

**DATE:** July 20, 2016

**TO:** Transportation Technical Advisory Committee (TTAC)

**FROM:** Dennis Wilson, Chairman  
Greg Youell, MAPA Executive Director

**RE:** July 22, 2016 TTAC Meeting

The MAPA TTAC will meet Friday, July 22, 2016 at 10:00 a.m. in the Metro Building at 2222 Cuming Street, Omaha, Nebraska 68102. The TTAC meeting will be held in the Metro Training Room on the lower level. Please enter the building through Metro's front door and follow the signs to the Metro Training Room on the lower level. The agenda item materials can be accessed by clicking on the linked agenda item titles. The agenda is also available at the MAPA offices and online at <http://www.mapacog.org/boards-a-committees/58-agendas>.

### **AGENDA**

#### **For TTAC Approval/Review**

- A. Meeting Minutes – The committee will consider approval of the June 24, 2016 TTAC meeting minutes. (Action Item) (Attachment)

#### **Recommendations to the Board**

- B. FY 2016-2019 Transportation Improvement Program (TIP) Amendments – Staff will present various amendments to the FY 2016-2019 TIP from local jurisdictions and request a recommendation for Board approval. (Action Item) (Attachment)
- C. 2040 Long Range Transportation Plan Amendment - Staff will request a recommendation for approval of an amendment to the LRTP for the adjustment of several NDOR projects. (Action Item) (Attachment)
- D. Unified Planning Work Program FY 17 Amendment - Staff to request a recommendation for approval of an amendment to adjust local match that will include funding from the Ethanol Board that will be used to purchase air quality monitor equipment. (Action Item)

#### **Discussion Items**

- E. Funding Obligation and Project Status – Staff will review the annual funding obligation and project status. (Information Item) (Attachment)
- F. 2050 Long-Range Transportation Plan (LRTP) – Staff will present LRTP planning status including alternative scoring and weights (Information Item) (Attachment)
- G. Member Agencies Updates – Agencies will present updates for on-going and future project and program across the region. (information Item)
- H. Additional Business  
Upcoming Meetings: Board of Directors- 7/28, Coordinated Transit Committee- 8/17, TTAC- 8/19
- I. Adjournment

Auxiliary aids, language assistance, and services are available when requested in advance, please call the office.  
Si necesita ayuda con traducción, por favor llame la oficina.

Agenda Item A  
Meeting Minutes

OMAHA-COUNCIL BLUFFS METROPOLITAN AREA PLANNING AGENCY  
Transportation Technical Advisory Committee  
Minutes of June 24, 2016 Meeting

The Transportation Technical Advisory Committee met on Friday, June 24, 2016, at Metro, 2222 Cuming Street, Omaha, Nebraska. Mr. Todd Pfitzer opened the meeting at 10:00 a.m.

VOTING MEMBERS

Dean Dunn	City of Bellevue Public Works
Greg Reeder	City of Council Bluffs Public Works
Joe Soucie	City of La Vista Public Works
Murthy Koti	City of Omaha Public Works
Todd Pfitzer	City of Omaha Public Works
Marty Leming	City of Papillion Public Works
Dan Kutilek	Douglas County Engineers Office
Scott Schram	Iowa Department of Transportation – District 4
Tim Weander	Nebraska Department of Roads – District 2
Noel Salac	Nebraska Department of Roads – Lincoln
Eric Williams	Papio-Missouri River NRD
Curt Simon	Metro Transit
Bruce Fountain	Sarpy County Planning Department

NON-VOTING MEMBERS

Matt Cox	City of Council Bluffs Public Works
Dan Giittinger	City of Gretna Development Services
Bryan Guy	City of Omaha Public Works
Bill Herr	Sarpy County Public Works
Maurice Hinchey	Nebraska Department of Roads – District 2

GUESTS

Kyle Kovar	3M Traffic Safety
John Donovan	AECOM
Jacob Weiss	HDR, Inc.
John Jorgensen	HGM Associates
Arobindu Das	Iteris, Inc.
Nick Weander	Olsson Associates
Stephen Rashid	SRF Consulting Group
Jordan Cook	City of La Vista Public Works Intern

STAFF

Michael Felschow	Metropolitan Area Planning Agency
Court Barber	Metropolitan Area Planning Agency
Mike Helgerson	Metropolitan Area Planning Agency
Megan Walker	Metropolitan Area Planning Agency

A. Approval of Minutes

Motion #1: Approval of the minutes of the May 20, 2016 Transportation Technical Advisory Committee Meeting.

Motion by: Marty Leming  
Second by: Dan Kutilek  
Motion Carried

## B. 2040 Long Range Transportation Plan Amendment (LRTP)

Mr. Helgerson presented the 2040 Long Range Transportation Plan Amendment. He said there had been a request from NDOR to amend two projects in the TIP. Changes exceeded both the threshold for 20% change in the project cost and \$2,000,000 project change cost which meets the threshold for an amendment. The two projects are being changed in the existing 2040 LRTP to match the new project estimates. The I-480 Bancroft to Dewey Avenue project increased from \$1.6 million to \$6.7 million and the I-80/I-480/US-75 Interchange project increased from \$7.5 million to \$12.970 million. The Amendment was presented to the TTAC in April, the public meeting was held in May, it will go before the MAPA Board of Directors for approval in June and then amended into the LRTP which will then allow these projects to move forward.

Mr. Helgerson also discussed tables in the LRTP that will be changed. They are Tables 7.1, 7.8 and 7.13.

Motion #2: Seeking approval of the MAPA Board of Directors at their June 30, 2016 meeting for incorporation of the Amendment into the 2040 Long Range Transportation Plan.

Motion by: Greg Reeder  
Second by: Marty Leming  
Motion Carried

## C. FY 2016 – 2019 Transportation Improvement Program (TIP) Amendments

Mr. Helgerson presented Amendment 12 of the FY 2016-2021 TIP with four projects. They are:

- o Eastern Hills Drive – Segment C – in Council Bluffs
- o 24<sup>th</sup> Street Road Diet
- o I-80/I-480/US-75 Interchange
- o I-480: Bancroft - Dewey

Motion #3: Seeking approval of the MAPA Board of Directors at their June 30, 2016 meeting for the approval of Amendment 12 of the FY 2016 – 2019 Transportation Improvement Program.

Motion by: Curt Simon  
Second by: Murthy Koti  
Motion Carried

## D. Final FY 2017 – 2020 Transportation Improvement Program (TIP)

Mr. Felschow told the TTAC the FY 2017 – 2010 TIP went out for public comment last month, a public meeting was held with no major comments received. This process began in August of last year with the final TIP now ready to be approved by the MAPA Board of Directors where it will then go on to both the Iowa DOT and NDOR. The TIP is fiscally constraint with money ready for projects to begin construction. In order for the UPWP and the TIP to match, \$80,000 in STP funds was flexed to PL funds for the Iowa side for Heartland 2050 projects. The \$200,000 from the Nebraska side has not been moved yet.

Motion #4: Seeking approval of the MAPA Board of Directors at their June 30, 2016 meeting for the approval of the Final FY 2017 – 2020 Transportation Improvement Program.

Motion by: Greg Reeder  
Second by: Marty Leming  
Motion Carried

## E. Committee Member Lists

Mr. Barber presented the TTAC Member List to the Committee. Added to the list is Scott Schram as an alternate to Scott Suhr / Iowa DOT – District 4. Removed from the list is Terry Bailey for the Council Bluffs Chamber of Commerce and Bob Mundt added in his place.

Motion #5: Seeking approval of the MAPA Board of Directors at their June 30, 2016 meeting of the amended 2017 Committee Member Lists for the Transportation Technical Advisory Committee, Project Selection Committee, Transportation Alternatives Committee and the Coordinated Transit Committee.



Motion by: Marty Leming  
Second by: Curt Simon  
Motion Carried

#### F. Funding Obligation and Project Status

Mr. Felschow said there is no major change since the May meeting on either the Iowa or Nebraska sides in funding obligation. There was discussion on how to help get projects accomplished quicker. Mr. Felschow said there are many factors that enter into the problem with a common problem being working through the NEPA process.

#### G. 2050 Long Range Transportation Plan (LRTP) / Heartland 2050 Vision Plan

Ms. Walker said Chapter 6 of the LRTP is finalized with transit information. Trip origins and destinations did not change significantly. Service frequency route systems done by Metro Transit a year ago has been successful. She reported that limited mobility is shown in the lower poverty sections as expected.

As the process continued for the LRTP, eight stakeholder meetings were held in June. The demographics whose input was used were land developers, community and neighborhood associations, land use planners of cities and counties, the Chambers and major employers including University of Nebraska Medical Center and PayPal. Included also were engineers from Heartland 2050's Infrastructure Committee and non-profits. The online survey remains active through July 1. MTIS preferences were studied as well as their preferred scenarios. Among the preferences, congestion reduction rated high with MTIS priorities and transit and geographic were among the preferred MTIS scenarios.

#### H. Member Agencies Updates

Mr. Simon thanked the volunteers for the two transit open houses held in June where around 400 persons attended. He said marketing had proven very successful with its success. Mr. Schram was introduced from Iowa DOT District 4. Mr. Tim Weander said the next Build Nebraska will be July 13, 2016 at the La Vista Embassy Suites. Discussion will regionally include the 287 corridors where each one will have been analyzed as far as benefits, costs, economic development opportunities as well as how corridors are prioritized. Mr. Weander continued with discussion about the ITS America conference in San Jose where the topic was autonomous and connected vehicles. He said the challenge will be to make the roadways work with these vehicles. The I-80 project should be finished up in the fall. Mr. Williams asked if the Advanced Construction agreement was finalized and Mr. Felschow said it's still being worked on.

#### I. Additional Business

Upcoming Meetings:

- Board of Directors – June 30, 2016
- Coordinated Transit Committee (CTC) – July 20, 2016
- TTAC – July 22, 2016

#### J. Adjournment

Motion for Adjournment: Dan Kutilek  
Second by: Marty Leming

The meeting was adjourned at 10:55 a.m.

Agenda Item B  
FY 2016-2019 Transportation  
Improvement Program (TIP)  
Amendments



**Revision Summary - Amendment 13**

<u>Control #</u>	<u>Project Name</u>	<u>Lead Agency</u>	<u>Revision Note</u>
IA-34865	Eastern Hills Drive - Segment C	Council Bluffs	Update project description to "In the City of Council Bluffs: Eastern Hills Dr., Cedarbrook Dr to Just N. of Cedar Ln, & Cedar Ln, From 900' W. and Just E. of Eastern Hills Drive"; increase DPS funding in FY2016 for ROW to \$920,000 and increase DPS funding in FY2017 for UTIL-CON-CE to \$2,288,000

TIP ID		Project Name	
2016-069		<b>Eastern Hills Drive - Segment C</b>	
Control Number			
IA-34865			
Lead Agency	Council Bluffs	Project Type	Road Widening
County	Pottawattamie	Length (mi)	0.00
		Total Project Cost*	\$4,010.00

**Location**  
 In the City of Council Bluffs: Eastern Hills Dr., Cedarbrook Dr to Just N. of Cedar Ln, & Cedar Ln, From 900' W. and Just E. of

**Description**  
 Widening of roadway to 4-lanes

Fiscal Year	Project Phase	Funding Source	Total Funds*	Federal Funds*	State Funds*	Local Funds*
2016	ROW	DPS	\$1,150.00	\$920.00	\$0.00	\$230.00
2017	UTIL-CON-CE	DPS	\$2,860.00	\$2,288.00	\$0.00	\$572.00

\* Amounts in thousands of U.S. dollars

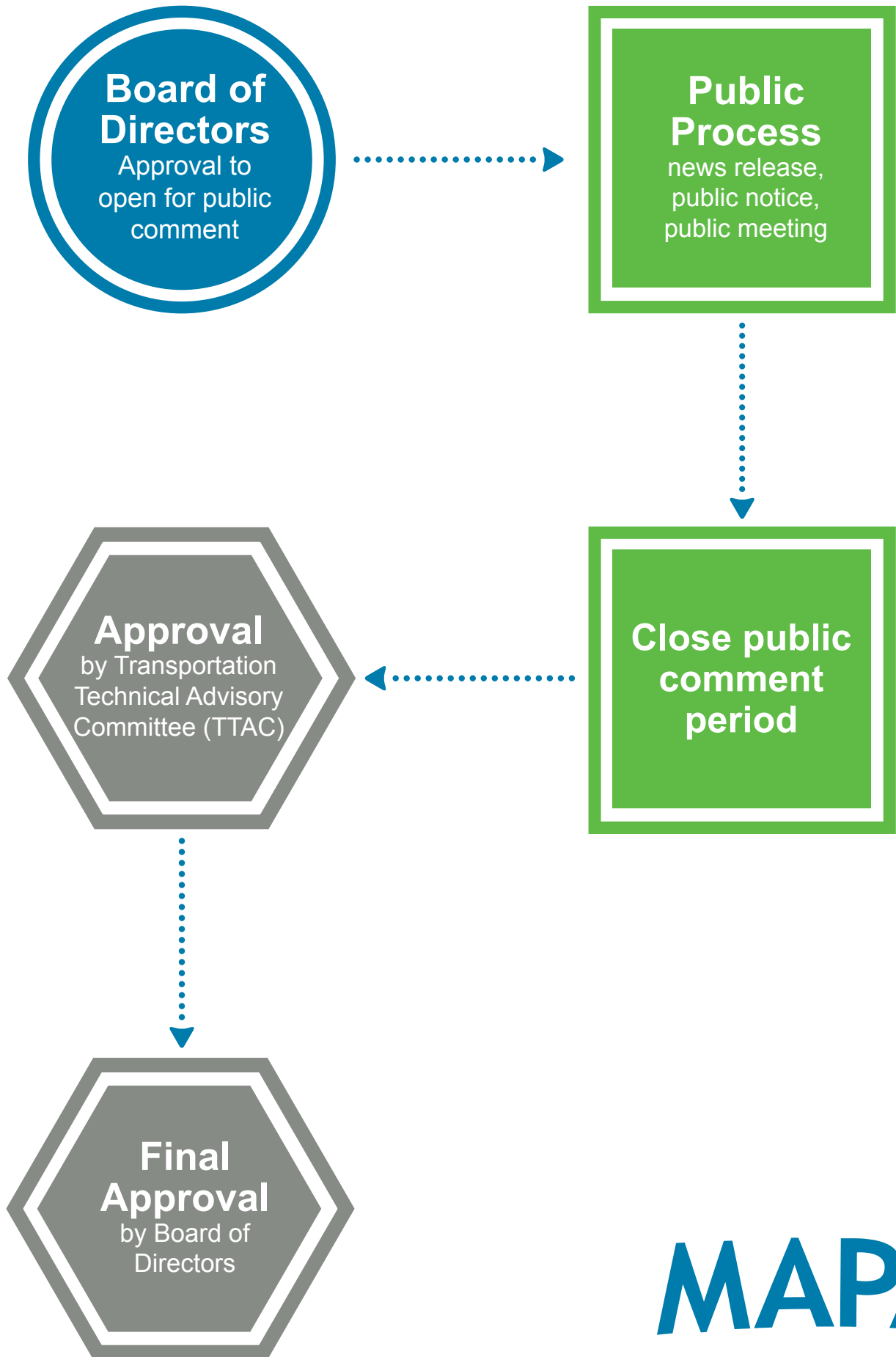
Revision History

- 3/31/2016** **Amendment 9**  
 Program \$739,000 of DPS in FY2016 for UTIL-CON-CE and program \$2,500,000 of DPS funding in FY2017 for UTIL-CON-CE
- 6/30/2016** **Amendment 12**  
 Update project description to "In the city of Council Bluffs, Eastern Hills Dr: Cedarbrook Dr to Cedar Ln and Cedar Ln: From Eastern Hill Dr West 700"; reduce DPS funding in FY2016 for ROW to \$672,000 and reduce DPS funding in FY2017 for UTIL-CON-CE to \$2,254,000
- 7/28/2016** **Amendment 13**  
 Update project description to "In the City of Council Bluffs: Eastern Hills Dr., Cedarbrook Dr to Just N. of Cedar Ln, & Cedar Ln, From 900' W. and Just E. of Eastern Hills Drive"; increase DPS funding in FY2016 for ROW to \$920,000 and increase DPS funding in FY2017 for UTIL-CON-CE to \$2,288,000



Agenda Item C  
Long Range Transportation Plan  
Amendment

# 2040 LRTP AMENDMENT



Metropolitan Area Planning Agency  
**Long Range Transportation Plan 2040**

**TABLE 7.1**  
**ANTICIPATED FEDERAL REVENUES**

**Nebraska Federal Highway Administration (FHWA) Revenues (in \$1,000s)**

Funding Category	Annual Average	2016-2019 (TIP)	2020-2025	2026-2030	2031-2035	2036-2040	Total
CMAQ	\$750	\$1,930	\$4,997	\$4,897	\$5,044	\$5,195	<b>\$22,063</b>
DPU	\$1,000	\$4,360	\$0	\$0	\$0	\$0	<b>\$4,360</b>
HSIP	\$1,600	\$6,248	\$10,660	\$10,447	\$10,761	\$11,084	<b>\$49,200</b>
NHPP	\$18,500	<b>\$75,589</b>	<b>\$3,065</b>	\$0	\$0	\$0	<b>\$78,654</b>
STP-MAPA	\$15,071	<b>\$101,169</b>	\$100,410	\$98,407	\$101,359	\$104,400	<b>\$505,745</b>
STP-HBP	\$1,000	\$5,000	\$6,662	\$6,530	\$6,725	\$6,927	<b>\$31,844</b>
STP-State	\$2,500	<b>\$13,183</b>	\$0	\$0	\$0	\$0	<b>\$13,183</b>
TAP-MAPA	\$1,000	\$4,730	\$6,662	\$6,530	\$6,725	\$6,927	<b>\$31,574</b>
<b>Total</b>	<b>\$41,421</b>	<b>\$212,209</b>	<b>\$132,456</b>	<b>\$126,811</b>	<b>\$130,614</b>	<b>\$134,533</b>	<b>\$736,623</b>

**Iowa Federal Highway Administration (FHWA) Revenues (in \$1,000s)**

Funding Category	Annual Average	2016-2019 (TIP)	2020-2025	2026-2030	2031-2035	2036-2040	Total
CMAQ	\$150	\$864	\$946	\$879	\$897	\$915	<b>\$4,501</b>
DPS	\$1,150	\$4,662	\$0	\$0	\$0	\$0	<b>\$4,662</b>
NHPP	\$98,000	\$388,309	\$84,681	\$0	\$0	\$0	<b>\$472,990</b>
STP-MAPA	\$1,700	\$15,600	\$10,724	\$9,963	\$10,162	\$10,366	<b>\$56,815</b>
STP-HBP	\$2,700	\$0	\$6,308	\$5,861	\$5,978	\$6,097	<b>\$24,244</b>
STP-State	\$5,000	\$0	\$6,557	\$18,400	\$0	\$0	<b>\$24,957</b>
TAP-MAPA	\$300	\$700	\$1,892	\$1,758	\$1,793	\$1,829	<b>\$7,972</b>
<b>Total</b>	<b>\$109,000</b>	<b>\$410,135</b>	<b>\$111,108</b>	<b>\$36,861</b>	<b>\$18,830</b>	<b>\$19,207</b>	<b>\$596,141</b>

**Total Regional Federal Highway Administration (FHWA) Revenues (in \$1,000s)**

Funding Category	Annual Average	2016-2019 (TIP)	2020-2025	2026-2030	2031-2035	2036-2040	Total
CMAQ	\$900	\$2,794	\$5,943	\$5,776	\$5,941	\$6,110	\$26,564
DPS & DPU	\$2,150	\$9,022	\$0	\$0	\$0	\$0	\$9,022
HSIP	\$1,600	\$6,248	\$10,660	\$10,447	\$10,761	\$11,084	\$49,200
NHPP	\$116,500	<b>\$463,898</b>	<b>\$87,746</b>	\$0	\$0	\$0	<b>\$551,644</b>
STP-MAPA	\$16,771	<b>\$116,769</b>	\$111,134	\$108,370	\$111,521	\$114,766	<b>\$562,560</b>
STP-HBP	\$3,700	\$5,000	\$12,970	\$12,391	\$12,703	\$13,024	\$56,088
STP-State	\$7,500	<b>\$13,183</b>	\$6,557	\$18,400	\$0	\$0	<b>\$38,140</b>
TAP-MAPA	\$1,300	\$5,430	\$8,554	\$8,288	\$8,518	\$8,756	\$39,546
<b>Total</b>	<b>\$150,421</b>	<b>\$622,344</b>	<b>\$243,564</b>	<b>\$163,672</b>	<b>\$149,444</b>	<b>\$153,740</b>	<b>\$1,332,764</b>

## 7.6 REGIONALLY SIGNIFICANT TRANSPORTATION INVESTMENTS

The list of street and highway projects eligible for Federal aid funding following in this section is fiscally-constrained to reasonably available local, state, and federal revenues. Project costs take inflation into account and appear in year-of-expenditure dollars. Therefore, project costs for future years appear higher than what they would cost if constructed today. As is described in Section 7.3, federal funding levels were identified based on past trends within the Omaha-Council Bluffs region. Local revenues were identified based on local financial reports and identified operations & maintenance costs.

These projects listed in this LRTP are considered eligible for Federal-Aid funding by the MPO. Projects will be selected for Federal aid funding as they go through the MPO’s project selection and prioritization process for the TIP, while some projects may be advanced using solely local funding sources. The following sections divide the projects between Regionally Significant Roadway & Trail Projects, Regionally Significant Transit Investments, and Illustrative Projects.

### 7.5.1– REGIONALLY SIGNIFICANT ROADWAY & TRAIL INVESTMENTS

The tables that follow this section include regionally significant roadway and trail projects identified from the 2035 Long Range Transportation Plan and the scenario planning process described earlier in this chapter. These investments represent the federal-aid eligible portion of this LRTP as the total funding for both local and state projects has been

The FY2016-2019 Transportation Improvement Program serves as the four-year implementation program of this plan. Projects identified in this TIP are included in the first band of projects within this project list.

A summary of the fiscally constrained Roadway & Trail program is included in Table 7.8 below.

**TABLE 7.8**  
**SUMMARY OF REGIONALLY SIGNIFICANT ROADWAY & TRAIL PROJECTS**

	2016-2019 (TIP)	2020-2025	2026-2030	2031-2035	2036-2040	Total
Iowa	\$467,444	\$120,273	\$37,320	\$59,884	\$35,153	<b>\$720,074</b>
Nebraska	352,104	\$126,460	\$151,710	\$147,222	\$148,488	<b>\$925,984</b>
<b>Total</b>	<b>\$819,548</b>	<b>\$246,733</b>	<b>\$189,030</b>	<b>\$207,106</b>	<b>\$183,641</b>	<b>\$1,646,058</b>

*(Figures in \$1,000s)*



Nebraska TIP Projects | FY 2016-2019

TIP ID	Lead Agency	Project Name	Improvement Location	Project Cost (FY2016-2019)	Total Project Cost
2015-048	Bellevue	36th Street Phase N-370 - Sheridan	36th St - N-370 to Sheridan	\$9,618,500	\$10,871,620
2015-050	Bellevue	36th Street Phase II	Sheridan to Platteview Rd	\$956,130	\$9,911,130
2015-046	Bennington	156th Street	Bennington	\$2,208,750	\$2,929,446
2015-039	Douglas	180th Street (Phase 1)	HWS Cleveland Blvd to Blondo St and Blondo St .25 mile East and West to 180th St	\$28,520,000	\$31,185,000
2016-037	La Vista	Applewood Creek Trail	From Giles Road north along Applewood Creek between Giles and Harrison	\$163,000	\$1,830,500
2016-038	MAPA	Heartland B-Cycle Expansion	Various locations throughout the City of Omaha	\$1,162,909	\$1,162,909
2015-021	Metro	Metro Rolling Stock	Metro Transit service area	\$3,052,500	\$4,466,250
2015-139	Metro	Bus Rapid Transit	Along Dodge/Farnham corridor, from Westroads Mall	\$2,232,500	\$36,012,500
2015-005	NDOR	I-680/US-6 Interchange DMS	Along I-680/US-6 in Omaha. Begin R.P. – 2.29	\$712,000	\$760,000
2015-006	NDOR	N-370: US-75 West, Bellevue	N-370 sections from 1.6 mi east of 72nd Street east 3.15 mi	\$5,474,000	\$5,670,000
2015-008	NDOR	I-80/680 'Q'-L' CD Rds, Omaha (WB)	WB I-80 CD roads and ramps in the I-80/I-680 interchange area in Omaha. Begin R.P. – 444.23	\$4,197,000	\$4,237,000
2015-015	NDOR	US-75: Plattsmouth - Bellevue, North of Platte River	US-75 from Platte River bridge, north 3.1 miles. Begin R.P. – 76.30	\$32,016,000	\$32,016,000
2015-023	NDOR	I-80: 24th Street - 13th Street	I-80 from 24th Street to 10th Street. Begin R.P. – 453.37	\$13,446,000	\$13,446,000
2015-024	NDOR	Platte River Bridges East of Yutan	On Highway N-92, two bridges over the Platte River 1.5 and 1.8 miles east of Yutan. Begin R.P. – 462.56	\$947,000	\$962,000
2015-025	NDOR	Schramm Park South	N-31, 4.2 miles south of Schramm Park Recreational Area. Begin R.P. – 4.18	\$1,870,000	\$1,925,000
2015-026	NDOR	Giles Road Interchange Ramps	I-80 ramps at Giles Road interchange. Begin R.P – 442.0	\$2,483,000	\$2,541,000
2015-027	NDOR	Jct N-31/N-36 Intersection Improvements	Junction of Highways N-31 and N-36. Begin R.P. – 30.93	\$2,092,000	\$2,092,000
2015-028	NDOR	Elkhorn River West	On N-36 from Old Highway 275/Reicmuth Road, east to just west of the Elkhorn River	\$5,234,000	\$5,234,000
2015-029	NDOR	N-64 at SE Jct US-275 - Omaha	N-64 (W Maple Road) at junction of US-275 east to Rablewood Drive/Elkhorn Drive. Begin R.P. – 59.21	\$3,250,000	\$3,360,000
2015-034	NDOR	N-92: Platte River East Structures	Nebraska Highway 92 (W Center Road) at the Platte River. Begin R.P. – 463.30	\$715,000	\$740,000
2015-036	NDOR	EB I-80 at I-680	EB I-80 at interchange with I-680. Begin R.P. – 445.74	\$1,342,000	\$1,342,000
2015-037	NDOR	Ralston Viaduct	N-85/BNSF viaduct in Ralston. Begin R.P. – 4.02	\$10,125,000	\$10,505,000
2015-068	NDOR	N-133: Thomas Creek Bridge North (SB)	On southbound lanes of N-133 from just north of Thomas Creek crossing, north 0.12 miles. Begin R.P. – 5.94	\$532,000	\$534,000
2016-001	NDOR	I-480: Bancroft - Dewey	On I-480, from 0.1 miles north of I-80/US-75, north to miles south of Harney Street. Begin R.P. – 0.50	\$6,692,000	\$6,700,000
2016-002	NDOR	N-31: Schramm Park - US-6	On N-31 from near Schramm Park entrance to south junction with US-6	\$5,088,000	\$5,088,000
2016-003	NDOR	US-275: Waterloo Viaduct	On US-275 from Valley to viaduct at Waterloo. Begin R.P. – 165.74	\$7,570,000	\$7,570,000
2016-004	NDOR	US-275: West Papillion Creek Bridge West	On US-275 from 1.6 mile east of the west limits of Omaha to east of West Papillion Creek bridge. Begin R.P. – 176.33	\$1,556,000	\$1,556,000
2016-005	NDOR	I-680: Fort Street to Missouri River	On I-680 from near Fort Street northeast to Missouri River Bridge. Begin R.P. – 6.04	\$155,000	\$155,000
2016-006	NDOR	I-80/I-480 Bridges	I-80 bridges at I-480 Interchange. Begin R.P. – 451.00	\$4,800,000	\$4,800,000
2016-007	NDOR	I-80/I-480/US-75 Interchange	I-80 and I-480 bridges at I-80/I-480/US-75 Interchange. Begin R.P. – 452.98	\$12,970,000	\$12,970,000
2016-008	NDOR	I-480: 20th Street - Missouri River Bridges (EB)	On eastbound I-480 (including ramps) from 20th Street to the Missouri River. Begin R.P. – 2.95	\$8,600,000	\$8,600,000
2016-009	NDOR	I-480: 20th Street - Missouri River Bridges (WB)	On westbound I-480 (including ramps) from 20th Street to the Missouri River. Begin R.P. – 2.95	\$9,350,000	\$9,350,000
2016-010	NDOR	N-31 Bridges North of N-36	On N-31, approximately 0.7 miles and 5.2 miles north of N-36. Begin R.P. – 31.75	\$2,271,000	\$2,271,000
2016-011	NDOR	US-75: J Street & Gilmore Ave Bridge (SB)	Viaduct on US-75 at Gilmore/Union Pacific Rail Road and bridge at J Street. Begin R.P. – 85.80	\$2,619,000	\$2,619,000
2016-012	NDOR	US-75: Off Ramp to N-64 (NB)	On northbound US-75 off-ramp to N-64 (Cumming Street). Begin R.P. – 91.09	\$258,000	\$258,000
2016-013	NDOR	US-75: Big Papillion Creek, Bellevue	On US-75 over Big Papillion Creek, approximately 0.3 miles south of Bellevue. Begin R.P. – 80.03	\$250,000	\$250,000
2016-014	NDOR	District 2 CCTV Cameras	On I-680, at three (3) locations in the Omaha area. Begin R.P. – 9.94	\$131,000	\$136,000
2016-015	NDOR	US-75 Fiber-Optic	Along US-75 from Fort Crook Road to south Junction with I-480	\$755,000	\$759,000
2016-016	NDOR	US-6 Fiber-Optic	Along US-6 from N-31 to Westroads Mall Road in Omaha	\$922,000	\$922,000
2016-017	NDOR	I-80/I-480/I-680 Barriers, Omaha	Along I-80, I-480, and I-680 bridge locations in Omaha	\$864,000	\$864,000
2016-018	NDOR	I-80, N-31, N-370, & N-50 Ramps	I-80 interchange ramps at N-31, N-370, and N-50	\$710,000	\$710,000
2016-019	NDOR	US-275: 25th Street - 23rd Street	On US-275 from 1/2 block west of 25th Street to 1/2 block east of 23rd Street. Begin R.P. – 189.14	\$1,668,000	\$1,668,000
2016-020	NDOR	I-680: Mormon Bridge Painting	On I-680 at Mormon Bridge over Missouri River. Begin R.P. – 13.43	\$12,412,000	\$12,412,000
2016-021	NDOR	I-680: Mormon Bridge Deck Overlay	On I-680 at Mormon Bridge over Missouri River. Begin R.P. – 13.43	\$1,610,000	\$1,610,000
2016-022	NDOR	US-75 Bridge Approaches, Bellevue	US-75 bridges approaches from approximately 0.3 miles south Bellevue, north to Chandler Road. Begin R.P. – 80.03	\$1,643,000	\$1,643,000
2016-023	NDOR	24th Street Interstate Bridge	On 24th Street over I-80. Begin R.P. – 453.37	\$460,000	\$460,000
2016-024	NDOR	N-31: Elkhorn Viaduct	On N-31, viaduct over Park/Papio/Union Pacific Railroad approximately 0.7 miles south of N-64. Begin R.P. – 24.40	\$4,500,000	\$4,500,000
2016-025	NDOR	I-680: West Center Road Bridge	On I-680 at West Center Road. Begin R.P. – 0.83	\$1,520,000	\$1,520,000
2016-026	NDOR	I-80: I-480 to 24th Street	On I-80 from I-480 to 24th Street. Begin R.P. – 453.01	\$6,762,000	\$6,762,000
2016-027	NDOR	N-370: I-80 to Bellevue	On N-370 from I-80 to NB US-75 ramp terminal in Bellevue. Begin R.P. – 4.19	\$500,000	\$500,000
2016-028	NDOR	District 2 I-80 Fiber-Optic	Along I-80 from near Mahoney interchange east to the Iowa State line. Begin R.P. – 426.90	\$2,426,000	\$2,426,000
2016-029	NDOR	District 2 I-680 Fiber-Optic	Along I-680 in Omaha	\$1,300,000	\$1,300,000
2016-030	NDOR	District 2 I-480 Fiber-Optic	Along I-480 in Omaha	\$467,000	\$467,000
2016-031	NDOR	US-75: Dynamic Message Signs, Omaha	Along northbound and southbound US-75 from approximately J Street to west of F Street in Omaha. Begin R.P. – 87.33	\$688,000	\$688,000
2016-032	NDOR	District 2 DMS	Along I-80, US-75, and US-34 in District 2. Begin R.P. – 428.92	\$2,065,000	\$2,065,000
2016-033	NDOR	District 2 CCTV Camera Towers	At eleven locations along I-80, I-680, US-75, US-34, and N-370 in District 2	\$485,000	\$485,000
2017-030	NDOR	US-6 Bridges at I-680	Bridge repair and overlay	\$4,500,000	\$4,500,000
2015-001	Omaha	North Downtown Riverfront Pedestrian Bridge	10th and Fahey Drive	\$5,848,500	\$6,558,500
2015-013	Omaha	Omaha Signal Infrastructure - Phase A	Various Locations Throughout City	\$4,447,500	\$4,447,500
2015-016	Omaha	Omaha ATMS Central System Software	Citywide	\$655,000	\$1,573,750
2015-017	Omaha	Omaha Signal Network - System Management	Various locations throughout the City of Omaha	\$500,000	\$500,000
2015-040	Omaha	156th Street Phase Two	Pepperwood Dr. to Corby St.	\$10,355,000	\$12,222,556
2015-044	Omaha	Q Street Bridge	Q St. between 26th St. and 27th St.	\$15,408,750	\$16,870,750
2015-051	Omaha	108th Street	Madison St to Q Street	\$6,431,250	\$6,771,250
2015-052	Omaha	168th Street	West Center Rd to Poppleton	\$5,908,750	\$6,466,250
2015-053	Omaha	114th Street	Burke to Pacific St	\$4,583,750	\$5,556,250
2015-054	Omaha	168th Street	West Center Rd to Q Street	\$12,292,500	\$12,959,190
2015-055	Omaha	120th Street	Stonagate Dr to Fort St	\$10,732,500	\$11,957,500
2015-065	Omaha	24th Street Road Diet	From L Street to Leavenworth Street.	\$3,395,000	\$3,395,000
2015-132	Omaha	132nd at West Center Road Safety Project	132nd Street from Kingswood to Arbor Plaza and West Center Road from 133rd Plaza to 130th Ave	\$2,001,000	\$2,313,500

Nebraska TIP Projects | FY 2016-2019

TIP ID	Lead Agency	Project Name	Improvement Location	Project Cost (FY2016-2019)	Total Project Cost
2015-157	Omaha	Omaha Signal Infrastructure - Phase B	Various Locations Throughout City	\$3,278,750	\$3,278,750
2015-158	Omaha	Omaha Signal Infrastructure - Phase C	Various Locations Throughout City	\$1,970,000	\$1,970,000
2015-159	Omaha	Omaha Signal Infrastructure - Phase D	Various Locations Throughout City	\$1,448,750	\$1,448,750
2016-045	Omaha	Omaha Resurfacing Program	Various locations throughout the City of Omaha	\$12,000,000	\$12,000,000
2015-010	Papillion	Schram Road 84th Street to 90th Street	Schram Road 84th Street to 90th Street	\$437,500	\$5,522,500
2015-041	PMRNRD	Western Douglas County Trail Phase 2	City of Valley to Village of Waterloo	\$2,224,910	\$2,543,228
2015-042	PMRNRD	Western Douglas County Trail Phase 1	City of Valley to Twin Rivers YMCA	\$3,224,655	\$3,586,055
2015-058	Sarpy	132nd and Giles	132nd and Giles Road	\$2,585,000	\$3,057,713
2015-062	Sarpy	66th and Giles	Harrison St. to 400ft. South of Giles Road and Giles Road from 69th St. to 66th St.	\$1,233,750	\$11,761,250
2015-138	Valley	Valley D.C. Safe Routes to School	Portion of Meigs Street in Valley, NE	\$225,000	\$270,000
<b>Total</b>				<b>\$352,104,104</b>	<b>\$429,347,597</b>

Iowa TIP Projects | FY 2016-2019

TIP ID	Lead Agency	Project Name	Improvement Location	Total Cost
2015-007	Pottawattamie	Pottawattamie County Multi-Use Trail - Phase 1	From Council Bluffs north to 330th Street along the Railroad Highway, approximately 7 miles	\$281,250
2015-014	Council Bluffs	Iowa Riverfront Trail III	Recreation Trail Connection Along Missouri River	\$286,250
2015-045	Council Bluffs	East Beltway Segments A-D	US-6 to IA-92	\$12,060,250
2015-056	Iowa DOT	I-80	I-80/I-29/I-480 Interstate Reconstruction	\$431,454,000
2015-060	Council Bluffs	River Rd. Trail	River Rd to Nebraska Ave.	\$307,500
2015-075	Council Bluffs	Interstate Utility Relocation	On I-29 at Mosquito Creek	\$1,863,000
2015-077	Council Bluffs	Kanesville Blvd Adaptive Traffic Signal Control	On Kanesville Boulevard, from 16th Street to North Avenue	\$486,000
2015-078	Council Bluffs	East Broadway Realignment at Kanesville Blvd	On Kanesville Boulevard from Frank Street to North Broadway	\$593,500
2015-079	Iowa DOT	US 275 Bridge Over Missouri River	US Highway 275 Bridge over Missouri River	\$1,236,000
2015-081	Iowa DOT	I-680 Bridge Over Missouri River - Westbound	On I-680 3.1 miles west of I-29	\$1,679,000
2015-082	Iowa DOT	I-680 Bridge Over Missouri River - Eastbound	On I-680 3.1 miles west of I-29	\$1,558,000
2015-085	Iowa DOT	I-80 Missouri River to Cass County	On I-80 from Missouri River to Cass County line	\$1,200,000
2015-086	Iowa DOT	I-29 Bridge at 9th Avenue - Southbound	I-29 at 9th Ave in Council Bluffs	\$250,000
2015-087	Iowa DOT	I-29 Bridge at 9th Avenue - Northbound	On I-29 at 9th Avenue in Council Bluffs	\$250,000
2016-034	Council Bluffs	North 16th Street Reconstruction	On 16th Street (Highway 192) from Avenue G to Nash Boulevard	\$5,625,000
2016-035	Council Bluffs	South Expressway Reconstruction - Phase 1	On Highway 192 from I-80 north to 21st Street	\$5,781,500
2016-039	Iowa DOT	I-80 Missouri River Bridge - Eastbound	On I-80 at Missouri River crossing in Council Bluffs	\$48,000
2016-040	Iowa DOT	I-80 Missouri River Bridge - Westbound	On I-80 at Missouri River crossing in Council Bluffs	\$48,000
2016-041	Iowa DOT	I-29: Mills County to Iowa 92	On I-29 from Mills County line to Iowa Highway 92 in Council Bluffs	\$250,000
2016-042	Iowa DOT	US-275 Missouri River Bridge	On US-275 at Missouri River crossing	\$572,000
2016-043	Iowa DOT	I-480: Missouri River to I-29	On I-480 from the Missouri River to I-29 in Council Bluffs	\$400,000
2016-044	Iowa DOT	I-480 Missouri River Bridge	On I-480 at the Missouri River crossing in Council Bluffs	\$1,218,000
<b>Total</b>				<b>\$467,447,250</b>

**Nebraska Short-Term Projects | FY 2020-2025**

Lead Agency	Roadway	Location	Improvement Description	Program	Year	Total Cost
Bellevue	36th St Phase II	Sheridan Rd to Platteview Rd	Widen 2 Lane Rural to 4 Lane Urban	STP-MAPA	2020	\$8,955,000
Douglas County	180th St	Blondo St to Maple St	4 Lane Urban	STP-MAPA	2020	\$9,852,000
Douglas County	Q St	192nd St to N-31	4-Lane Divided with LTLs and RTLs	STP-MAPA	2025	\$7,251,234
NDOR	I-680	I-680 / US-6 Bridges	On I-680 at US-6. Begin R.P. – 2.89	NHPP	2021	\$3,700,000
Omaha	Citywide Resurfacing	Various Locations throughout City of Omaha	Advance Construction (AC) repayment of Omaha resurfacing projects	STP-MAPA	2021	\$6,227,000
Omaha	Citywide Resurfacing	Various Locations throughout City of Omaha	Advance Construction (AC) repayment of 2014 Resurfacing Package	STP-MAPA	2021	\$3,313,000
Omaha	180th St	West Dodge Road to HWS Cleveland Blvd	6-Lane Urban Divided	STP-MAPA	2021	\$3,641,400
Omaha	Industrial Road	132nd St to 144th St	Widen 4 Lane Divided Rural to 6 Lane Urban Divided with Turn Lanes	STP-MAPA	2025	\$11,803,338
Papillion	Schram Rd	84th St to 90th St	3 Lane with TWLTL	STP-MAPA	2023	\$5,556,517
Sarpy	66th Street	66th & Giles Intersection	Widening and reconstruction of roadway	STP-MAPA	2022	\$8,422,000
Sarpy County	New I-80 Interchange	At 180th Street	I-80 and 180th Street	STP-MAPA	2024	\$36,414,000
Sarpy County	Harrison St	168th - 156th St	4-Lane Divided with LTL	STP-MAPA	2025	\$13,684,381
Sarpy County	Platteview Rd	36th - 27th St	4-Lane Divided with LTLs	STP-MAPA	2025	\$7,640,429
<b>Total</b>						<b>\$126,460,299</b>

**Iowa Short-Term Projects | FY 2020-2025**

Lead Agency	Roadway	Location	Improvement Description	Program	Year	Total Cost
Council Bluffs	East Beltway	Greenview Road - West Segment	Construct/Widen to a 4 Lane Urban Divided	STP-MAPA	2022	\$3,654,688
Council Bluffs	East Beltway	Stevens Road - West Segment	Construct/Widen to a 4 Lane Urban Divided	STP-MAPA	2023	\$2,420,313
Council Bluffs	23rd Ave Trail	From Mid America Drive to South Expressway	Ped/Bike Grade and Pave	TAP-MAPA	2025	\$884,340
Council Bluffs	West Broadway Reconstruction Phase I	On West Broadway (US 6) from I-29 to 30th Street	Reconstruction of extsting roadway	STP-MAPA	2025	\$7,462,500
IDOT	I-80	Along Interstate network in Council Bluffs	Council Bluffs Interstate System Improvements: Madison Avenue Interchange, ITS improvements, and ROW Management	NHPP	2021	\$105,850,696
<b>Total</b>						<b>\$120,272,536</b>

## 7.7 FISCAL CONSTRAINT OVERVIEW FOR ROADWAY & TRAIL PROJECTS

In order to demonstrate fiscal constraint of the projects and revenues identified in this chapter, MAPA has included Tables 7.13 (below) and 7.14 (next page). These tables correlate the anticipated federal-aid highway revenues, local revenues, and estimated project costs to summarize the analysis conducted within this chapter. The positive balances shown in Table 7.13 below demonstrates that the identified Federal-Aid program of projects is fiscally constrained. Balances in the short-term bucket reflects the inability to program funding by year for non-regional sources of federal funding.

Table 7.14 (next page) summarizes non-federal-aid revenue and expenditures identified within this plan. The maps that follow this section show identified Federal-Aid investments, non-federal-aid projects, and all projects together.

**TABLE 7.13**  
**MAPA FEDERAL-AID FISCAL CONSTRAINT OVERVIEW (IN \$1,000S)**

### Anticipated Federal-Aid Revenues (in \$1,000s)

	TIP	Short Term	Medium Term	Long Term		Total
	2016-2019	2020-2025	2026-2030	2031-2035	2036-2040	
<b>Iowa Federal-Aid</b>	\$410,135	\$111,108	\$36,861	\$18,830	\$19,207	<b>\$596,141</b>
<b>Nebraska Federal-Aid</b>	<b>\$212,209</b>	<b>\$132,456</b>	\$126,811	\$130,614	\$134,533	<b>\$736,623</b>
<b>Sub-Total</b>	<b>\$622,344</b>	<b>\$243,564</b>	<b>\$163,672</b>	<b>\$149,444</b>	<b>\$153,740</b>	<b>\$1,332,764</b>
<b>Iowa Match</b>	\$57,309	\$24,055	\$7,464	\$23,423	\$15,946	<b>\$128,197</b>
<b>Nebraska Match</b>	<b>\$139,895</b>	<b>\$24,917</b>	\$28,759	\$16,608	\$13,955	<b>\$224,134</b>
<b>Sub-Total</b>	<b>\$197,204</b>	<b>\$48,972</b>	<b>\$36,223</b>	<b>\$40,031</b>	<b>\$29,901</b>	<b>\$352,331</b>
<b>Iowa Total</b>	<b>\$467,444</b>	<b>\$135,163</b>	<b>\$44,325</b>	<b>\$59,884</b>	<b>\$35,153</b>	<b>\$741,969</b>
<b>Nebraska Total</b>	<b>\$352,104</b>	<b>\$157,373</b>	<b>\$157,153</b>	<b>\$147,222</b>	<b>\$148,488</b>	<b>\$962,340</b>
<b>Total Revenues</b>	<b>\$819,548</b>	<b>\$292,536</b>	<b>\$201,478</b>	<b>\$207,106</b>	<b>\$183,641</b>	<b>\$1,704,309</b>

### Total Federal-Aid Project Costs (in \$1,000s)

	TIP	Short Term	Medium Term	Long Term		Total
	2016-2019	2020-2025	2026-2030	2031-2035	2036-2040	
<b>Federal-Aid - IA</b>	\$467,444	\$120,273	\$37,320	\$59,884	\$35,153	<b>\$720,074</b>
<b>Federal-Aid - NE</b>	<b>\$352,104</b>	<b>\$126,460</b>	\$151,710	\$147,222	\$148,488	<b>\$925,984</b>
<b>Sub Total</b>	<b>\$819,548</b>	<b>\$246,733</b>	<b>\$189,030</b>	<b>\$207,106</b>	<b>\$183,641</b>	<b>\$1,646,058</b>

### Balance of Federal-Aid Revenues & Expenditures (in \$1,000s)

	TIP	Short Term	Medium Term	Long Term		Total
	2016-2019	2020-2025	2026-2030	2031-2035	2036-2040	
<b>Iowa Balance</b>	\$0	\$14,890	\$7,005	\$0	\$0	<b>\$21,895</b>
<b>Nebraska Balance</b>	\$0	<b>\$30,913</b>	\$5,443	\$0	\$0	<b>\$36,356</b>
<b>Regional Balance</b>	<b>\$0</b>	<b>\$45,803</b>	<b>\$12,448</b>	<b>\$0</b>	<b>\$0</b>	<b>\$58,251</b>

Agenda Item E  
Funding Obligation and Project  
Status

# Funding Obligation and Project Status

Information Item



## MAPA Surface Transportation Program (STP) (NE)

FAST Act FY2016 Obligation Limit	Obligated Funds Through 04/30/16	Balance
\$13.224	\$0.570	\$12.654

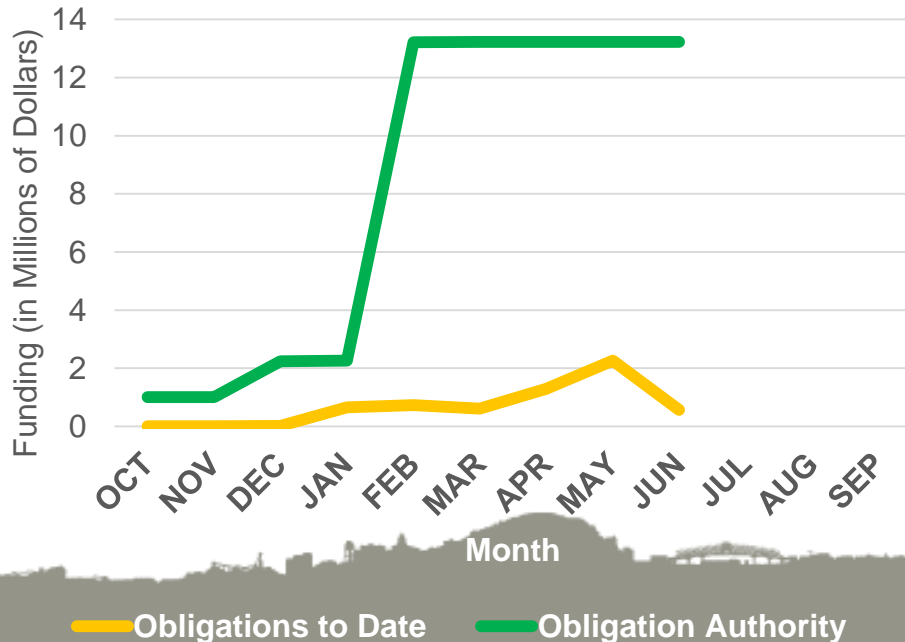
## MAPA Transportation Alternatives Program (TAP) (NE)

(In \$Millions)

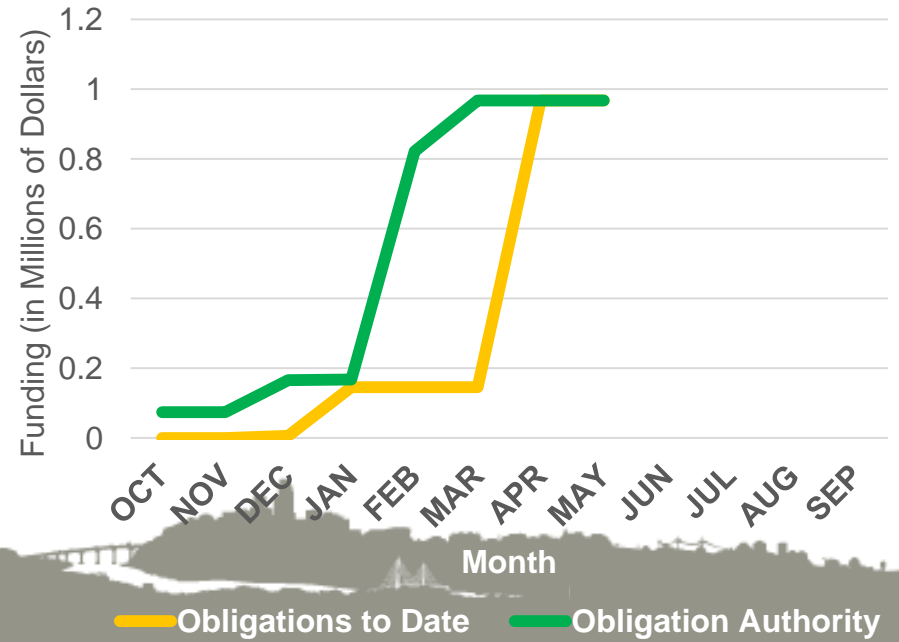
FAST Act FY2016 Obligation Limit	Obligated Funds Through 04/30/16	Balance
\$.968	\$0.968	\$0.000

(In \$Millions)

FY2016 MAPA Regional STP Obligations (NE)



FY2016 MAPA Regional TAP Obligations (NE)



# Iowa Funding Status

	Highway Program	Enhancement Program
<b>Q3 Balance Before Obligations</b>	\$7,260	\$566
<b>Q3 Obligations</b>	\$0	\$0
<b>Q3 Ending Balance</b>	\$7,260	\$566

(In \$Millions)



# Fiscal Constraint

FY2016 - FY2019				
	Beginning Balance	Total Spending Authority	Total Projects	Ending Balance
STP-NE	\$ 43,470	\$ 60,112	\$ 101,930	\$ 1,652
STP-IA	\$ 8,706	\$ 7,939	\$ 15,600	\$ 1,045
TAP-NE	\$ 558	\$ 3,930	\$ 3,799	\$ 689
TAP-IA	\$ 287	\$ 760	\$ 700	\$ 347
5339/5307	\$ 24,520	\$ 37,902	\$ 60,135	\$ 2,287
5310	\$ 867	\$ 2,120	\$ 2,925	\$ 61

# MAPA Regional STP Funding - Nebraska

Lead Agency	Project Name	Comments	Control Number	FY2016	FY2017	FY2018	FY2019
Bellevue	36th Street Phase 1-370 – Sheridan		NE-22276-1	PE/ROW	C		
Bellevue	36th Street Phase II		NE-22276-2	PE/ROW			
Bennington	156th Street		NE-22233	PE/ROW	C		ACC
Douglas	180th Street (Phase 1)		NE-22224	PE	ROW		C
Omaha	108th Street		NE-22237	PE/ROW/U	C		
Omaha	114th Street (Pacific Street to Burke Street)		NE-22236	ROW		C	
Omaha	120th Street (Stonegate Drive to Roanoke Circle)		NE-22277	PE	ROW / U	C	
Omaha	156th Street (Phase 2)		NE-22376	ROW	C		
Omaha	168th Street (Q Street to West Center Road)		NE-22209	PE	ROW	C	
Omaha	168th Street (West Center Rd to Poppleton St.)		NE-22210	PE	ROW	C	
Omaha	42nd St Bridge C to D street	ACC in 16					ROW/A C
Omaha	Q Street Bridge	OA in FY 16	NE-22325	ROW	C		
Omaha	Omaha Signal Network – Infrastructure A-E	OA in FY 17	NE-22608 A-E		C	C	C
Omaha	Omaha Signal Infrastructure Phase 0	OA in FY 16	NE-22608	C			
Omaha	Omaha ATMS Central System Software	OA in FY 16	NE-22591	C			
Omaha	Omaha Signal Network - System Management	OA in FY 16	NE-22587	PE	PE		
Omaha	2014 Omaha Resurfacing Package		NE-22605	ACC			
Omaha	Resurfacing Project			AC	AC	AC	AC/ACC
Sarpy	132nd and Giles		NE-22283	ROW/C/U			
Sarpy	66th and Giles				PE	ROW	
MAPA/NDO R	Metro Area Travel Improvement Study		NE-22547	PLAN			

PE-NEPA-FD (PE)
  Right-of-Way (ROW)
  Construction/CE (C)
  Transit Capital (PUR)

# MAPA Regional STP Funding - Iowa

Lead Agency	Project Name	Control Number	FY2016	FY2017	FY2018	FY2019
Council Bluffs	East Beltway Segments A-D	IA-13414				
	Eastern Hills Drive – Segment D				C	
	Greenview Road – East Segment			PE/ROW		C
	Greenview Road – West Segment				PE	
	Stevens Road – West Segment					PE
Council Bluffs	Interstate Utility Relocation	IA-15903				
	Interstate Utility Relocation		C	C	C	C
Council Bluffs	South Expressway Reconstruction Phase 1				C	
Council Bluffs	N 16 Street		C			

# MAPA Regional TAP Funding - Nebraska

Lead Agency	Project Name	Control Number	FY2016	FY2017	FY2018	FY2019
Metro	BRT	MET-11242014-001	C			
LaVista	Applewood Creek	LV-033115-001				PE
Omaha	North Downtown Ped Bridge	NE-22571	PE	C	C	

# MAPA Regional TAP Funding - Iowa

Lead Agency	Project Name	Control Number	FY2016	FY2017	FY2018	FY2019
Council Bluffs	Iowa Riverfront Trail III	IA-1581	C			
Council Bluffs	River Road Trail	IA-21087		C		
Pottawattamie	Multi-Use Trail – Phase I	IA-29802			C	

Agenda Item F  
2050 LRTP Alternative Scoring

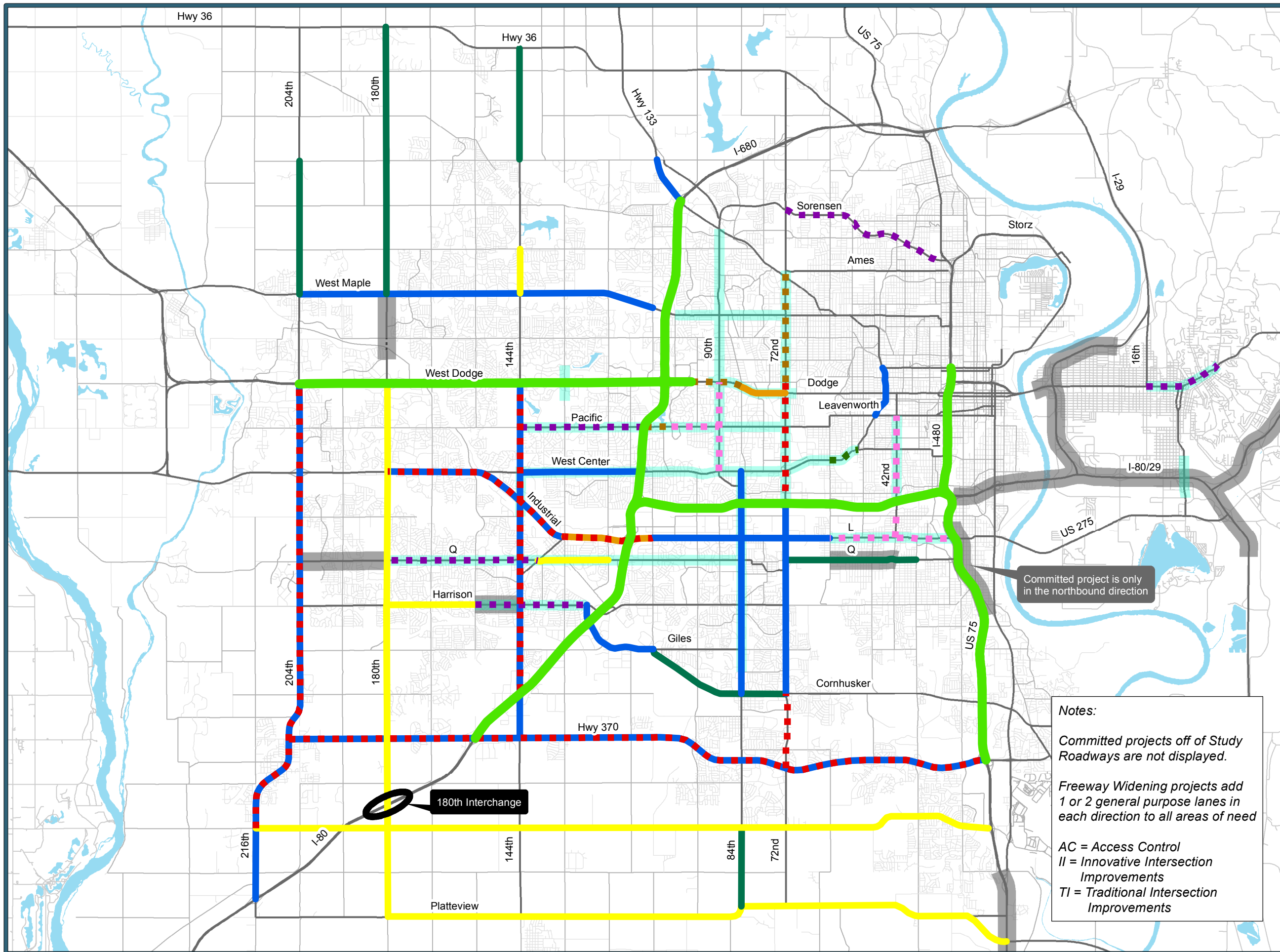
Goal Area	Goal Area Weight	Performance Measure	Performance Measure Target	Type	Scaled Raw Points						Weight	Weighted Points						Target Bonus Points						Total Score						
					Strategy Package 1	Strategy Package 2	Strategy Package 3	Strategy Package 4	Strategy Package 5	Strategy Package 6		Strategy Package 1	Strategy Package 2	Strategy Package 3	Strategy Package 4	Strategy Package 5	Strategy Package 6	Strategy Package 1	Strategy Package 2	Strategy Package 3	Strategy Package 4	Strategy Package 5	Strategy Package 6	Strategy Package 1	Strategy Package 2	Strategy Package 3	Strategy Package 4	Strategy Package 5	Strategy Package 6	
Congestion Reduction	45%	VMT	VMT growth per household between 2010 and 2040 is 8% or less.	Daily VMT / Household	98.5	97.4	97.3	100.0	98.8	97.8	2%	1.97	1.95	1.95	2.00	1.98	1.96							1.97	1.95	1.95	2.00	1.98	1.96	
		VHT	VHT growth per household between 2010 and 2040 is 12% or less.	Daily VHT / Household	100.0	97.8	98.4	98.4	94.8	98.9	9%	9.00	8.81	8.85	8.85	8.53	8.90	0.9						9.90	8.81	8.85	8.85	8.53	8.90	
		Delay	Delay growth per household between 2010 and 2040 is 1.5% per year or less (compounded growth).	Daily Hours Delay	100.0	81.2	85.4	73.1	57.4	93.1	10%	10.00	8.12	8.54	7.31	5.74	9.31	1.0						11.00	8.12	8.54	7.31	5.74	10.31	
		Miles of Congested Freeway (Mainline) Segments	Congested Miles of Freeway growth per household between 2010 and 2040 is 1.5% per year or less.	Miles at LOS E or F	100.0	85.8	14.3	30.8	16.8	90.8	15%	15.00	12.87	2.15	4.62	2.52	13.62	1.5	1.5					1.5	16.50	14.37	2.15	4.62	2.52	15.12
		Miles of Congested Non-Freeway Segments	Congested Miles of Non-Freeway (Arterial) growth per household between 2010 and 2040 is 1.5% per year or less.	Miles at LOS E / F	63.1	49.6	100.0	44.5	39.5	60.5	9%	5.68	4.46	9.00	4.01	3.56	5.44	0.9		0.9				6.58	4.46	9.90	4.01	3.56	5.44	
Mobility & Accessibility	25%	Regional Mode Share	Achieve 10% transit, bike, walk mode share for all trips by 2040	Total	78.0	92.0	90.0	100.0	66.0	86.0	5%	3.90	4.60	4.50	5.00	3.30	4.30						3.90	4.6	4.5	5.00	3.3	4.3		
		Access to Jobs	Auto Access to jobs is reduced less than 1% per year. Transit Access to jobs increases by 1% per year.	Auto: % jobs within 15 minutes	90.5	76.8	79.9	100.0	70.7	91.1	3%	2.72	2.30	2.40	3.00	2.12	2.73	0.3				0.15	0.15	3.02	2.30	2.40	3.15	2.12	2.88	
				Transit: % jobs within 60 minutes																										
		Proximity to Transit	Maintain housing and jobs proximity levels at ¼ mile walk distance at 2010 levels	Jobs: % within ¼ mile	77.9	75.7	75.7	100.0	75.7	82.1	3%	2.34	2.27	2.27	3.00	2.27	2.46					0.3		2.34	2.27	2.27	3.30	2.27	2.46	
				Houses: % within ¼ mile																										
		EJ Access to Jobs	Auto Access to jobs is reduced less than 1% per year. Transit Access to jobs increases by 1.15% per year.	Auto: % jobs within 15 min for EJ HH	90.3	80.5	81.1	100.0	76.3	93.1	6%	5.42	4.83	4.87	6.00	4.58	5.58	0.3	0.3	0.3	0.6	0.3	0.6	5.72	5.13	5.17	6.60	4.88	6.18	
				Transit: % jobs within 60 minutes for EJ HH																										
EJ Proximity to Transit	Maintain EJ proximity to Transit services at 2010 levels.	% within ½ mile of local transit	98.7	98.7	98.7	100.0	98.7	99.7	7%	6.91	6.91	6.91	7.00	6.91	6.98					0.7		6.91	6.91	6.91	7.70	6.91	6.98			
Proximity to Bicycle / Pedestrian Facilities	Proximity to Bicycle and Pedestrian facilities increases by 1.0% per year or more.	% of Jobs within ½ mile of bike facilities	100.0	100.0	100.0	100.0	83.8	87.8	1%	1.00	1.00	1.00	1.00	0.84	0.88	0.1	0.1	0.1	0.1			1.10	1.10	1.10	1.10	0.84	0.88			
		% of Households within ½ mile of bike facilities																												
Stewardship & Environment	10%	Criteria Pollutant Emissions	Reduce NOx and VOCs by 10% compared to 2040 No-Build.	NOx - lbs/day	99.0	96.8	96.7	100.0	97.2	97.6	4%	3.96	3.87	3.87	4.00	3.89	3.91						3.96	3.87	3.87	4.00	3.89	3.91		
				VOCs - lbs/day	99.8	97.4	97.5	100.0	97.0	98.4	4%	3.99	3.90	3.90	4.00	3.88	3.94							3.99	3.90	3.90	4.00	3.88	3.94	
		Sustainability Score	No Baseline Assessment	95.5	54.5	31.8	100.0	0.0	90.9	2%	1.91	1.09	0.64	2.00	0.00	1.82	N/A						1.91	1.09	0.64	2.00	0.00	1.82		
Safety	20%	Fatalities per 100 MVMT Serious Injuries per 100 MVMT Non-motorized Fatalities and Serious Injuries	10% Reduction compared to 2040 No-Build	# of Fatalities per 100 MVMT	100.0	83.2	93.2	95.3	87.7	97.6	8%	8.00	6.66	7.45	7.63	7.02	7.81	0.8		0.8	0.8		0.8	8.80	6.66	8.25	8.43	7.02	8.61	
				# of Serious Injuries per 100 MVMT	100.0	84.6	93.6	96.0	88.2	95.4	6%	6.00	5.08	5.61	5.76	5.29	5.73	0.6		0.6	0.6		0.6	6.60	5.08	6.21	6.36	5.29	6.33	
				# of Non-motorized Fatalities and Serious Injuries	100.0	86.7	94.5	98.1	85.2	85.2	6%	6.00	5.20	5.67	5.89	5.11	5.11	0.6	0.6	0.6	0.6	0.6	0.6	6.60	5.80	6.27	6.49	5.71	5.71	



	SP 1	SP 2	SP 3	SP 4	SP 5	SP 6
Congestion Reduction	46.0	37.7	31.4	26.8	22.3	41.7
Mobility & Accessibility	23.0	22.3	22.3	26.9	20.3	23.7
Stewardship & Environment	9.9	8.9	8.4	10.0	7.8	9.7
Safety	22.0	17.5	20.7	21.3	18.0	20.7
Score	100.8	86.4	82.9	84.9	68.4	95.7
Rank	1	3	5	4	6	2

Regional Strategy Package Evaluation Summary Table

Strategy	Theme	Overview	Road capacity	Creative road improvements	Transit	Bike/Pedestrian Improvements
1	High levels of investment in all modes	High levels of roadway investments, creative roadway improvements are done to fill system gaps, considerable transit investments, and bike and pedestrian routes are built	Full needs met	Travel demand management, and improved signals and intersections	Moderate transit investment	Bike and pedestrian plan is implemented
2	Freeway focused	Focuses on improving freeways with some minor arterial improvements. Limited transit investment	Focuses on freeway needs	Signal improvements on some arterials	Low levels of investment	Bike and pedestrian plan is implemented
3	Arterial focused	Focuses on improving arterial routes and increasing existing levels of transit service	Focuses on arterial needs	Intersection and signal improvements on freeways	Very Low levels	Bike and pedestrian plan is implemented
4	Transit and alternate systems	Limited freeway and arterial investments with heavy consideration for creative improvements, transit build out with BRT	Limited	Considerable investment in signal and intersection improvement	High levels of investment	Bike and pedestrian plan is implemented
5	Limited levels of investment	Limited funding across all modes focusing on just preserving existing roads and routes	Limited	None	Low levels of investment	Highest priority bike and pedestrian projects only
6	Geographic distribution	Provides strategies based on suburban and urban areas	Suburban expansions	Improvements mostly in the city centers	Improvements focused in the city center with some suburban improvements	All central city bike and pedestrian routes built, in the suburbs only the highest priority routes are built



### Strategy Package #1

#### Legend

**Freeway Widening**

**Arterial Widening**  
 3  
 4  
 6  
 8

**Arterial Other Strategies**  
 Access Control  
 Innovative Intersections  
 II & AC  
 Traditional Intersections  
 TI & AC

**ITS Corridors**

**Committed Widening Projects**

**Notes:**  
 Committed projects off of Study Roadways are not displayed.  
 Freeway Widening projects add 1 or 2 general purpose lanes in each direction to all areas of need  
 AC = Access Control  
 II = Innovative Intersection Improvements  
 TI = Traditional Intersection Improvements

**Committed project is only in the northbound direction**

**Metro Area Travel Improvement Study**




# Strategy Package #1


## Legend

### Transit Projects

-  Busway BRT
-  BRT
-  Express

-  Park & Ride

### Existing Transit System

-  Park & Ride

### Committed BRT Project

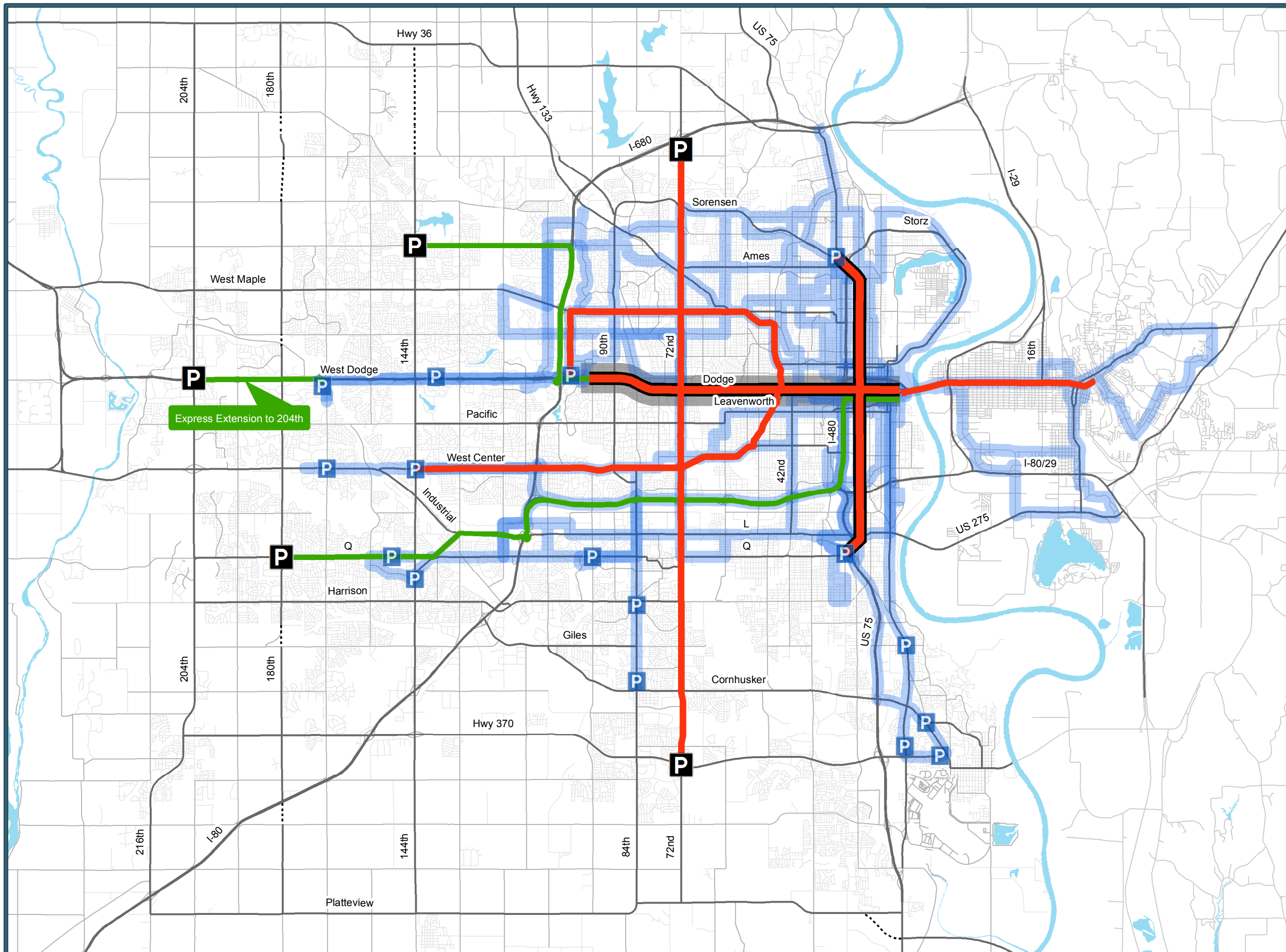
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### Notes:

Committed projects off of Study Roadways are not displayed.

Additional transit improvements include increased headways on key central city routes.

BRT = Bus Rapid Transit



# Strategy Package #2

## Legend

### Freeway Widening

- █ Freeway Expansion
- █ Beltway (4 lane Fwy)

### Arterial Widening

- █ 4
- █ 6
- █ 8

### Arterial Other Strategies

- █ Innovative Intersections
- █ II & AC
- █ Traditional Intersections

### ITS Corridors

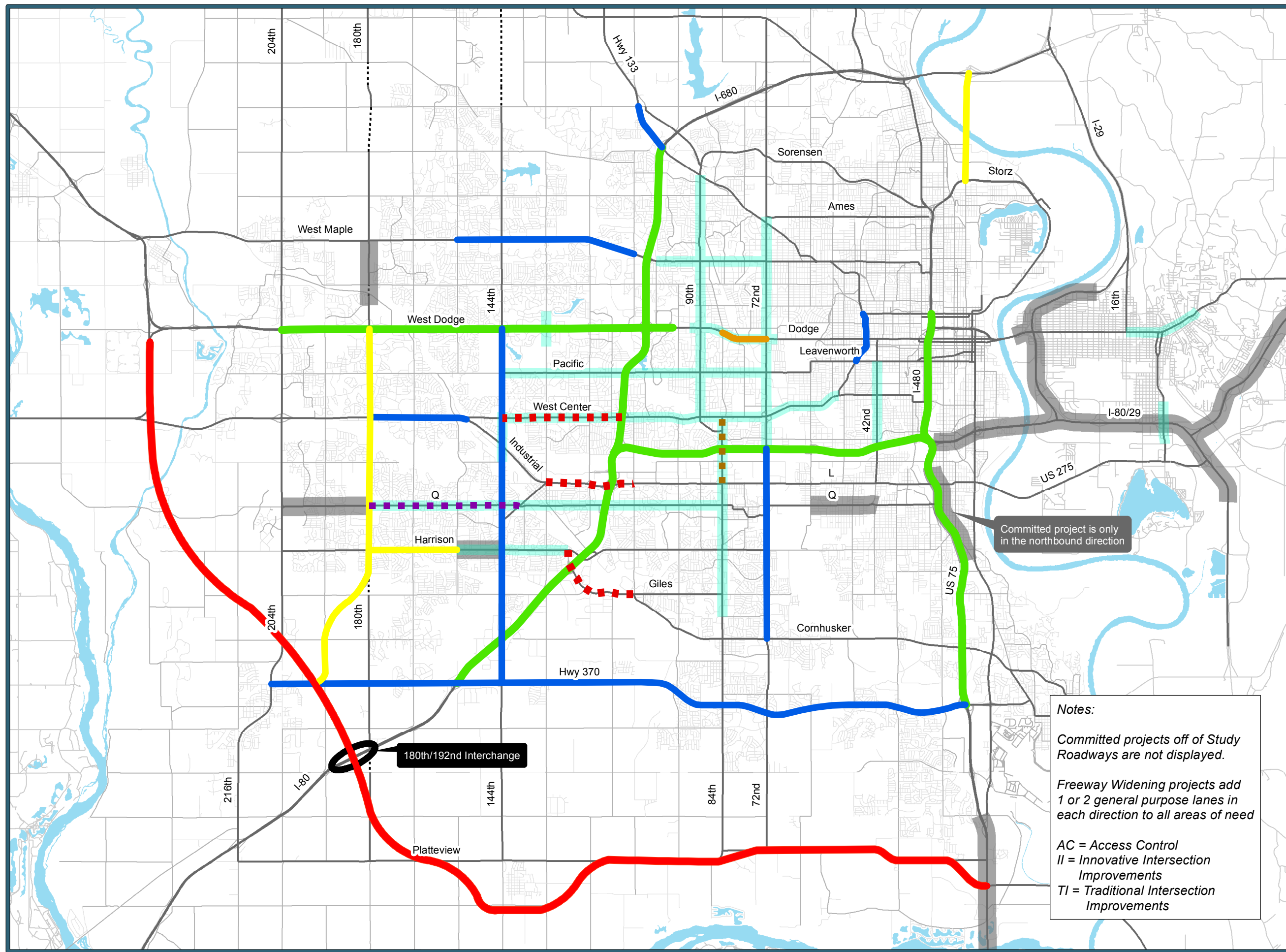
- █ Committed Widening Projects
- █ Committed Widening Projects

**Notes:**

Committed projects off of Study Roadways are not displayed.

Freeway Widening projects add 1 or 2 general purpose lanes in each direction to all areas of need

AC = Access Control  
 II = Innovative Intersection Improvements  
 TI = Traditional Intersection Improvements





# Strategy Package #2


## Legend

### Transit Projects

 Express

 Park & Ride

### Existing Transit System

 Park & Ride

### Committed BRT Project

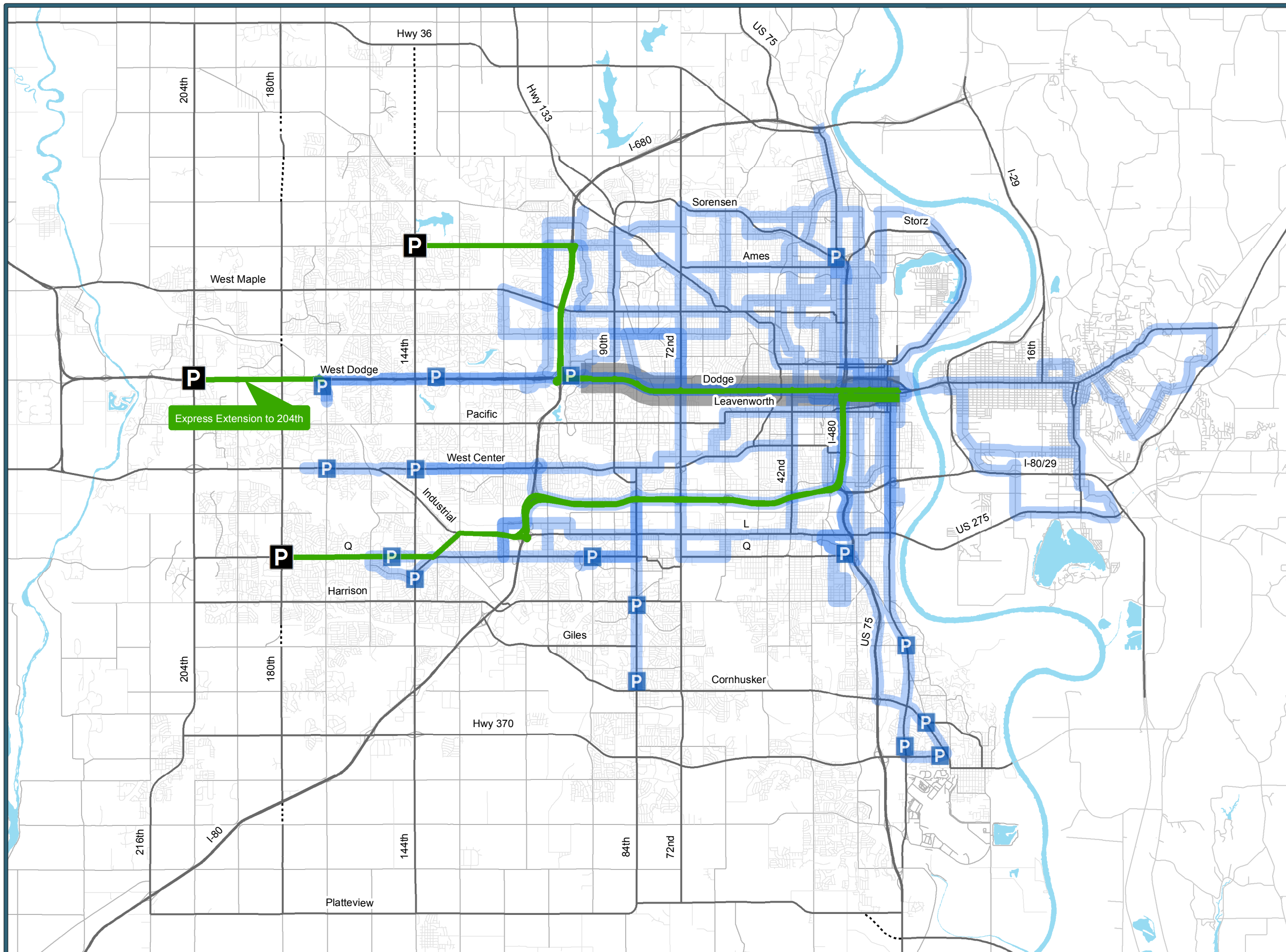


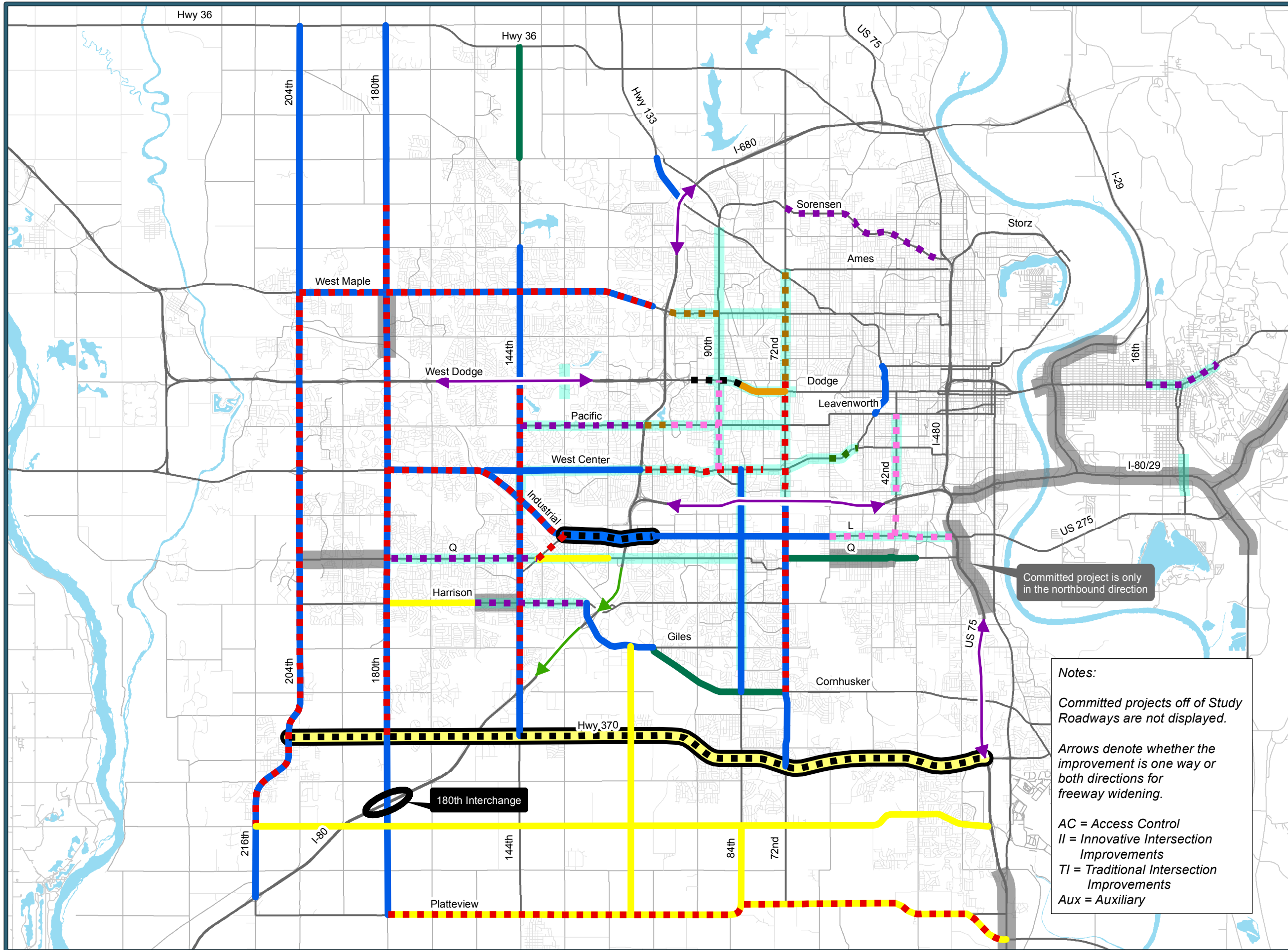
### Notes:

Committed projects off of Study Roadways are not displayed.

Additional transit improvements include increased headways on key central city routes.

BRT = Bus Rapid Transit





## Strategy Package #3

### Legend

**Freeway Widening**

- Aux Lane Add (One-Way)
- General Purpose Lane Add

**Arterial Widening**

- 3
- 4
- 6
- 8

**ITS Corridors**

- Fwy 4
- Fwy 6

**Arterial Other Strategies**

- Access Control
- Grade Separations
- Innovative Intersections
- II & AC
- Traditional Intersections
- TI & AC

**Committed Widening Projects**

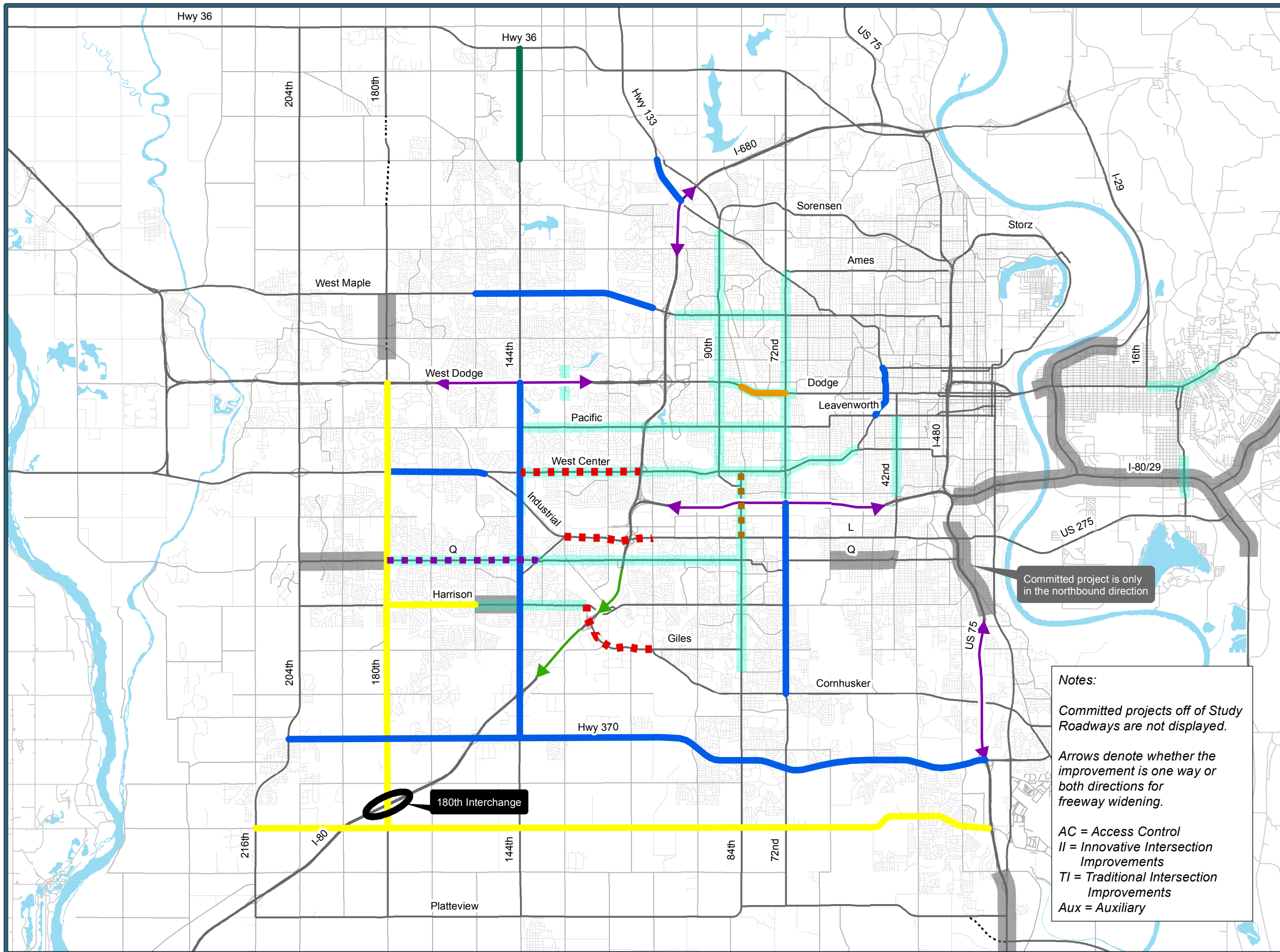
**Notes:**

- Committed projects off of Study Roadways are not displayed.
- Arrows denote whether the improvement is one way or both directions for freeway widening.
- AC = Access Control
- II = Innovative Intersection Improvements
- TI = Traditional Intersection Improvements
- Aux = Auxiliary

Committed project is only in the northbound direction

Metro Area Travel Improvement Study





# Strategy Package #4

## Legend

- Freeway Widening**
  - ← Aux Lane Add (One-Way)
  - ↔ General Purpose Lane Add
- Arterial Widening**
  - 4
  - 6
  - 8
  - 3
- Arterial Other Strategies**
  - Innovative Intersections
  - II & AC
  - Traditional Intersections
- ITS Corridors**
- Committed Widening Projects**







**Notes:**  
 Committed projects off of Study Roadways are not displayed.  
 Arrows denote whether the improvement is one way or both directions for freeway widening.  
 AC = Access Control  
 II = Innovative Intersection Improvements  
 TI = Traditional Intersection Improvements  
 Aux = Auxiliary



# Strategy Package #4


## Legend

### Transit Projects

-  Busway BRT
-  BRT
-  Transitway
-  Bus on Shoulder
-  Express
-  Local

 Park & Ride

### Existing Transit System

 Park & Ride

### Committed BRT Project

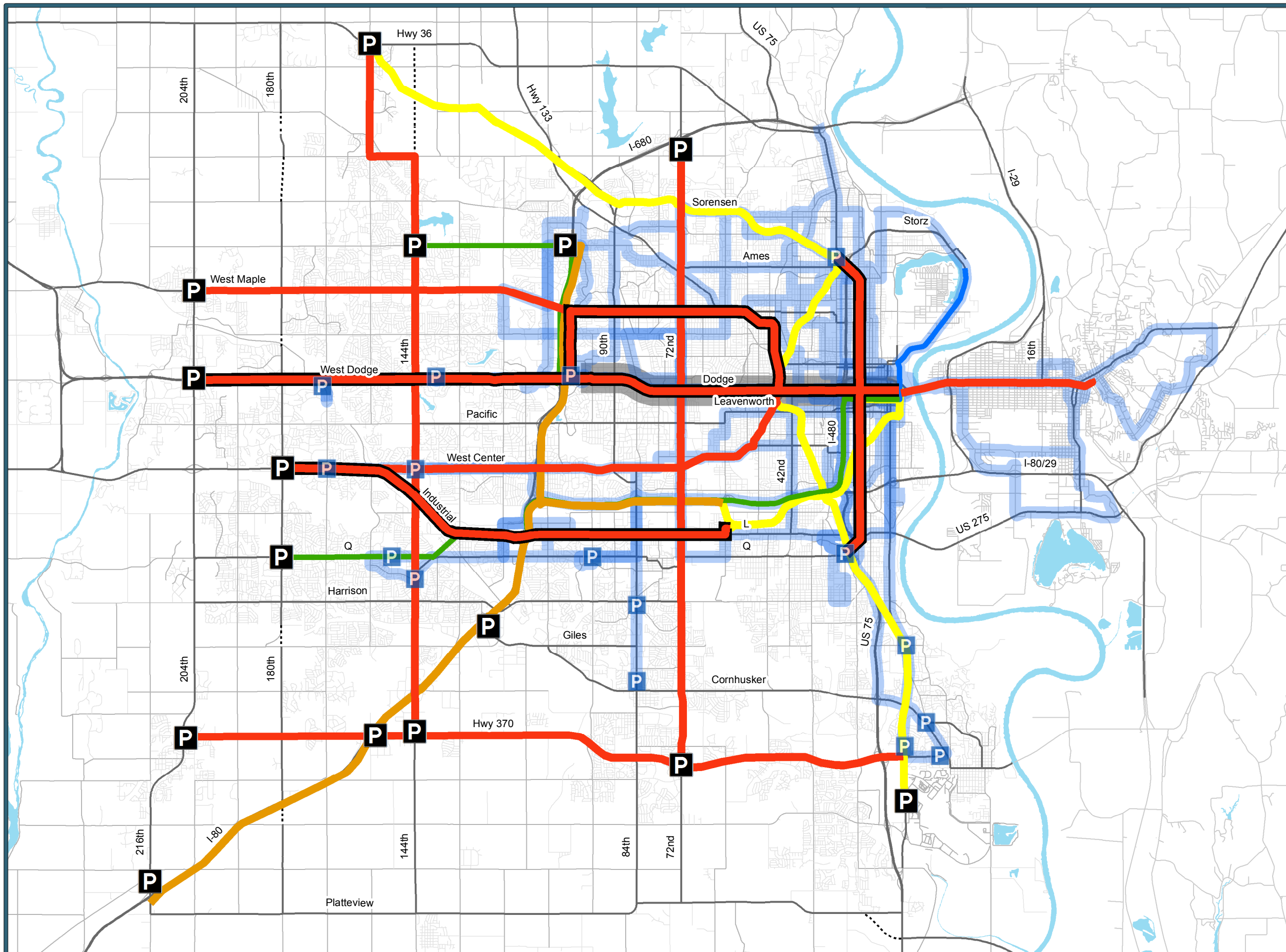


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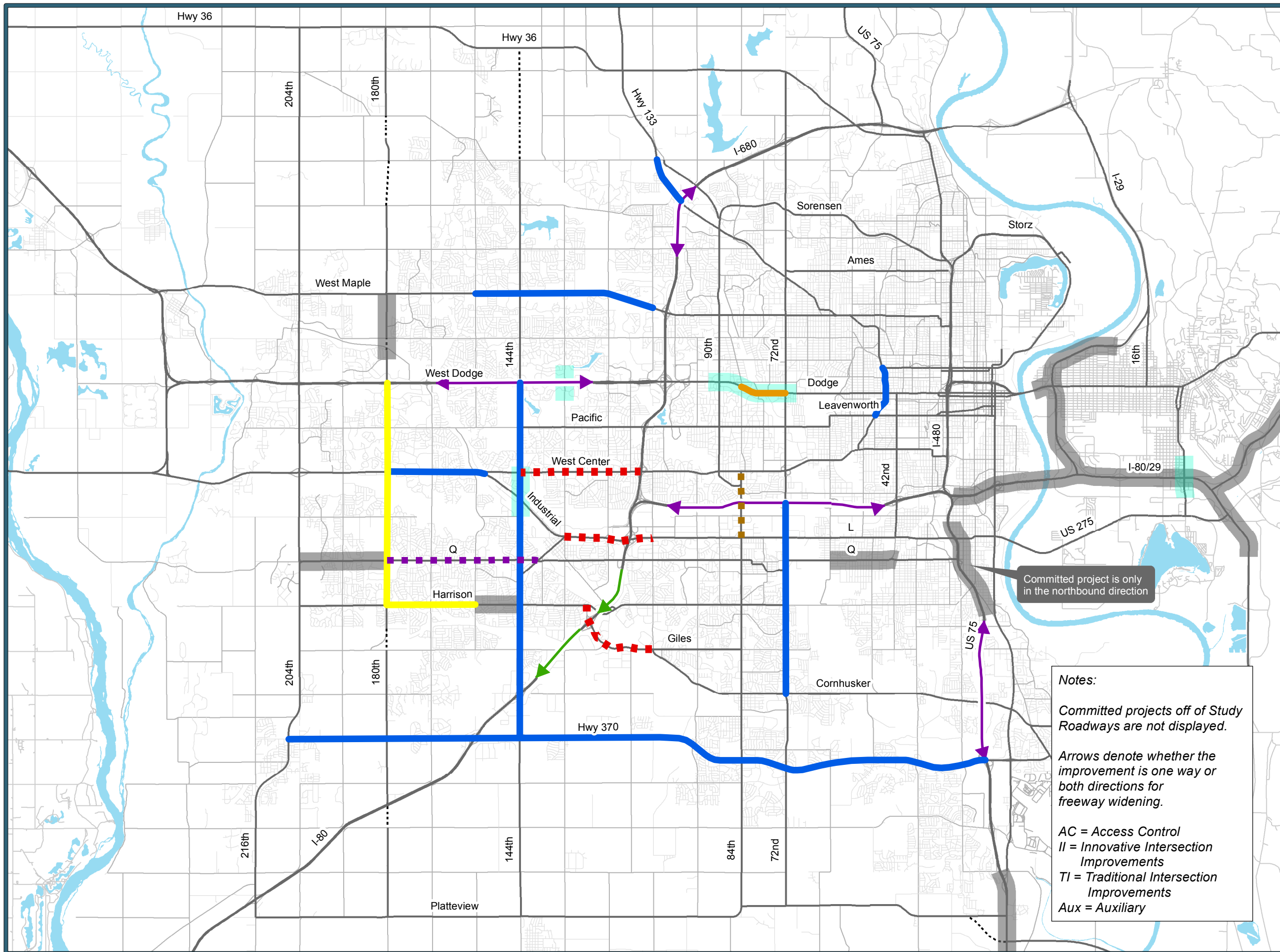
*Committed projects off of Study Roadways are not displayed.*

*Additional transit improvements include increased headways on key central city routes.*

*BRT = Bus Rapid Transit*







# Strategy Package #5

- ## Legend
- Freeway Widening**
    - Aux Lane Add
    - General Purpose Lane Add
  - Arterial Widening**
    - 4
    - 6
    - 8
  - Arterial Other Strategies**
    - Innovative Intersections
    - II & AC
    - Traditional Intersections
  - ITS Corridors**
  - Committed Widening Projects**

**Notes:**

Committed projects off of Study Roadways are not displayed.

Arrows denote whether the improvement is one way or both directions for freeway widening.

AC = Access Control  
 II = Innovative Intersection Improvements  
 TI = Traditional Intersection Improvements  
 Aux = Auxiliary

# Strategy Package #6

## Legend

### Freeway Widening



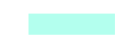
### Arterial Widening

- 3
- 4
- 6
- 8

### Arterial Other Strategies

- Access Control
- Innovative Intersections
- II & AC
- Traditional Intersections
- TI & AC

### ITS Corridors



### Committed Widening Projects



**Notes:**

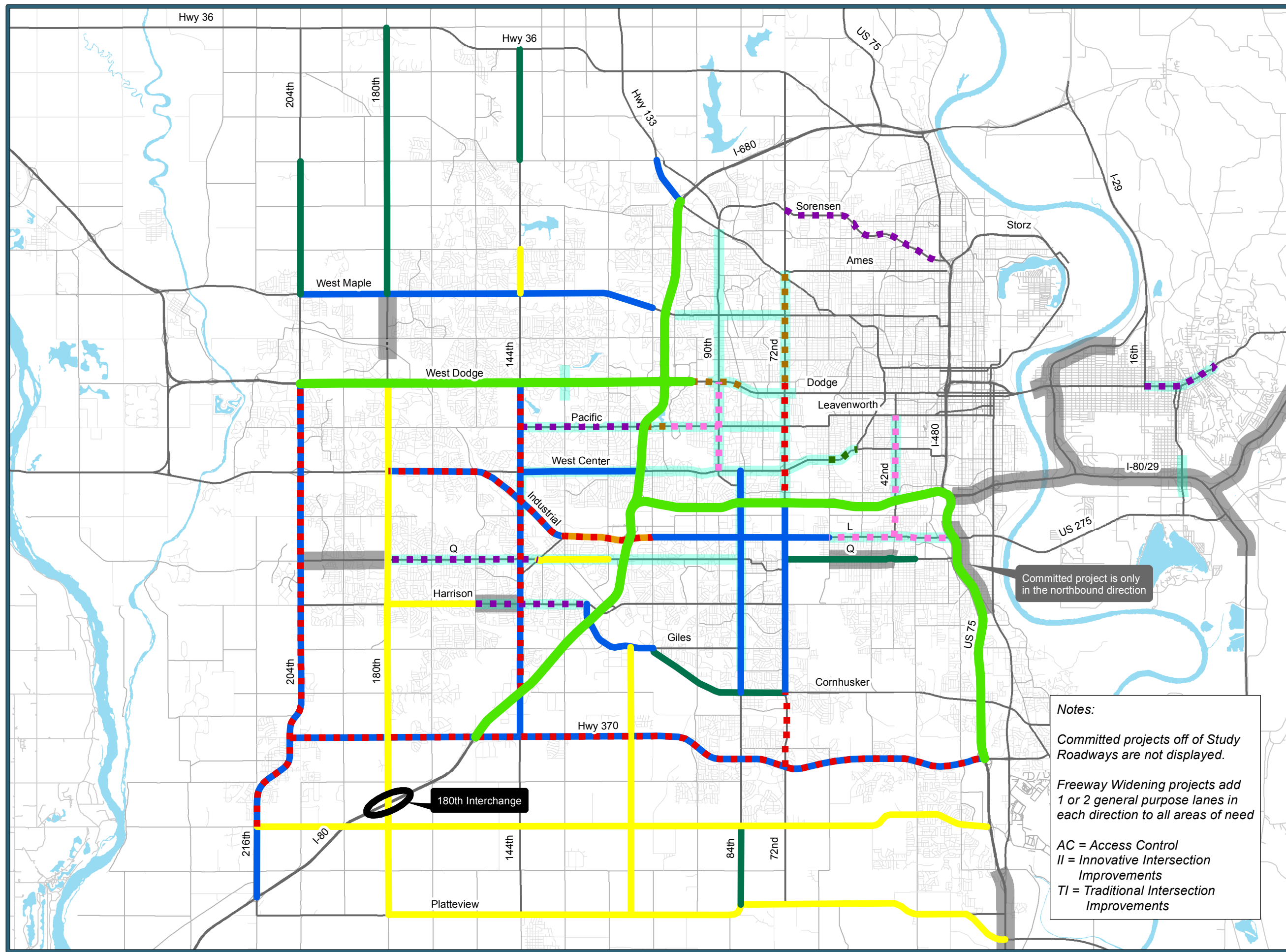
Committed projects off of Study Roadways are not displayed.

Freeway Widening projects add 1 or 2 general purpose lanes in each direction to all areas of need

AC = Access Control  
 II = Innovative Intersection Improvements  
 TI = Traditional Intersection Improvements

Committed project is only in the northbound direction

180th Interchange











# Strategy Package #6


## Legend


### Transit Projects

-  Busway BRT
-  BRT
-  Transitway
-  Bus on Shoulder
-  Express
-  Local

 Park & Ride

### Existing Transit System

 Local

 Park & Ride

### Committed BRT Project



### Notes:

*Committed projects off of Study Roadways are not displayed.*

*Additional transit improvements include increased headways on key central city routes.*

*BRT = Bus Rapid Transit*

