

To: AAMPO Transportation Policy Committee Members
Cc: John Joiner, AAMPO Administrator [Public Works Director]
From: Damion Pregitzer, Traffic Engineer [Vice Chair of MPO TTC]
Date: September 4, 2020
Subject: September 8, 2020, Policy Committee Meeting: Progress Update for the Ames Area MPO Metropolitan Transportation Plan “Forward 45”

BACKGROUND:

On July 14, 2020, the Ames Area MPO Policy Committee was given a presentation on the progress of the 2045 Metropolitan Transportation Plan (MTP). At that meeting, the MPO’s consultant, HDR, went through the public input process for the plan, the “universe of alternatives” list of potential projects, and the performance measures (scoring criteria) for the plan.

FUNDING SUMMARY AND DRAFT FISCAL CONSTRAINED PLAN:

On September 8, 2020, HDR will review the performance measures and resultant project scoring. (See Attached Presentation) The consultant will also provide a review of the funding summary to show the estimated budget for the next 25 years of transportation improvements (fiscal constraint). **The Policy Committee can give direction to HDR and staff for any desired changes to the prioritized projects. Otherwise, no other action by the Policy Committee is needed at this meeting.**

The funding is broken into multiple time frames; Committed Project (2021-2024), Short-Term (2025-2029), Mid-Term (2030-2037), and Long-Term (2038-2045). The costs for projects in each respective time frame are based on 2020 construction costs inflated by approximately 4% per year.

The fiscally constrained plan will prioritize projects that fall within the funding limits of each time frame based on need and highest possible benefit to the network. **Projects that are caused by new development (annexations, subdivisions, or other large developments) or projects in the fiscally constrained plan that are accelerated by impacts of development are expected to be 100% funded by the developer.** Those

projects that are known during the implementation of the 2045 MTP will be considered as “development-driven projects.”

Illustrative projects are projects that are identified by the plan as having benefits to the transportation system and are sometimes referred to as “unfunded needs” or “projects of opportunity.” The need for those projects likely falls outside the time frame (>2045) or outside the fiscal constraint (higher priority projects expend all available funds). These projects are expected to happen when need and funds from external sources become available to the jurisdictions.

NEXT STEPS:

September 22, 2020 - The Policy Committee will receive a presentation of the Draft 2045 Metropolitan Transportation Plan. Minor corrections or revisions will be discussed at that meeting. **The Policy Committee is not expected to take final action on the plan at this meeting.** The by-laws of the MPO requires that we begin a 30-day minimum comment period, which would end on October 22, 2020.

October 27, 2020 - The Policy Committee will be presented with the **Final 2045 MTP “Forward 45” for formal approval/adoption.** Staff does not expect to make a formal presentation on the Final plan unless there are substantive changes needed from the public comments received.

STAFF COMMENTS:

It should be noted that the Ames Plan 2040 (update to the Comprehensive Plan) is not likely to be finalized by the October 27, 2020 adoption of the 2045 MTP (Forward 45). **Therefore, any changes to the identified transportation priorities in the final draft of the Comprehensive Plan may later require an amendment to the MTP if there is a desire to use Federal Aid to fund those transportation projects.** The amendment process would include a minor update to the plan and a recalculation of the fiscal constraint. These changes to the MTP would require DOT and FHWA review and approval.

Ames Area MPO Policy Committee Presentation




09/08/20





Performance-Based Planning Approach



Performance Measures

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					
	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.
Safe						
	Reduce number and rate of crashes	Vehicular safety assessment	Has the potential to improve safety at top crash frequency or crash rate intersection	Has the potential to improve safety at any intersection	Does not impact safety at top crash frequency or crash rate intersection	Has the potential to negatively impact safety
	Reduce number and rate of serious injury and fatal crashes					
	Reduce the number of bicycle and pedestrian crashes	Non-motorized safety assessment	Has the potential to improve non-motorized safety at in corridors with observed non-motorized crash history	Has the potential to improve non-motorized safety in any corridor	Does not impact non-motorized safety at top crash frequency or crash rate intersection	Has the potential to negatively impact non-motorized safety
	Prioritize projects that improve the Ames Area Safe Routes to School Program	K-12 School connectivity assessment	Creates or improves connection to Safe Route to School network for two or more modes	Creates or improves connection to Safe Route to School network	No impact on connectivity to Safe Routes to School network	Removes or creates barrier to Safe Routes to School network
Sustainable						
	Reduce transportation impacts to natural resources	Environmental Screening	Is not located in an identified natural resource area	-	-	Is located in an identified natural resource area
	Limit transportation system emissions of greenhouse gases	VMT/VHT Projection	Provides a significant reduction in system-wide in VMT and VHT	Provides significant reduction system-wide in either VMT or VHT	Does not significantly impact system-wide VMT or VHT	Significantly increases system-wide VMT and VHT
	Make transportation infrastructure more secure, and resilient to natural and manmade events	Corridor Flood Risk	Project would reduce flooding risk for corridor.	-	Project would have no impact on flooding risk for corridor.	Project would increase flooding risk for corridor.
	Promote financially sustainable transportation system investments	Prioritize Investment in Existing Assets	Technology or management strategies on existing infrastructure	Minor system enhancements to existing infrastructure (e.g. turn lanes, protected bike lanes/side path)	Major system enhancements to existing infrastructure or new trails (e.g. roadway widening)	New transportation infrastructure (e.g. new corridor)

Performance Measures

Goal	Objectives	Performance Measure	Project Scoring Approach			
			+2	+1	0	-1
Efficient & Reliable						
	Identify context-sensitive strategies and projects that improve traffic flow in corridors with high levels of peak period congestion (LOS D or worse)	Traffic Level of Service	Improves LOS in corridor estimated to have LOS D or worse in 2045	Improves LOS	Does not impact LOS	Degrades LOS a letter grade or worse
	Maintain acceptable travel reliability on Interstate and principal arterial roadways	Passenger LOTTR	Has potential to improve reliability on an NHS corridor identified as having reliability issues	Has potential to improve reliability on an NHS corridor	Does not impact LOTTR	Worsens LOTTR on a NHS corridor
	Provide frequent transit service to high trip generation locations	Transit density screening	Improves transit frequency in identified high trip location	-	Does not impact transit frequency in identified high trip location	Worsens transit frequency in identified high trip location
	Increase the regional share of trips made by walking, biking, and transit	Walk/bike/transit mode shares	Major Increase to mode share for walking, biking, and/or transit	Slight Increase to mode share for walking, biking, and/or transit	Does not impact mode share for walking, biking, or transit	Reduces mode share for walking, biking, and/or transit
	Improve freight system reliability	Interstate TTTR	Has potential to improve freight reliability on Interstate corridor identified as having freight reliability issues	Has potential to improve freight reliability on Interstate corridor	No expected impact to freight reliability on Interstate corridor	Has potential to worsen freight reliability on Interstate corridor
	Identify technology solutions to enhance system operation	Technology Elements for System Management	Includes technology element that more effectively manages system operation	-	Does not include technology element	-
Placemaking						
	Increase the percentage of population and employment within close proximity to transit and/or walking and biking system.	Multi-modal Connectivity to Dense and Mixed-Use Nodes	Creates new, multi-modal connection between highest tier of dense / diverse land use.	Creates new, multi-modal connection between second highest tier of dense / diverse land use.	Does not create new, multi-modal connection to dense / diverse land use.	Removes multi-modal connection to dense / diverse land use.
	Provide transportation strategies and infrastructure that support current adopted plans	Project and Context Consistency	Project is proposed by other plan or would support neighborhood or district development goals.	-	Project is not included in other plans and is neutral in relation to neighborhood or district development goals.	Project is not included in other plans and would negatively impact neighborhood or district development goals.

Roadway Project Scoring Results

MTP ID	Project Description	Scoring Tier	Project Cost
16	13th St & Grand Ave - Left Turn Lanes (All Approaches)	High	\$3,000,000
19	Lincoln Way from Gilchrist St to Duff Ave - Road Diet from 4 Lanes to 3 Lanes	High	\$1,750,000
20	Lincoln Way from Duff Ave to South Skunk River - Road Diet from 4 Lanes to 3 Lanes	High	\$220,000
26	Y St from Lincoln Way to Mortensen Rd including Mortensen Rd Extension to Y St - Pave 3 Lanes	High	\$3,200,000
29	Grand Ave from S 16th Street to Airport Rd - New Road w/ Traffic Signal @ Airport Road	High	\$13,500,000
30	Duff Ave from S 16th Street to Airport Rd - Widen to 6 Lanes/Reconstruct Interchange to 4 lane Diverging Diamond Interchange	High	\$11,180,000
32	Duff Ave from Airport Rd to 265th St - Widen to 5 Lanes	High	\$16,020,000
40	16 th Street, Grand Avenue, and Dayton Avenue Traffic Signals	High	\$1,130,000
42	Hyde Ave from Bloomington Rd to 190th St - Traffic Calming	High	\$300,000
44	Grand Ave from Bloomington Rd to 180th St - Widen to 4 Lanes and intersection improvements	High	\$20,190,000
1	520th Ave & W 190th St - Roundabout	Medium	\$1,500,000
2	530th Ave/Grant Ave & W 190th St - Roundabout	Medium	\$2,000,000
3	520th Ave & Cameron School Rd - Roundabout	Medium	\$1,500,000
4	E Riverside Rd to from Grand Ave to N Dayton Ave - Widen to 3 Lanes	Medium	\$12,920,000
13	N Dakota from Ontario St to UPRR - Widen to 3 Lanes	Medium	\$840,000
14	13th St & Stange Road - N/S Left Turn Lanes	Medium	\$2,490,000
17	13th St from Dayton Ave to 570th Ave - Widen to 6 Lanes/Reconstruct Interchange to 4 lane Diverging Diamond Interchange	Medium	\$11,880,000
18	13th St from 570th Ave to 580th Ave - Widen to 4 Lanes	Medium	\$8,040,000
21	Duff Ave & UPRR Crossing - Grade Separation	Medium	\$22,000,000
22	Dayton Ave from 13th St to Lincoln Way - Widen to 5 Lanes	Medium	\$3,200,000
24	Lincoln Way & Cherry Ave - Traffic Signal & Turn Lanes	Medium	\$1,200,000
25	Lincoln Way & University Blvd - Intersection Diet/Protected Intersection	Medium	See Bicycle/Pedestrian Project CR 42
28	13th Street & Dayton Ave - Add turn lane(s)	Medium	\$2,000,000
31	Lincoln Way & Y Street - Traffic Signal & Turn Lanes	Medium	\$2,000,000
37	Airport Rd from Duff Ave to Sam's Club - Improve Roadway/Access	Medium	\$800,000

Roadway Project Scoring Results (continued)

MTP ID	Project Description	Scoring Tier	Project Cost
38	Grand Ave & 20th St - Left Turn Lanes	Medium	\$1,600,000
39	Dayton Ave & Riverside Rd - Add Left Turn Lanes	Medium	\$750,000
43	George Washington Carver from Weston Dr to 190th St - Widen to 3 Lanes	Medium	\$5,650,000
45	190th St from 520th Ave to Grand Ave - Widen to 3 Lanes / Grade Separation w UPRR	Medium	\$11,310,000
46	Dayton Ave from 13th St to Riverside Rd - Widen to 3 Lanes	Medium	\$9,870,000
47	Cameron School Rd from George Washington Carver to Grant Ave - Pave to 3 Lanes / Grade Separation w/ UPRR	Medium	\$6,330,000
49	Lincoln Way from Thackery Rd to Y Ave - Widen to 4 Lanes	Medium	\$5,800,000
50	Ontario St from Idaho Ave to Y Ave - Widen to 3 Lanes	Medium	\$3,780,000
52	Lincoln Way from Y Ave to X Ave - Widen to 4 Lane	Medium	\$8,070,000
53	South Dakota Avenue from Lincoln Way to Mortensen Road - Widen to 5 lanes	Medium	\$6,000,000
54	Lincoln Way from I-35 to 580th Ave - Widen to 3 Lanes	Medium	\$8,200,000
1a	520th Ave & W 190th St - Traffic Signal & Turn Lanes	Medium	\$1,400,000
2a	530th Ave/Grant Ave & W 190th St - Traffic Signal & Turn Lanes	Medium	\$1,400,000
3a	520th Ave & Cameron School Rd - Traffic Signal & Turn Lanes	Medium	\$1,150,000
5	E Riverside Rd from N Dayton Ave to 570th Ave - Add New 3-Lane Road & I-35 Overpass	Low	\$7,950,000
6	E Riverside Rd & I-35 - New Interchange (remove 190th St/I-35 Interchange)	Low	\$15,000,000
7	550th Ave from Ken Maril Rd to Airport Rd - Pave 2 Lanes	Low	\$5,530,000
9	Bloomington Rd from Hyde Ave to Hoover Ave - Widen to 4 Lanes	Low	\$3,210,000
10	580th St and UPRR Grade Separation	Low	\$2,830,000
12	550th Ave from 265th to Ken Maril Rd - Pave 2 Lanes	Low	\$5,600,000
27	Freel Dr from Lincoln Way to Dayton Ave - Add New Road	Low	\$4,500,000
33	265th St from Duff Ave to Skunk River - Pave to 3 Lanes	Low	\$5,500,000
34	265th St from Skunk River to I-35 - Pave to 2 Lanes	Low	\$2,800,000
35	265th St & I-35 - New Interchange	Low	\$15,000,000
36	265th from University Ave to Duff Ave & University Ave from 265th to Collaboration Pl - Pave to 3 Lanes	Low	\$9,660,000
48	Stange Rd Extension North to Cameron School Rd - Pave 3 Lanes	Low	\$2,700,000
51	Y Ave from Lincoln Way to Ontario St - Widen to 3 Lanes	Low	\$4,070,000

Bicycle and Pedestrian Project Scoring Results

MTP ID	Project Description	Overall Project	
		Priority	Project Cost
CR 14	Intersection of 20th / Grand - Crossing / Signal Improvements	High	\$180,000
CR 25	Intersection of Grand / 24th St- Improvements for crossing visibility and safety	High	\$100,000
CR 36	Intersection of Mortensen Rd / Seagrave Blvd- beacon/signal upgrade	High	\$230,000
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	High	\$180,000
CR 42	Intersection of Lincoln Way / University - Protected intersection. Roadway project 25	High	\$750,000
CR 43	Intersection of Lincoln Way / Hyland - improvements for crossing visibility and safety (bike and pedestrian)	High	\$130,000
CR 46	Intersection of Lincoln Way / Beach Ave	High	\$130,000
CR 47	Intersection of Beach Ave / S 4th	High	\$80,000
CR 50	Intersection of 24th St and Stange Rd / Improvements for crossing visibility and safety	High	\$500,000
CR 6	Intersection of Lincoln Way / Clark - Improve crossing visibility	High	\$130,000
CR 7	Intersection of Grand / 30th St - Crossing Visibility / Signal improvements	High	\$130,000
OFF 1	East 13th sidepath, Northwestern Ave to Duff Ave.	High	\$920,000
OFF 10	Lincoln Way sidepath, Grand Ave to Duff Ave. With roadway projects 19 and 20.	High	\$380,000
OFF 14	20th St sidepath, Ames High to Grand	High	\$560,000
OFF 15	20th sidepath, Grand Ave to Duff Ave	High	\$380,000
OFF 2	West Mortensen Side Path, fill in gap west of South Dakota	High	\$410,000
OFF 20	Grand Ave Side Path between 6th and 16th Street	High	\$650,000
OFF 27	South Dayton Side Path between S 16th St and Lincoln Way	High	\$930,000
OFF 29	Cherry Ave to Squaw Creek sidepath	High	\$490,000
OFF 3	24th St sidepath, Grand Ave to Duff Ave	High	\$250,000
OFF 31	Hyland-Hayward South Campus Trail Connection	High	\$1,850,000
OFF 48	trail to connect to Skunk River Trail (from east end of 6th)	High	\$550,000
OFF 50	S Duff Ave from E Lincoln Way to S 5th St - Shared-use path or protected bike lanes	High	\$290,000
OFF 55	Stange Rd shared use path gap	High	\$110,000
ON 15	Clark / Walnut bike boulevard, South 3rd to S 5th Street	High	\$30,000
ON 16	Welch On-Street Bike Treatment, Mortensen to Union Drive	High	\$90,000
ON 21	Bike boulevard north of Lincoln Way between North Dakota and Iowa State Campus	High	\$350,000
ON 22	Bike boulevard across Campus between Beach/Lincoln Way and Pammel/Stange	High	\$110,000
ON 29	Kellogg bike boulevard, S 3rd to 6th St	High	\$70,000
ON 30	Ash Ave bike boulevard, current bike lane end to Lincoln Way	High	\$80,000
ON 33	Cessna St Bike Boulevard	High	\$110,000
ON 44	Eisenhower Ave/Hayes Ave/Ridgewood Ave from Harrison Rd to 6th St - Bike Blvd	High	\$380,000
ON 47	Carroll Avenue bike boulevard, 13th St to 5th St, 5th St to Duff Ave	High	\$150,000

Bicycle and Pedestrian Project Scoring Results (continued)

MTP ID	Project Description	Overall Project Priority	Project Cost
CR 1	Intersection of University / Mortensen - Improve visibility / safety at Mortensen	Medium	\$180,000
CR 10	Intersection of US 30 / University North Ramp - Crossing Visibility / Signal improvements	Medium	\$130,000
CR 11	Intersection of Lincoln Way / Welch- Improvements for crossing visibility and safety	Medium	\$20,000
CR 12	Intersection of Hyland / Ontario - Improvements for crossing visibility and safety	Medium	\$180,000
CR 17	Stange at Bruner Dr Midblock - Improve crossing visibility / consider crossing signal	Medium	\$230,000
CR 18	Stange at Somerset - Midblock crossing improvements for visibility / consider crossing signal	Medium	\$130,000
CR 2	Intersection of University / S 16th St - Consider median crossing or pedestrian refuge	Medium	\$70,000
CR 20	Intersection of Lincoln Way / Lynn - - Improvements for crossing visibility and safety	Medium	\$10,000
CR 21	Intersection of Grand / Bloomington Rd - Crossing Visibility / Signal improvements	Medium	\$130,000
CR 22	Intersection of Lincoln Way / Ash- Improvements for crossing visibility and safety	Medium	\$10,000
CR 23	Intersection of Lincoln Way / Knoll - Improvements for crossing visibility and safety	Medium	\$10,000
CR 26	Beach / Mortensen crossing to provide safer crossing than University / Mortensen	Medium	\$230,000
CR 27	Lincoln Way / Stanton - Improvements for crossing visibility and safety	Medium	\$230,000
CR 28	Intersection of South Dakota Ave / Todd Dr- Improvements for crossing visibility and safety	Medium	\$230,000
CR 30	Intersection of Bloomington Rd / Eisenhower Ave- Improvements for crossing visibility and safety	Medium	\$110,000
CR 34	Intersection of Mortensen Rd / Welch Ave - ped signal	Medium	\$230,000
CR 35	Intersection of State Ave / Arbor St- beacon/signal upgrade	Medium	\$30,000
CR 37	Intersection of Wilmoth Ave / Lincoln Way- Improvements for crossing visibility and safety	Medium	\$230,000
CR 38	Bike/ped crossing to Ada Hayden from Hyde	Medium	\$40,000
CR 45	Intersection of University / S 4th St - protected intersection	Medium	\$500,000
CR 51	Intersection of Maxwell Ave and 13th St / Bike boulevard crossing improvement	Medium	\$240,000
CR 8	Intersection of Stange / 13th St - Improvements for trail crossing visibility	Medium	\$180,000
CR 9	Intersection of US 30 / University South Ramp - Crossing Visibility / Signal improvements	Medium	\$130,000
OFF 11	On-street facility on Cottonwood connecting Trail Connection	Medium	\$200,000
OFF 12	Worrell Creek Trail with US 30 Crossing (Identify Grade Separation)	Medium	\$2,730,000
OFF 16	Research Park / University Blvd Trail connection to Heart of Iowa trail (beyond MPO Boundary)	Medium	\$2,290,000
OFF 25	Riverside Rd Trail (Paved Shoulder is Alternative)	Medium	\$4,420,000
OFF 26	Dayton Trail or Improved Shoulders north of 13th Street	Medium	\$2,990,000
OFF 28	E 13th St Trail or Paved Shoulders for Bikes Extension past I-35	Medium	\$810,000
OFF 33	Squaw Creek Trail from Grand Avenue Extension to 4th Street	Medium	\$2,210,000

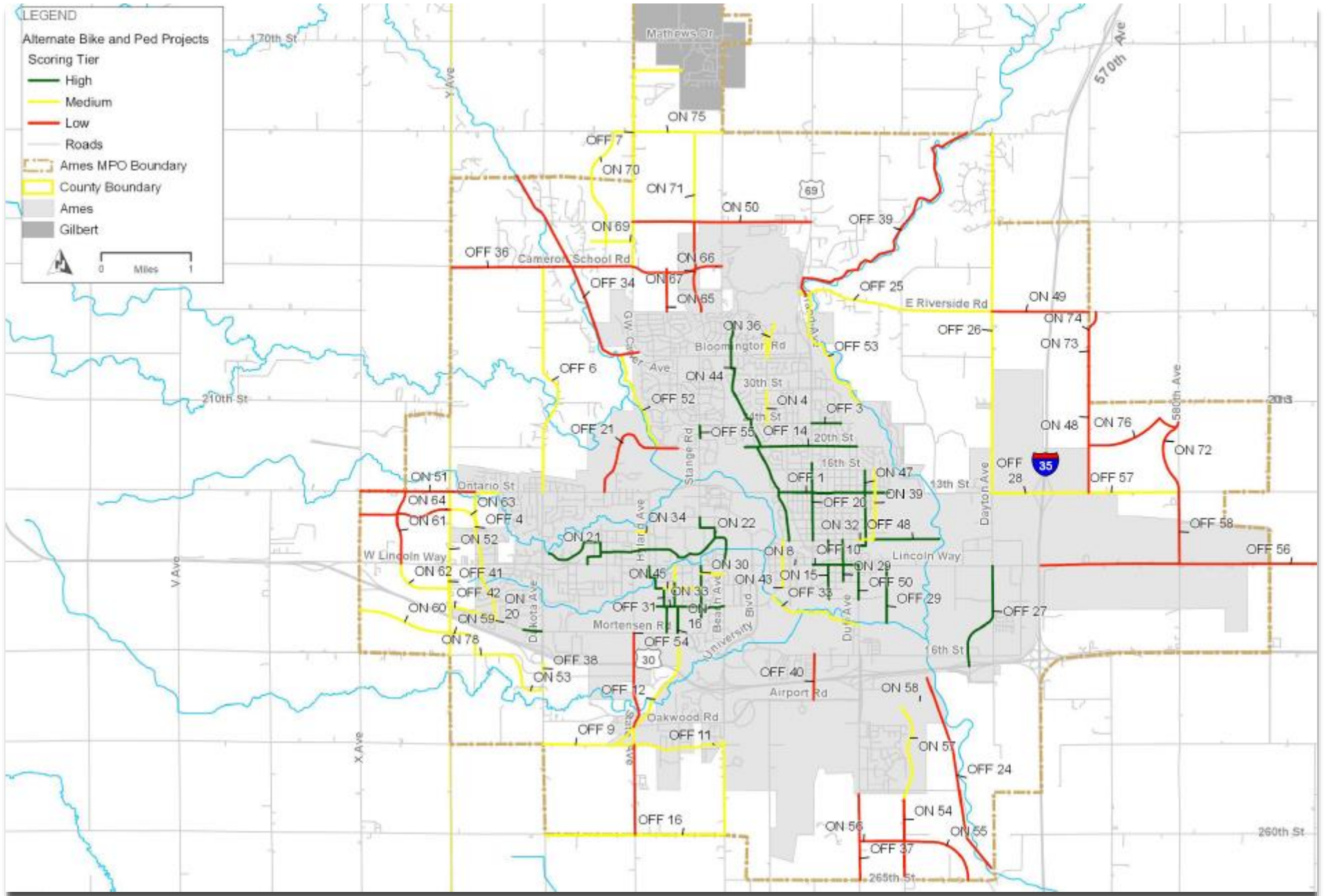
Bicycle and Pedestrian Project Scoring Results (continued)

MTP ID	Project Description	Overall Project Priority	Project Cost
OFF 38	South Dakota / R38 Northbound Bike Connection between 240th Street and Mortensen	Medium	\$100,000
OFF 4	Wilder-Ontario Side Path Connection	Medium	\$2,120,000
OFF 41	Sidepath with S 500th Avenue Improvement between Lincoln Way and Mortenson Extension	Medium	\$340,000
OFF 42	Sidepath along Mortensen Avenue Extension west to S 500th Avenue (Developer Funded Roadway Project *	Medium	\$1,140,000
OFF 52	Squaw Creek trail	Medium	\$2,330,000
OFF 53	Skunk River trail connection	Medium	\$2,990,000
OFF 57	East 13th - 570th to 580th	Medium	\$750,000
OFF 6	North Dakota Side Path	Medium	\$1,950,000
OFF 7	George Washington Carver Side path or bike lanes on shoulder to Gilbert	Medium	\$2,040,000
OFF 9	Zumwalt Station to Oakwood Trail	Medium	\$2,430,000
ON 20	Bike boulevard along Wilder, Mortensen to Lincoln Way, with intersections improvements	Medium	\$100,000
ON 32	6th St bike boulevard east of Duff	Medium	\$20,000
ON 34	Oakland St bike boulevard between Trail and Hyland Ave	Medium	\$20,000
ON 36	Hoover Ave from Bloomington to Ada Hayden	Medium	\$60,000
ON 39	Bike boulevard on Crawford from 6th St up to Municipal Cemetery.	Medium	\$30,000
ON 4	Hoover On-Street Bike Treatment, 30th St to 24th St	Medium	\$50,000
ON 41	Welch Ave ped mall (Lincoln to Hunt)	Medium	\$130,000
ON 43	Hazel St from 6th to S 4th - Bike Blvd	Medium	\$70,000
ON 45	Knapp St from path end (near Hayward Ave) to Ash St - bike blvd	Medium	\$60,000
ON 46	Gable/Sunset from Ash St to Beach - Bike blvd	Medium	\$40,000
ON 52	Arterial Widening	Medium	\$1,360,000
ON 53	Arterial Future	Medium	\$510,000
ON 56	Collector Future	Medium	\$100,000
ON 57	Arterial Future	Medium	\$820,000
ON 59	Collector Future	Medium	\$90,000
ON 60	Collector Future	Medium	\$210,000
ON 62	Collector Future	Medium	\$140,000
ON 63	Collector Future	Medium	\$80,000
ON 68	Collector Future	Medium	\$50,000
ON 69	Collector Future	Medium	\$90,000
ON 70	Collector Future	Medium	\$230,000

Bicycle and Pedestrian Project Scoring Results (continued)

MTP ID	Project Description	Overall Project Priority	Project Cost
ON 71	Collector Future	Medium	\$200,000
ON 74	Arterial Future	Medium	\$170,000
ON 75	Arterial Widening	Medium	\$910,000
ON 78	Arterial Widening	Medium	\$250,000
CR 31	Intersection of Airport Rd / S Loop Dr (location 1)- Improvements for crossing visibility and safety	Low	\$80,000
CR 32	Intersection of Airport Rd / S Loop Dr (location 2)- Crosswalks across Airport Rd	Low	\$80,000
CR 33	Intersection of Mortensen Rd / Wilder Blvd, Mortensen Rd / Miller Ave, Mortensen Rd / Poe Ave- Improvements for crossing visibility and safety	Low	\$240,000
CR 39	Intersection of Weston / George W Carver - add crosswalk/ other safety improvements	Low	\$70,000
CR 48	Grade Separation of RR at 580th	Low	See Roadway Project #10
CR 49	Skunk River Trail Grade Separated Crossing of 13th	Low	\$500,000
OFF 21	Recreational Trail Adjacent to Veenker Golf Course and Reactor Woods	Low	\$2,710,000
OFF 24	South Skunk River Trail extension to MPO Boundary	Low	\$4,540,000
OFF 34	Bloomington Road and Squaw Creek Trail connection to north MPO Boundary	Low	\$5,190,000
OFF 36	Cameron School Road sidepath to west MPO Boundary	Low	\$4,000,000
OFF 37	US 69 South Trail to MPO Boundary	Low	\$720,000
OFF 39	Skunk River Trail connection between soft-surfaced trails near Peterson Park to Ada Hayden Park. Co*	Low	\$6,540,000
OFF 40	Sidepath with Grand Avenue Roadway Extension between S 16th St and Airport Road	Low	\$1,020,000
OFF 54	State Ave from Mortenson to MPO boundary	Low	\$1,550,000
OFF 56	Lincoln Hwy east of Dayton	Low	\$4,170,000
OFF 58	580th Lincoln to 13th	Low	\$600,000
ON 48	Arterial Widening	Low	\$1,050,000
ON 49	Arterial Future	Low	\$810,000
ON 50	Arterial Widening	Low	\$1,490,000
ON 51	Arterial Widening	Low	\$960,000
ON 54	Arterial Widening	Low	\$640,000
ON 55	Collector Future	Low	\$190,000
ON 61	Collector Future	Low	\$160,000
ON 64	Collector Future	Low	\$200,000
ON 65	Collector Future	Low	\$100,000
ON 66	Collector Future	Low	\$200,000
ON 67	Collector Future	Low	\$200,000
ON 72	Arterial Future	Low	\$670,000
ON 73	Arterial Widening	Low	\$290,000
ON 76	Collector Future	Low	\$180,000
ON 77	Collector Future	Low	\$40,000

Bicycle /Pedestrian Scoring



Develop Anticipated Funding Levels

- Federal, State and Local Funding Sources
- Develop Time Periods:
 - Current TIP (2021-2024)
 - Short-Term (2025-2029)
 - Mid-Term (2030-2037)
 - Long-Term (2038-2045)
- Cost Breakdown Projections
 - System Preservation
 - System Improvement

Improvement Funding Summary

Roadway

Time Period/Years		Formula-Based Funds ¹	Discretionary Funds ²	Local Funds ³
TIP Years	2021-2024	\$2,713,000	\$18,284,000	\$19,318,000
Short-Term	2025-2029	\$3,912,000	\$4,303,000	\$8,503,380
Mid-Term	2030-2037	\$6,898,000	\$7,587,000	\$14,993,820
Long-Term	2038-2045	\$7,770,000	\$8,547,000	\$16,889,940
Total	2025-2045	\$18,580,000	\$20,437,000	\$40,387,140

1 - STBG funds not directed towards future preservation projects

2 - Estimated potential ICAAP (CMAQ) and NHPP funds

3 - Local funds not spent on system preservation, or improvement of local system / non-Federal aid streets

Bicycle & Pedestrian

Time Period/Years		Formula-Based Funds ¹	Discretionary Funds ²	Local Funds ³
TIP Years	2021-2024	\$96,000	\$0	\$0
Short-Term	2025-2029	\$534,000	\$0	\$5,511,590
Mid-Term	2030-2037	\$942,000	\$0	\$9,718,310
Long-Term	2038-2045	\$1,062,000	\$0	\$10,947,370
Total	2025-2045	\$2,538,000	\$0	\$26,177,270

1 - TAP and TAP-Flex funds not directed towards future preservation projects

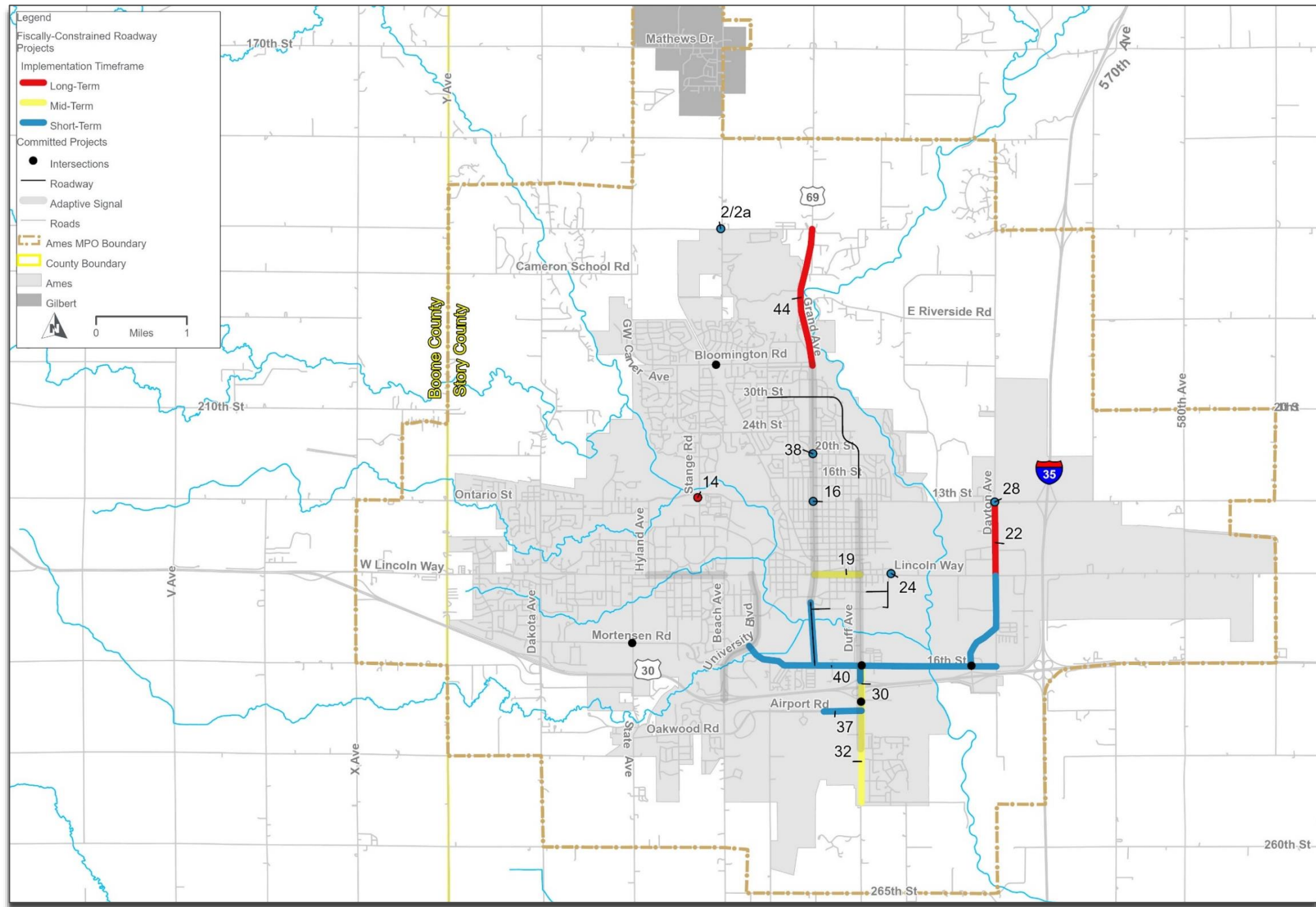
2 - No bicycle / pedestrian discretionary funds assumed

3 - Local funds not spent on system preservation

Develop Constrained Plan

- Multiple Criteria Applied
 - Project Scoring
 - Current Issues / Future Issues
 - Anticipated Growth in Near Future
 - Project Timing Coordination
 - Project Costs
- Illustrative Plan Will Be Included
 - Priority Projects that are Not Fiscally-Constrained
 - Some Developer-Driven Projects

Draft Roadway



Draft Roadway Plan

Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share*	Potential Non-Local Funding Sources	Potential Sponsor(s)
Short-Term (2025-2029)	40	16th Street, Grand Avenue, and Dayton Avenue Traffic Signals	\$1,130,000	\$1,440,000	\$724,752	\$715,248	ICAAP	City of Ames
	37	Airport Rd from Duff Ave to Sam's Club - Improve Roadway Access	\$800,000	\$1,020,000	\$513,366	\$506,634	STBG Swap	City of Ames
	16	13th St & Grand Ave - Left Turn Lanes (All Approaches)	\$3,000,000	\$3,820,000	\$1,922,606	\$1,897,394	STBG Swap	City of Ames
	2 OR 2A	Hyde Ave/Grant Ave & W 190th St	\$2,000,000	\$2,540,000	\$1,278,382	\$1,261,618	STBG Swap	Story County / City of Ames
	28	13th Street & Dayton Ave - Add turn lane(s)	\$2,000,000	\$2,540,000	\$1,278,382	\$1,261,618	STBG Swap	City of Ames
	24	Cherry - Lincolnway Intersection Improvements	\$1,200,000	\$1,530,000	\$770,049	\$759,951	STBG Swap	City of Ames
	38	Grand Ave & 20th St - Left Turn Lanes	\$1,600,000	\$2,040,000	\$1,026,732	\$1,013,268	STBG Swap	City of Ames
Time Frame Total			\$11,730,000	\$14,930,000	\$7,514,269	\$7,415,731		
Mid-Term (2030-2037)	30	Duff Ave from S 16th Street to Airport Rd - Widen to 6 Lanes/Reconstruct Interchange	\$10,000,000	\$15,910,000	\$8,007,503	\$7,902,497	STBG / NHPP / ICAAP	City of Ames / Iowa DOT
	19	Lincoln Way from Gilchrist St to Duff Ave - Road Diet from 4 Lanes to 3 Lanes	\$1,750,000	\$2,780,000	\$1,399,174	\$1,380,826	STBG Swap	City of Ames
	32a	Duff Ave from Airport Rd to Ken Maril - Widen to 5 Lanes	\$8,010,000	\$12,740,000	\$6,412,042	\$6,327,958	ICAAP	City of Ames
Time Frame Total			\$19,760,000	\$31,430,000	\$15,818,719	\$15,611,281		
Long-Term (2038-2045)	44a	Grand Ave from Bloomington Rd to 190th St - Widen to 5 Lanes	\$10,400,000	\$21,790,000	\$10,966,907	\$10,823,093	ICAAP / NHPP	City of Ames / Iowa DOT
	22	Dayton Ave from 13th St to Lincoln Way - Widen to 5 Lanes	\$3,200,000	\$6,700,000	\$3,372,110	\$3,327,890	STBG Swap	Story County / City of Ames
	14	13th St & Stange Road - N/S Left Turn Lanes	\$2,490,000	\$5,220,000	\$2,627,226	\$2,592,774	Local	City of Ames
Time Frame Total			\$16,090,000	\$33,710,000	\$16,966,243	\$16,743,757		
Grand Total			\$47,580,000	\$80,070,000	\$40,299,231	\$39,770,769		

* Note that some of these projects will be paid for by developer funds if development accelerates project need and time frame

Draft Bicycle / Pedestrian Plan

Time Frame	Project ID	Project Description	Cost (2020 \$)	Cost (YOE \$)	Potential Federal Share	Potential Local Share*	Potential Funding Sources	Potential Sponsor(s)
Short-Term (2025-2029)	CR 42	Intersection of Lincoln Way / University - Protected intersection.	\$750,000	\$950,000	\$0	\$950,000	TAP / Local	City of Ames
	OFF 1	East 13th sidepath, Northwestern Ave to Duff Ave	\$560,000	\$710,000	\$87,330	\$622,670	TAP / Local	City of Ames
	OFF 2	West Mortensen Side Path, fill in gap west of South Dakota	\$410,000	\$520,000	\$63,960	\$456,040	TAP / Local	City of Ames
	OFF 3	24th St Sidepath Grand to Duff	\$250,000	\$320,000	\$39,360	\$280,640	TAP / Local	City of Ames
	OFF 20	Grand Ave Side Path between 6th and 16th Street	\$650,000	\$830,000	\$102,090	\$727,910	TAP / Local	City of Ames
	OFF 29	Cherry Street Connection to Squaw Creek	\$490,000	\$620,000	\$76,260	\$543,740	TAP / Local	City of Ames
	OFF 48	East 6th St to Skunk River Connection	\$550,000	\$700,000	\$86,100	\$613,900	TAP / Local	City of Ames
	OFF 50	South Duff Sidepath	\$290,000	\$370,000	\$45,510	\$324,490	TAP / Local	City of Ames
	ON 15	Clark / Walnut bike boulevard, South 3rd to S 5th Street	\$90,000	\$110,000	\$13,530	\$96,470	TAP / Local	City of Ames
ON 47	Carroll Ave Bike Boulevard	\$150,000	\$190,000	\$116,466	\$73,534	TAP / Local	City of Ames	
Time Frame Total			\$4,190,000	\$5,320,000	\$630,606	\$4,689,394		
Mid-Term (2030-2037)	OFF 53	Skunk River trail connection	\$2,990,000	\$4,760,000	\$585,480	\$4,174,520	TAP / Local	City of Ames
	OFF 33	Squaw Creek Trail from Grand Avenue Extension to 4th Street	\$2,200,000	\$3,500,000	\$430,500	\$3,069,500	TAP / Local	City of Ames
	ON 30	Ash Ave bike boulevard, current bike lane end to Lincoln Way	\$80,000	\$130,000	\$15,990	\$114,010	TAP / Local	City of Ames
	CR	Various Pedestrian Crossing Projects	\$1,700,000	\$2,700,000	\$0	\$2,700,000	TAP / Local	City of Ames
Time Frame Total			\$6,970,000	\$11,090,000	\$1,031,970	\$10,058,030		
Long-Term (2038-2045)	OFF 31	Hyland-Hayward South Campus Trail Connection	\$1,850,000	\$3,880,000	\$477,240	\$3,402,760	TAP / Local	City of Ames
	OFF 55	Stange Rd shared use path gap	\$110,000	\$230,000	\$28,290	\$201,710	TAP / Local	City of Ames / Iowa State
	ON 14	20th St Bike Route, Ames High to Grand	\$150,000	\$310,000	\$38,130	\$271,870	TAP / Local	City of Ames
	ON 16	Welch On-Street Bike Treatment, Mortensen to Union Drive	\$90,000	\$190,000	\$23,370	\$166,630	TAP / Local	City of Ames
	ON 21	Bike boulevard north of Lincoln Way between North Dakota and Iowa State Campus	\$350,000	\$730,000	\$89,790	\$640,210	TAP / Local	City of Ames / Iowa State
	ON 26	20th Street bike boulevard, Grand to Duff	\$70,000	\$150,000	\$18,450	\$131,550	TAP / Local	City of Ames
	ON 33	Cessna St Bike Boulevard	\$110,000	\$230,000	\$28,290	\$201,710	TAP / Local	City of Ames
	ON 41	Welch Ave ped mall (Lincoln to Hunt)	\$130,000	\$270,000	\$33,210	\$236,790	TAP / Local	City of Ames
	ON 44	Eisenhower Ave/Hayes Ave/Ridgewood Ave from Harrison Rd to 6th St - Bike Blvd	\$380,000	\$800,000	\$98,400	\$701,600	TAP / Local	City of Ames
CR	Various Pedestrian Crossing Projects	\$2,400,000	\$5,030,000	\$0	\$5,030,000	TAP / Local	City of Ames	
Time Frame Total			\$5,640,000	\$11,820,000	\$835,170	\$10,984,830		
Grand Total			\$16,800,000	\$28,230,000	\$2,497,746	\$25,732,254		

* Note that some of these projects will be paid for by developer funds if development accelerates project need and time frame

Draft Transit Plan

Time Frame	Project ID	Project Description	Cost (YOE \$)
Short-Term (2025-2029)	1	Vehicle Replacement/Expansion - 3 buses per year	\$9,200,000
	2	Building Improvements and Expansion	\$3,880,000
	8	Light Duty Vehicles	\$660,000
	9	Articulated Bus Expansion/Replacement	\$4,930,000
	10	Install Benches & Shelters	\$200,000
Total			\$18,870,000
Mid-Term (2030-2037)	1	Vehicle Replacement/Expansion - 3 buses per year	\$17,860,000
	2	Building Improvements and Expansion	\$7,540,000
	8	Light Duty Vehicles	\$1,280,000
	9	Articulated Bus Expansion/Replacement	\$9,570,000
	10	Install Benches & Shelters	\$380,000
Total			\$36,630,000
Long-Term (2038-2045)	1	Vehicle Replacement/Expansion - 3 buses per year	\$22,620,000
	2	Building Improvements and Expansion	\$9,550,000
	8	Light Duty Vehicles	\$1,620,000
	9	Articulated Bus Expansion/Replacement	\$12,130,000
	10	Install Benches & Shelters	\$480,000
Total			\$46,400,000
Grand Total			\$101,900,000

Note: All Projects are Rolling Stock and Facilities / Stations Improvements

Next Steps:

- Develop Draft Plan
- ***Present to Policy Committee (Sep 22)***
- Develop Final Plan
- ***Present to Policy Committee (Oct 27)***



Questions?

