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# INVESTMENT STRATEGIES



# INVESTMENT STRATEGIES

A key role of Mobilizing Tomorrow is outlining strategies for how the region will invest in transportation infrastructure over the next 30 years. This chapter sets a vision for maintaining and improving the transportation system for the Greater Des Moines region through 2050.

The investment plan recognizes that Iowa's infrastructure is ranked 9th worst according to an index created by 24/7 Wall Street. Iowa was ranked 11th highest for roads in poor condition and 2nd highest for deficient bridges. In addition, data from the National Household Travel Survey indicated that residents in the Des Moines region wished to see more investment in existing road maintenance and reconstruction. The Long-Range Plan Steering Committee considered this information when developing the funding categories and target percentages for the plan update.

The following sections identify the investment categories, planning time periods, funding reasonably anticipated through Horizon Year 2050 of Mobilizing Tomorrow, and projects broken out by time period.

## Investment Categories

The MPO developed an investment strategy for Mobilizing Tomorrow that targets funding into five categories – system capacity, reconstruction, system optimization, bridge, and transit. The investment strategy recommended by the MPO considers federal funds the MPO controls (STBG & TAP funds) and non-federal match at a 30 percent federal – 70 percent non-federal ratio. The plan also considers additional non-federal local funds and other grants that have already been awarded.

For purposes of forecasting revenue for fiscal constraint, the reconstruction, system optimization, bridge, and transit categories are dedicated set-asides with minimum funding targets as outlined in **Figure 3.1**. A maximum of 30 percent of STBG funds are targeted to fund the regionally significant roadway projects listed in this plan (a 50 percent reduction in this target from the last plan update in November 2014).

### System Capacity Category

The system capacity category will be used to fund street and highway projects proposed by MPO member governments. These projects were reviewed based on performance against the plan's performance targets and placed into either a federally eligible (fiscally constrained list) or a locally funded list. The MPO will determine which projects from the federally eligible list will receive funds on an annual basis. Projects in the system capacity category are included in the maps and tables provided in this chapter.

### Bridge Category

The purpose of the bridge category is to dedicate funds for bridges deemed structurally deficient or functionally obsolete. This program will be modeled off the Iowa DOT's city bridge program where funding is awarded to eligible bridges based on the rank of the bridge and the willingness of the community to move forward with the project. The MPO will review the latest bridge condition information annually to determine which bridges will receive funds.

### Major Reconstruction and Replacement

The reconstruction category is for non-capacity related projects that address major maintenance needs. This category does not include basic ongoing maintenance like crack sealing and overlays. This category is intended to fund full-depth replacements of existing roadways.

### System Optimization

The system optimization category is for non-capacity projects that improve the efficiency of the system. Traffic signal coordination, other Intelligent Transportation Systems solutions, transit solutions, and planning studies are eligible under this category.

### Transit Category

The transit category will provide a funding set-aside to assist DART with capital projects such as the purchase of buses and other infrastructure.

### Bicycle/Pedestrian Category

The bicycle/pedestrian category uses Set-Aside funds allocated to the MPO. The Set-Aide program provides funding for alternative transportation projects such as bicycle and pedestrian facilities. The purpose of the MPO's transportation alternatives category is to fund regionally significant gaps in the trail system and expand the on-street bicycle network. These funds should also be used to enhance the pedestrian realm through streetscape improvement, bus shelter installation, and improving pedestrian facilities near schools.

FIGURE 3.1: FUNDING CATEGORY TARGET PERCENTAGES\*

FUNDING TYPE	TARGET PERCENTAGES
System Capacity	30%
Bridge	20%
Major Reconstruction/Replacement	25%
System Optimization	15%
Transit	10%

\*These funding targets only apply to the STBG funding that is expected to be available over the life of the plan.

## Plan Time Periods

Mobilizing Tomorrow is divided into the following four investment time periods: 2020-2024, 2025-2029, 2030-2034, and 2035-2050.

The first time period, 2020-2024, consists of projects included in the MPO's Transportation Capital Improvement Program (TCIP). The FY 2020-2024 TCIP was approved by the MPO Policy Board on August 15, 2019. The FY 2020-2024 TCIP includes 348 projects at a total cost of approximately \$650 million. Of the 348 projects, 43 are considered regionally significant system capacity projects and are listed in this chapter. Similarly, the Iowa Transportation Commission approved the 2020-2024 Iowa Transportation Improvement Program on June 11, 2019, which includes numerous Iowa DOT projects in the MPO area. Those considered to be regionally significant system capacity projects are listed in this chapter. See **Appendix K** for a full list of currently programmed projects

The subsequent three investment time periods consist of projects that were submitted by the member governments. These projects were collected and scored. For additional information on project evaluation and selection criteria see **Appendix F**.

## Fiscal Capacity Analysis

There is some uncertainty about the future of federal transportation funding. The gas tax, which has been the main source of transportation infrastructure revenue at the federal and state levels, is failing to keep up with the needs of the system. Discussions at the state and federal level have yet to develop a solution to the transportation funding challenge. Due to this uncertainty, a conservative approach was used to develop funding projections for Mobilizing Tomorrow. The forecasting methodology developed for available funding is outlined in **Appendix D**.

**Figure 3.2** shows the annual funding increase assumptions used to develop the funding projections for Mobilizing Tomorrow. These projections were developed in consultation with the Iowa DOT and the Long-Range Plan Steering Committee. Based on these assumptions, funding available to the region from the Iowa DOT, DART, and the MPO programs exceeds \$8.1 billion through 2050. **Figure 3.3** outlines the available funding through 2050.

FIGURE 3.2: ANNUAL FUNDING INCREASES BY CATEGORY

FUNDING TYPE	ANNUAL INCREASE
Federal (MPO)	5%
State (Iowa DOT)	2%
Local Funding	0%
DART	0-5%

FIGURE 3.3: PROJECTED FUNDING 2020-2050 (BILLIONS)

FUNDING TYPE	AVAILABLE FUNDING THROUGH HY 2050
Federal (MPO)	\$0.7
State (Iowa DOT)	\$2.5
Local	\$3.3
DART	\$1.5
Total	\$8.1

**Figure 3.4** shows available funding compared to total project costs from 2020 through 2050. The total for available funding doesn't include transit funding. This shows that the MPO has enough funding to cover the costs of the projects outlined in this plan.

FIGURE 3.4: FISCAL CAPACITY (MILLIONS)

	2020-2050
Total Available Funding	\$6,634.9*
Total Project Costs	\$5,388.8
Excess Fiscal Capacity	\$1,246.1

\*Excludes \$1.5 billion for DART from Figure 3.3 since specific DART projects aren't listed beyond first time period.

## System Capacity Investments

This section documents the system capacity projects identified in Mobilizing Tomorrow. The projects outlined in this section are fiscally constrained and include projects from MPO member governments and the Iowa Department of Transportation. The projects listed in this section are eligible for Surface Transportation Block Grant funds. However, none of these projects are guaranteed to receive federal funding. Funding decision will be made on an annual basis through the STBG application process. The System Capacity projects are broken out by time frame. The total project cost for the System Capacity Projects is \$3.6 billion.

FIGURE 3.6: PREVIOUSLY COMMITTED PROJECTS - 2020-2024

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
1	Altoona	1st Avenue N Widening	Widening - Phase 2 and 3	9th Street N	8th Street S	\$11.8
2	Altoona	34th Ave SW Widening	Widening - in conjunction with Lion's Gate Development	8th Street SW	1,200' north of 8th Street SW	\$0.8
3	Altoona	21st St NW Expansion	New street - in conjunction with Graham Warehouse Development	34th Avenue NW	2,650' east of 34th Avenue NW	\$1.9
4	Ankeny	SE Hulsizer Rd Expansion	New street with turn lanes and realignment	SE Oralabor Rd N		\$2.2
5	Ankeny	W 1st Street Expansion	5-lane curb and gutter - Phase 1	NW School Street	NW Kline Street	\$6.7
6	Ankeny	NW 18th St Expansion	New 2-lane street	NW Weigel Drive	NW Abbie Drive	\$4.3
7	Ankeny	NE Delaware Ave Expansion	5-lane curb and gutter	NE 5th Street	NE 18th Street	\$10.9
8	Ankeny	NW 18th St Expansion	New 2-lane street	NW Abbie Drive	IA Hwy 415	\$0.7
9	Ankeny	NW 36th St	5-lane street design	NW Irvinedale Drive	NW Abilene Road	\$0.3
10	Des Moines	E Douglas Ave	Widening and expansion	E 42nd Street	E 56th Street	\$8.7
11	Des Moines	SE Connector	Widening and expansion	SE 30th Street	US 65	\$41.1
12	Des Moines	Hubbell Ave	New road construction, expansion	E 33rd Street	E 38th Street	\$5.6
13	Des Moines	Indianola Ave	Widening and expansion	E Army Post Road	Hwy 69	\$5.2
14	Des Moines	McKinley Ave	Widening and expansion	Fleur Drive	Indianola Avenue	\$5.5
15	Des Moines	SE 30th St	Widening and expansion	UPRR Viaduct	SE Connector	\$5.6
16	Grimes	SW County Line Rd	New road construction - project in design	Hwy 44		\$6.5
17	Grimes	SE 11th St	New road construction - project in design	SE 11th Street	S James Street	\$1.8
18	Grimes	SE 19th St	HMA Overlay, turn lanes, and widening - project in design	SW County Line Rd		\$2.1
19	Norwalk	Colonial Pkwy	Lane addition	IA 28	Turnberry Drive	\$0.3
20	Pleasant Hill	NE 70th St	New construction	University Avenue	Rising Sun Dr and 440' of Meacham Drive	\$3.6
21	Pleasant Hill	Meacham Dr	New construction	1,350' E of NE 64th Street	NE 75th St	\$8.0

FIGURE 3.6: PREVIOUSLY COMMITTED PROJECTS - 2020-2024 (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
22	Pleasant Hill	Woodland Dr	New construction	Pleasant Ridge Road	SE 55th Street	\$0.4
23	Pleasant Hill	SE 70th Ave and SE 68th St	New construction	Rising Sun Drive	SE 6th Avenue	\$6.9
24	Urbandale	170th St (Alice's Rd)	Construction of 5-lane roadway	Meredith Drive	Waterford Road	\$7.7
25	Urbandale	Meredith Dr	Reconstruction to 4 lane roadway	170th Street	184th Street	\$7.8
26	Urbandale	Aurora Ave, 104th St, Sutton Dr, and NW 100th St	Reconstruct street to 3-lane roadway	NW Urbandale Drive	Plum Drive	\$5.2
27	Waukee	SE Kettlestone Blvd	4-line divided cross-section	Grand Prairie Pkwy	1/4 mi east of Grand Prairie Pkwy	\$1.8
28	Waukee	NW Douglas Pkwy	2-lane cross-section of future 4-lane cross section	NW 10th Street	1/4 mi east of NW 10th Street	\$2.9
29	Waukee	NW Sunrise Dr	2-lane cross-section with roundabout	NW 10th Street	1/4 mi east of NW 10th Street	\$2.4
30	Waukee	NW 10th St	4-lane divided cross section	NW Sunrise Drive	NW Douglas Pkwy	\$10.4
31	Waukee	NW 6th St	2-lane cross section	Hickman Road	NW Sunrise Drive	\$5.7
32	Waukee	NW Sunrise Dr	2-lane cross-section with roundabout	NW 6th Street	NW 4th Street	\$2.5
33	Waukee	S Warrior Ln	2-lane divided cross-section	Waukee Middle School Entrance	University Ave	\$7.2
34	Waukee	NW Douglas Pkwy	2-lane cross-section of future 4-lane cross section	NW 4th Street	1/4 mi west of NW 4th Street	\$2.7
35	Waukee	NW 4th St	2-lane cross section	NW Sunrise Drive	NW Douglas Pkwy	\$2.5
36	West Des Moines	Ashworth Rd	Street widening and bridge replacement	S 88th Street	N 88th Street	\$11.6
37	West Des Moines	Mills Civic Pkwy	Street widening and realignment	S 81st Street	S 91st Street	\$6.7
38	West Des Moines	Grand Ave	Street widening	1st Street	6th Street	\$6.1
39	Polk County	NE 22nd Street	Street widening	NE 54th Avenue	0.5 miles north of NE 58th Avenue	\$3.4
40	DOT	IA 28	Pavement widening	IA 5	Lincoln Street	\$1.4
41	DOT	I-35	Pavement widening	Oralabor Road	NE 36th Street	\$27.6
42	DOT	US 69	Pavement widening	I-80	SE 33rd Street	\$22.2
43	DOT	I-35	Pavement widening	NE36th Street	North of IA 210	\$30.6



FIGURE 3.7: 2020-2024 PROJECT MAP

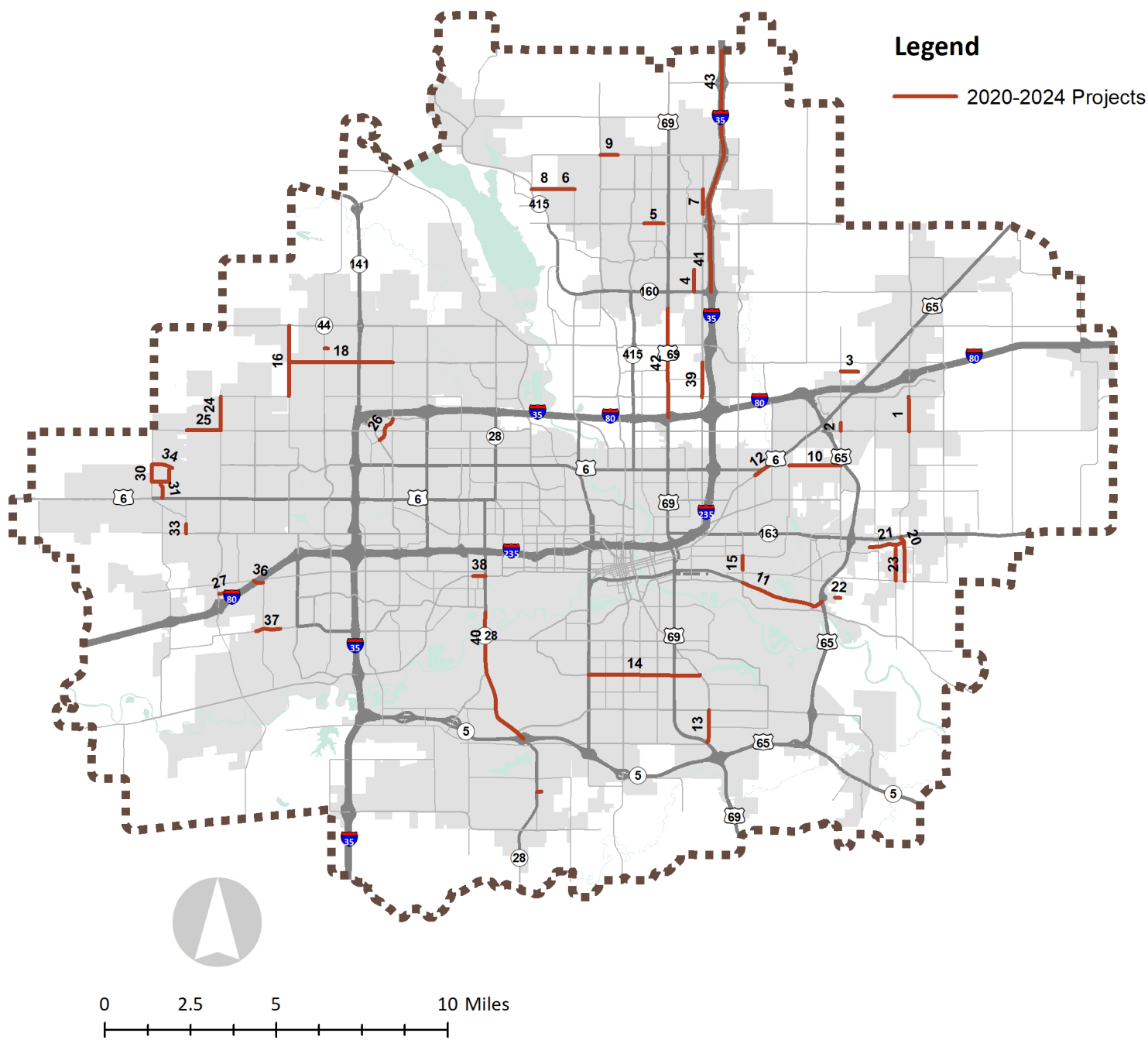


FIGURE 3.8: PROJECTS 2025-2029 TIME FRAME

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
101	Altoona	Edwin W Skinner Parkway Extension	5,700 LF extension of Edwin W Skinner Parkway	West flood plain limit of Little Four Mile Creek	400 feet west of 6th Avenue SW	\$26.3
201	Ankeny	East First Street Widening	Widen 2-lane rural roadway into 4-lane urban section with turn lanes	NE Frisk Drive	NE Four Mile Drive	\$8.8
202	Ankeny	NW 36th Street Reconstruction	Rebuild rural asphalt deteriorated roadway into urban section	NW Irvinedale Drive	NW Abilene Drive	\$4.6
203	Ankeny	NE Delaware Avenue Widening	Widening 2-lane rural roadway into 4-lane urban section with turn lanes	NE 18th Street	NE 36th Street	\$10.5
223	Ankeny	NW 18th Street Construction	New 2-lane roadway	Highway 415	NW Abbie Drive	\$7.8
301	Bondurant	Grant Street South Extension	Realignment of Grant Street south of Hubbell Avenue looping back toward Grant Street S (NE 72nd St)	15th Street SE	Grant Street S	\$7.8
302	Bondurant	28th Street SW Road	Construction of 28th Street SW between Hubbell and Grant St S	Grant Street S	NE Hubbell Avenue	\$3.2
303	Bondurant	Pope Drive Extension	Construct on new alignment a north south arterial west of Grant Street	15th Street SW	NE Hubbell Avenue	\$6.3
304	Bondurant	Lincoln Street SE Extension	Connection from existing Lincoln Street to realigned Grant Street S	15th Street SE	Grant Street S	\$1.9
305	Bondurant	20th Street SW Road	Construction of 20th Street between Pope Drive and SW Franklin Street (NE 64th Street)	Pope Drive	NE 64th Street	\$2.6
306	Bondurant	10th Street SW Extension	Build on new alignment and extend 10th Street west of to NE 64th Street	Grant Street S	NE 64th Street	\$6.3
401	Carlisle	52nd Street Connection to Highway 5	The construction of a new roadway from the Intersection of Norgard Circle and Gateway Drive through future commercial development ground to SE 52nd Street	Gateway Drive and Norgard Circle Intersection	West to 52nd Street	\$0.9
601	Des Moines	E. MLK Jr. Pkwy.	New 2-lane roadway	SE 30th St.	US 65	\$53.9
602	Des Moines	SE 30th Widening	Widen from 2 to 3 lanes	Raccoon St.	Vandalia Rd.	\$3.2
801	Johnston	NW 100th Street - NW 54th to NW 62nd	Widen from 2 to 4 lanes, rural to urban with pedestrian improvements	1000 Feet North of NW 54th Avenue	NW 62nd Avenue	\$13.8
802	Johnston	NW 100th Street, NW 54th Avenue to NW 62nd Avenue	Reconstruct rural 2 lane road with 4-5 lane urban road with pedestrian improvements	NW 86th Street	NW 100th Street	\$7.6

FIGURE 3.8: PROJECTS 2025-2029 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
1001	Norwalk	Beardsley	Urbanize and reconstruct Beardsley from 80th Avenue to the Lake Colchester bridge, adding turn lanes or additional lanes as needed	80th Avenue	Lake Colchester Bridge	\$13.1
1002	Norwalk	North Avenue Reconstruction West	Urbanize west section of North Avenue with potential addition of turn lanes and additional lanes as needed	IA 28	50th Ave	\$6.5
1003	Norwalk	Delaware Street West	Paving of the gravel section of Delaware Street to 50th Avenue	Existing end of pavement	50th Ave	\$6.5
1004	Norwalk/ Warren County	80th Street Reconstruction	Urbanize 80th Street with the addition of turn lanes as needed	Beardsley	Coolidge St	\$6.5
1005	Norwalk	Chatham Extension and Intersection Upgrade	Create a full access point intersection at Chatham and Iowa Highway 28 with an extension of Chatham to the east	Chatham	IA 28	\$6.5
1006	Norwalk	Colonial Parkway Extension	Extend Colonial Parkway to 80th Street	Eastern end of Colonial Parkway	80th Street	\$6.5
1301	Urbandale	Aurora Avenue - 128th Street to 142nd Street	Rural two lane cross section to 5-lane urban cross section	128th Street	142nd Street	\$6.5
1302	Urbandale	NW 54th Avenue	Reconstructing NW54th Avenue from a two lane rural cross section to a five lane urban cross section	100th Street	Iowa Highway 141	\$1.3
1303	Urbandale	142nd Street Reconstruction Project	Reconstruct rural cross section into a 4-lane urban section	Douglas Parkway	Meredith Drive	\$9.1
1304	Urbandale	156th Street Reconstruction Project	Reconstruction of a two lane rural cross section to a four lane urban cross section	Waterford Road	Meadow Drive	\$91.1
1305	Urbandale	170th Street Reconstruction Project	Reconstructing a two lane rural cross section into a four lane urban cross section	Waterford Road	North Corporate Limit	\$4.7
1306	Urbandale	142nd Street Reconstruction Project	Widened current 2 lane rural road to a four lane urban cross section	Waterford Road	North Corporate Limit	\$4.6
1307	Urbandale	111th Street Reconstruction	Reconstruct current rural two lane roadway to three lane urban roadway	Justin Drive	Living History Farms	\$1.3
1401	Waukee	10th Street Expansion Phase 2	Expand existing road from two lanes to four lanes with turning lanes	Hickman Road	NW Sunrise Drive	\$10.5
1402	Waukee	Alice's Road Widening Phase 6	Widen road from two lanes to four lanes	NE Horizon Drive	Douglas Parkway	\$15.4
1403	Waukee	University Avenue Extension Phase 1	Construct a four lane road with turning lanes	Warrior Lane	10th Street	\$18.4

FIGURE 3.8: PROJECTS 2025-2029 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
1410	Waukeez	10th Street Extension Phase 1	Construct initial 2 lanes of a future 4 lane arterial	Cedar Street	University Avenue	\$6.5
1411	Waukeez	142nd Street Expansion	Widen arterial street from two lanes to four lanes	SE Place D'Avray	SE Timberline Drive	\$2.6
1412	Waukeez	Ashworth Road Expansion Phase 4	Pave existing two lane gravel road	6th Street	U Avenue	\$7.8
1413	Waukeez	Douglas Parkway Extension Phase 1	Construct two of a future four lane arterial	Warrior Lane	4th Street	\$13.1
1414	Waukeez	Douglas Parkway Extension Phase 3	Construction of two lanes of a future four lane arterial	10th Street	T Avenue	\$15.7
1415	Waukeez	Ashworth Road Widening Phase 1	Widen arterial roadway from two lanes to four lanes	Waco Place	Grand Prairie Parkway	\$10.5
1416	Waukeez	Ashworth Road Expansion Phase 2	Widen and pave road from two lanes to four lanes	Grand Prairie Parkway	LA Grant Parkway	\$9.2
1417	Waukeez	T Avenue Paving Phase 1	Pave existing gravel road to two lane road	University Avenue	Douglas Avenue	\$21.0
1501	West Des Moines	Ashworth Road & I-80 Interchange	Construct ramps for new interchange	Interstate 80 at Ashworth Rd	Interstate 80 at Ashworth Rd	\$10.5
1503	West Des Moines	S. Jordan Creek Pkwy Widening	Widen from 2-lanes to 6-lanes with turn lanes	Stagecoach Drive	Grand Avenue	\$9.8
1504	West Des Moines	Grand Prairie Pkwy Widening	Widen from 2-lanes to 6-lanes with turn lanes	Interstate 80 South Ramp	Mills Civic Parkway	\$7.8
1508	West Des Moines	Grand Ave Widening	Widen from 2-lanes to 6-lanes with turn lanes	Interstate 35 West Ramp	S. Jordan Creek Parkway	\$17.1
1521	West Des Moines	Jordan Creek Pkwy Widening	Widen from 4 lanes to 6 lanes	University Avenue	Interstate 80 North Ramp	\$6.5
1522	West Des Moines	University Avenue Widening	Widen from 4-lanes to 6-lanes	142nd Street	71st Street	\$5.2
1523	West Des Moines	Westtown Parkway Extension and Future Widening	Pave initial 2 lanes and turn lanes, widen to 4-lanes with turn lanes once additional capacity is needed	92nd Street	98th Street	\$3.2

FIGURE 3.8: PROJECTS 2025-2029 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
2101	Polk County	NW Meredith Drive Reconstruction	Project will reconstruct the existing 2-lane rural roadway to an urban 3 lane curb & gutter roadway with continuous left turn lane, sidewalks and bike lanes	Beaver Avenue	Merle Hay Road (IA Hwy 28)	\$4.6
2102	Polk County	Broadway Avenue Multi-Modal Improvement Project	The project will include multi-modal improvements to improve traffic safety by adding a continuous center turn lane, turn lanes and signals at two unsignalized intersections, remove 2 at-grade Railroad crossings, remove limited clearance freight impediment, improve existing traffic signals at 4 intersections to coordinate peak traffic, and provide a trail connections between the three major trail corridors in this area	NW 2nd Street (IA Hwy 415)	E. Hubbell Avenue	\$52.6
2103	Polk County	NW 66th Avenue Relocation	Project will construct a new 3-lane curb & gutter roadway from the T-intersection of NW 66 Avenue and NW 6 Dr, east to NW 65 Lane just prior to the intersection of NW 4 Street, and the installation of traffic signals	NW 6th Drive	NW 65th Lane	\$5.2
4001	DOT	I-35 Widening	The project will widen I-35 from four lanes to six	36th Street Interchange, Ankeny	North Urban Area Boundary	\$59.2
4002	DOT	Reconfigure I-35/80 interchange at US 6/Hickman Rd.	Reconfigure the interchange, most likely as a diverging diamond.	I-35/80 interchange at US 6/Hickman Rd.	I-35/80 interchange at US 6/Hickman Rd.	\$15.7
4003	DOT	I-35/80 Widening	The project would widen I-35/80 from six lanes to eight lanes	West Mixmaster	East Mixmaster	\$250.0
4004	DOT	Reconfigure West Mixmaster	Reconfigure the interchange at the west junction of I-35/80/235	West Jct. of I-35/80/235	West Jct. of I-35/80/235	\$197.3
4005	DOT	US 6 Widening	Widen US 6/Hickman Road from four lanes to six lanes	NW 156th Street, Clive & Urbandale	NW 111th Street, Clive & Urbandale	\$26.3
4006	DOT	US 69 Widening	Widen US 69/Ankeny Blvd. from three lanes to five lanes	N. 36th Street, Ankeny	N. 54th Street, Ankeny	\$19.7
4007	DOT	I-80 Widening	Widen I-80 from six to eight lanes.	East Mixmaster	First Street, Altoona	\$75.0
4008	DOT	Widen Iowa 28	Widen IA 28 from 2 lanes to four lanes	SCL Norwalk	North Avenue, Norwalk	\$18.9
4027	DOT	I-80 Widening	Widen I-80 from four lanes to six lanes	Grand Prairie Parkway	Jordan Creek Pkwy	\$20.9

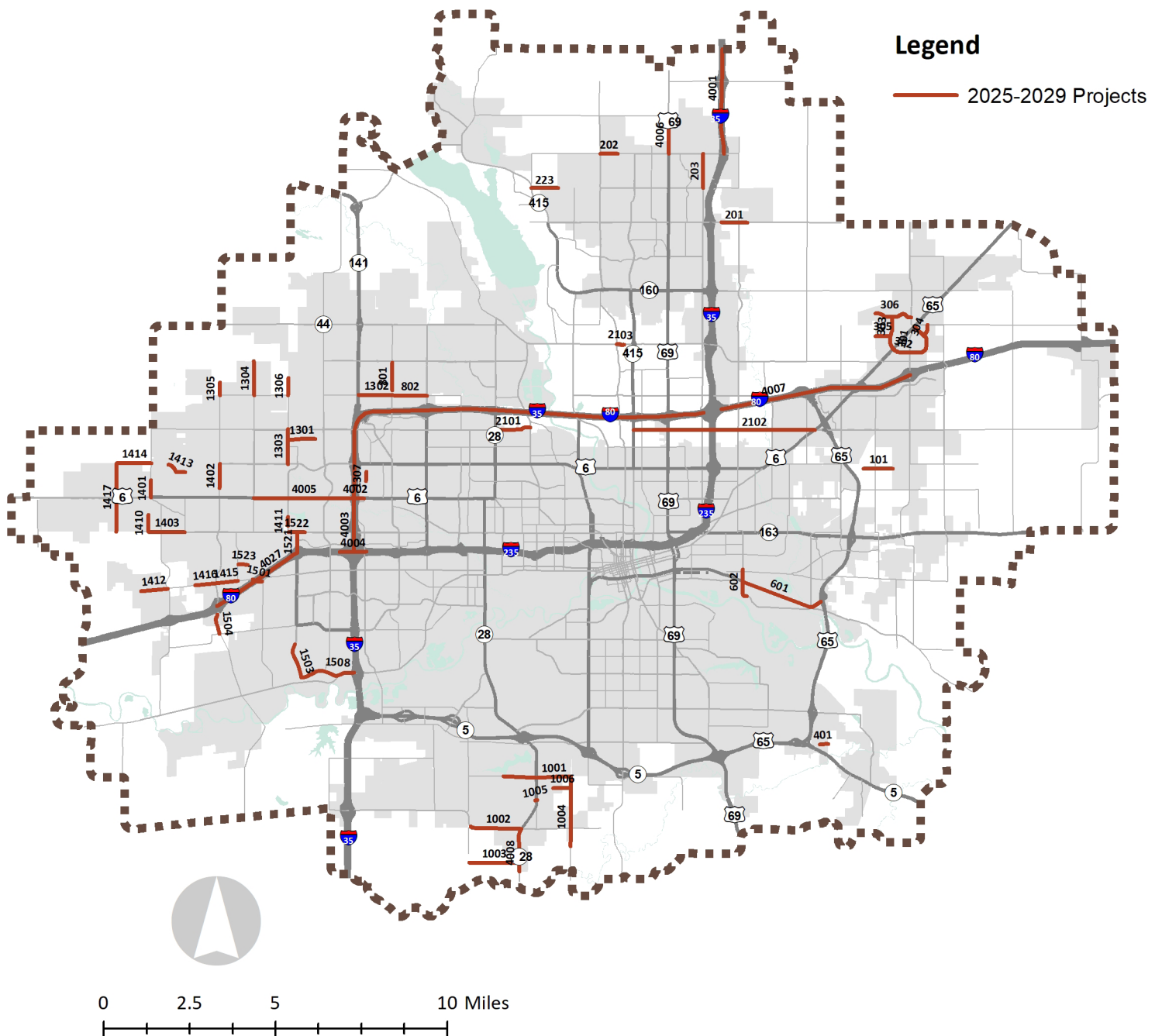


FIGURE 3.10: PROJECTS 2030-2034 TIME FRAME

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
102	Altoona	14th Avenue SE Widening	Widening 14th Avenue SE to a four lane divided roadway with center turn lanes	8th Street SE	24th Street SE	\$12.8
204	Ankeny	SE Corporate Woods Drive Roadway and Overpass	Railroad Overpass Structure and 4-lane Expansion	SE Convenience Blvd.	SE Four Mile Drive	\$24.8
205	Ankeny	NE 18th Street Reconstruction	Rebuild gravel roadway into urban PCC street	NE Fourmile Drive	County NE 38th Street	\$6.0
206	Ankeny	NW 36th Street Widening	Widening existing 2-lane urban section to 4 lanes with turn lanes	NW Abilene Drive	Highway 69	\$7.2
207	Ankeny	NE 54th Street Improvements	Rebuild deteriorated asphalt roadway into urban section	Ankeny Boulevard	NE Delaware Avenue	\$7.2
208	Ankeny	NW State Street Extension to NW Irvinedale Drive	Construct new 5-lane roadway on reverse-curve alignment	NW State Street	NW Irvinedale Drive	\$20.1
209	Ankeny	SE Delaware Avenue Widening	Replace 2-lane rural roadway with 5-lane urban section	South Corporate Limits (SE 72nd)	SE Corporate Woods Drive	\$8.0
210	Ankeny	NW Irvinedale Drive Improvements - Phase 2	Widening and intersection improvements	NW 18th Street	NW 36th Street	\$4.0
211	Ankeny	NE 36th Street Widening	Replace rural asphalt 2-lane roadway with 5-lane urban section	I-35 Off ramps	NE Four Mile Drive	\$6.4
212	Ankeny	West First Street Widening	Reconstruct deteriorated 4-lane section into 5-lane section	NW Greenwood Street	NW State Street	\$14.4
213	Ankeny	Ankeny Boulevard Widening - Phase 1	Widen from 4-lane rural section to 5-lane urban section	South Surfline Drive	South Magazine Road	\$6.4
224	Ankeny	NW Weigel Drive Improvements	Replace gravel roadway with 2-lane urban section	NW 18th Street	NW Reinhart Drive	\$5.6
603	Des Moines	SE 14th St. Widening	Widen from 4 to 6 lanes	US 65	E. Army Post Rd.	\$13.6
604	Des Moines	Hickman Rd. Widening	Widen from 4 to 5 lanes	Merle Hay Rd.	63rd St.	\$6.4
605	Des Moines	Guthrie Ave. Widening	Widen from 2 to 3 lanes	I-235	Hubbell Ave.	\$5.6

FIGURE 3.10: PROJECTS 2030-2034 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
1007	Norwalk	North Avenue Reconstruction East	Urbanize North Avenue with potential turning lane and additional lanes	IA 28	80th Ave	\$8.0
1101	Pleasant Hill	SE 68th Street Improvements	New roadway construction from University Avenue to SE 6th Ave	NE Rising Sun Drive	SE 6th Avenue	\$8.0
1404	Waukee	Grand Prairie Parkway Expansion Phase 1	Addition of two lanes to existing four lane arterial	University Avenue	Ashworth Road	\$9.6
1405	Waukee	Meredith Drive Paving Phase 1	Pave existing gravel road to two lanes	Alice's Road	T Avenue	\$28.8
1406	Waukee	R-22/Ute Avenue Widening	Expand existing two lane arterial to four lanes	University Avenue	Ashworth Road	\$12.8
1407	Waukee	R-22/Ute Avenue Widening Phase 2	Widen existing road from two lanes to four lanes	Ashworth Road	Interstate 80	\$12.8
1418	Waukee	Ashworth Road Expansion Phase 5	Pave two lanes of existing gravel road	U Avenue	T Avenue	\$12.8
1419	Waukee	Douglas Parkway Extension Phase 2	Construct two lanes of an eventual full lane arterial roadway	T Avenue	S Avenue	\$19.2
1420	Waukee	Douglas Parkway Expansion Phase 1	Expansion from two lanes to four lane arterial roadway	Alice's Road	Warrior Lane	\$9.6
1421	Waukee	T Avenue Paving Phase 2	Pave existing gravel road to two lanes	University Avenue	Ashworth Road	\$11.2
1502	West Des Moines	EP True Pkwy Widening	Pave initial 2 lanes and turn lanes, widen to 4-lanes with turn lanes once additional capacity is needed	88th Street	Grand Prairie Parkway	\$16.0
1505	West Des Moines	S. Grand Prairie Pkwy Widening	Pave initial 2 lanes and turn lanes, widen to 6-lanes with turn lanes once additional capacity is needed	Stagecoach Drive	Grand Avenue	\$12.0
1509	West Des Moines	Grand Ave Widening	Pave initial 2 lanes and turn lanes, widen to 6-lanes with turn lanes once additional capacity is needed	S. 88th Street	S. Grand Prairie Parkway	\$12.8
1510	West Des Moines	S. 60th Street Widening	Widen from 2-lanes to 4-lanes with left-turn lanes	Mills Civic Parkway	Grand Avenue	\$16.0
1511	West Des Moines	88th Street Widening	Widen from 2-lanes to 4-lanes with turn lanes	Ashworth Road	Mills Civic Parkway	\$11.2
1512	West Des Moines	S. 88th Street Widening	Widen from 2-lanes to 4-lanes with turn lanes	Mills Civic Parkway	Raccoon River Drive	\$12.8
1513	West Des Moines	Veterans Pkwy Widening	Widen from 2-lanes to 6-lanes with turn lanes	Highway 28	SE Willow Creek Drive	\$12.0



FIGURE 3.10: PROJECTS 2030-2034 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
1514	West Des Moines	Veterans Pkwy & I-35 Interchange	Construct new interchange	Interchange 35 at Veterans Pkwy	Interchange 35 at Veterans Pkwy	\$24.0
1524	West Des Moines	EP True Pkwy Widening	Widen from 2-lanes to 4-lanes with turn lanes	81st Street	88th Street	\$6.4
1525	West Des Moines	Maffitt Lake Rd Widening	Widen from 2 lanes to 4-lanes with turn lanes	SE Soteria Avenue	SE 50th Street	\$24.0
1526	West Des Moines	SE 35th Street Extension and Future Widening	Pave initial 2 lanes and turn lanes, widen to 4-lanes with turn lanes once additional capacity is needed	Maffitt Lake Road	Adams Street	\$16.0
4009	DOT	I-35/80 Interchange at IA 141	Project will complete the reconfiguration of the interchange that began in the 2015-2020 period	I-35/80 interchange at IA 141	I-35/80 interchange at IA 141	\$32.0
4010	DOT	I-35 Widening	Widen I-35 from six lanes to eight lanes	East Mixmaster	First Street, Ankeny	\$52.8
4011	DOT	East Mixmaster	Complete the reconfiguration of the East Mixmaster	N/E Jct. of I-35/80/235	N/E Jct. of I-35/80/235	\$288.1
4012	DOT	I-80 Widening	Widen I-80 from four lanes to six lanes	First Street, Altoona	East Urban Area Boundary	\$43.2
4013	DOT	US 6 Widening	Widen US 6/Hickman Road from four lanes to six lanes. The ultimate improvement extends easterly from from NW 156th Street to NW 111th Street. Improvements to US 6 in that area will likely take place in the 2021-2030 period. Improvements will include the minor widening of the existing surface and intersection improvements	W Jct Co Rd R22	NW 156th Street, Clive	\$40.0
4014	DOT	US 6/Douglas Avenue Widening	Widen US 6/Douglas Avenue from four lanes to five lanes	Merle Hay Road	Lower Beaver Road	\$13.4
4015	DOT	US 69/NE 14th Street Widening	Widen US 69/NE 14th Street from four lanes to five lanes	Aurora Avenue	Euclid Avenue	\$5.6
4016	DOT	US 69/NE 14th Street Widening	Widen US 69/NE 14th Street from four lanes to five lanes	Euclid Avenue	University Avenue	\$13.7
4017	DOT	US 69/E. 14th Street One-Way Conversion	Convert US 69/E. 14th Street to a one-way street	Court Avenue	E. 15th Street Extension	\$1.1

FIGURE 3.10: PROJECTS 2030-2034 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
4018	DOT	US 69/SE 14th Street Widening	Widen US 69/SE 14th Street from four lanes to six lanes	South termini of future E 15th Street Extension	Park Avenue	\$5.2
4019	DOT	Reconfigure West Mixmaster (W Jct I-35/80/235)	Complete reconfiguration of the West Mixmaster	West Mixmaster (W Jct I-35/80/235)	West Mixmaster (W Jct I-35/80/235)	\$160.1
4020	DOT	Reconfigure I-35/80 Interchange at University Avenue	Reconfigure I-35/80 Interchange at University Avenue	I-35/80 Interchange at University Avenue	I-35/80 Interchange at University Avenue	\$16.6

FIGURE 3.11: 2030-2034 PROJECT MAP

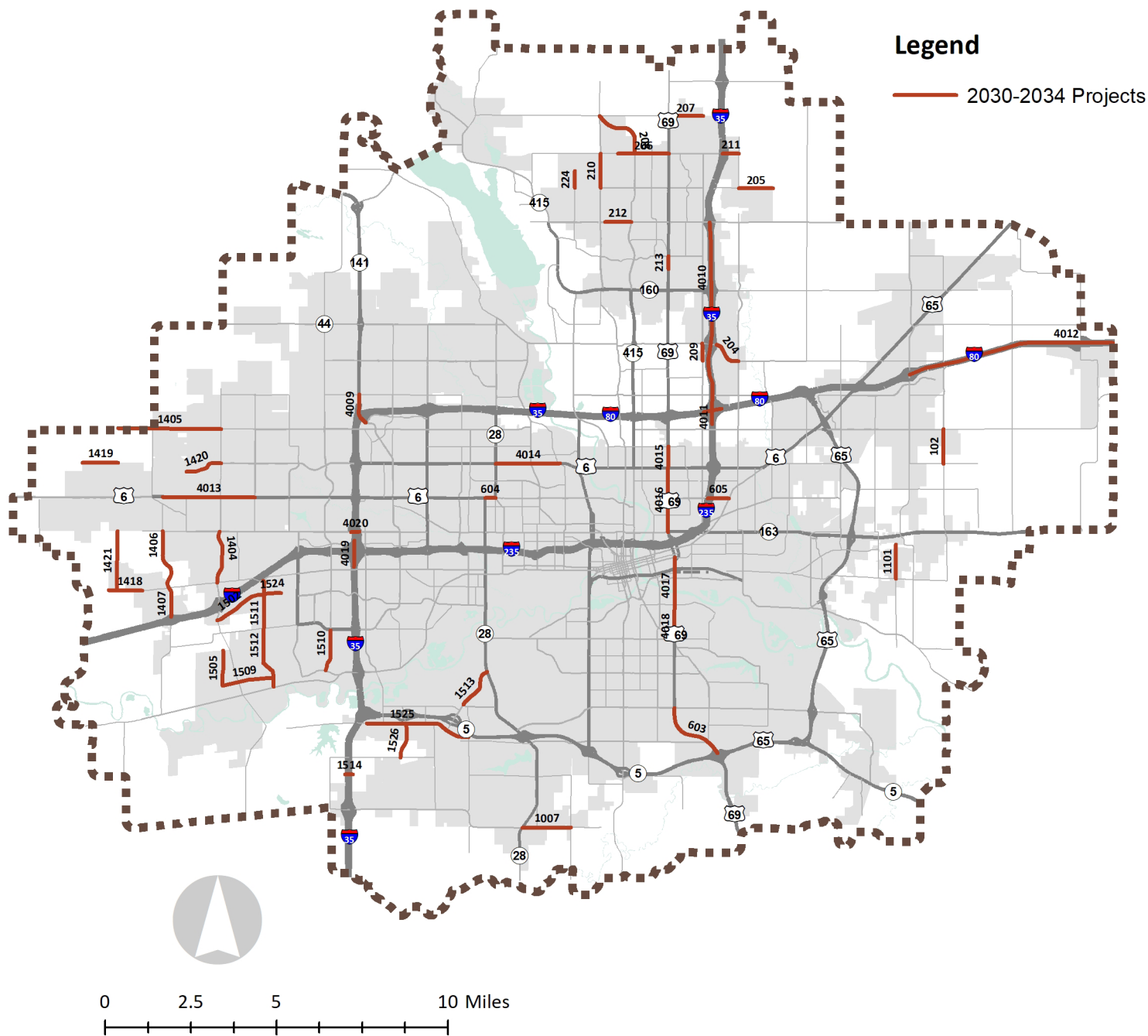


FIGURE 3.12: PROJECTS 2035-2050 TIME FRAME

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
103	Altoona	Edwin W Skinner Parkway SE Widening	Widening Edwin W Skinner Parkway SE to a four lane divided street section with center turn lanes	1st Avenue S	14th Avenue SE	\$18.9
104	Altoona	NE Adventureland Drive Extension	6,000 LF extension of Adventureland Drive NE	County NE 80th Street	County NE 88th Street	\$28.4
214	Ankeny	I-35 SE Oralabor Road Interchange Reconstruction	Rebuild existing interchange into a diverging diamond configuration	On Interstate 35	At Oralabor Road (Highway 160) Interchange	\$94.7
215	Ankeny	NE Delaware Avenue Widening	Replace 2-lane rural roadway with 5-lane urban section	NE 36th Street	NE 54th Street	\$26.0
216	Ankeny	SE Magazine Road I-35 Overpass and Connection	Overpass of I-35 and 2-lane roadway from SE Delaware Ave. to corporate limits	SE Delaware Avenue	East Corporate Limits	\$35.5
217	Ankeny	NW 36th Street Improvements	Replace two-lane gravel roadway with 2-lane urban section	NW Irvinedale Drive	Highway 415	\$42.6
218	Ankeny	NE 54th Avenue I-35 Overpass and Extension	Overpass structure on Interstate 35 for NE 54th Street	NE Delaware Avenue	NE Four Mile Drive	\$47.3
219	Ankeny	NE 36th Street Widening - Phase 2	Replacing 2-lane rural asphalt / gravel roadway with 5-lane urban section	NE Four Mile Drive	NE 38th Street	\$21.3
220	Ankeny	SE Corporate Woods Drive Interchange	Addition of Planned Ramp Loops to the Existing Interchange	I-35 Interchange	At SE Corporate Woods Drive	\$7.1
221	Ankeny	Ankeny Boulevard Widening - Phase 2	Widening of 4-lane rural roadway into 5-lane urban section	South Oralabor Road	South Shurfine Drive	\$14.2
222	Ankeny	Ankeny Boulevard CBD Widening	Widening of Hwy 69 to provide a center turn lane and pedestrian improvements	SE Magazine Road	SE 2nd Street	\$16.5
225	Ankeny	NW Weigel Drive Improvements	Reconstruction of gravel roadway into a 2-lane urban section	NW Reinhart Drive	NW 36th Street	\$7.1
606	Des Moines	SW Connector Pt. 1	New 2-lane roadway	Park Ave.	SW 9th	\$120.8
607	Des Moines	Vandalia Rd. Widening	Widen from 2 to 3 lanes	SE 30th St.	US 65	\$26.0
608	Des Moines	Merle Hay Widening	Widen from 4 to 5 lanes	Urbandale	Douglas	\$11.8

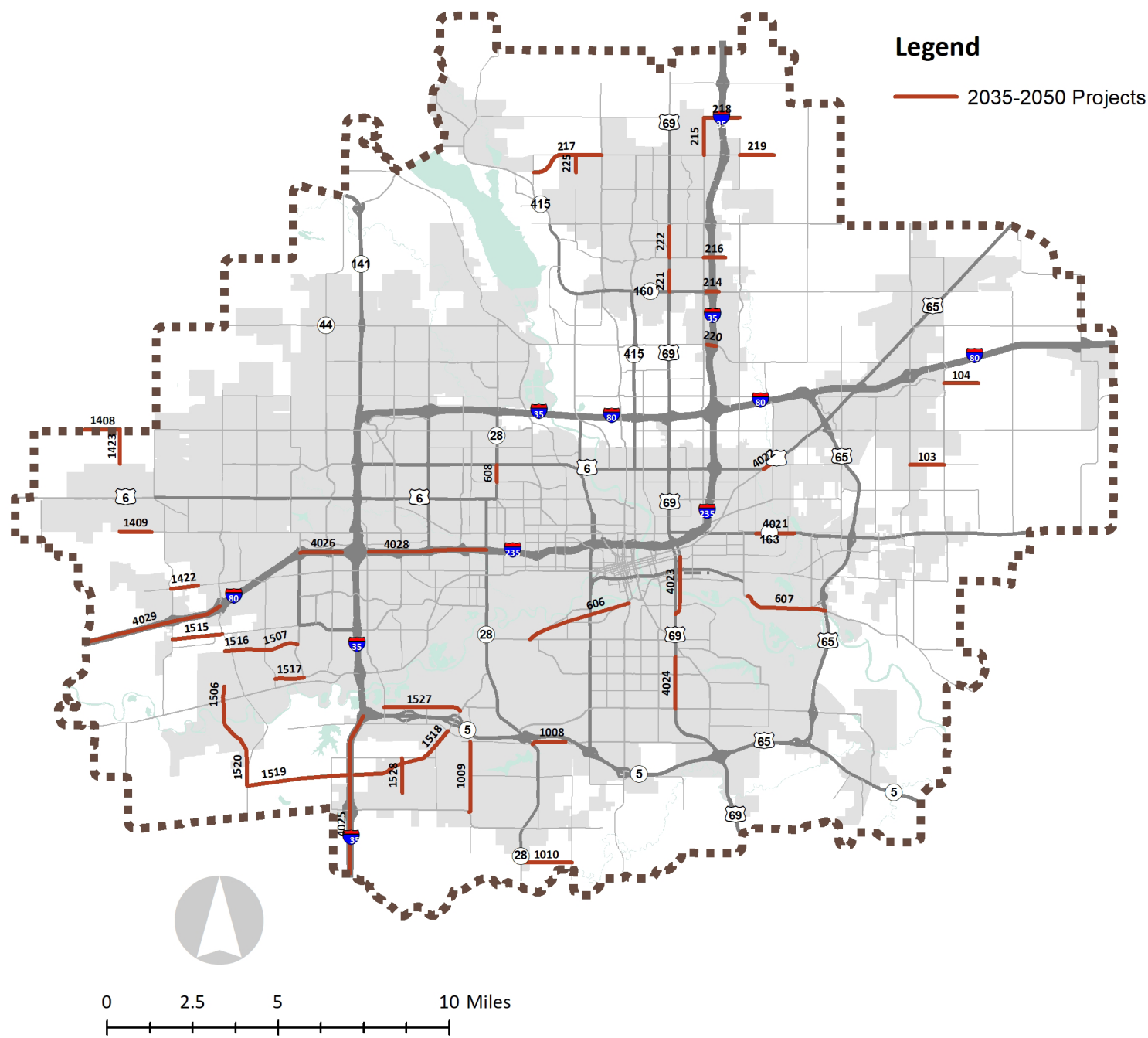
FIGURE 3.12: PROJECTS 2035-2050 TIME FRAME (CONTINUED)

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
1008	Norwalk	Echo Valley Drive Reconstruction	Urbanize and reconstruct Echo Valley Drive (County Line Road) adding turn lanes as needed	IA 28	Eastern City Limits	\$11.8
1009	Norwalk	50th Avenue Reconstruction	Urbanize and add turning lanes as needed	North Avenue	County Line Road	\$23.6
1010	Norwalk	Delaware Street East	Development of Delaware Street east of IA 28	IA 28	80th Avenue	\$23.6
1408	Waukee	Meredith Drive Paving Phase 2	Pave existing gravel road to two lanes	T Avenue	S Avenue	\$14.2
1409	Waukee	University Avenue Extension Phase 2	Pave existing gravel road to four lane road with turning lanes	10th Street	T Avenue	\$23.6
1422	Waukee	Ashworth Road Expansion Phase 3	Widen road from 2-lanes to 4-lanes	LA Grant Parkway	Ute Avenue	\$18.9
1423	Waukee	T Avenue Paving Phase 3	Pave existing gravel road to two lane road	Douglas Avenue	Meredith Drive	\$16.5
1506	West Des Moines	S. Grand Prairie Pkwy Widening	Pave initial 2-lanes and turn lanes including bridge over railroad tracks, widen to 6-lanes with turn lanes once additional capacity is needed	Grand Avenue	South of Raccoon River Drive	\$18.9
1507	West Des Moines	Stagecoach Drive Widening	Pave initial 2 lanes and turn lanes, widen to 4-lanes with turn lanes once additional capacity is needed	S. Jordan Creek Parkway	S. 88th Street	\$11.8
1515	West Des Moines	Mills Civic Pkwy Extension and Future Widening	Pave initial 2 lanes and turn lanes, widen to 4-lanes with turn lanes once additional capacity is needed	Grand Prairie Parkway	Ute Avenue	\$23.6
1516	West Des Moines	Stagecoach Drive Widening	Widen from 2-lanes to 4-lanes with turn lanes	S. 88th Street	S. Grand Prairie Parkway	\$18.9
1517	West Des Moines	Grand Ave Widening	Widen from 2-lanes to 6-lanes with turn lanes	S. Jordan Creek Parkway	S. 88th Street	\$21.3
1518	West Des Moines	Veterans Pkwy Widening	Widen from 2 lanes to 6-lanes with turn lanes	Highway 5	Interstate 35	\$59.2
1519	West Des Moines	Veterans Pkwy Widening	Widen from 2 lanes to 4-lanes with turn lanes	Interstate 35	SW Grand Prairie Parkway	\$47.3
1520	West Des Moines	SW Grand Prairie Pkwy Widening	Widen from 2-lanes to 6-lanes with turn lanes	Raccoon River Drive	South Corporate Limits	\$71.0
1527	West Des Moines	Army Post Rd Widening	Widen from 2 lanes to 4-lanes with turn lanes	Veterans Parkway	SE 42nd Street	\$26.0
1528	West Des Moines	SE 35th Street Widening	Widen from 2 lanes to 4-lanes with turn lanes	Adams Street	South Corporate Limits	\$17.7

FIGURE 3.12: PROJECTS 2035-2050 TIME FRAME

#	SPONSOR	PROJECT	DESCRIPTION	TERMINI 1	TERMINI 2	YOE COST (MILLIONS)
4021	DOT	IA 163/E. University Widening	Widen IA 163/E. University Avenue from four lanes to five lanes	E. 33rd Street, Des Moines	ECL Des Moines	\$12.5
4022	DOT	US 6/Hubbell Avenue Widening	Widen US 6/Hubbell Avenue from four lanes to five lanes	Euclid Avenue	E. 38th Street	\$4.2
4023	DOT	US 69/SE 15th Street Extension	Extend US 69/SE 15th Street south approximately 1.8 miles; Construct 3-lanes on new alignment	North of Court Avenue	South of Hartford Avenue	\$189.5
4024	DOT	US 69/SE 14th Street Widening	Widen US 69/SE 14th Street from 4-lanes to six lanes	Watrous Avenue	E. Army Post Road	\$16.8
4025	DOT	I-35 Widening	Widen I-35 from 4-lanes to 6-lanes	South Urban Area Boundary	IA 5	\$43.3
4026	DOT	I-80 Widening	Widen I-80 from 6-lanes to 8-lanes	Jordan Creek Pkwy	West Mixmaster	\$35.5
4028	DOT	I-235 Widening	Widen I-235 from 6-lanes to 8-lanes	West Mixmaster	63rd Street	\$94.7
4029	DOT	I-80 Widening	Widen I-80 from 4-lanes to 6-lanes	West Urban Area Boundary	Grand Prairie Pkwy	\$59.9

FIGURE 3.13: 2035-2050 PROJECT MAP



## Bridge Investments

This section does not outline specific bridge projects that will occur over the next 30 years. However, the MPO recognizes that the region's bridges are a valuable resource that needs to maintain over the life of this plan. Therefore, this plan proposes that \$444.7 million are invested in bridge projects over the next 30 years. The projects funded under this category will be decided on an annual basis. **Figure 3.14** outlines bridge investments by time frame.

## Major Reconstruction/Replacement Investments

A key objective of this plan is to promote stewardship of our existing infrastructure. Caring for the roadway network is crucial to the continued success of the region. This plan recognizes the importance of our existing network and proposed that \$555.9 million are invested in major reconstruction and replacement projects through 2050. The projects funded under this category will be decided on an annual basis. **Figure 3.14** outlines major reconstruction and replacement investments by time frame.

## System Optimization Investments

This category was created to incentivize projects that address capacity-related issues without adding lane miles. The MPO recognizes that the region cannot build its way out of congestion and that alternative solutions should be implemented to address traffic issues whenever possible. Therefore, the MPO proposes that \$333.6 million are invested in projects that optimize the system without adding more lanes/roads. The projects under this category will be decided on an annual basis. **Figure 3.14** outlines system optimization investments by time frame.

## Transit Investments

The plan proposes that \$222.4 million are invested in transit projects through 2050. Traditionally, this funding has gone toward bus replacements to ensure the fleet is well maintained. However, investments under this category could include other capital expense such as shelter and stop improvements. DART submits projects under this category on an annual basis. **Figure 3.14** outlines transit investments by time frame.

## Bicycle and Pedestrian Investments

The plan proposes that \$160.7 million are invested in bicycle and pedestrian projects through 2050. The projects under this category will be decided on an annual basis. **Figure 3.14** outlines bicycle and pedestrian investments by time frame.



FIGURE 3.14: FUNDING CATEGORY INVESTMENTS BY TIME PERIOD (MILLIONS)

	2020-2024	2025-2029	2030-2034	2035-2050	TOTAL 2020-2050
System Capacity	309	1180.4	1031.1	1141.6	3662.1
Bridge*	45.1	55.3	65.6	278.7	444.7
Major Reconstruction/ Replacement*	56.4	69.2	82.0	348.4	555.9
System Optimization*	33.8	41.5	49.2	209.1	333.6
Transit*	22.5	27.7	32.8	139.4	222.4
Bicycle/Pedestrian*	16.3	20.0	23.7	100.7	160.7
<b>Total</b>	<b>483.1</b>	<b>1394.1</b>	<b>1284.3</b>	<b>2217.9</b>	<b>5379.4</b>

\*These categories only include the STBG funding that is proposed to be spent on projects from 2020-2050. The System Capacity category includes additional local funding that is projected to be available over the life of the plan.

## Other Transportation Investments

This section outlines other regional significant transportation investments that are not using the revenue outlined in **Appendix D**.

### Rail Investments

The Des Moines area's location at the crossroads of I-35 and I-80 – which connect the region to Canada, Mexico, the east and west coast's, the Great Lakes, and the Gulf of Mexico – provides the region with a global connection and the ability to simplify the process of importing or exporting. This crossroad location is attractive for transportation companies and is a desirable freight terminal location. In order for the region to ensure economic growth through enhanced transportation infrastructure, the region should:

- Upgrade rail lines to handle heavier railcars to improve overall freight capacity in the area;
- Develop rail-centric transportation options for businesses through the development of a transload facility;
- Expand existing transportation options to attract new industries to the region; and,
- Maintain and upgrade rail crossings to improve safety.

### Des Moines Transload Facility

The Des Moines Transload Facility is proposed on property located in the southeast section of Des Moines. The site is directly adjacent to East Martin Luther King Jr. Parkway, a major arterial roadway connecting west to the Central Business District in downtown Des Moines. The site will also be included in a planned connection to Iowa Highway 65 to the east, which provides connectivity to the Interstate system, I-35 and I-80.

The proposed site is adjacent to a convergence of four rail lines, including three Class I railroads and one Class II railroad. The site's location offers both regional and national significance, providing a location for the transfer of goods from truck to rail in an environment that will maximize competitive benefits for users. The facility will strengthen the existing transportation and goods movement network in the region, and assist in connecting Central Iowa businesses to coastal ports at a national level.

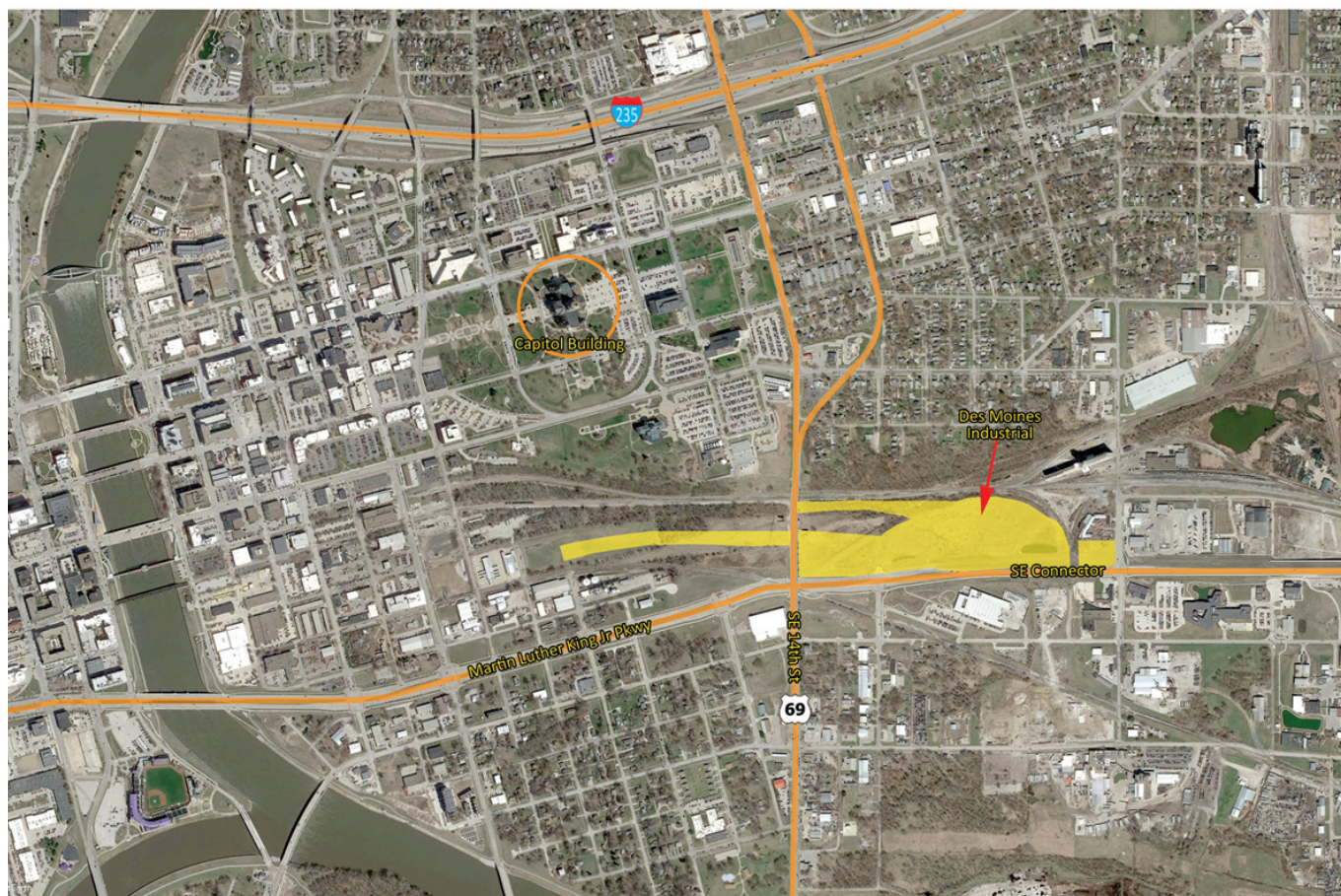
Anticipated users of the facility include a wide variety of companies that handle commodities, such as minerals, steel, chemicals, lumber, finished products, agricultural products, food, fertilizers, products for the development of Iowa's growing wind energy industry, roofing materials, pipe, sheet metal, pilings, beams, plastics, aggregates, salts, oils, green bio-products, generators, transformers, farm machinery, equipment, feed additives.

The main challenges that the proposed facility would begin to address are:

- Lack of large scale means to get goods onto rail in the market;
- Removing truck traffic from congested roadways;
- Provide more efficient and cost-effective goods movement to businesses; and,
- Reduce significant existing drayage costs required to move goods 2-5 hours from Des Moines to access rail service.

In November 2018, the Des Moines Area MPO received an \$11.2 million Better Utilizing Infrastructure to Leverage Development (BUILD) grant. The BUILD grant is in addition to a \$1.7 million Railroad Revolving Loan and Grant program award from the Iowa Department of Transportation. The project is expected to cost \$22 million in total to construct and will be fully operational by 2021.

FIGURE 3.15: DES MOINES TRANSLOAD FACILITY LOCATION



## Aviation Investments

The Des Moines region is served by three airports. The following section will focus on the two principal airports in the MPO planning area, the Des Moines International Airport and the Ankeny Regional Airport. The Iowa DOT's Iowa Aviation System Plan 2010-2030 includes individual airport summaries for Iowa airports.

### Ankeny Regional Airport

The Ankeny Regional Airport (IKV) is considered an Enhanced Service Facility that provides general aviation needs for the Des Moines region as a business airport and as a reliever to the Des Moines International Airport. The IKV is owned and operated by the Polk County Aviation Authority and accounts for personal and business travel, as well as just-in-time shipping, law enforcement, agriculture, and medical transport.

The Ankeny Airport will invest \$11.72 million in infrastructure improvements from 2020-2025. **Figure 3.16** outlines these projects.

FIGURE 3.16: ANKENY REGIONAL AIRPORT INVESTMENTS, 2020-2025 (COST IN MILLIONS)

PROJECT DESCRIPTION	FISCAL YEAR	PROJECT COST
Taxiway D Apron Grading and Paving (Phase 2)	2020	\$0.583
Taxiway D Access Road Relocation (Phases 2-4) and Utilities (Phase 2)	2020	\$0.557
Taxiway D Access Road Paving (Phase 2)	2020	\$0.209
Environmental Assessment (Runway 18 Extension, South Corporate Access and Apron)	2021	\$0.100
Rehabilitate Maintenance Building Parking Lot	2021	\$0.184
Strengthen and Extend Runway 18/36	2022	\$4.474
Taxiway D Apron Grading & Paving (Phase 3)	2022	\$0.699
South Corporate Access and Apron Grading, Drainage, and Demo	2023	\$1.034
Taxiway D Apron Grading and Paving (Phase 4)	2023	\$0.704
Taxiway D Access Road Paving and Utilities (Phase 3)	2023	\$0.429
South Corporate Access and Apron Paving	2024	\$1.134
Taxiway D Access Road Paving and Utilities (Phase 4)	2024	\$0.433
Runway 4/22 and Taxiway D & E Lighting	2025	\$0.380
Acquire Snow Removal Equipment	2025	\$0.150
MALSR for Runway 36	2025	\$0.654
<b>TOTAL</b>	<b>2020-2025</b>	<b>\$11.72</b>



## Des Moines International Airport

The City of Des Moines owns and operates Des Moines International Airport (DSM). The airport is governed by a five-member Airport Authority Board, composed of representatives appointed by the Des Moines Mayor and approved by the Des Moines City Council. DSM serves as the major air passenger and airfreight service center for central Iowa. In addition, DSM serves as a base for the Iowa Air National Guard.

In April 2014, the Des Moines Airport Authority published the Des Moines International Airport Terminal Area Concept Plan Technical Report. The report outlines the airport authority's plans to relocate and expand the terminal based on growing demand and inadequacies associated with the current terminal location and facilities. The preferred alternative identified in the study would cost approximately \$433 million in 2018 dollars. **Figure 3.17** below shows the layout of the proposed terminal development.

FIGURE 3.17: DES MOINES INTERNATIONAL AIRPORT TERMINAL CONCEPT

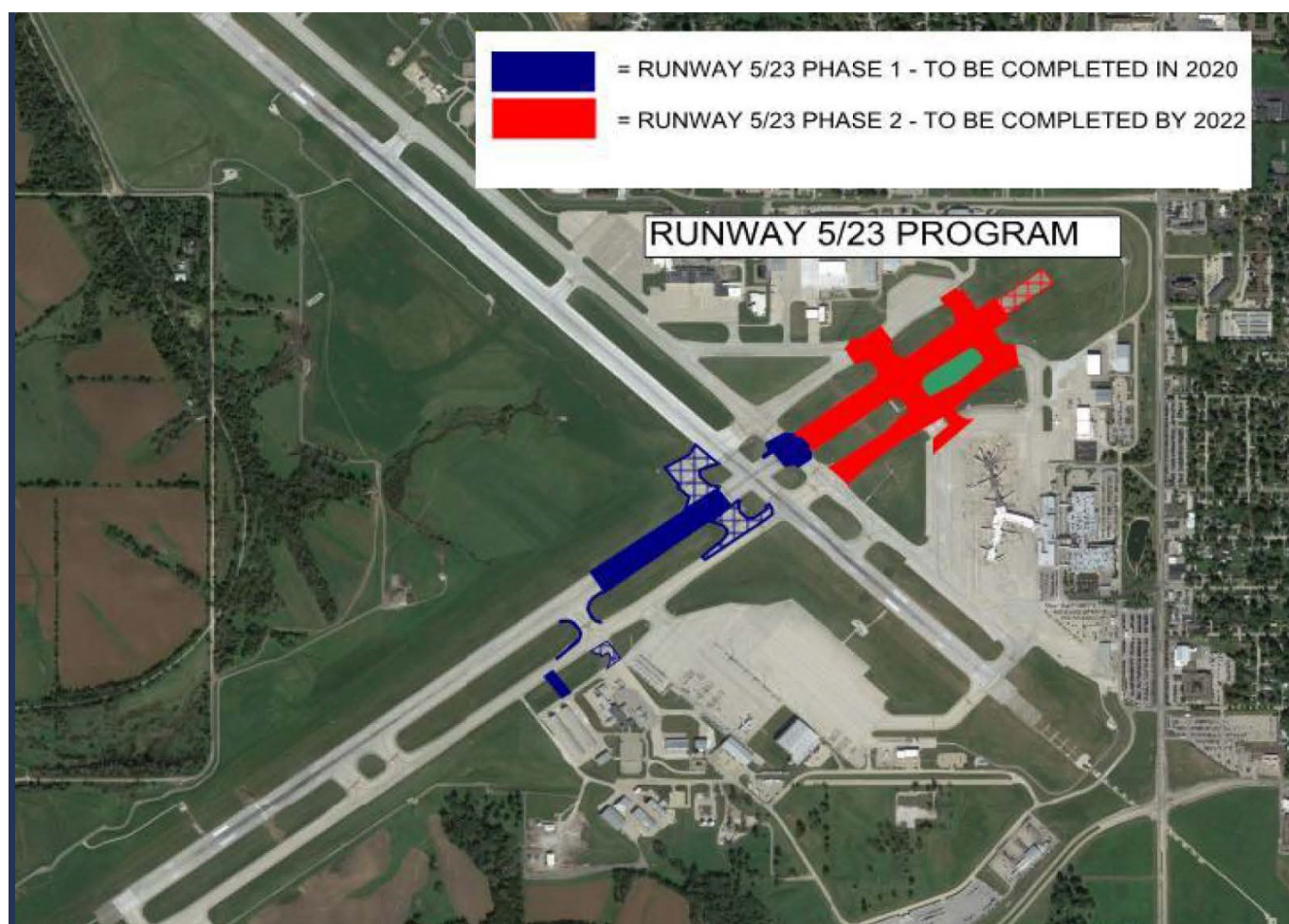


Des Moines International Airport will invest more than \$65 million in infrastructure improvements from 2020-2025. **Figure 3.18** outlines these projects.

FIGURE 3.18: DES MOINES INTERNATIONAL AIRPORT INVESTMENTS, 2020-2025 ( COST IN MILLIONS)

PROJECT DESCRIPTION	FISCAL YEAR	PROJECT COST
Pave Airport Service Road (Design & Construction)	2020	\$0.750
Rehabilitate Runway 5/23 – Phase III (Design)	2020	\$1.323
Rehabilitate Runway 5/23 – Phase IV (Construction)	2021	\$22.050
Reconstruct Runway 5/23 & 13/31 Intersection (Design)	2021	\$0.780
Runway 5 Temporary Extension (Design)	2021	\$1.205
Reconstruct Runway 5/23 & 13/31 Intersection (Construction)	2022	\$5.580
Airfield Pavement Maintenance Program Update	2022	\$0.135
Runway 5 Temporary Extension (Construction)	2022	\$8.870
Construct Terminal Apron “A” (Design & Construction)	2023	\$14.680
Construct Terminal Apron “B” (Design & Construction)	2024	\$7.180
<b>TOTAL</b>	<b>2020-2025</b>	<b>\$62.55</b>

FIGURE 3.19: RUNWAY 5/23 CONSTRUCTION PLAN



## Des Moines Area Regional Transit Authority

The Des Moines Area Regional Transit Authority (DART) works closely with the MPO on regional planning of mobility while also developing in concert its own long-range plan and investment strategies. DART's first long range transit plan named DART Forward 2035 was adopted in September 2011 and was implemented beginning in June of 2012, with additional analysis and public outreach guiding DART's service planning efforts thereafter. Transit services as a result has seen an increase in ridership, expanded service to weekends, earlier morning and later evening service as well as more populations served.

With the adoption of the FY2020 Budget, the DART Commission approved a proposal to begin a new long-range plan called the Transit Optimization Study which aims to maximize the efficiency of mobility offerings with effectiveness of the transit funding available. The Study is forecasted to be completed in the summer of 2020.

Additionally, DART has built a Transit Asset Management Plan as mandated by the Federal Transit Administration which establishes goals and metrics to consistently assess, prioritize, and address the condition of transit assets. This program aims to keep all federally sponsored assets in a State of Good Repair (SGR). A series of performance targets have been adopted (see **Figure 3.20**) which ties to the capital projects programmed for 2020 through 2024.

FIGURE 3.20: TRANSIT PERFORMANCE TARGETS

CATEGORY	CLASS	PERFORMANCE TARGET
Rolling Stock	35' to 60' Heavy-Duty Buses	10% of fleet exceeds ULB of 13 years
	30' to 34' Heavy-Duty Buses	10% of fleet exceeds ULB of 11 years
	27' to 31' Medium-Duty Buses	10% of fleet exceeds ULB of 8 years
	<b>25' Light-Duty Buses</b>	<b>10% of fleet exceeds ULB of 5 years</b>
	Vans	10% of fleet exceeds ULB of 5 years
Equipment	Support Vehicles- Trucks, Autos, Vans, & SUV's	10% of fleet exceeds ULB of 7 years
Facilities	Administration & Passenger Facility- DCS	10% of facility rated under 3.0 on TERM Scale
	Maintenance & Operations Facility- DW	10% of facility rated under 3.0 on TERM Scale
	Parking Facility- N/A at this time	10% of facility rated under 3.0 on TERM Scale

In relation to the performance targets of Facilities, specifically DART's Maintenance and Operations Facility, staff and DART Commissioners are reviewing the lagging performance of its current operations center located at 1100 DART Way. An analysis of investment needs to bring the geographically constrained facility into performance versus building a new maintenance and operations facility is being considered.

**Figure 3.21** lists the investments that DART will make to the transit system from 2020 through 2024.

FIGURE 3.21: DES MOINES AREA REGIONAL TRANSIT INVESTMENTS, 2020-2024 (MILLIONS)

CAPITAL PROJECTS	2020-2024	2025-2029	2030-2034	2035-2050
Fleet	\$33.09	\$34.65	\$38.07	\$171.93
Facilities	\$69.74	\$5.51	\$7.58	\$20.26
Equipment & Technology	\$1.71	\$2.60	\$3.74	\$13.07
Passenger Amenities	\$0.48	\$0.48	\$0.55	\$2.16
Development	\$-	\$25.00	\$-	\$-
<b>Total Costs</b>	<b>\$105.01</b>	<b>\$68.25</b>	<b>\$49.92</b>	<b>\$207.42</b>
CAPITAL EXPENSES	2020-2024	2025-2029	2030-2034	2035-2050
Federal	\$61.23	\$55.50	\$40.64	\$169.83
State	\$1.00	\$2.00	\$-	\$-
Local	\$42.77	\$10.74	\$9.28	\$37.59
<b>Total Capital Funding</b>	<b>\$105.01</b>	<b>\$68.25</b>	<b>\$49.92</b>	<b>\$207.42</b>
FEDERAL OPERATIONS	2020-2024	2025-2029	2030-2034	2035-2050
<b>Total Federal Operations</b>	<b>\$16.22</b>	<b>\$16.65</b>	<b>\$16.78</b>	<b>\$54.67</b>



## Central Iowa Water Trails

The region is in the early stages of developing a regional network of water trails on 150 miles of rivers and creeks in Central Iowa. This follows a regional plan and a subsequent engineering feasibility study that were developed by the Des Moines Area MPO from 2015 to 2018. The effort is now being led by a consortium of regional organizations, operating together under Capital Crossroads, including Catch Des Moines, Community Foundation of Greater Des Moines, Greater Des Moines Partnership, Great Outdoors Foundation, and Des Moines Area MPO. The goals of the initiative are to improve safety, economic development, tourism and workforce attraction, outdoor recreation, and environmental conservation.

The plan calls for improvements to 86 sites in and along waterways throughout the region. The total cost of the fully built-out water trails network is estimated at \$117 million, including:

### Regional Projects – \$11 million

- Beaver Creek Total – \$2.3 million
- Des Moines River Total – \$2.8 million
- Four Mile Creek Total – \$1.3 million
- Middle River Total – \$200,000
- Mud Creek Total – \$34,000
- North River Total – \$66,000
- Raccoon River Total – \$2.8 million
- Skunk River Total – \$256,000
- Walnut Creek Total – \$1.3 million

### Dam-mitigation projects – \$106 million

- Center Street Dam – \$57 million
- Scott Avenue Dam – \$22 million
- Fleur Avenue Dam – \$28 million

Funding for the Central Iowa Water Trails network will come from a mix of public and private resources. As of this writing, a capital campaign is underway to fundraise more than \$30 million in private funds for water trails in the region. The public funds will be a combination of local, state and federal dollars, as outlined below.

### Local Funding

Local jurisdictions have already committed funding to water trails projects. For example, West Des Moines, Johnston, and Polk County Conservation are all in various stages of implementation of water trail projects. These efforts are critical to the success of the larger, regional water trails system. In addition, a funding mechanism, such as a revolving loan fund, is being created to supplement these local investments and help fund critical regional infrastructure.



## State Funding

State funding is being sought to mitigate the dams in downtown Des Moines and will provide matching dollars for federal grant requests. Potential sources include funding through Iowa Department of Agriculture and Land Stewardship (IDALS) for water quality projects, the Iowa Department of Natural Resources' (IDNR) conservation, recreation, and the low-head dam mitigation and water trails programs, and Iowa Economic Development Authority's (IEDA) community revitalization and tourism programs. Specific opportunities include Resource Enhancement and Protection (REAP), Water Trails and Dam Mitigation through IDNR, Community Attraction and Tourism (CAT), Urban Conservation and Water Quality Initiative (WQI), and others. In addition, water trails supporters are supporting the implementation of Iowa's Water and Land Legacy Trust Fund (IWILL) and its directive to fund conservation practices and recreation.

## Federal Funding

A variety of federal funding opportunities exist to support the implementation of Central Iowa Water Trails. A key opportunity is an appropriation through the Army Corps of Engineers Des Moines River Recreational Greenbelt program, along with other fish passage and habitat programs. Other programs include the include BUILD grant, the U.S. Department of Agriculture (USDA) conservation and economic development programs through Natural Resources Conservation Services (NRCS), and Rural Development, Department of Interior recreation programs such as the Land and Water Conservation Fund (LWCF), and others. Finally, water trails are an eligible expense for the Surface Transportation Block Grant (STBG) allocated by the MPO.

FIGURE 3.22: RENDERING OF THE CENTER STREET DAM MITIGATION PROJECT

