ITEM # AAMPO 1

DATE: 07-14-20

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

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

BACKGROUND:

In order to receive Federal 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 Program (TIP). The attached TIP document includes projects for street improvements, CyRide improvements, and trail projects. In February 2020, the Ames Area MPO distributed applications for new funding for Surface Transportation Block Grant (STBG) and Transportation Alternative (STBG-TAP) projects. Two STBG applications were received and no STBG-TAP applications were received.

TPMS #	Project Sponsor	Project Name	Federal Fund Request	Total Project Cost	Federal Fiscal 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

Projects selected for regional transportation funding, along with previously awarded projects and state-sponsored projects within the Ames area, have been incorporated into the FFY 2021 – 2024 TIP.

Following notification of Iowa Clean Air Attainment Program funding, the following project was added into the FFY 2021 – 2024 Transportation Improvement Program. This project does not use STBG funding, so it does not change any of the MPO's funding projections; however, it is required to be shown in the TIP per the funding agreement.

TPMS #	Project Sponsor	Project Name	ICAAP-SWAP Funding	Total Project Cost	Federal Fiscal Year
45239	City of Ames	First Phase Deployment Ames Traffic Signal Master Plan	$1,176,548	$1,470,685	FFY21

The Transportation Policy Committee unanimously approved the draft TIP on May 26, 2020. During the public comment period, the document and project maps were available online and at a public input session held virtually. **No comments were received from the public.** AAMPO staff received and addressed minor comments from the Iowa Department of Transportation, Federal Highway Administration, and Federal Transit Administration. The final FFY 2021 – 2024 Transportation Improvement Program is due to the Iowa Department of Transportation by July 15, 2020.

ALTERNATIVES:

1. Approve the final FFY 2021 – 2024 Transportation Improvement Program for submission to the Iowa Department of Transportation.

2. Approve the final FFY 2021 – 2024 Transportation Improvement Program with Transportation Policy Committee modifications for submission to the Iowa Department of Transportation.

ADMINISTRATOR'S RECOMMENDED ACTION:

The FFY 2021 – 2024 TIP has been reviewed by State and Federal funding agencies, with their comments being incorporated into the final document. No comments were received from the public.

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

FINAL

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 of 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

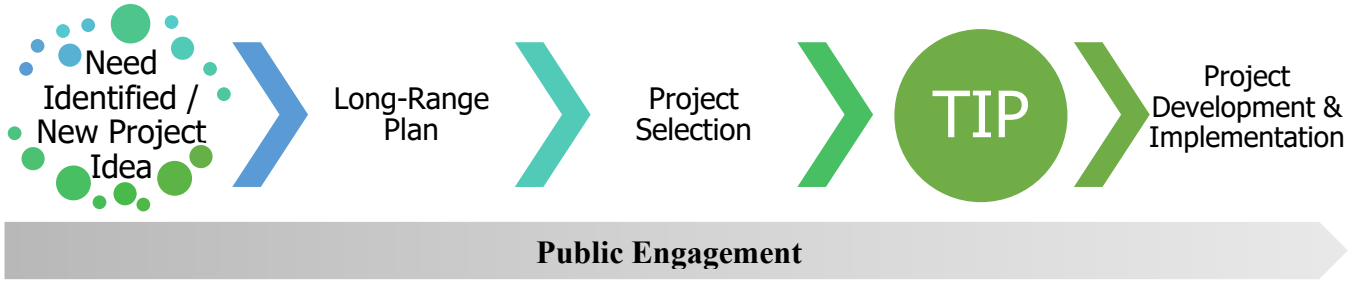
During the comment period, the draft document and maps of the proposed projects are available online or in hardcopy at the Ames Area MPO office.

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	• 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	• 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	• 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 report[3]. 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 STOP 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	• 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	• 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 report[5]. 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.

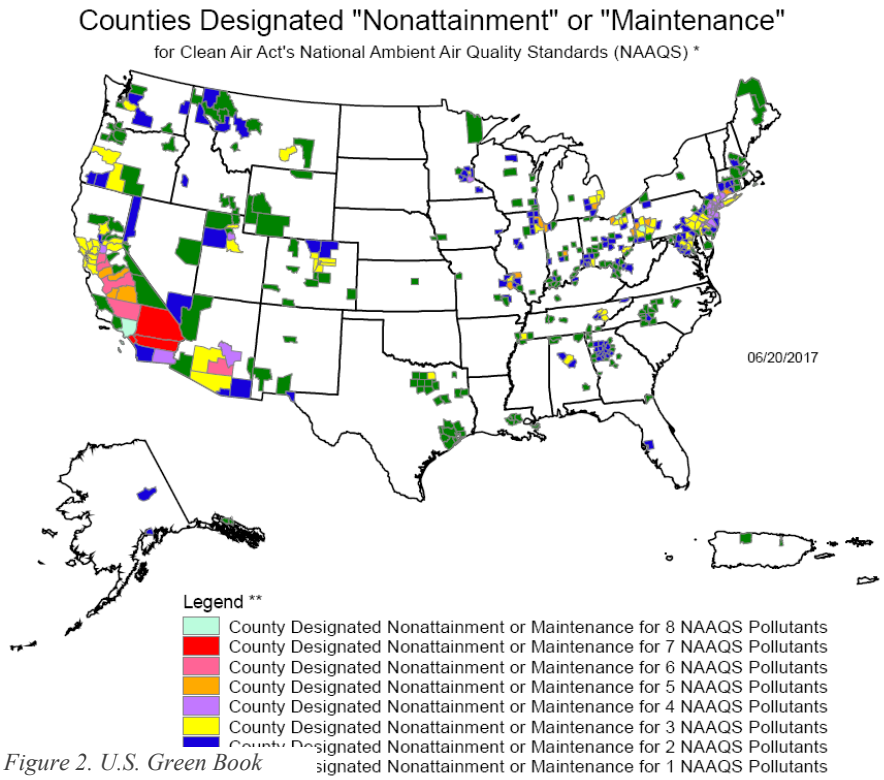


Figure 2. U.S. Green Book

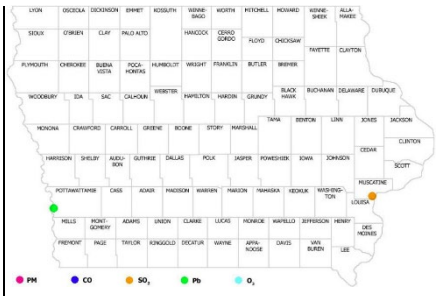


Figure 1. Iowa Non-Attainment Areas (2015)[7]

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.

[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	• System Reliability / Reliability Index 80 (RI_{80}) • 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	• 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	• 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	• 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	• 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	• 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'STRANSPORTATION 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 formulized 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 1a: Summary of Costs and Federal Aid

	2021		2022		2023		2024	
PROGRAM	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

Table 2b: Summary of Costs and SWAP Aid

	2021		2022		2023		2024	
PROGRAM	Total Cost	SWAP	Total Cost	SWAP	Total Cost	SWAP	Total Cost	SWAP
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 3: 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 4: 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 5: 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	$915,153	$949,048	$982,942	$1,016,837
CITY OF AMES TOTAL MAINTENANCE	$1,690,182	$1,752,781	$1,815,380	$1,877,980
CITY OF GILBERT TOTAL OPERATIONS	$4,943	$5,126	$5,309	$5,492
CITY OF GILBERT TOTAL MAINTENANCE	$6,395	$6,632	$6,868	$7,105
IOWA DOT TOTAL OPERATIONS AND MAINTENANCE	$718,852	$742,106	$765,973	$789,431
TOTOAL O&M	**$3,335,525**	**$3,455,692**	**$3,576,473**	**$3,696,845**

Table 6: 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 7: 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 5th St., and S 5th 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 16th St North 0.54 miles to S 5th 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 16th St to East Lincoln Way	160	521	Rolled over to FFY 2021	City of Ames
TAP	21260	In Ames, Skunk River Trail from SE 16th 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 deleing 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)

PL

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

STBG

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

SWAP-STBG

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

STBG-TAP

Project ID / Sponsor / STIP ID	Project Number / Location / Work Codes	Approval Level / Letting Date		2021	2022	2023	2024	Totals
38306	TAP-U-0155()--8I-85	Draft TIP Approved	**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**
			Regional	$159,000				**$159,000**
	9509 - Ped/Bike Grade & Pave		**Swap**					
21260	TAP-U-0155(SE16TH)--8I-85	Draft TIP Approved	**Total**	**$835,000**				**$835,000**
Ames	Skunk River Trail: From SE 16th Street to East Lincoln Way		**Federal Aid**	$240,000				**$240,000**
			Regional	$240,000				**$240,000**
	9510 - Ped/Bike Structures, 9511 - Ped/Bike Miscellaneous		**Swap**					
14983	TAP-U-0155(SE16th)--8I-85	Draft TIP Approved	**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**
			Regional	$160,000				**$160,000**
	9509 - Ped/Bike Grade & Pave		**Swap**					
DOT Note: Project eligible for FHWA TAP funding								
19249	TAP-U-0155()--8I-85	Draft TIP Approved	**Total**		**$681,000**			**$681,000**
Ames	Squaw Creek: From Skunk River to S. Duff Avenue		**Federal Aid**		$159,000			**$159,000**
			Regional		$159,000			**$159,000**
	9509 - Ped/Bike Grade & Pave		**Swap**					

SWAP-CMAQ

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

PRF

Project ID Sponsor STIP ID	Project Number Location Work Codes	Approval Level Letting Date		2021	2022	2023	2024	Totals
38031 Iowa Department of Transportation	BRFN-69()--39-85 US69: GRAND AVE IN AMES 0.1 MI N OF LINCOLN WAY 2522 - Bridge Deck Overlay	Draft TIP Approved	**Total** **Federal Aid** **Regional** **Swap**		**$265,000**			**$265,000**
45416 Iowa Department of Transportation	IMN-35()--0E-85 I-35: US 30 AND CO RD E15 INTERCHANGE RAMPS 1509 - Pavement Rehab	Draft TIP Approved	**Total** **Federal Aid** **Regional** **Swap**		**$1,800,000**			**$1,800,000**
45391 Iowa Department of Transportation	IMN-35()--0E-85 I-35: US 30 TO CO RD D59 (SB)	Draft TIP Approved	**Total** **Federal Aid** **Regional** **Swap**			**$2,400,000**		**$2,400,000**

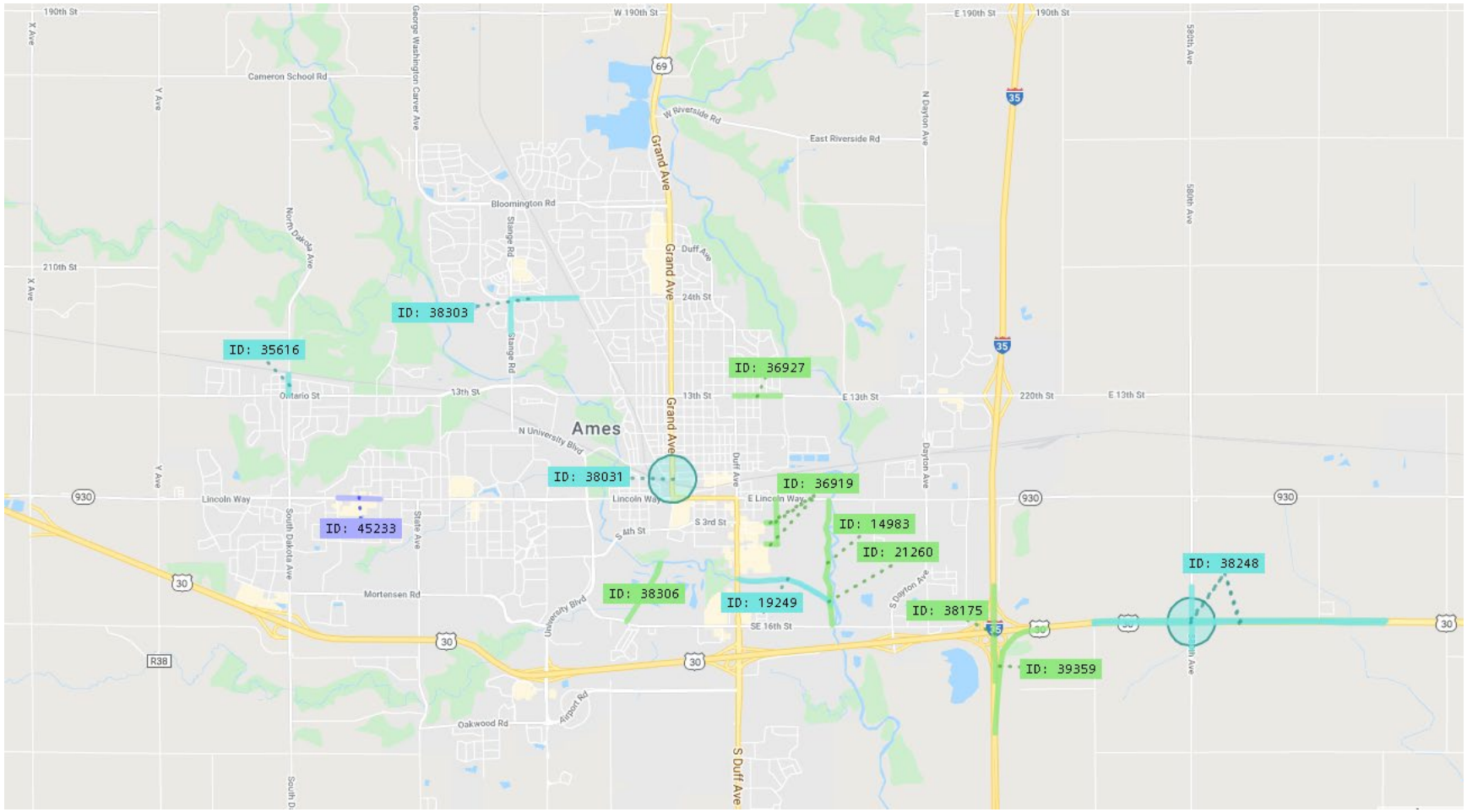
TRANSIT PROGRAM (FFY 2021-2024)

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

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

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

07/14/20

Vision, Goals & Objectives Input

Issues / Visioning Process

Multiple Sources of Input

- Regional Travel Survey
- In-Person Visioning Open House
- Online Visioning Open House
- Transportation Technical Committee

Regional Travel Survey

Purpose:

- Perceptions on transportation issues
- Methods of transportation used
- Concerns regarding traffic safety

Method:

- Random sample of residents
- 404 surveys completed
- +/- 4.8% at the 95% level of confidence

FORWARD 2045

Regional Travel Survey Executive Summary

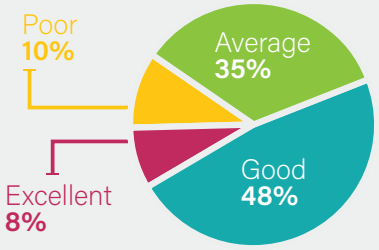
The **Ames Area Metropolitan Planning Organization (AAMPO)** conducted a regional transportation survey of residents during fall 2019 in support of the Forward 2045 Metropolitan Transportation Plan update.

404 people were surveyed regarding multi-modal transportation issues and opportunities relating to transportation planning and improvements within the region. Survey results told a story about how Ames residents feel about the **current state of the transportation system** and hopes for the **future of the transportation system.**

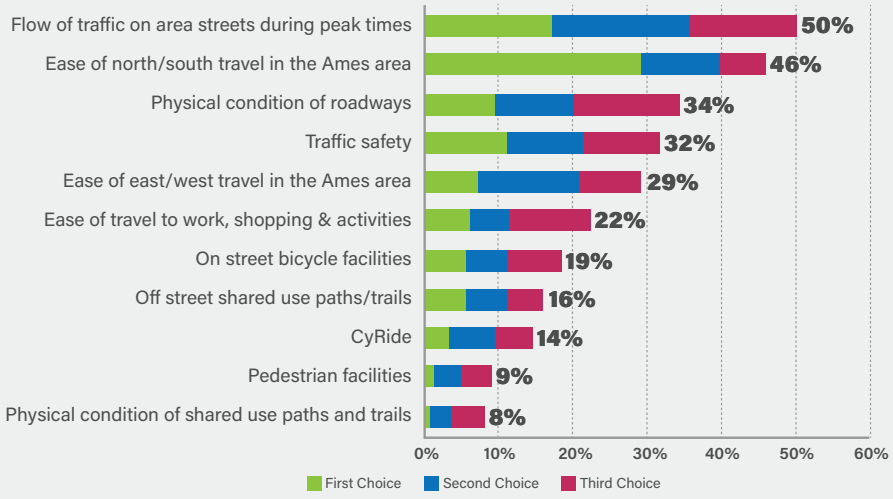
The Current Ames Transportation System

Overall

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



Most important transportation issues:



Key sentiment across multiple modes:

ROADWAYS

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

BICYCLE FACILITIES

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

PEDESTRIAN FACILITIES

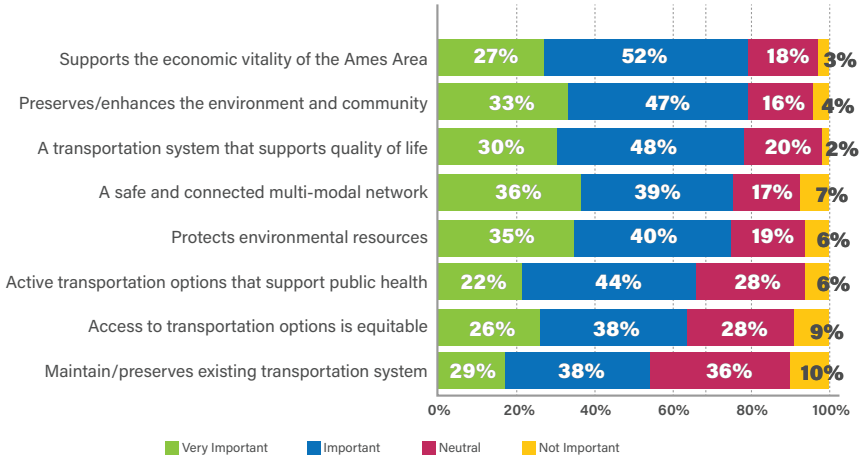
- **74%** of respondents feel safe or very safe walking or using a wheelchair on shared-use paths or trails where they live.

TRANSIT

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

The Future of the Ames Transportation System

Importance of Long-Range Goals:



As the AAMPO plans for the future, the most important characteristics to consider for the Ames transportation system include:

- Facilitating reliable & efficient travel
- Providing safe transportation options
- Ensuring ease of connecting to destinations

Visioning Open House Results

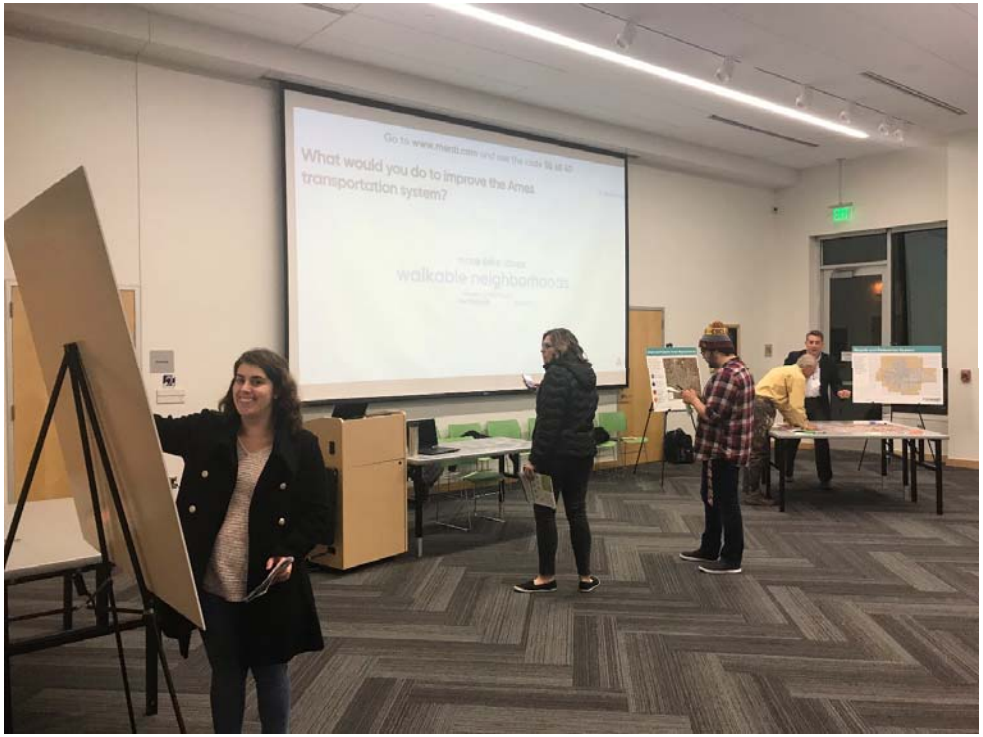
In-Person Visioning Open House

- November 14, 2019 at the Ames Public Library
- Approximately **40** in-person attendees

Online Visioning Open House

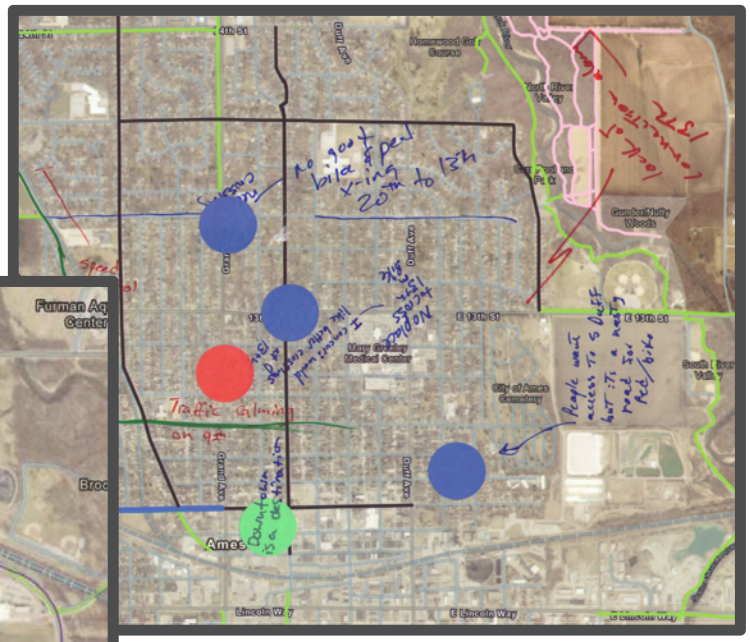
- Open November 14 – November 27, 2019
- **91** total visits

Visioning Open House Results



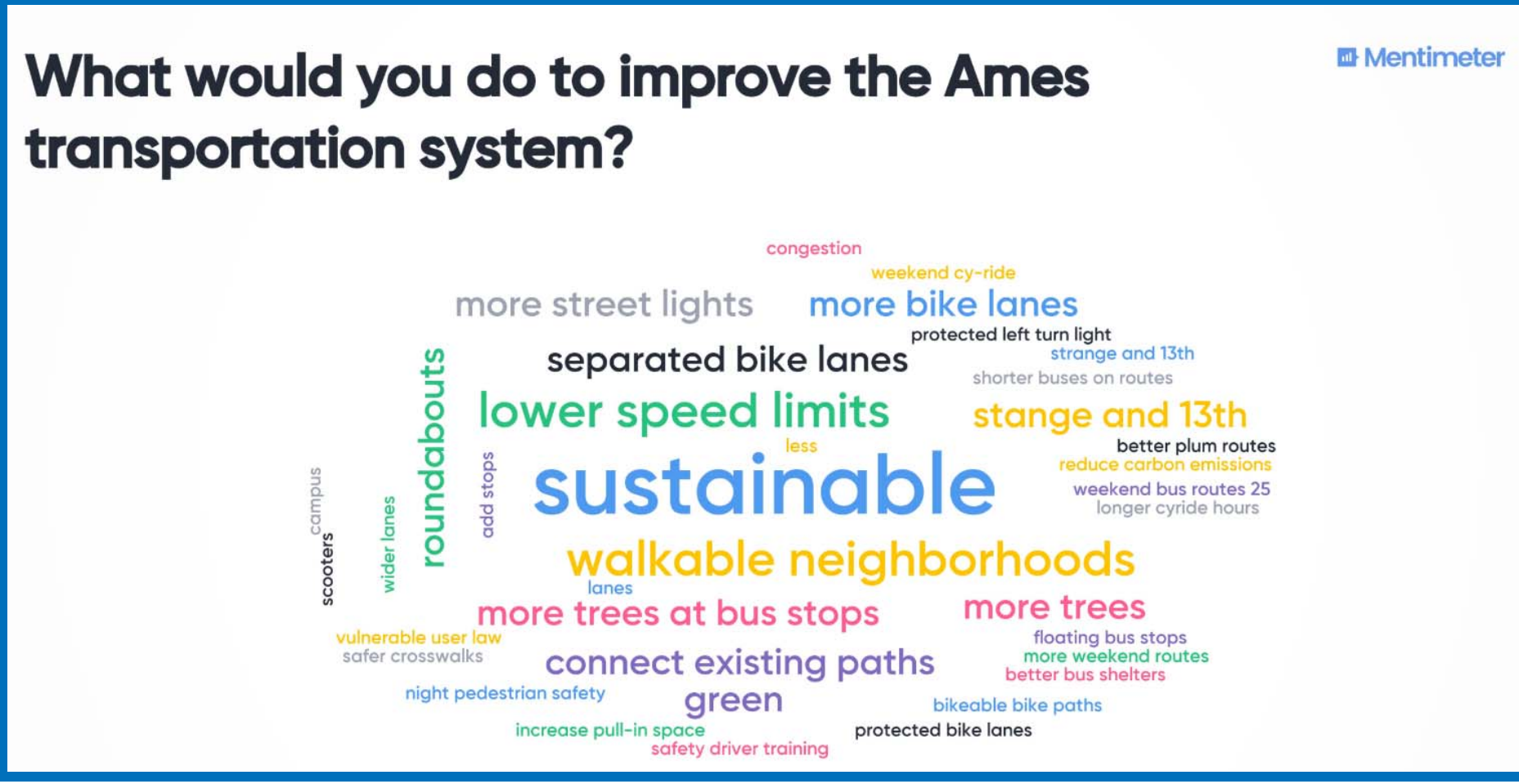
FORWARD 2045

Issues Mapping Exercise



FORWARD 2045

Visioning Open House Results



Transportation Vision Priorities Excersize

ACCESSIBLE
The ease of connecting people to goods and services in the Ames area, as well as providing choices for different modes of transportation (car, bike, bus, etc.)

SAFETY
Reducing the risk of harm to users of the Ames transportation system

HEALTH
Supporting mobility choices that improve personal and community health and well-being

SUSTAINABLE
Reducing or eliminating negative environmental impacts from the Ames transportation system and promoting financially sustainable investments

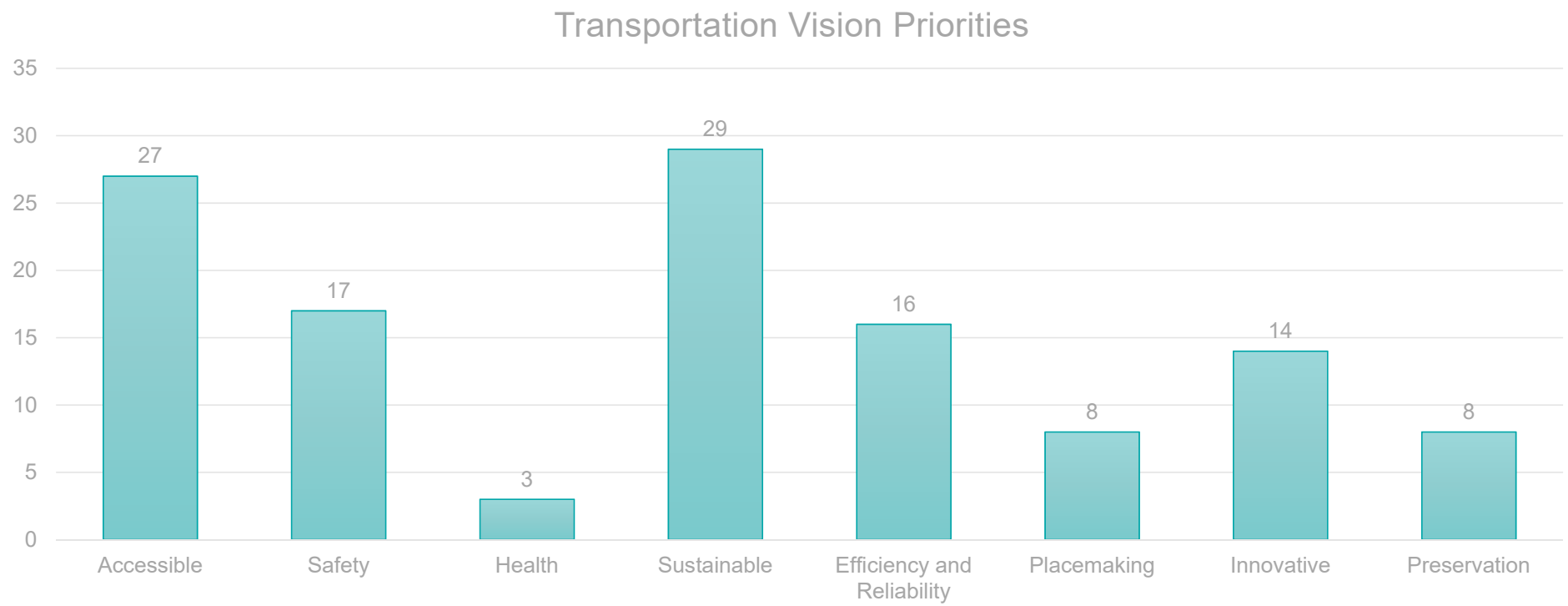
EFFICIENCY AND RELIABILITY
Provide for the efficient and reliable movement of people, services, and goods

PLACEMAKING
Integrating the transportation system with land use to create well-designed places and complete communities

INNOVATIVE
Incorporate emerging trends and technologies into the transportation system

PRESERVATION
Maintain the existing transportation system in a state of good repair

Visioning Open House Results



Vision, Goals & Objectives Development

Forward 45 Vision Statement

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

Goal Areas


ACCESSIBLE
SAFE
SUSTAINABLE
EFFICIENT AND RELIABLE
PLACEMAKING
PRESERVATION

Federal Requirements

- FHWA & FTA Performance Measures
  - *Safety*
  - *Transit Asset Management*
  - *Pavement*
  - *Bridge*
  - *System Performance*
  - *Freight*
  - *Transit Safety*

Federal Requirements

- Federal Planning Factors - *23 U.S.C. 135 (d)(1)*
  - *Economic Vitality*
  - *Safety*
  - *Accessibility & Mobility*
  - *Environment, Energy Conservation & Quality of Life*
  - *Integration & Connectivity*
  - *System Management & Operations*
  - *Preservations*
  - *Resiliency & Reliability*
  - *Travel & Tourism*

FORWARD 2045

Forward 45 – Goals & Objectives

Goal Area		Objectives
	Accessible	• Improve walk, bike, and transit system connections • Provide appropriate arterial and collector spacing • Improve bicycle and pedestrian access to CyRide routes • Provide improved access to transit for transit dependent, disabled, and disadvantaged populations • Incorporate bicycle, pedestrian, and transit-friendly infrastructure in new developments
	Safe	• Reduce number and rate of crashes • Reduce the number of bicycle and pedestrian crashes • Reduce number and rate of serious injury and fatal crashes • Identify strategies and projects that improve user safety for all modes • Prioritize projects that improve the Ames Safe Routes to School Program
	Sustainable	• Reduce transportation impacts to natural resources • Make transportation infrastructure more resilient to natural and manmade events • Limit transportation system emissions of greenhouse gases • Promote financially sustainable transportation system investments • Promote transportation decisions that follow State of Iowa Smart Planning Principles
	Efficient and Reliable	• Identify context-sensitive strategies and projects that improve traffic flow in corridors with high levels of peak period congestion. • Maintain acceptable travel reliability on Interstate and principal arterial roadways • Provide frequent transit service to high trip generation locations • Increase the regional share of trips made by walking, biking, and transit • Improve freight system reliability • Identify technology solutions to enhance system operation
	Placemaking	• Provide transportation strategies and infrastructure that support current adopted plans • Increase the percentage of population and employment within close proximity to transit and/or walking and biking system • Provide transportation investments that fit within their context • Connect activity centers and adjoining developments with complete streets
	Preservation	• Maintain NHS routes in good condition while minimizing routes in poor condition • Maintain NHS bridges in good condition while minimizing bridges in poor condition

Goals & Objectives – Planning Factors

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

Goals & Objectives – Planning Factors

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

Performance-Based Planning Approach

Performance Measure Example

Goal	Objectives	Performance Measure	Project Scoring Approach			
			+2	+1	0	-1
Accessible						
	Improve walk, bike, and transit system connections	Multi-modal connectivity ranking	Creates or improves connection between two or more modes	Creates or improves connections for non-motorized or transit modes	No impact on connectivity for non-motorized or transit modes	Non-motorized or transit connection is removed, or barrier to non-motorized or transit modes is created
	Improve bicycle and pedestrian access to CyRide routes	Transit accessibility ranking				
	Provide appropriate arterial, collector, bicycle, pedestrian, and transit corridor spacing	System Connectivity Assessment	New Multimodal network connection where a gap of ½ mile or more existing before.	Provides a new connection between two existing facilities, or an extension of an existing facility	-	-
	Provide improved access to transit for transit dependent, disabled, and disadvantaged populations	Transit accessibility ranking	Improves transit accessibility in identified EJ area	-	Does not impact transit accessibility in identified EJ area	Removes or creates barriers to transit accessibility in identified EJ area
	Incorporate bicycle, pedestrian, and transit-friendly infrastructure in new developments	Multi-model corridor extensions	Extends a bike, pedestrian, or transit corridor closer to an identified future development growth area.	-	Does not extend a bike, pedestrian, or transit corridor closer to an identified future development growth area.	Reduces facility connectivity.

FORWARD 2045

Alternatives Development Online Meeting

FORWARD 2045

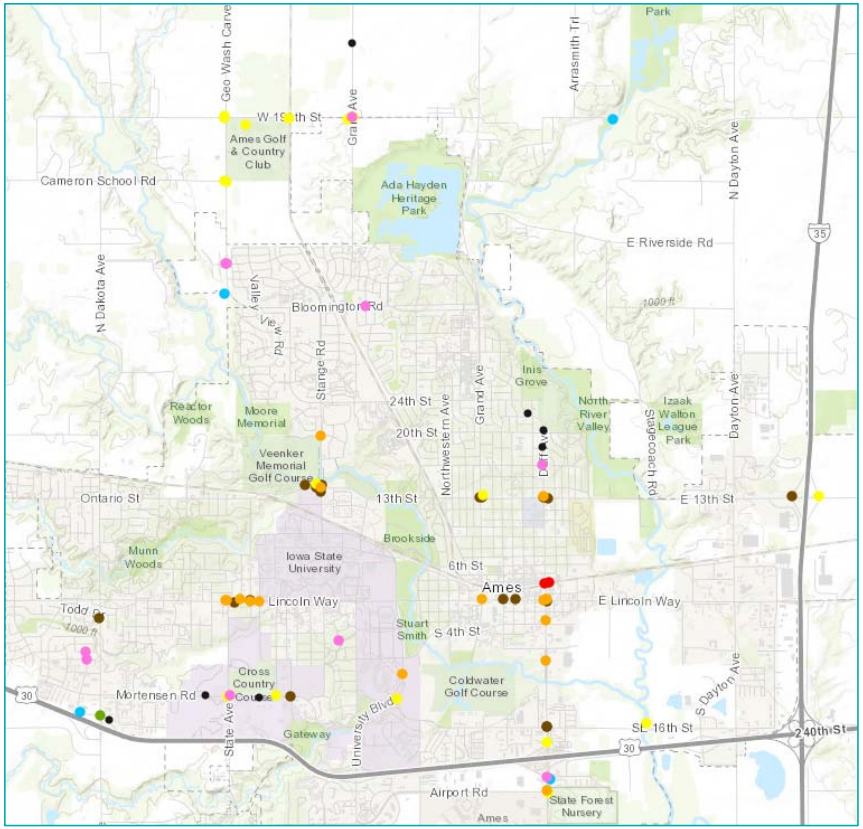
Online Open House Engagement & Participation

- Open March 31 – April 14, 2020
- 443 total views
- 193 total responses

Roadway Comment Mapping Results

- 85 total comments

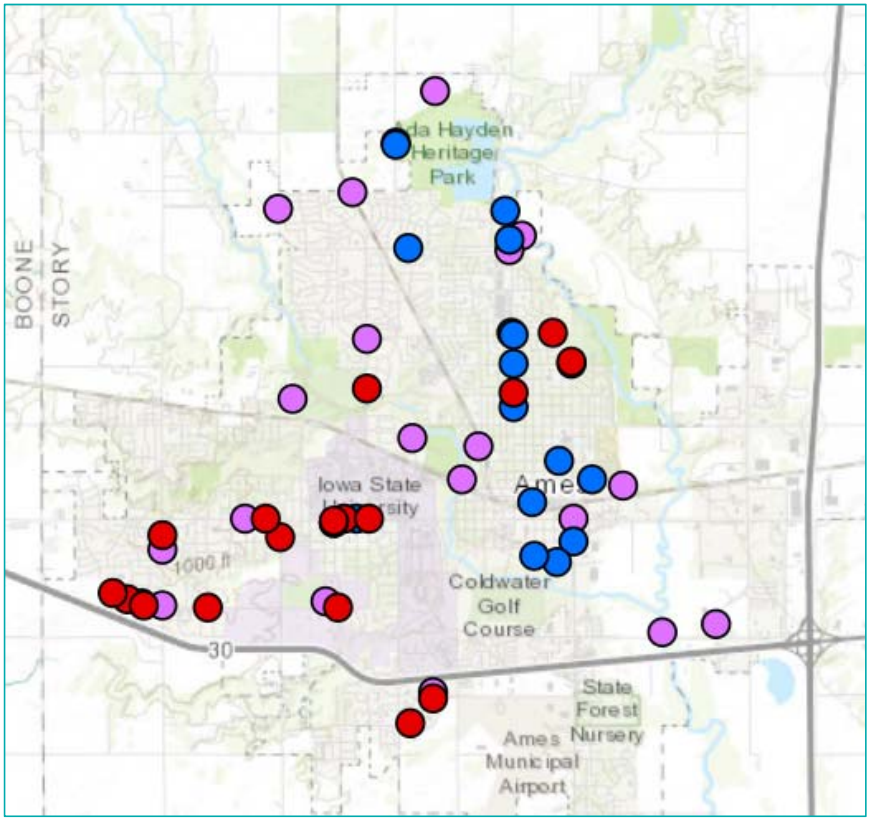
Proposed Strategies	# of Comments
More Travel Lanes (Street Widening)	10
New Traffic Signals	16
Traffic Signal Timing Optimization/Coordination	18
Roundabouts	15
Turn Lanes	19
Medians	1
Expressway	4
Grade Separations	2



Bike/Ped Comment Mapping Results

- 56 total comments

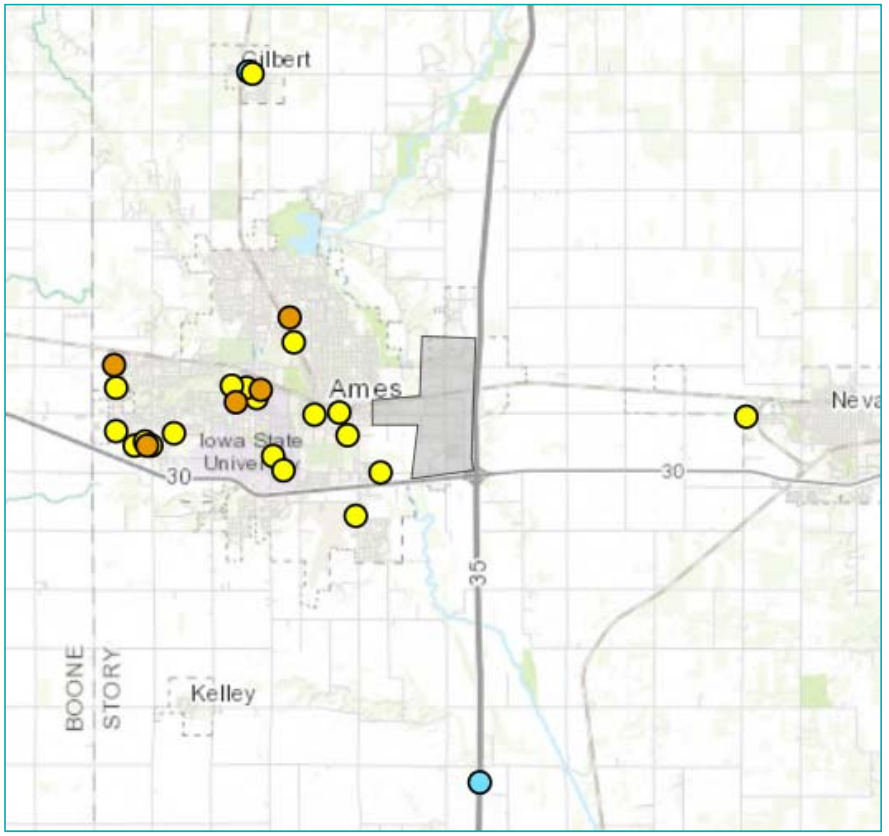
Proposed Strategies	# of Comments
Pedestrian Strategies (High Visibility Crosswalks; Shorter Crossings; Leading Pedestrian Interval)	18
Bike Strategies (New/Improved Trail or Sidepath; Grade-Separated Crossing)	17
Bike/Ped Strategies (Blvd; Lanes; Cycle Tracks/Protected Bike Lanes; Intersection Treatments for Bike Facilities; Wayfinding; Actuated Signals)	21



Transit Comment Mapping Results

- 26 total comments

Proposed Strategies	# of Comments
Increased Hours of Service	0
Increased Frequency	5
New Route or Extension	19
Express Route	0
Intercity Bus	2
Ridesharing	0



Potential Alternatives to be Considered

Potential Alternatives to be Considered

Multiple Sources of Input

- Technical Analysis (Traffic & Safety)
- Online Public Open House
- Transportation Technical Committee
- Other Plans & Studies

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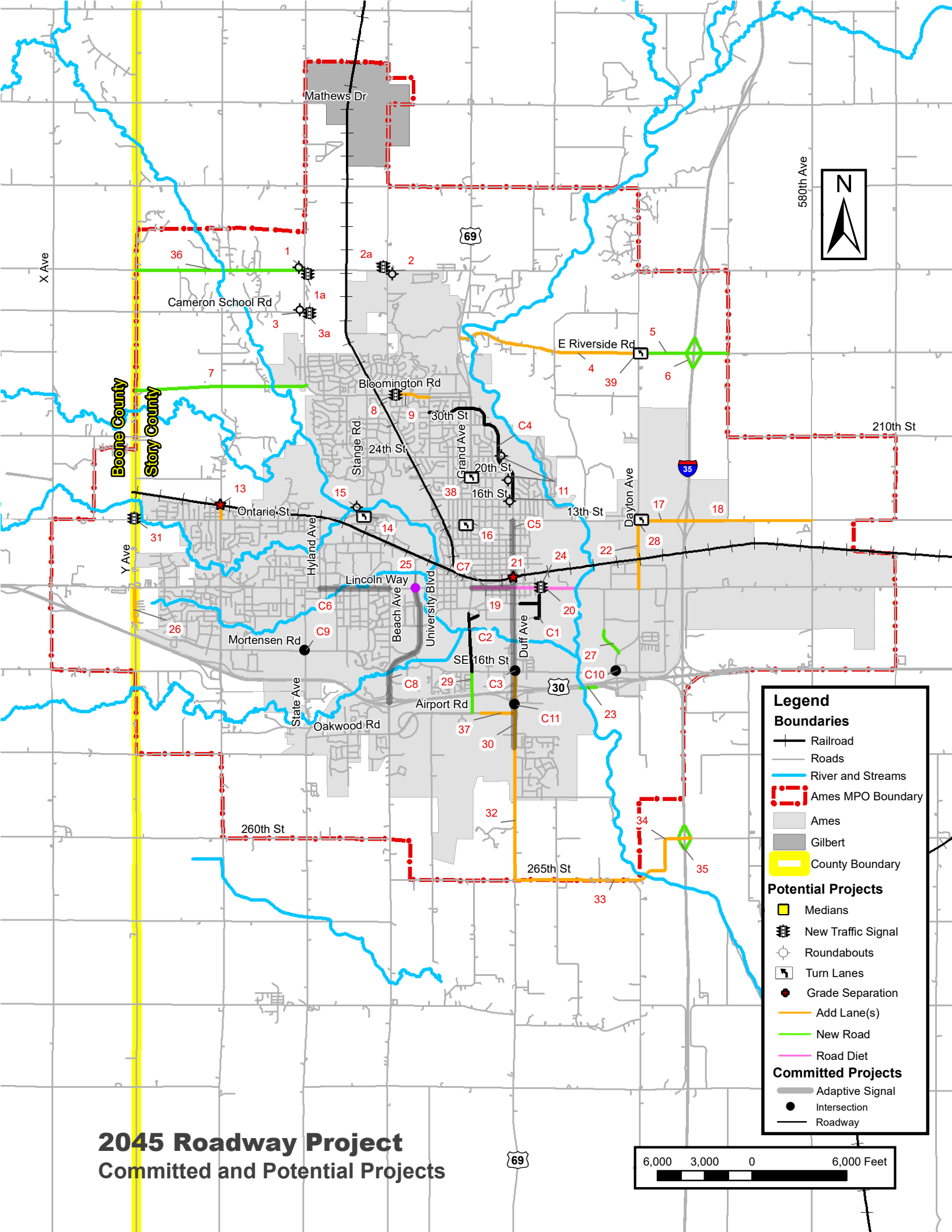


2045 Roadway Project

Committed and Potential Projects

Preliminary List of Candidate Roadway Alternatives

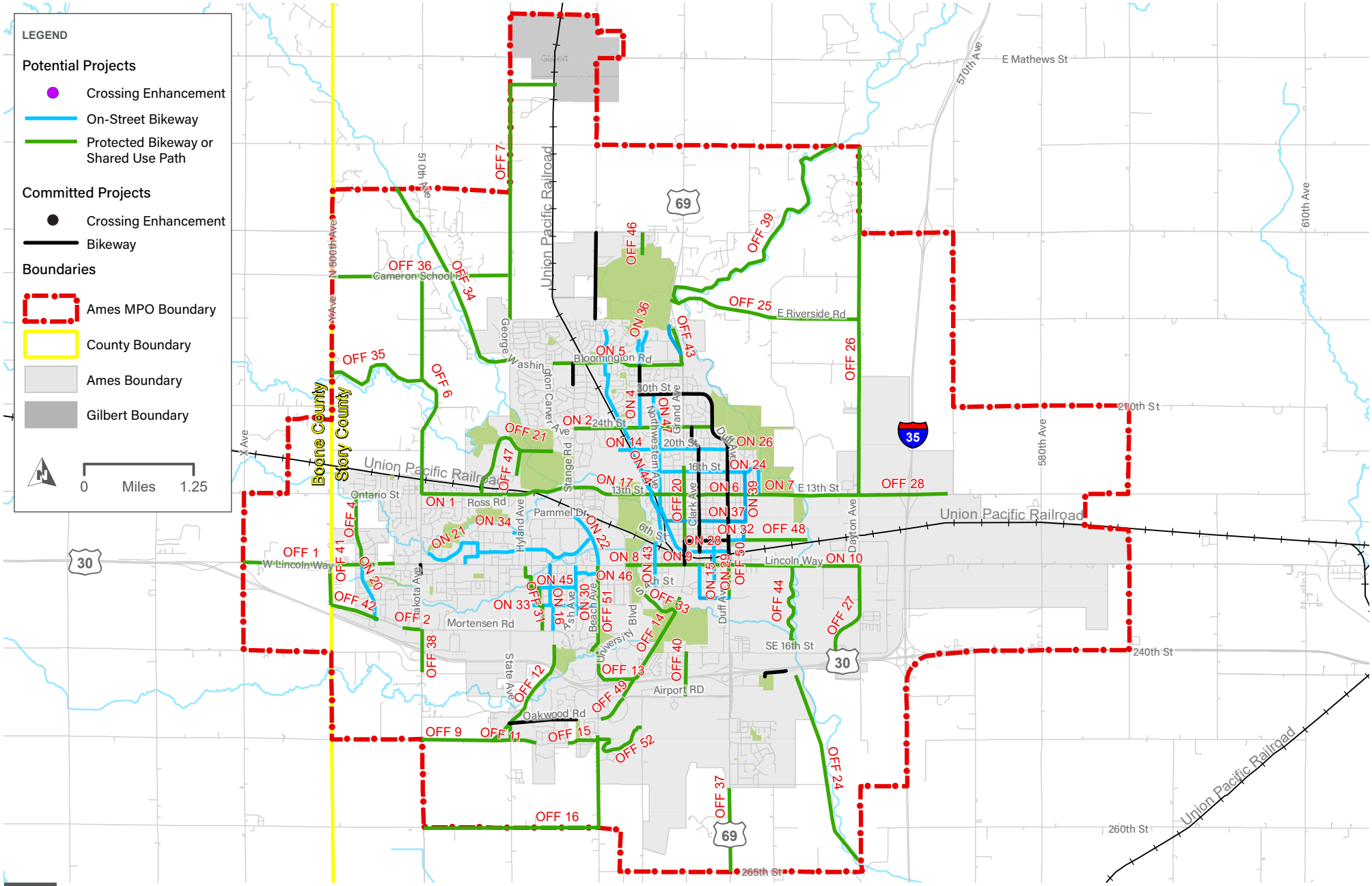
DRAFT - 7/01/2020

COMMITTED PROJECTS

ID	Project Description	Type
C1	Cherry Ave from Lincoln Way to SE 5th Street - Add New Road	New Road
C2	Grand Ave from S 3rd St to S 16th St - Add New Road	New Road
C3	Duff Ave & S 16th Street - Add Turn Lanes	Turn Lanes
C4	Hoover Ave & 30th St to Duff Ave & 13th St - Road Diet to 3 Lanes	Road Diet
C5	Duff Ave from 13rd St to Crystal St - Add Adaptive Signal Control Technologies	Traffic Signal
C6	Lincoln Way from Beach Ave to Hyland Ave - Add Adaptive Signal Control Technologies	Traffic Signal
C7	Lincoln Way from Grand Ave to Duff Ave - Add Adaptive Signal Control Technologies	Traffic Signal
C8	University Blvd from Lincoln Way to US30 - Add Adaptive Signal Control Technologies	Traffic Signal
C9	State Ave & Mortensen Rd - Traffic Signal & Turn Lanes	Traffic Signal/Turn Lanes
C10	SE 16th St & Dayton Ave - Traffic Signal	Traffic Signal
C11	Duff Ave & US30 EB Ramp - Traffic Signal	Traffic Signal

CANDIDATE PROJECTS

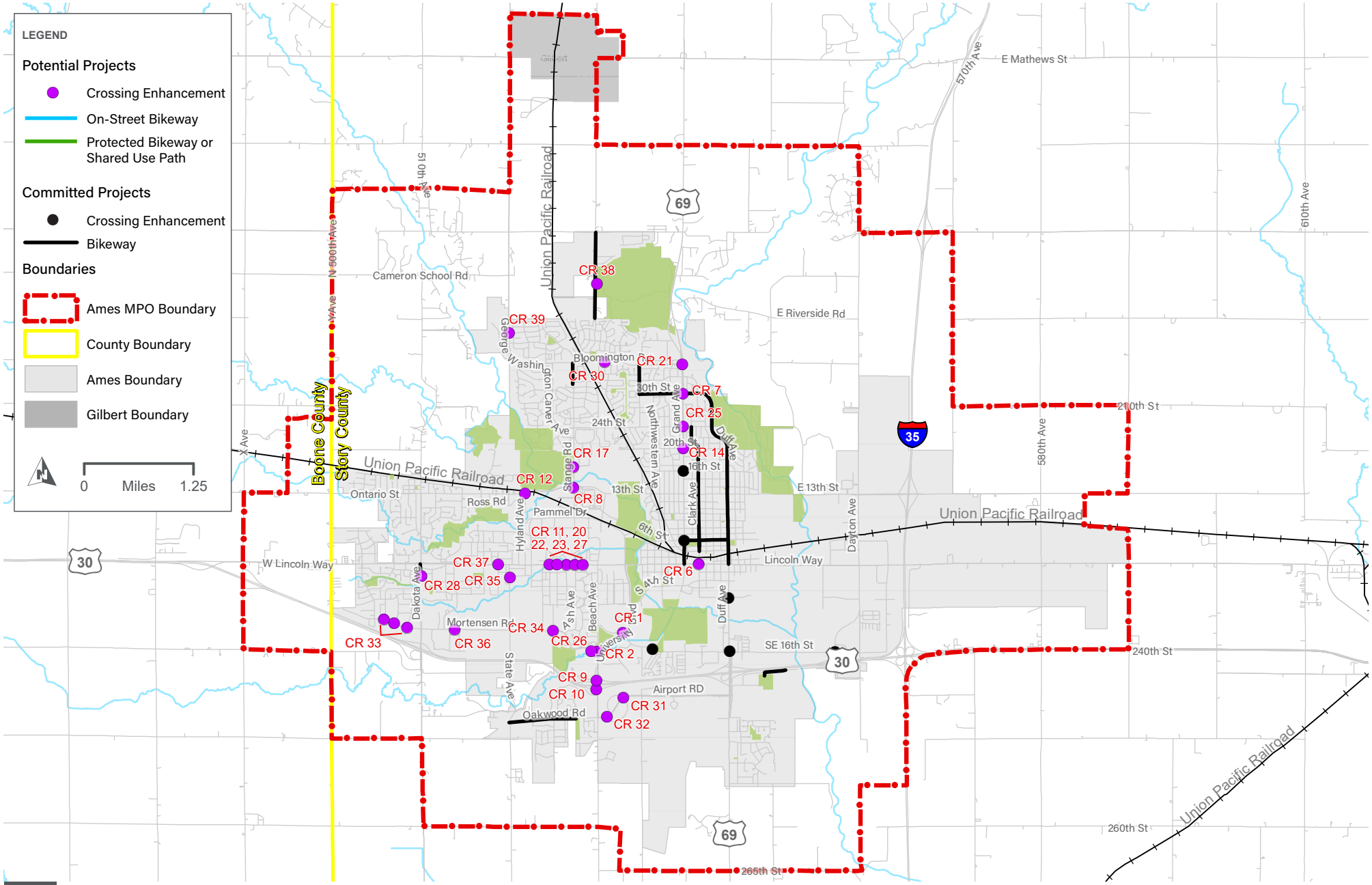
ID	Project Description	Type
1	520th Ave & W 190th St - Roundabout	Roundabout
1a	520th Ave & W 190th St - Traffic Signal & Turn Lanes	Traffic Signal/Turn Lanes
2	530th Ave/Grant Ave & W 190th St - Roundabout	Roundabout
2a	530th Ave/Grant Ave & W 190th St - Traffic Signal & Turn Lanes	Traffic Signal/Turn Lanes
3	520th Ave & Cameron School Rd - Roundabout	Roundabout
3a	520th Ave & Cameron School Rd - Traffic Signal widen to 3-lanes to Weston Dr	Traffic Signal/Add Lane(s)
4	E Riverside Rd to from Grand Ave to N Dayton Ave - Widen to 3 Lanes	Add Lane(s)
5	E Riverside Rd from N Dayton Ave to 570th Ave - Add New 3-Lane Road & I-35 Overpass	New Road
6	E Riverside Rd & I-35 - New Interchange (remove 190th St/I-35 Interchange)	New Interchange
7	Bloomington Rd from George Washington Carver Ave to N 500th Ave - New Road	New Road
8	Hyde Ave & Bloomington Rd - Traffic Signal	Traffic Signal
9	Bloomington Rd from Hyde Ave to Hoover Ave - Widen to 4 Lanes	Add Lane(s)
11	Duff Ave & 16th/20th/24th St Roundabout/Traffic Circle	Roundabout
13	N Dakota from Ontario St to UPRR - Widen to 3 Lanes with Grade Separation	Add Lane(s)/Grade Separation
14	13th St & Stange Road - N/S Left Turn Lanes	Turn Lanes
15	13th St & Stange Road - Roundabout	Roundabout
16	13th St & Grand Ave - Left Turn Lanes (All Approaches)	Turn Lanes
17	13th St from Dayton Ave to 570th Ave - Widen to 6 Lanes/Reconstruct Interchange	Add Lane(s)
18	13th St from 570th Ave to 580th Ave - Widen to 4 Lanes	Add Lane(s)
19	Lincoln Way from Grand Ave to Duff Ave - Road Diet from 4 Lanes to 3 Lanes	Road Diet
20	Lincoln Way from Duff Ave to South Skunk River - Road Diet from 4 Lanes to 3 Lanes	Road Diet
21	Duff Ave & UPRR Crossing - Grade Separation	Grade Separation
22	Dayton Ave from 13th St to Lincoln Way - Widen to 5 Lanes	Add Lanes
23	Sport Complex Road to Relocated South Dayton Avenue - Add New Road	New Road
24	Lincoln Way & Cherry Ave - Traffic Signal & Turn Lanes	Traffic Signal/Turn Lanes
25	Lincoln Way & University Blvd - Intersection Diet/Protected Intersection	Road Diet
26	Y Street from Lincoln Way to Mortensen Rd - Pave 3 Lanes	Add Lanes
27	Freel Dr from Lincoln Way to Dayton Ave - Add New Road	New Road
28	13th Street & Dayton Ave - Add turn lane(s)	Turn Lanes
29	Grand Ave from S 16th Street to Airport Rd - New Road w/ Traffic Signal @ Airport Road	New Road
30	Duff Ave from S 16th Street to Airport Rd - Widen to 6 Lanes/Reconstruct Interchange	Add Lane(s)
31	Lincoln Way & Y Street - Traffic Signal & Turn Lanes	Traffic Signal/Turn Lanes
32	Duff Ave from Airport Rd to 265th St - Widen to 5 Lanes	Add Lane(s)
33	265th St from Duff Ave to Skunk River - Pave to 3 Lanes	Add Lane(s)
34	265th St from Skunk River to I-35 - Pave to 2 Lanes	Add Lane(s)
35	265th St & I-35 - New Interchange	New Road
36	190th St from 520th Ave to 500th Ave - Pave & Extend Road	New Road
37	Airport Rd from Duff Ave to Sam's Club - Improve Roadway/Access	Add Lane(s)
38	Grand Ave & 20th St - Left Turn Lanes	Turn Lanes
39	Dayton Ave & Riverside Rd - Add Left Turn Lanes	Turn Lanes



2045 Bike and Pedestrian Projects

Committed and Potential Projects

FORWARD 2045



2045 Bike and Pedestrian Projects

Committed and Potential Projects

FORWARD 2045

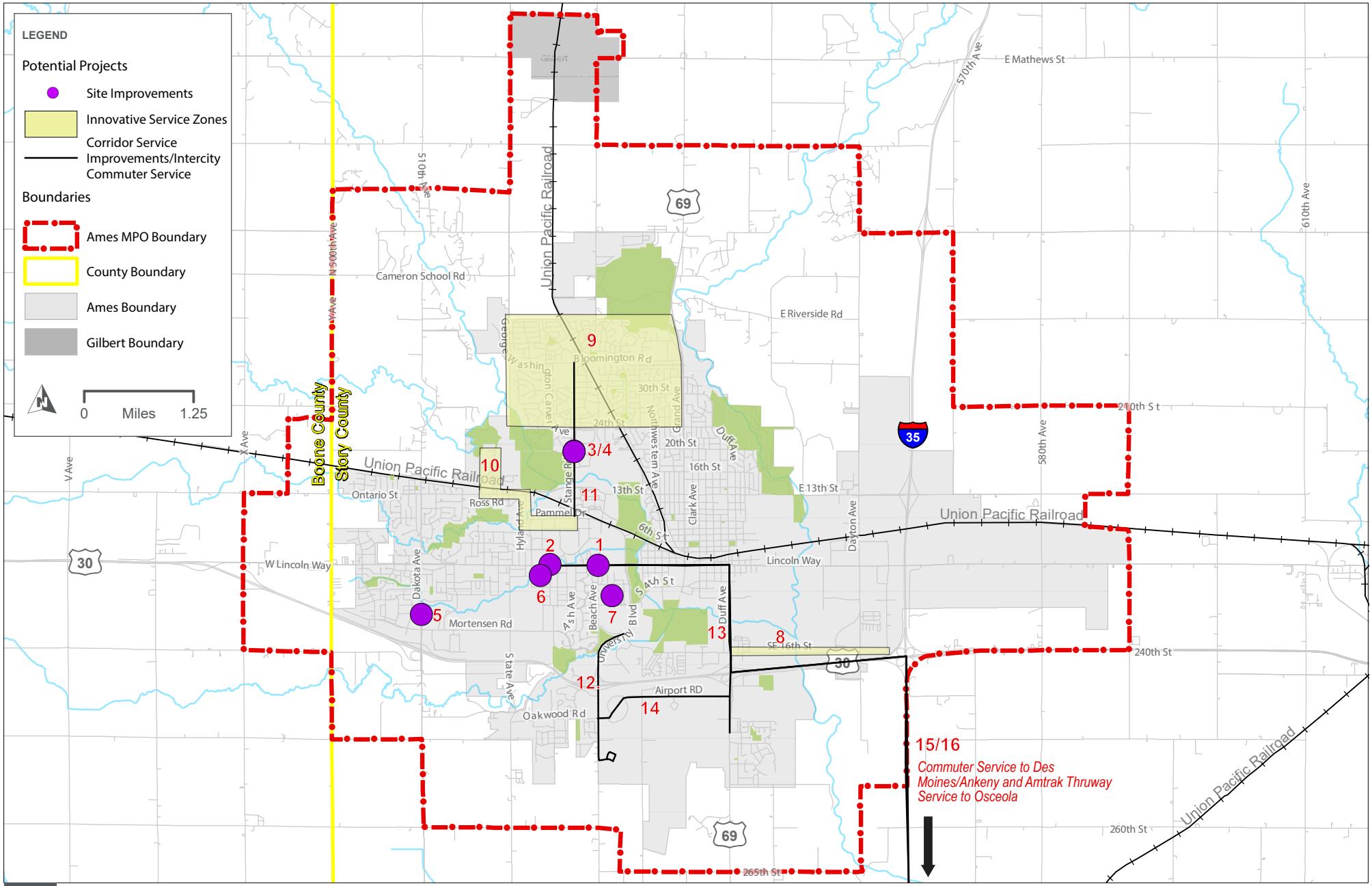
Committed Bicycle/Pedestrian Projects

7/1/2020

ID	Description	Type
C 1	Intersection of Dayton / S 16th - Improve visibility for crossing	Crossing
C 2	Intersection of Duff / S 16th St - Improve crossing visibility, median refuge. Part of project 44A.	Crossing
C 3	Intersection of Grand / 6th St - Improve crossing visibility of Grand	Crossing
C 4	S 16th midblock trail crossing near Vet Med - High visibility treatment for trail cross - over	Crossing
C 5	Intersection of Grand / (N) 16th St - Cycling Enhancements to support 16th Street Bike Route	Crossing
C 6	Intersection of Duff / S 5th - Improve crossing visibility of Duff and 5th. Part of project 44A.	Crossing
C 7	N Walnut Sharrows	Bike Boulevard
C 8	North Duff Bike Lanes	Bike Lane
C 9	30th St Bike Lanes	Bike Lane
C 10	6th Street Bike Lanes	Bike Lane
C 11	Hoover Ave bike lanes from 30th to Bloomington Rd	Bike lanes
C 12	Grand Ave Side Path between Lincoln Way and 6th Street	Shared-use path
C 13	Skunk River - South Duff Trail Connection along Billy Sunday Rd.	Shared-use path
C 14	Gilbert to Ames trail - Hyde Ave south of W 190th St	Shared-use path
C 15	Stange Road to Bloomington Trl	Shared-use path
C 16	Oakwood Side Path	Shared-use path
C 17	S Dakota Side Path	Shared-use path

Preliminary List of Potential Bicycle/Pedestrian Projects
7/1/2020

ID	Descriptions	Type
CR 1	Intersection of University / Mortensen - Improve visibility / safety at Mortensen	Crossing
CR 10	Intersection of US 30 / University North Ramp - Crossing Visibility / Signal improvements	Crossing
CR 11	Intersection of Lincoln Way / Welch- Improvements for crossing visibility and safety	Crossing
CR 12	Intersection of Hyland / Ontario - Improvements for crossing visibility and safety	Crossing
CR 14	Intersection of 20th / Grand - Crossing / Signal Improvements for bikes	Crossing
CR 17	Stange at Bruner Dr Midblock - Improve crossing visibility / consider crossing signal	Crossing
CR 2	Intersection of University / S 16th St - Consider median crossing or pedestrian refuge	Crossing
CR 20	Intersection of Lincoln Way / Lynn - - Improvements for crossing visibility and safety	Crossing
CR 21	Intersection of Grand / Bloomington Rd - Crossing Visibility / Signal improvements	Crossing
CR 22	Intersection of Lincoln Way / Ash- Improvements for crossing visibility and safety	Crossing
CR 23	Intersection of Lincoln Way / Knoll - Improvements for crossing visibility and safety	Crossing
CR 25	Intersection of Grand / 24th St- Improvements for crossing visibility and safety	Crossing
CR 26	Beach / Mortensen crossing to provide safer crossing than University / Mortensen.	Crossing
CR 27	Lincoln Way / Stanton - Improvements for crossing visibility and safety	Crossing
CR 28	Intersection of South Dakota Ave / Todd Dr- Improvements for crossing visibility and safety	Crossing
CR 29	Intersection of South Dakota Ave / Mortensen Rd- Improvements for crossing visibility and safety	Crossing
CR 30	Intersection of Bloomington Rd / Eisenhower Ave- Improvements for crossing visibility and safety	Crossing
CR 31	Intersection of Airport Rd / S Loop Dr (location 1)- Improvements for crossing visibility and safety	Crossing
CR 32	Intersection of Airport Rd / S Loop Dr (location 2)- Crosswalks across Airport Rd	Crossing
CR 33	Intersection of Mortensen Rd / Wilder Blvd, Mortensen Rd / Miller Ave, Mortensen Rd / Poe Ave- Improvements for crossing visibility and safety	Crossing
CR 34	Intersection of Mortensen Rd / Welch Ave - ped signal	Crossing
CR 35	Intersection of State Ave / Arbor St- beacon/signal upgrade	Crossing
CR 36	Intersection of Mortensen Rd / Seagrave Blvd- beacon/signal upgrade	Crossing
CR 37	Intersection of Wilmoth Ave / Lincoln Way- Improvements for crossing visibility and safety	Crossing
CR 38	Bike/ped crossing to Ada Hayden from Hyde	Crossing
CR 39	Intersection of Weston / George W Carver - add crosswalk/ other safety improvements	Crossing
CR 40	Intersection of Lincoln Way / Walnut - improvements for crossing visibility and safety (on bikeway) Implement with project ON-15	Crossing
CR 41	Intersection of Grand Ave / 13th St - improvements for crossing visibility and safety (on bikeway) Implement with project ON-6 and roadway project 16	Crossing
CR 42	Intersection of Lincoln Way / University - Protected intersection. Roadway project 25	Crossing
CR 43	Intersection of Lincoln Way / Hyland - improvements for crossing visibility and safety (bike and pedestrion)	Crossing
CR 44	Intersection of University Blvd / Oakwood Rd - add RRFB at roundabout	Crossing
CR 45	Intersection of University / S 4th St - protected intersection	Crossing
CR 46	Intersection of Lincoln Way / Beach Ave	Crossing
CR 47	Intersection of Beach Ave / S 4th	Crossing
CR 48	Intersection of Hyland Ave / Lincoln Way	Crossing
CR 6	Intersection of Lincoln Way / Clark - Improve crossing visibility	Crossing
CR 7	Intersection of Grand / 30th St - Crossing Visibility / Signal improvements	Crossing
CR 8	Intersection of Stange / 13th St - Improvements for trail crossing visibility	Crossing
CR 9	Intersection of US 30 / University South Ramp - Crossing Visibility / Signal improvements	Crossing
OFF 1	West Lincoln Way Sidepath to MPO Boundary	Shared-use path
OFF 11	Zumwalt to Cottonwood Trail Connection	Shared-use path



2045 Transit Projects

Potential Projects

FORWARD 2045

Preliminary List of Candidate Transit Alternatives

DRAFT - 6/30/2020

COMMITTED PROJECTS

ID	Description	Type
1	Vehicle Replacement/Expansion	Rolling Stock
2	HVAC Rehabiliation/Replacement	Facilities
3	Maintenance Bay Ventilation Improvements	Facilities
4	Bus Stop Annunciator LED Signage	Technology

CANDIDATE PROJECTS

ID	Description	Type
1	Lincoln & Beach - Add Transit Signal Priority	Transit Signal Priority
2	Lincoln & Welch - Add Transit Signal Priority	Transit Signal Priority
3	Stange & Blankenburg - Add New Signal	New Signal
4	Stange & Blankenburg - Add Pedestrian Crossing	Pedestrian Crossing
5	South Dakota & Steinbeck - Add Pedestrian Crossing	Pedestrian Crossing
6	Ames Intermodal Facility Improvements	Facilities
7	Iowa State Center (ISC) - Implement Transit-Oriented Development in Conjunction with Redevelopment	Transit Oriented Development
8	South 16th Street - Add Innovative Transit Service Zone	Service
9	North Ames (Somerset/Northridge/Valley View) - Add Innovative Transit Service Zone	Service
10	Applied Sciences - Add Innovative Transit Service Zone	Service
11	Stange Road from Bloomington to University - Corridor Service Improvements	Service
12	University Blvd from ISC to ISU Research Park - Corridor Service Improvements	Service
13	South Duff from Lincoln to Crystal - Corridor Service Improvements	Service
14	Airport Road from South Duff to Universty - Corridor Service Improvements	Service
15	Ames to Ankeny and Des Moines Intercity/Commuter Service	Service
16	Amtrak Thruway from Ames to Osceola Intercity/Commuter Service	Service
17	Vehicle Replacement/Expansion	Rolling Stock
18	Battery Electric Buses	Rolling Stock
19	Battery Electric Bus Charging Infrastructure	Facilities
20	Battery Electric Bus Facility Modifications	Facilities
21	Facility Expansion	Facilities
22	Automatic Passenger Counters (APCs) for Full Fleet to Collect Stop-Level Ridership Data	Technology
23	Automatic Vehicle Location (AVL) Technology Upgrades	Technology
24	Real-Time Passenger Information - Vehicle Location and Passenger Loads	Technology
25	On-Demand Trip Booking App for East Ames Service Extension (EASE) and Moonlight Express	Technology
26	Electronic Farebox System	Fares
28	Regional Commuter Study (North Ames, Nevada, Gilbert, Boone, etc.)	Planning
29	Late-Night Service Effectiveness Study	Planning
30	Identify Locations and Install Benches, Shelters, and Heated Bus Shelters	Passenger Amenities
31	Add Passenger Information at Bus Stops	Passenger Amenities
32	Add LED Signage and Real-Time Passenger Information at Major Bus Stops	Passenger Amenities
33	Transit and Bicycle Integration - Roadway Improvement Projects	Multimodal Integration

Next Steps:

- Analyze Potential Alternatives
- Prioritize Potential Alternatives
- Develop Financial Forecasts
- Develop Draft Constrained Plan Projects
- ***Present to Policy Committee (Sept)***
- Develop Draft Plan
- Develop Final Plan
- ***Present to Policy Committee (Oct)***

Questions?