.	lf	20.00	0	\$ -
4.3	4040-108-B-0	Perforated Subdrain and Fittings, 6" dia.	lf	25.00	0	\$ -
4.4	4040-108-E-0	Footing Drain Service Connection	ea	1000.00	0	\$ -
<i>Division 5 - Water Mains and Appurtenances</i>						
5	5020-108-G-0	Valve Box Replacement/Adjustment	ea	750.00	2	\$ 1,500.00
<i>Division 6 - Structures for Sanitary and Storm Sewer</i>						
6.1	6010-108-A-0	Manhole, SW-301	ea	8500.00	3	\$ 25,500.00
6.1	6010-108-B-0	Intake, SW-501	ea	3500.00	6	\$ 21,000.00
6.2	6010-108-E-0	Manhole Adjustment, Minor	ea	2000.00	2	\$ 4,000.00
6.3	6010-108-H-0	Removal of Intake/Manhole	ea	1350.00	9	\$ 12,150.00
<i>Division 7 - Streets and Related Work</i>						
7.1	7010-108-A-0	Pavement, PCC, 8" Depth	lf	85.00	12066.6	\$ 1,025,661.00
7.2	7030-108-A-0	Removal of Drive/Walk	sy	20.00	213.4	\$ 4,268.00
7.3	7030-108-A-0	Removal of Shared Use Path	sy	20.00	930.7	\$ 18,614.00
7.4	7030-108-E-0	PCC Drive/Walk, 6" Depth	sy	65.00	179.3	\$ 11,654.50
7.4	7030-108-E-0	PCC Shared Use Path, 5" Depth	sy	65.00	930.7	\$ 60,495.50
7.5	7030-108-E-0	PCC Walk, 4" Depth	sy	50.00	34.1	\$ 1,705.00
7.7	7030-108-G-0	Truncated Domes	sf	35.00	40	\$ 1,400.00
7.8	7040-108-A-0	Full Depth Patches, PCC	ls	20000.00	0	\$ -
7.9	7040-108-H-0	Pavement Removal, Full-Depth	sy	20.00	12066.6	\$ 241,332.00
7.10	7040-108-I-0	Removal of Curb & Gutter	lf	15.00	0	\$ -
<i>Division 8 - Traffic Signals</i>						
8.1	8020-108-B-0	Pavement Markings	sta	325.00	77.16	\$ 25,077.00
8.2	8020-108-G-0	Symbols & Legends	ea	200.00	12	\$ 2,400.00
8.3	8030-108-A-0	Temporary Traffic Control	ls	15000.00	1	\$ 15,000.00
<i>Division 9 - Sitework and Landscaping</i>						
9.1	9040-108-F-1	Wattles	lf	5.00	200	\$ 1,000.00
9.2	9040-108-T-1	Inlet Protection Device	ea	175.00	4	\$ 700.00
9.3	9040-108-T-2	Inlet Protection Device, Maintenance	ea	50.00	4	\$ 200.00
<i>Division 10 - Demolition</i>						
(Not Used)						
<i>Division 11 - Miscellaneous</i>						
11.1	11010-108-A	Construction Survey/Staking	ls	7500.00	1	\$ 7,500.00
11.2	11010-108-B	Pedestrian Facility Construction Survey & Staking	ea	300.00	4	\$ 1,200.00
11.3	11020-1080A	Mobilization	ls	40000.00	1	\$ 40,000.00
11.4	11060-108-A	Concrete Washout	ls	3000.00	1	\$ 3,000.00
SUBTOTAL ESTIMATED COST						\$ 1,907,744.00
ENGINEERING (20%)						\$ 381,548.80
CONTINGENCY (12%)						\$ 228,929.28
TOTAL ESTIMATED COST						\$ 2,518,222.08

*Does not include R&R pavement/drives/walks installed with Franklin intersection work

*Includes removing existing centerline median and using pavement markings instead

*Includes replacing all 12" or unknown storm sewer pipe with 15"



Ames Transit Agency
601 N. University Blvd., Ames, IA 50010
cyride@cyride.com * www.cyride.com
voice 515.292.1100
fax 515.239.5578

March 23, 2020

Mark Gansen
Ames Area Metropolitan Planning Organization
515 Clark Ave.
Ames, IA 50014

RE: FY2024 STP Grant Application

Dear Mark:

Enclosed is a hard copy of CyRide's grant application for FY2024 Surface Transportation Program funding for a partial bus purchase. If you have questions about the application or justification within, please give either Barb Neal or myself a call at 515-292-1100.

Thank you in advance for consideration of this proposal.

Sincerely,

A handwritten signature in black ink that reads "Shari Atwood". The signature is written in a cursive, flowing style.

Shari Atwood, Transit Planner
CyRide

Enc (1)

FY2024 Surface Transportation Block Grant Program Application

Submitted to:

AMES AREA METROPOLITAN PLANNING ORGANIZATION

By:

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

March 23, 2020



AMES AREA METROPOLITAN PLANNING ORGANIZATION SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG) APPLICATION

General Information

MPO: Ames Area MPO e-mail: bneal@cyride.com

Sponsor/Applicant Agency: Ames Transit Agency (CyRide)

Contact Person (Name & Title): Barb Neal, Interim Transit Director

Complete Mailing Address: 601 N. University Blvd.

	Street Address and/or Box No.		
Ames	IA	50010	515-239-5565
City	State	Zip	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.)*

Applicant Agency: _____ e-mail: _____

Contact Person (Name & Title): _____

Complete Mailing Address: _____
Street Address and/or Box No.

City	State	Zip	Daytime Phone
------	-------	-----	---------------

Project Information

Project Title: Purchase heavy-duty (HD) 40-foot battery electric fixed-route bus OR 60-foot articulated bus

Project Description (including length if applicable) required: The Ames Transit Agency (CyRide) proposes to replace a fixed-route transit bus in FY2024 providing service to residents in the Ames metropolitan service area. STP funding could help with the financing of a partial bus for CyRide or upgrade to an articulated or battery electric bus.

Project in Long Range Transportation Plan?: Yes No If Yes, LRTP ID: 6

If this project includes land acquisition, how many acres? n/a

Project Category Check all boxes that apply to indicate the categories that best describe your project.

- | | |
|---|---|
| <input type="checkbox"/> Preserve or improve conditions and performance on:
<input type="checkbox"/> Any federal-aid highway
<input type="checkbox"/> Bridges on any public road | <input type="checkbox"/> Facilities for nonmotorized transportation
<input checked="" type="checkbox"/> Transit capital projects
<input type="checkbox"/> Public bus terminals and facilities |
|---|---|

Estimated Project Costs

Land Cost	\$	_____
Preliminary Design / Engineering	\$	_____
Utility Relocation	\$	_____
Construction Engineering	\$	_____
Construction Cost	\$	_____
In-Kind Cost	\$	_____
Indirect Cost (if applicable)	\$	_____
Other <i>(please specify)</i> _____	\$	_____
Total Cost	\$	<u>850,000</u>
STBG Fund Request	\$	<u>225,000</u>
Applicant Match <i>(20% Minimum)</i>	\$	<u>56,250</u>

	Match Source	Amount	Assured or Anticipated (Date Anticipated)
1.	Ames Transit Agency (CyRide)	\$113,750	7/1/2023 (This is in addition to the \$56,250 local match for the STBG)
2.	Federal Transit Administration (5339, CMAQ/ICAAAP, etc)	\$455,000	7/1/2023
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 The STP funding may be matched with other federal or state
funding (ICAAAP, 5339, or other federal discretionary funding) sources to complete the purchase of a bus. Additional
federal/state participation will be ascertained closer to FY2024 after allocations for that year have been made.

Will this project be open to the public? Yes No

Estimated Project Development Schedule

Design	Start Date	_____	Completion Date	_____
Land Acquisition	Start Date	_____	Completion Date	_____
Construction	Start Date	_____	Completion Date	_____
Noninfrastructure	Start Date	7/1/2023	Completion Date	1/2/2025

Has any part of this project been started? Yes No

If yes, explain: CyRide anticipates future additional federal funding of a partial bus to match this FY2024 STP
funding. The buses likely designated for replacement with STP FY2024 funds will be 2000-2005 models. Delivery
typically takes 12-18 months after the purchase order is issued, which will make these buses 19-24 years of age at
the time of purchase, or nearly twice the recommended age for replacement by FTA.

Documentation and Narrative Information

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

- A. A NARRATIVE assessing existing conditions, outlining the concept of the proposed project, and providing adequate project justification. Surface Transportation Program projects must have a direct relationship to the intermodal transportation system, either as it exists or as it is planned. Assess your project in regard to the transportation system relative to its functional relationship, proximity, or impact to an existing or planned transportation facility. Assess the value of this project from a regional perspective and how it will be a functional addition to the transportation system and the region as a whole if no additional development funds are received.
- B. A DETAILED MAP identifying the location of the project.
- C. A SKETCH-PLAN of the project, including cross sections of roadways.
- G. A NARRATIVE discussing the public input process that was followed and the extent to which adjacent property owners and others have been informed of the proposed project and an assessment of their acceptance.



The award of STBG funds; any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; or the furnishing of materials shall not involve direct or indirect interest, prohibited by Iowa Code Sections 314.2, 362.5, or 331.342, of any state, county, or city official, elective or appointive. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of 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 that, although this information is sufficient to secure a commitment of funds, an executed contract between the applicant and the Iowa Department of Transportation is required prior to the authorization of funds.

Representing the Ames Transit Agency

Signature

March 23, 2020

Date

Barb Neal, Transit Director

Typed Name and Title

March 23, 2020

Date

Please send one copy of the application with the supportive documentation to:

Ames Area Metropolitan Planning Organization
515 Clark Avenue
Ames, Iowa 50010

CyRide FY2024 STBG Narrative

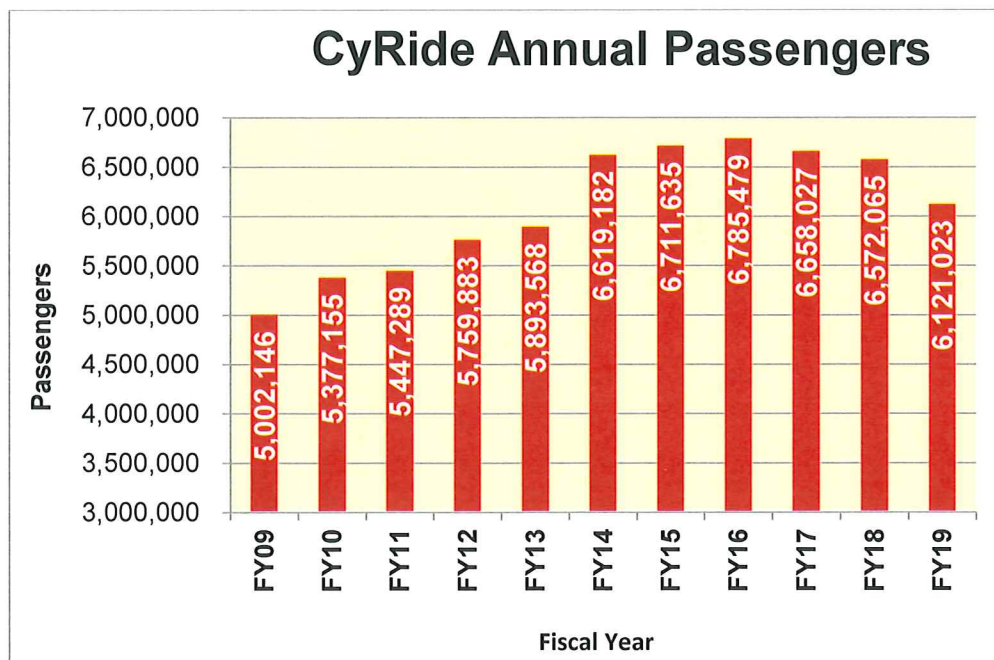
Proposed CyRide Project for Proposed FY2024 STBG Funding

CyRide is requesting the Ames Area MPO dedicate a portion of the FY2024 Ames STBG funding allocation, \$225,000, for a partial heavy duty articulated (60-foot) or large (40-foot) battery electric transit bus. The STBG allocation could also be used for partial funding of a regular heavy-duty large (40-foot) standard bus.

Background & Existing Conditions

Ridership: CyRide’s public transit system is an integral transportation strategy within the Ames community, allowing people *to travel efficiently between their desired destinations, as well as connect to alternative transportation choices throughout the region*. CyRide currently serves over **6.1 million riders annually transporting approximately 94 trips per capita** ([Ames 2013-2017 American Community Survey population 5-Year estimate – 65,005](#)). To illustrate how outstanding this figure stands out nationally, the median ridership density for urbanized areas serving less than 1 million in population nationwide in 2018 is 5.88 trips per capita, whereas the median for transit agencies serving urban areas over 1 million is 22.12. (See FTA’s 2018 National Transit Summary and Trends; page 23; https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ntd/data-product/134401/2018-ntst_1.pdf). As illustrated within the NTD data, CyRide well surpasses the average urbanized transit agencies for trips per capita. In fact, CyRide experienced a 22% ridership increase over the past decade with record breaking ridership occurring between FY2009-FY2016. Only in the last few years, has CyRide’s ridership started to decline due to lower student enrollment (less populated Ames’ community) at Iowa State University.

The benefits of public transit go beyond services provided to passengers, as public transit reduces congestion and the need for costly parking ramp infrastructure. Public transit helps the city and university maintain good air quality standards, promote economic opportunities, and drive community growth and revitalization within Ames. The procurement of buses is a substantial public investment, yet essential if CyRide is to provide a safe and efficient service that meets the needs of a growing community.



Service Level/Fleet Size: *CyRide currently operates a progressive, seamless transit system with a high service level and frequency rivaling much larger communities* by running 14 fixed routes, 18 hours/day, 7 days a week. Service frequencies on CyRide routes are every 4 – 20 minutes during the busiest times of the day (peak period) and every 30-40 minutes when there is less demand.

CyRide currently operates a total revenue fleet of **83 buses, of which 74 are large, 40' buses, six are large, 60' articulated buses and 3 are 25' vehicles**. The table below provides a detailed description of CyRide's revenue fleet, of which 49.4% of the vehicles, highlighted in yellow below, are past FTA's recognized useful life (12 years for large buses; 4 years for mini-buses) and due to their age and condition, should be retired from operating daily service. CyRide's current bus fleet age is 11.5 verses a national average fleet age of 7.49 in 2018 (https://www.transit.dot.gov/sites/fta.dot.gov/files/Vehicles_3.xlsm).

Furthermore, 33 out of 83 40'-60' heavy duty buses (identified in red text) or **39.8 percent, exceed CyRide's "useful life benchmark" (ULB) of 15 years well over CyRide's performance target for FY2020 of 33 percent**. (see page 8 of this application) These performance targets and CyRide TAM Plan were passed along to the Ames Area MPO in October 2019 to integrate into their Long Range Transportation planning efforts. (See Page 7-8 of this narrative for additional justification.) Therefore, additional work by CyRide and the AAMPO is needed to reduce this asset category's age.

March 2020 Revenue Bus Fleet Description

# of Vehicles		Age	Vehicles
6	2000 Gillig	20	#953, 954, 955, 956, 957, 958
4	2001 Gillig Phantom	19	# 762, 778, 779, 785
2	2001 Gillig	19	# 1140, 1141
1	2002 Gillig Phantoms	18	#7117
5	2002 Gillig Phantoms	18	#7123, 7124, 7125, 7132, 7133
8	2002 Orion	18	#9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077
4	2005 Orion	15	#949, 950, 951, 952
4	2006 Orion	14	#501, 502, 503, 504
4	2008 Gillig	12	#186, 187, 188, 189
12	2010 Gillig Hybrid	10	#418, 419, 420, 421, 422, 423, 424, 425, 429, #430, 431, 432
3	2010 Gillig	9	#126, 127, 128
3	2010 Ford Eldorado (Minibuses)	10	#333, 334, 335
6	2012 Gillig	8	#105, 106, 107, 108, 109, 110
5	2012 Gillig	8	#180, 181, 182, 183, 184,
2	2012 Nova Articulated	8	#660, 661
6	2015 Gillig	5	#1111, 1112, 1113, 1114, 1115, 1116,
4	2016 Nova Articulated	4	#6101, 6102, 6103, 6104
3	2018 Gillig Low-Floor	2	#1136, 1137, 1138
1	2019 Gillig Low-Floor	1	#1139
83	TOTAL VEHICLES	11.5	

Notes: 41 Buses (49.4%) At OR Beyond FTA Useful Life; 33 buses (39.8%) beyond their Useful Life Benchmark

Federal Funding:

Operating - ***CyRide currently receives approximately \$2.4 million in Urbanized Area federal apportionment funding under the FAST Act from “regular” 5307 formula dollars plus its Small Transit Intensive Cities allocation.*** CyRide’s total operating budget is approximately \$12.8 million and applies all of its \$2.4 million federal apportionment funding (18.8% of total operating revenues) to operating needs, which make grants administratively easier for the Federal Transit Administration (FTA). The local community of 65,005 contributes \$8,796,326 or 68% of the funding for the remaining operating and capital needs.

Capital – From 2008 – 2016, CyRide dramatically grew its fleet to keep pace with its explosive record ridership. This has required the purchase of as many buses as financially possible, both new and used. CyRide was extremely successful within several competitive national discretionary grants in ***averaging nearly \$2 million in awards each year for buses under the SAFETEA-LU Transportation Bill prior to MAP-21 transportation bill. Overall, CyRide purchased 45 new buses under SAFETEA-LU.*** However, 18 of these buses were purchased through the 2009 American Recovery & Reinvestment Act (ARRA) which was one-time stimulus money. This funding will likely never be realized again. In hindsight; excluding the buses purchased under ARRA, ***CyRide averaged 3.4 bus purchases each year since 2008.***

With the passing of the ***MAP-21 transportation bill in 2013, CyRide became ineligible to apply directly for any future competitive national discretionary capital grants.*** MAP-21 primarily focused on allocating federal funding via formula primarily for rail transportation, as well as to transit agencies serving populations of more than 200,000. Furthermore under MAP-21, CyRide’s designation was changed from a “designated recipient” to a “direct recipient” and, as such, was no longer allowed to apply for competitive national grant applications or discretionary funding directly. MAP-21 also formulized the discretionary funding program and allocated it to each state’s Department of Transportation for their small urban communities. Instead of providing this formulized small amount of funding (approximately \$139,000/year) directly to CyRide, it was now distributed to the State of Iowa. As the individual allocations to small urbans were not significant enough to purchase one bus each year for transit agencies, the State decided to pool the funding together and allocate the funding according to the state’s Public Transit Management System (PTMS) process of ranked buses needing replaced. The buses with the highest mileage and age were replaced first throughout the state. The Iowa Department of Transportation’s PTMS process places bus replacement as the priority over all other capital needs such as bus expansion or larger articulated buses making it virtually impossible for CyRide to efficiently manage its year-after-year growth. Additionally, Iowa’s transit system vehicles are some of the oldest in the nation. ***MAP-21’s Transportation Bill allowed CyRide 0.75 buses per year, on average, under the four years of its existence.***

The ***FAST Transportation bill (newest bill signed into law in December 2015) restored the competitive discretionary funding grants for bus procurement*** allowing small urban transit systems like CyRide serving less than 200,000 in population to apply directly for grants. The Iowa DOT applied for this new competitive discretionary funding on behalf of Iowa urbanized transit agencies (system serving populations more than 50,000), as well as a separate application for rural transit agencies (systems serving populations less than 50,000). In 2019, the Iowa DOT’s rural grant application was awarded \$3.5 million while the urban grant was denied for the second year. In 2020, CyRide was finally awarded 6 mini-buses under the Iowa DOT’s grant application as it was able to apply for rural and urban buses within one united application. CyRide believes future competitive discretionary 5339 funding applications will be ***highly competitive*** and any funding received will ***be considerably less than the annual \$2 million previously***

received directly by CyRide. CyRide hopes future transportation bills regain some of the funding lost to transit agencies during the MAP-21 era.

In order *to keep CyRide's entire bus fleet in a state of good repair*, which is required by the federal government, *CyRide should replace approximately 6 buses each year* as opposed to the 3.4 buses that has been historically replaced.

FY2021 bus costs for new 40-foot vehicles (\$507,707/bus via the IowaDOT FY2021 Programming Guidance - <https://iowadot.gov/transit/funding/FY21FinalProgrammingGuidance.pdf>), this is an annual investment of approximately \$3.05+ million dollars per year. *Even if all CyRide's federal funds could be utilized for capital replacement each year instead of operating, CyRide would have a deficit of \$650,000 dollars annually.* CyRide does plan on purchasing upgrades to its buses, either allowing an additional articulated bus or battery-electric bus to be purchased. The Iowa DOT does not support the replacement of these higher cost vehicles due to the backlog of replacing standard diesel buses throughout Iowa. CyRide will purchase two battery electric buses in FY2020 to have in its fleet by FY2022 and it is hoped that STBG funding can support upgrades for an electric buses by FY2024.

CyRide's need to keep its fleet in a state of good repair over the next 5 years is 30 buses (6 buses/year x 5 years) at a cost of over \$15 million dollars. However, even if CyRide received all of the statewide formula bus replacement dollars (approximately 2.1 million annually) for urbanized transit systems, approximately \$10.5 million would only be available leaving CyRide short by 5.5 million.

Investments in public transit are supported through several planning documents for the Ames community including the City of Ames' five-year Capital Investment Plan, as well as the Ames Area MPO's Long Range Transportation Plan. These plans illustrate that transit is an important element in the community as it relates to the existing and/or planned transportation facilities for all transportation modes throughout Ames. CyRide's current STBG projects builds on the momentum of these plans by advocating for consistent annual fleet replacement, which is desperately needed for the 41 buses that are already beyond their useful life.

STBG Funding Need Justification

STBG Utilized for Transit Projects throughout Iowa Precedent - Nine Iowa Metropolitan Planning Organizations and Regional Planning Alliances have committed STBG (shown as STP funding within the TIP) funding for transit bus purchases in their area as illustrated in the FY2019 – FY2022 State Transportation Improvement Program. (https://iowadot.gov/program_management/stip/STIPFinal.pdf). These transit agencies include: Ames, Cedar Rapids, Des Moines DART, Region 3/RIDES, Region 4/SRTS, Region 11/HIRTA, Region 12/WITS, Region 14/SIT, RPA 17 and MPO-23. There is a precedent for utilizing flex funding (STBG) throughout Iowa, even in areas where transit ridership is not as robust as Ames.

This is the fifth year the Ames Transit Agency (CyRide) has requested STBG federal funding from the Ames Area MPO. CyRide is currently behind in bus replacement having 41 buses, or 49.4% of the fleet, beyond their service life due to limited federal funding. This STBG application supports the transportation network that is needed to efficiently move people throughout the community on a daily basis.

Performance Measures - The federal government is placing more emphasis on transit agencies, as well as metropolitan planning organizations (MPO's), to establish performance measures (PM) for their

transportation modes, including public transit. CyRide has determined its performance measures and performance targets for FY2020-2024 based upon fleet age for the following:

- Rolling Stock: Revenue vehicles (All minibuses, large 40-foot buses and articulated 60-foot buses)
- Equipment: Non-revenue support, service and maintenance vehicles over \$50,000 in acquisition value with an expected life of at least one year (Maintenance/Shop trucks)
- Facilities – Maintenance and administrative facilities, passenger stations and parking facilities (CyRide Administrative/Maintenance Facility, Ames Intermodal Facility)

CyRide has developed the following performance targets:

Category	Class	2020 Performance Target	2021	2022	2023	2024
Rolling Stock	40'-60' Buses	33% of fleet exceeds CyRide's ULB of 15 yrs.	33%	33%	31%	33%
	Cutaways	67% of fleet exceeds CyRide's ULB of 8 yrs.	89%	89%	0%	0%
	Minivan	0% of fleet exceeds CyRide's ULB of 8 yrs.	0%	0%	0%	0%
Equipment	Shop Trucks	0% of fleet exceeds CyRide ULB of 10 yrs.	0%	0%	0%	0%
Facilities	Admin./Maint. Facility	0% of facilities rated under 3.0 on TERM scale	0%	0%	0%	0%
	Ames Intermodal Facility	0% of facilities rated under 3.0 on TERM scale	0%	0%	0%	0%

CyRide communicated these measures/targets to the AAMPO and submitted their full TAM Plan in October 2019 which the AAMPO will incorporate into their future LRTP. ***CyRide's fleet age will become an important measurement for the Ames Area MPO to identify, as well as document, set future targets and rate projects for future funding within future LRTP documents.*** Therefore, lowering or keeping CyRide's fleet age stable from year-to-year would be optimal for the entire community.

Top Performer - CyRide dramatically outperforms every other large/small urban transit system in Iowa as evidenced by the table to the right. In fact, many of CyRide's individual routes exceed other Iowa transit community's entire transit systems as detailed. With the level of ridership support for transit within the Ames community, financial support by the Ames Area MPO will meet the goal of cost effective transportation services. Specifically, the #23 Orange Route has higher ridership than most transit systems throughout Iowa by itself. With the use of STBG funding, CyRide hopes to upgrade a typical 40-foot bus funded by the Iowa DOT to purchase either an articulated bus or battery electric bus. CyRide's transit board has already begun the commitment to fund battery electric bus technology

City	FY19 Rides
CyRide	6,121,023
Des Moines	4,395,395
Cambus	3,474,572
CyRide #23 Orange Route	1,791,362
Iowa City	1,583,166
Cedar Rapids	1,333,692
CyRide #1 Red Route	947,104
Sioux City	871,952
CyRide #6 Brown Route	719,244
Davenport	634,165
CyRide #3 Blue Route	626,520
Dubuque	488,318
Coralville	455,373
CyRide #21 Cardinal Route	443,028
Waterloo	404,918
CyRide #2 Green Route	366,630
Council Bluffs	133,607
Bettendorf	83,001

and infrastructure. They commissioned a study to determine that CyRide can incorporate up to 17 battery electric buses within our garage under the same service priorities that we have today. CyRide also studied articulated buses and can foresee having 10 articulated buses (8 buses to operate; 2 spares) exclusively for the #23 Orange route and can then begin implementing artic's along other high capacity corridors for the west Ames area as recommended by previous consultants.

According to the US Census American Community Survey, 8.3% of Ames residents utilize transit for commuting purposes as opposed to 1.1% throughout the State of Iowa. ([See Commuting Characteristics 2013-2017 American Community Survey 5-Year Estimates](#)). Therefore, a bus funded for the Ames metro area would benefit more individuals throughout the region as CyRide carries substantially more passengers than anyone else within the state.

Modern Fleet - Additionally, the following benefits would be realized by CyRide through a more modern, newer and efficient fleet if STBG funding were an additional resource for future FY2024 bus purchases.

1. **Improved Transit Image** – New vehicles make transit service more attractive to current riders, as well as riders completely unfamiliar with the service. A modern looking fleet will alleviate fears that a single-occupant vehicle rider may have as they choose transit for their travel alternative throughout Ames. With a frequent service along many corridors, choosing transit may become a more preferred option for residents travelling throughout Ames whether it's for work, school, medical appointments or social engagements.
2. **Lower Operating Costs** – New transit buses average 4.57 miles per gallon to operate, while vehicles in excess of 20 years currently average 3.43 miles per gallon. The vehicles replaced with STBG funds would be over 21+ years of age at the time of replacement. The cost of operating a newer bus in service compared to a 21 year old bus could save CyRide an average of \$2,500 (1,163 gallons * 2.15/gallon) annually per bus.
3. **Lower Emissions** – Lower emissions polluting the air would be realized with less fuel being operated from a new bus as opposed to more fuel being operated in a 20+-year old bus. For every gallon of fuel saved, 9.17 kg of carbon dioxide would be saved equating to 10 tons annually(1,163 gallons fuel * 9.17 kg CO²/1,000) of CO² saved.
4. **Increased Service Reliability** – Mechanical breakdowns causing customer delays are significantly reduced with newer vehicles. Additionally, newer buses are easier to start during the cold, Iowa winters. As buses age, their service reliability decreases by approximately 30% which is evidenced by less miles between work orders for CyRide's 2000 Gillig fleet versus the newer 2015 fleet to keep the buses in good working condition. By keeping a more modern fleet, costly repairs and service interruptions are kept at a minimum.
5. **ADA Improvements** – Buses replaced within this application would likely be high floor models with "lifts" to board individuals utilizing wheelchairs. Currently, if a high-floor bus's lift electronics fail to function, the passenger is essentially trapped aboard the vehicle. Additionally, the bus will not be able to operate in service until the ramp is completely repaired. In replacement of these buses, CyRide will purchase low-floor articulated bus models that utilize a "ramp" to board wheelchair passengers as opposed to a "lift". If the ramp electronics fail to function on low-floor buses, the ramp can be manually deployed by the operator and switching out the bus is no longer necessary disrupting the entire trip. The bus can continue its service and drivers can deploy the lift themselves manually. Finally, low-floor ramps are less expensive to maintain over their lifespan of the vehicles.

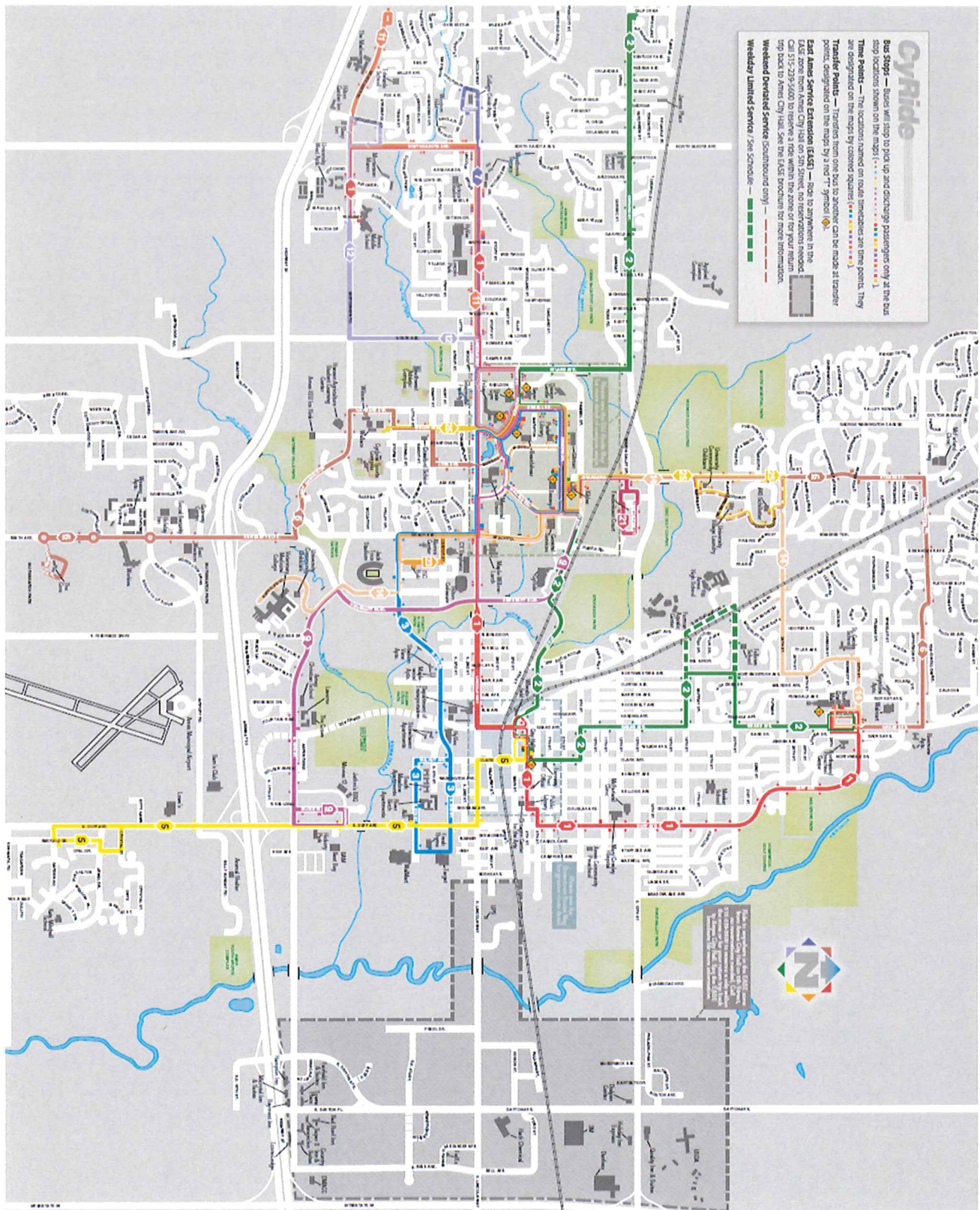
STBG Funding Request Based on Iowa DOT Programming Guidance – CyRide’s most recent purchase of an articulated bus was \$712,000 in FY2016. The Iowa Department of Transportation does not recommend programming guidance for 60-foot heavy duty buses as they do not fund these lengthy vehicles per their PTMS policies. Adding 3% cost inflation a year brings the cost of this vehicle to approximately \$850,000. Battery electric vehicles are approximately the same in cost for a 40-foot vehicle.

FHWA/FTA Certification Review Recommendation – Finally, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) recommended within their October 2015 review and report of the Ames Area MPO that both the Ames Area MPO and CyRide explore funding options for the acquisition of “new” revenue vehicles. Specifically the 2015 Ames Area MPO Planning Review Report notes, *“CyRide’s current purchase of “used” revenue service vehicles is a short term fix of a continuing need to serve a growing transit riding population.”* They determined that additional federal funding is needed to sustain the continuance of Transit for the Ames area which has an expanding riding public.

CyRide will be remain diligent and continue looking to alternative sources to assist in financially meeting its goals to maintain a modern, reliable fleet. However, STBG funds would be an important piece of the funding package that allows CyRide and the Ames Area MPO to immediately begin meeting the Ames metropolitan area’s needs for transit service while helping to maintain a relatively stable fleet age. This effort in lowering CyRide’s fleet age will be documented in the future through the Ames Area MPO’s performance measures.

B. DETAILED MAP

Ames Transit Agency (CyRide) System Route Map - CyRide circulates all its buses on all routes operating throughout the Ames metropolitan area. The exception to this is the articulated buses which are primarily utilized on the #23 Orange Route which carries approximately 1.8 million passengers. This route is the largest route in the State of Iowa necessitating additional ridership capacity. Overall, CyRide carries the highest number of passengers in Iowa with over 6 million passengers.



New Artic CyRide Bus

Below is a photo of CyRide's articulated bus that was placed into service in 2016. CyRide's image improves with the sharp look of these buses travelling through the Ames community. Residents want to ride the "bendy" buses!



Battery Electric Buses

Below is an example of a battery electric bus. CyRide is currently procuring two of these type buses for the Ames community. By 2024, CyRide will have tested them and will be ready to upgrade additional base bus purchases with battery electric bus options. This sustainable vehicle is desired by the CyRide Transit board and the community leadership as well as the Ames community!



Public Input Process

CyRide buses circulate throughout the Ames community and therefore, there are not any adjacent property owners as is the case with street-related projects for which this criteria addresses. This narrative request seems to be geared for construction projects such as streets, roads, or sidewalks.

CyRide's public input process for buses is aligned within the Ames Area Metropolitan Planning Organizations' Long Range Transportation Plan and local Transportation Improvement Planning public input processes. Both of these plans contain projects for replacement and expansion of heavy duty buses. The public was informed of these potential projects as part of the public participation for these approved plans. If STBG funding was deemed appropriate by the Ames Area MPO, this adjustment is just a minor revision of funding type within the TIP/STIP of this critical need.

- **FY2020 TIP/STIP:** Bus expansion/replacement is identified within all four years of the FY2020-FY2023 Ames Area Transportation Improvement Program (TIP) (<https://www.cityofames.org/home/showdocument?id=51555>) (pages 32-35). These same projects are then incorporated into the Iowa Statewide Transportation Improvement Plan each October. Any STBG funding approved through this application would be incorporated into the FY2021 TIP/ STBG of year FY2024 and go through the Ames Area MPO's TIP public input process.
- **Long Range Plan:** Bus expansion/replacements are identified as a short-term, mid-term and long-term projects within the Ames Area Metropolitan Planning Organization's 2040 Long Range Transportation Plan.
 - **Ames Mobility 2040: AAMPO 2015-2040 Long Range Transportation Plan Final Report** <http://www.cityofames.org/home/showdocument?id=23750> (page 194 – table 48; 197 – table 51; page 200 – table 54)

If FY2024 STBG funding is approved for this transit project, several years of additional opportunities for public input through the Transportation Improvement Planning process will be available before purchasing vehicles utilizing this funding.