AGENDA

This meeting of the Transportation Technical Advisory Committee will be held in the lower level training room of the Metro Transit Building at 2222 Cuming Street, Omaha, Nebraska 68102. It will also be streamed live through MAPA’s Facebook page. Anyone interested in viewing the meeting should go to facebook.com/MAPA2222/.

Action Items
A. Approval of the Minutes from the February - October 2020 Meetings (Action)

Recommendations to MAPA Board (Action)
B. Regional System Reliability Performance Targets Update 2018-2021 (Action) | Jim Boerner will present the update.

Discussion Items
C. Metro Transit - ORBT Launch Update | Lauren Cencic and Jason Rose will provide an update on the launch of the ORBT Bus Rapid Transit corridor on Dodge Street.

D. Member Agencies Updates (Discussion)

E. Additional Business

Future Meetings/Events
- Board of Directors: December 10, 2020
- FY2022 TIP Application Deadline: January 8, 2021
- TTAC: January 15, 2021
Agenda Item A
Meeting Minutes
February 2020 – October 2020
The Transportation Technical Advisory Committee met on Friday, February 21, 2020, at Metro, 2222 Cuming Street, Omaha, Nebraska. Mr. Dennis Wilson opened the meeting at 10:03 a.m.

**VOTING MEMBERS**

- Pat Dowse  
  City of La Vista  
- Jeff Roberts  
  City of Bellevue  
- Bryan Guy  
  City of Omaha  
- Dan Kutilek  
  Douglas County  
- Janet McCartney  
  Cass County  
- Derek Miller  
  City of Omaha Planning  
- Dan Owens  
  Sarpy County  
- Todd Pfizer  
  City of Omaha  
- Joy Willoughby  
  Metro Transit  
- Gayle Sturdivant  
  City of Omaha  
- Dave Vermillion  
  City of Council Bluffs  
- Craig Wacker  
  NDOT  
- Tim Weander  
  NDOT – District 2  
- Maruice Hinchey  
  NDOT – District 2  
- Drew Parks  
  NDOT – District 2  
- Dennis Wilson  
  Sarpy County  
- Evan Williams  
  Papio-Missouri River NRD

**NON-VOTING MEMBERS**

- Nick Weander  
  Olsson  
- Jacob Weiss  
  HDR  
- Chad Marsh  
  Kirkham Michael  
- Joan Green  
  E&A Consulting Group, Inc.  
- Michael Heigerson  
  Metropolitan Area Planning Agency  
- Greg Youell  
  Metropolitan Area Planning Agency  
- Bruce Fountain  
  City of La Vista Community Development

**GUESTS**

- Danny Jablonski  
  Jacobs  
- Bart Pugh  
  Schemmer  
- Stephen Osberg  
  Greater Omaha Chamber of Commerce  
- Jeff Rieselman  
  City of Omaha  
- Steve Wolf  
  FMF Inc.  
- Mark Tuch  
  Burns & McDonnell  
- Kevin Hicks  
  TranSystems  
- Jessica Smith  
  TranSystems

**STAFF**

- Court Barber  
  Metropolitan Area Planning Agency  
- Jim Boerner  
  Metropolitan Area Planning Agency  
- Megan Walker  
  Metropolitan Area Planning Agency  
- Jim Boerner  
  Metropolitan Area Planning Agency

A. **Introductions**

B. **Approval of Minutes:**

Motion #1: Approval of the minutes of the December 6, 2019 Transportation Technical Advisory Committee Meeting.
C. Amendment 13 to the 2040 Long Range Transportation Plan:

Mr. Barber presented the amendment to the committee and requested a recommendation for approval to the MAPA Board of Directors.

Motion #2: Recommending approval of Amendment 13 to the 2040 Long Range Transportation Plan to the MAPA Board of Directors.

Motion by: Tim Weander  
Second by: Gayle Sturdivant  
Motion Carried

D. Amendment 5 to the FY2020-2025 Transportation Improvement Program:

Mr. Barber presented Amendment 5 to the FY2020-2025 Transportation Improvement Program.

No questions or comments were received from the committee.

Motion #3: Recommending approval of Amendment 5 to the FY2020-2025 Transportation Improvement Program to the MAPA Board of Directors.

Motion by: Todd Pfitzer  
Second by: Janet McCartney  
Motion Carried

E. Draft 2017-2018 Safety Report & 2020 Safety Targets:

Mr. Boerner presented the draft report and requested a recommendation to the MAPA Board of Directors for approval of the 2020 safety targets.

Eric Williams asked a question that was not recorded; Dennis Wilson asked for clarification on updates to the data.

Motion #4: Recommending approval of the 2020 Safety Targets to the MAPA Board of Directors.

Motion by: Maurice Hinchey  
Second by: Todd Pfitzer  
Motion Carried

F. ConnectGO Survey Results:

Stephen Osberg presented the survey results and engaged the committee in the survey through the use of MAPA’s remote polling devices.

G. Project Solicitation for 2050 Long Range Transportation Plan:

Michael Helgerson explained the framework for adding additional projects to the 2050 Long Range Transportation Plan, which is currently in development.

H. Public Involvement:

Steve Wolf presented on the importance of involving the public early and often in all projects. He emphasized the usefulness of providing the public with the correct information before rumors begin and developing positive relationships.
I. **Funding Obligation and Project Status:**

Mr. Helgerson presented updates to funding and obligations for TIP and TAP projects for both Iowa and Nebraska.

J. **Member Agencies Update**

In the interest of time, agency updates were skipped at the direction of the chairperson. Tim Weander and Maurice Hinchey provided an update for NDOT District 2.

K. **Additional Business**

No additional business was conducted by the committee.

L. **Adjournment**

Motion #5: Motion to adjourn:

Motion by: Tim Weander
Motion Carried

The meeting was adjourned at 11:30 a.m.
The Transportation Technical Advisory Committee met on Friday, March 20, 2020 in a virtual format on the Internet.

The meeting was called to order at 10:01 a.m.

VOTING MEMBERS, NON-VOTING MEMBERS, AND GUESTS

This virtual TTAC meeting was held via Google Hangouts Meet. The meeting was not recorded and attendance was not taken.

STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Metropolitan Area Planning Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greg Youell</td>
<td></td>
</tr>
<tr>
<td>Court Barber</td>
<td></td>
</tr>
<tr>
<td>Mike Helgerson</td>
<td></td>
</tr>
<tr>
<td>Megan Walker</td>
<td></td>
</tr>
<tr>
<td>Jim Boerner</td>
<td></td>
</tr>
<tr>
<td>Travis Halm</td>
<td></td>
</tr>
</tbody>
</table>

A. Introductions

B. Approval of Minutes

Approval of the minutes from the February 21, 2020 meeting is postponed until the next time TTAC meets in person.

C. Amendment 6 to the FY2020 Transportation Improvement Program

Mr. Barber presented the amendment to the committee, no questions or comments were offered.

D. Amendment 1 to the Section 5310 Program Management Plan

Mr. Barber presented the amendment, stating that the proposed change adds language to the plan that will enable the Coordinated Transit Committee’s Project Selection Subcommittee to recommend awards to TTAC and MAPA’s Board of Directors. He asked for questions or comments on the proposed changes.

E. Draft FY2021 Unified Planning Work Program (UPWP)

Mr. Helgerson presented the draft UPWP for the upcoming fiscal year.

F. Metro Transit’s Transit Asset Management Plan

G. Funding Obligation and Project Status:

Mr. Helgerson presented updates to funding and obligations for TIP and TAP projects for both Iowa and Nebraska.

H. Member Agencies Update

In the interest of time, agency updates were skipped at the direction of the chairperson. Tim Weander and Maurice Hinchey provided an update for NDOT District 2.

I. Additional Business

No additional business was conducted by the committee.

J. Adjournment

The meeting was adjourned at 10:48 a.m.
VOTING MEMBERS, NON-VOTING MEMBERS, AND GUESTS

This virtual TTAC meeting was held via Google Hangouts Meet. The meeting was not recorded and attendance was not taken.

STAFF

Greg Youell  Metropolitan Area Planning Agency
Court Barber  Metropolitan Area Planning Agency
Mike Helgerson  Metropolitan Area Planning Agency
Megan Walker  Metropolitan Area Planning Agency
Jim Boerner  Metropolitan Area Planning Agency
Travis Halm  Metropolitan Area Planning Agency

Approval of the minutes from the February and March 2020 TTAC meetings is postponed until the next time TTAC meets in person.

A. Amendment 7 to the FY2020 Transportation Improvement Program

Mr. Barber presented the amendment to the committee and asked for questions or comments on the proposed changes, none were offered.

B. Draft FY2021 Unified Planning Work Program (UPWP)

Mr. Helgerson presented the draft UPWP for the upcoming fiscal year, no questions or comments were offered.

C. New Projects Selected for the FY2021 Transportation Improvement Program

Mr. Barber presented the list of projects to be included in the upcoming TIP, no questions or comments were offered.

D. COVID-19 Impacts Discussion:

MAPA staff facilitated discussion regarding impacts of COVID-19.

E. Member Agencies Update

In the interest of time, agency updates were skipped at the direction of the chairperson. Tim Weander and Maurice Hinchey provided an update for NDOT District 2.

F. Additional Business

No additional business was conducted by the committee.

G. Adjournment

The meeting was adjourned at 10:50 a.m.
The Transportation Technical Advisory Committee met on Friday, June 19, 2020 in a virtual format on the Internet.

The meeting was called to order at 10:03 a.m.

**VOTING MEMBERS, NON-VOTING MEMBERS, AND GUESTS**

This virtual TTAC meeting was held via Zoom and broadcast on Facebook.

**STAFF**

- Greg Youell, Metropolitan Area Planning Agency
- Court Barber, Metropolitan Area Planning Agency
- Mike Helgerson, Metropolitan Area Planning Agency
- Megan Walker, Metropolitan Area Planning Agency
- Jim Boerner, Metropolitan Area Planning Agency
- Travis Halm, Metropolitan Area Planning Agency

**MEMBERS**

- Craig Wacker, NDOT
- Tim Weander, NDOT
- Maurice Hinchey, NDOT
- Todd Pfitzer, City of Omaha
- Jeff Riesselman, City of Omaha
- Pat Dowse, City of La Vista
- Eric Williams, PMRNDRD
- Denny Wilson, Sarpy County
- Jason Kubicek, Sarpy County

Approval of the minutes from the February, March, April, and May 2020 TTAC meetings is postponed until the next time TTAC meets in person.

A. **Final FY2021 Transportation Improvement Program**

Mr. Barber presented the final FY2021 TIP, no questions or comments were offered.

B. **FY2021 TTAC and Subcommittee Membership Lists**

Mr. Barber presented the updated committee lists, no questions or comments were offered.

C. **Regional Development Report**

Mr. Helgerson presented the report, no questions or comments were offered.

D. **Safety Performance Measure Report**

Mr. Boerner presented the report, no questions or comments were offered.

E. **Member Agencies Update**

Community updates were provided by the following members:

- Todd Pfitzer - City of Omaha
- Jeff Riesselman - City of Omaha
- Derek Miller - City of Omaha
- Craig Wacker - NDOT Planning
- Pat Dowse - City of La Vista
- Denny Wilson - Sarpy County
F. **Additional Business**

   No additional business was conducted by the committee.

G. **Adjournment**

   The meeting was adjourned at 10:46 a.m.
The Transportation Technical Advisory Committee met on Friday, August 21, 2020 in the Training Room of the Metro Transit Building. The meeting was also broadcast via Zoom and Facebook Live.

The meeting was called to order at 10:04 a.m.

VOTING MEMBERS, NON-VOTING MEMBERS, AND GUESTS

STAFF

- Greg Youell - Metropolitan Area Planning Agency
- Court Barber - Metropolitan Area Planning Agency
- Mike Helgerson - Metropolitan Area Planning Agency
- Megan Walker (virtual) - Metropolitan Area Planning Agency
- Jim Boerner (virtual) - Metropolitan Area Planning Agency
- Travis Halm (virtual) - Metropolitan Area Planning Agency

MEMBERS

- Craig Wacker - NDOT
- Tim Weander - NDOT
- Maurice Hinchey - NDOT
- Jeff Riesselman - City of Omaha
- Derek Miller - City of Omaha
- Dan Kutilek - Douglas County
- Joy Willoughby - Metro Transit
- Dean Dunn - City of Bellevue
- Janet McCartney - Cass County
- Alex Evans - City of Papillion
- Eric Williams (virtual) - PMNRD
- Pat Dowse (virtual) - City of La Vista

Approval of the minutes from the February, March, April, and May 2020 TTAC meetings is postponed until the next time TTAC meets in person.

A. **Draft 2050 Long Range Transportation Plan (LRTP)**

MAPA staff presented the draft document, no questions or comments were offered.

B. **Regional Traffic Update**

Mr. Boerner presented the traffic update, no questions or comments were offered.

C. **Regional Fiscal Constraint**

Mr. Helgerson presented current projects in the regional program. Nick Weander asked about the status of Sarpy County Collector & Arterial Study, Mr. Helgerson responded that the project is no longer moving forward.

D. **Member Agencies Update**

Community updates were provided by the following members:

- Dan Kutilek - Douglas County
- Jeff Riesselman - City of Omaha
- Joy Willoughby - Metro Transit
- Alex Evans - City of Papillion
- Maurice Hinchey - NDOT
- Tim Weander - NDOT
- Craig Wacker - NDOT Planning
E.  **Additional Business**  

   No additional business was conducted by the committee.

F.  **Adjournment**  

   The meeting was adjourned at 11:22 a.m.
The Transportation Technical Advisory Committee met on Friday, September 18, 2020 in the Training Room of the Metro Transit Building. The meeting was also broadcast via Zoom and Facebook Live.

The meeting was called to order at 10:05 a.m.

VOTING MEMBERS, NON-VOTING MEMBERS, AND GUESTS

STAFF

Greg Youell  Metropolitan Area Planning Agency
Court Barber  Metropolitan Area Planning Agency
Mike Helgerson  Metropolitan Area Planning Agency
Megan Walker (virtual)  Metropolitan Area Planning Agency
Jim Boerner (virtual)  Metropolitan Area Planning Agency
Travis Halm (virtual)  Metropolitan Area Planning Agency

MEMBERS

Craig Wacker  NDOT
Maurice Hinchey  NDOT
Dennis Wilson  Sarpy County
Jeff Riesselman (virtual)  City of Omaha
Derek Miller (virtual)  City of Omaha
Dan Kutilek  Douglas County
Curt Simon  Metro Transit
Eric Williams (virtual)  PMRNDRD
Dan Gittinger (virtual)  City of Gretna
Pat Dowse (virtual)  City of La Vista
Jason Kubicek (virtual)  Sarpy County
Joe Soucie (virtual)  City of La Vista
Kevin Carder (virtual)  City of Omaha
Bryan Guy (virtual)  City of Omaha
Matt Cox (virtual)  City of Council Bluffs

GUESTS

Nick Weander  Olsson
Jeremy Williams  HDR
Lee Myers  AARP

A. Approval of the Minutes from the February, March, April, May, June, and August 2020 Meetings

Approval of the minutes from the February, March, April, May, June, and August 2020 TTAC meetings is postponed until the next time TTAC meets in person with a quorum.

B. Final 2050 Long Range Transportation Plan (LRTP)

MAPA staff presented the final 2050 LRTP.

C. FY2021 Transportation Improvement Program (TIP) Amendment 1

Mr. Barber presented Amendment 1 to the FY2021 program.

D. Maple Street Block Talks Update

Mr. Boerner and Ms. Walker presented on the results of the block talk.

E. Regional Fiscal Constraint

Mr. Helgerson provided an update on fiscal constraint for the FY2020 program. Dan Kutilek updated the committee on the progress of the 180th Street project.
F. **Member Agencies Update**

Community updates were provided by the following members:

Pat Dowse - City of La Vista
Maurice Hinchey - NDOT
Jeff Riesselman - City of Omaha

Eric Williams - Papio-Missouri River Natural Resources District
Dan Gittinger - City of Gretna
Dennis Wilson - Sarpy County
Greg Youell - MAPA

G. **Additional Business**

No additional business was conducted by the committee.

H. **Adjournment**

The meeting was adjourned at 10:54 a.m.
The Transportation Technical Advisory Committee met on Friday, October 16, 2020 in the Training Room of the Metro Transit Building. The meeting was also broadcast via Zoom and Facebook Live.

The meeting was called to order at 10:03 a.m.

VOTING MEMBERS, NON-VOTING MEMBERS, AND GUESTS

STAFF
- Greg Youell, Metropolitan Area Planning Agency
- Court Barber, Metropolitan Area Planning Agency
- Mike Helgerson, Metropolitan Area Planning Agency
- Megan Walker (virtual), Metropolitan Area Planning Agency
- Jim Boerner (virtual), Metropolitan Area Planning Agency
- Travis Halm (virtual), Metropolitan Area Planning Agency

MEMBERS
- Craig Wacker (virtual), NDOT
- Maurice Hinchey, NDOT
- Tim Weander, NDOT
- Dennis Wilson, Sarpy County
- Lauren Cencic, Metro Transit
- Gerri Doyle, FTA
- Dan Kutilek, Douglas County
- Janet McCartney, Cass County
- Eric Williams (virtual), PMRNDRD
- Dan Gittinger (virtual), City of Gretna
- Pat Dowse, City of La Vista
- Jason Kubicek (virtual), Sarpy County
- Kevin Carder (virtual), City of Omaha

GUESTS
- Nick Weander, Olsson
- Jeremy Williams, HDR
- Lee Myers, AARP

A. Approval of the Minutes from the February, March, April, May, June, August, and September 2020 Meetings

Approval of the minutes from the February, March, April, May, June, August, and September 2020 TTAC meetings is postponed until the next time TTAC meets in person with a quorum.

B. Final FY2022 Policy Guides and Applications

MAPA staff presented the updated policy guides for STBG-MAPA, TAP-MAPA, the Heartland 2050 Mini-Grant Program, and the FTA Section 5310 Program.

Kutilek asked about the local match requirement for AC Resurfacing, Helgerson responded that it is 80% federal, 20% local.

C. FY2022 Call for Projects

Weander asked about reimbursement timing and whether the existing program takes the current AC balance into account, Helgerson responded that the current balance is included in the program and that future reimbursement will likely be in 2024 or 2025.
D. Regional Fiscal Constraint Update

Mr. Helgerson provided an update on fiscal constraint for the FY2020 program. Dan Kutilek updated the committee on the progress of the 180th Street project.

E. Member Agencies Update

Community updates were provided by the following members:
Janet McCartney - Cass County
Maurice Hinchey - NDOT
Tim Weander - NDOT
Dan Kutilek - Douglas County
Pat Dowse - City of La Vista
Greg Youell - MAPA
Dennis Wilson - Sarpy County
Jason Kubicek - Sarpy County
Craig Wacker - NDOT Planning
Dan Gittinger - City of Gretna
Eric Williams - Papio-Missouri River Natural Resources District
Gerri Doyle - FTA
Lauren Cencic - Metro Transit

F. Additional Business

No additional business was conducted by the committee.

G. Adjournment

The meeting was adjourned at 11:09 a.m.
Agenda Item B
Regional System Reliability Performance Targets Update 2018-2021
Executive Summary

In October of 2018, MAPA established regional truck and travel time reliability targets to meet federal requirements. These three targets, part of the National Highway Performance Program, measure performance on: Interstate and non-interstate travel time reliability, and truck travel time reliability (measured only on the interstate). These performance measures established four year targets, with a mid-term assessment period offering the opportunity to adjust targets based on the additional two year’s worth of data.

Following a detailed assessment of the data described within, MAPA intends to revise the 4-year targets as shown in Table 1 below.

Table 1: MAPA Original and Revised Freight and Travel Time Reliability Targets

<table>
<thead>
<tr>
<th>NHPP Measure</th>
<th>4-Year Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original</td>
</tr>
<tr>
<td>Interstate Travel Time Reliability (% of person-miles travelled)</td>
<td>94.7%</td>
</tr>
<tr>
<td>Non-Interstate Travel Time Reliability (% of person-miles travelled)</td>
<td>90.2%</td>
</tr>
<tr>
<td>Freight Travel Time Reliability (Travel Time Reliability Ratio)</td>
<td>1.14</td>
</tr>
</tbody>
</table>
Purpose

This memo provides a detailed review of the MAPA regional Freight and Non-Interstate Travel Time Reliability (PM3) performance measures and recommended target updates. These targets, established in October of 2018, were based upon National Performance Management Research Data Set (NPMRDS) trend data, and are eligible for update during the current mid-period review.

Abstract

Of the three National Highway Performance Program (NHPP) measures (Interstate Travel Time Reliability, Non-Interstate Travel Time Reliability, and Truck Travel Time Reliability), only the Interstate Travel Time Reliability measure is currently on track to meet its target of 94.70% in 2021. Analysis provided in MAPA’s June 15th, 2020 update highlights current trends and some possible issues not considered during initial target development.

On June 24th, NDOT presented an update on statewide Federal Transportation Performance Measures (to include changes to the state's PM3 targets) to MPOs. This notification of PM3 changes provides MAPA with a 180-day window to accept the state’s changes, as well as the opportunity to change our existing targets. NDOT changes include an increase in Truck Travel Time Reliability Ratio (TTTR) target from 1.10 to 1.25, acknowledging greater delay in truck traffic than predicted. NDOT is also lowering its percent Person-Miles Travelled (Non-Interstate) which are reliable from 92.6% to 88.0%, again reflecting lower reliability than projected. Effective September 30th, Iowa DOT increased TTTR from 1.14 to 1.21, as well as reducing percent Person-Miles Travelled (Interstate) from 99.5% to 98.5%. Proposed changes for MAPA are generally consistent with NDOT and Iowa DOT trends.

Background

Table 1 provides the targets established in coordination with the Nebraska and Iowa Departments’ of Transportation, reviewed by the MAPA Transportation Technical Advisory Committee and approved by the MAPA Board of Directors. These targets are based on a linear trend of data from 2013-2017, which generally predicted:

1. Slow reduction in passenger vehicle reliability on MAPA region interstates
2. Improvement in passenger vehicle travel time reliability on MAPA non-Interstate highways
3. Improvement in interstate highway truck travel time reliability
Table 2: MAPA FY2019 Freight and Travel Time Reliability Targets

<table>
<thead>
<tr>
<th>NHPP Measure</th>
<th>Target (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate Travel Time Reliability (% of person-miles travelled)</td>
<td>94.70%</td>
</tr>
<tr>
<td>Non-Interstate Travel Time Reliability (% of person-miles travelled)</td>
<td>90.20%</td>
</tr>
<tr>
<td>Freight Travel Time Reliability (Travel Time Reliability Ratio)</td>
<td>1.14</td>
</tr>
</tbody>
</table>

**Interstate Travel Time Reliability**

As reported in June, MAPA is on track to meet the 4-year Interstate NHPP measure. The target provides an objective measure and will not be considered for change in this review. This report is available at the link.

**Non-Interstate Travel Time Reliability**

There is a large amount of variability in the evaluated non-interstate data set from year to year. Some of this variability is a result of the process used in developing the NPMRDS dataset, while some is due to external factors, such as road construction, flooding, and the dramatic drop in traffic due to pandemic response. Specifically, the year-to-year dataset being analyzed in this report (2017-2020-to-date) is impacted by:

1. NPMRDS conflation lagging HPMS NHS updates (2020 update from 2018 HPMS)
2. MAPA changes to the functional classification in 2015, 2017 and 2020
3. Large changes were made to NPMRDS dataset as a result of 2019 PM3 reporting

Figure 1 below shows progress to date towards the MAPA non-interstate reliability target. The flooding in 2019 had a measurable impact on reliability, however, the growth in traffic volume throughout the region also played a role. From January through September of 2020 a milder winter and reduced traffic from pandemic response has resulted in 93.3% of person-miles travelled on the non-interstate system being reliable. While analysis of traffic volumes and resulting congestion is ongoing, it is evident for the short-term that while traffic volumes have nearly returned to pre-COVID response volumes, the distribution of traffic to the traditional AM and PM peak periods has not.
Table 2 below presents the total mileage evaluated in the MAP-21 non-interstate travel time reliability measure. A road segment is deemed to be unreliable if the Level of Travel Time Reliability (LOTTR) for any one of the four measured time periods is greater than or equal to 1.5. The variation in NPMRDS coverage and the location of the unreliable segments are shown by year in Figures 2-5.

Table 3: MAPA Segment Miles Measuring Non-Interstate Travel Time Reliability by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (Miles)</th>
<th>Unreliable (Miles)</th>
<th>% Unreliable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>502.28</td>
<td>54.82</td>
<td>10.9%</td>
</tr>
<tr>
<td>2018</td>
<td>427.51</td>
<td>93.87</td>
<td>22.0%</td>
</tr>
<tr>
<td>2019</td>
<td>609.50</td>
<td>93.9</td>
<td>15.4%</td>
</tr>
<tr>
<td>2020</td>
<td>607.05</td>
<td>47.5</td>
<td>7.8%</td>
</tr>
</tbody>
</table>
Table 4: Non-Interstate Roads with the Most Unreliable Segments | 2017

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Route Number</th>
<th>Unreliable (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Dodge Rd, Dodge and Douglas St</td>
<td>US-6</td>
<td>5.48</td>
</tr>
<tr>
<td>S 144th St</td>
<td>US-50, 5001</td>
<td>4.83</td>
</tr>
<tr>
<td>N 90th St</td>
<td>NE-133</td>
<td>3.86</td>
</tr>
<tr>
<td>N 72nd St</td>
<td>5037</td>
<td>3.43</td>
</tr>
<tr>
<td>Blair High Rd</td>
<td>NE-133</td>
<td>3.33</td>
</tr>
</tbody>
</table>
Table 5: Non-Interstate Roads with the Most Unreliable Segments | 2018

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Route Number</th>
<th>Unreliable (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 72nd St</td>
<td>5037</td>
<td>6.89</td>
</tr>
<tr>
<td>W Dodge Rd, Dodge and Douglas St</td>
<td>US-6</td>
<td>6.67</td>
</tr>
<tr>
<td>S 144th St</td>
<td>US-50 (portions)</td>
<td>6.20</td>
</tr>
<tr>
<td>N 90th St</td>
<td>NE-133 (portions)</td>
<td>3.87</td>
</tr>
<tr>
<td>Irvington Rd</td>
<td>5021</td>
<td>3.65</td>
</tr>
</tbody>
</table>
Table 6: Non-Interstate Roads with the Most Unreliable Segments | 2019

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Route Number</th>
<th>Unreliable (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 72nd St</td>
<td>5037</td>
<td>6.89</td>
</tr>
<tr>
<td>W Dodge Rd, Dodge and Douglas St</td>
<td>US-6</td>
<td>6.67</td>
</tr>
<tr>
<td>S 144th St</td>
<td>US-50 (portions)</td>
<td>6.2</td>
</tr>
<tr>
<td>N 90th St</td>
<td>NE-133 (portions)</td>
<td>3.87</td>
</tr>
<tr>
<td>Irvington Rd</td>
<td>5021</td>
<td>3.65</td>
</tr>
</tbody>
</table>
Figure 5: MAPA Non-Interstate Travel Time Reliability Network | 2020 through September

Table 7: Non-Interstate Roads with the Most Unreliable Segments | 2020*

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Route Number</th>
<th>Unreliable (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 204 St</td>
<td>NE-31</td>
<td>3.01</td>
</tr>
<tr>
<td>S 42nd St</td>
<td>5057</td>
<td>2.95</td>
</tr>
<tr>
<td>L St</td>
<td>US-275</td>
<td>2.78</td>
</tr>
<tr>
<td>Cornhusker Rd</td>
<td>5006</td>
<td>2.41</td>
</tr>
</tbody>
</table>
| S Expressway St | -            | 2.40               

93.3% of the person-miles traveled that are reliable are better than baseline and 4-year target.
Positive Contributing Factors

Signal Timing Projects

Recently completed Adaptive Signal Controller Technologies (ASCT) upgrades along Dodge St and 144th St (shown in Figure 5 below) are just two of several projects intended to reduce delay on non-interstate corridors. These ASCT corridors will also be supported by improvements to most of Omaha’s aged signal architecture, providing the opportunity for more efficient travel. The NE-370 corridor is also undergoing many changes and will soon be “Nebraska’s smartest corridor”, offering improvements along a major east-west corridor.

Figure 5: City of Omaha Signal System Master Plan
Bus Rapid Transit

The Metro Transit agency recently launched ORBT, the region’s first Rapid Transit line. ORBT will provide greater frequency combined with dedicated bus lanes downtown and Transit Signal Priority (TSP)—extending green lights to allow the bus to pass through intersections. This will improve the traffic flow of east and westbound traffic as well. By both reducing automobile traffic, as well as reducing bus stop time (through level boarding through three doors and on-bus bicycle storage), travel times along Dodge St should improve.

Travel Demand Management Strategies

Travel demand strategies, including work-from-home, staggered working hours, and even providing distance-learning during severe weather are three of a range of Travel Demand Strategies (TDM) aimed at reducing traffic congestion by reducing the AM and PM peak traffic volumes. While historically not approached at a scale significant enough to measure, the current pandemic has forced these changes to occur. While it is too soon to tell how long the current impacts will continue, it is fair to assume the reduced traffic will continue through a measurable portion of 2021 (the final data collection year for this PM3 reporting cycle).

Traffic Incident Management

The metro area continues to build upon a robust Traffic Incident Management (TIM) collaboration (MetroArea TIM), as well as current additions to related infrastructure which improves incident recognition and response. In particular, the addition of Digital Message Signs (DMS) and traffic cameras along US-75 (and the stretch of I-480 which divides it in the downtown area) will improve response along this major corridor. Coordination with neighboring cities is critical, as the off-expressway roadway network has little extra capacity, and well-designed TIM detour plan execution both reduce the overall impact of the first incident, as well as the risk of secondary crashes.

Recommended Target

Following nearly three years of data collection, it is clear that environmental factors outside the control of local transportation organizations have been the major influence on the non-interstate measure. The 2017 and 2018 data was least impacted by external factors, and are therefore a better predictor of future reliability. Assuming the long-term positive contributing factors offset traffic volume growth, it is recommended that the PM3 4-year target be set to the baseline value of 87.3%, recognizing many improvements are just beginning to become operational.
Truck Travel Time Reliability

As highlighted in Figure 6, the measured truck travel time reliability index is both significantly higher than predicted, and showing a negative trend. As this analysis is only conducted on the interstate TMC segments, it is difficult to capture the full extent of the change in truck traffic flow and subsequent impact of congestion, but it is likely major construction (such as the Council Bluffs Interstate System and I-80 at 13th Street) in 2018-2019, and blizzards and flooding in the spring of 2019 were major contributors. Figures 7-10 show the progression of truck reliability changes from 2017 through 2020.

Figure 6: MAPA Regional Truck Travel Time Reliability

The truck travel time reliability data has not encountered the variability experienced in the non-interstate NPMRDS data. However, there are instances where TMCs have been included which lie off the interstate system, or otherwise shouldn’t be counted (such as interstate ramps), which provide unrepresentative TTTR values. As these TMCs are only a small percentage of the total interstate network, they are only a small fraction of resultant annual TTTR (removing them for 2019 results in a TTTR of 1.35 versus 1.37). Therefore, the approach taken is to acknowledge the errors, and to not include them in tables 6-9 below. The table lists the top five series of interstate segments ranked by the highest TTTR in that segment.
Figure 7: MAPA Truck Travel Time Reliability Network | 2017

Table 8: Truck Travel Time Most Unreliable Segments | 2017

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Max. TTTR</th>
<th>Length (mi)</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80 W</td>
<td>42nd St to county line</td>
<td>3.29</td>
<td>9.2</td>
<td>PM</td>
</tr>
<tr>
<td>I-80 E</td>
<td>I-680 to 60th St</td>
<td>2.45</td>
<td>4.4</td>
<td>PM</td>
</tr>
<tr>
<td>US-75 N</td>
<td>I-80</td>
<td>2.27</td>
<td>0.8</td>
<td>AM</td>
</tr>
<tr>
<td>I-480 S</td>
<td>US-75N to I-80</td>
<td>1.90</td>
<td>1.8</td>
<td>PM</td>
</tr>
<tr>
<td>I-480 W</td>
<td>US-75/N 30th St</td>
<td>1.70</td>
<td>0.29</td>
<td>PM</td>
</tr>
</tbody>
</table>
Table 9: Truck Travel Time Most Unreliable Segments | 2018

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Max. TTTR</th>
<th>Length (mi)</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80 W</td>
<td>13th St to county line</td>
<td>3.4</td>
<td>10.9</td>
<td>PM</td>
</tr>
<tr>
<td>I-680 N</td>
<td>Dodge St to Blair High Rd</td>
<td>2.52</td>
<td>1.1</td>
<td>OVN/AM/PM</td>
</tr>
<tr>
<td>I-680 S</td>
<td>Dodge St to I-80</td>
<td>2.34</td>
<td>3.0</td>
<td>PM</td>
</tr>
<tr>
<td>I-80 E</td>
<td>84th to 13th St</td>
<td>2.32</td>
<td>5.1</td>
<td>PM</td>
</tr>
<tr>
<td>I-480 S</td>
<td>I-480 W to Leavenworth</td>
<td>2.03</td>
<td>1.1</td>
<td>PM</td>
</tr>
</tbody>
</table>
Table 10: Truck Travel Time Most Unreliable Segments | 2019

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Max. TTTR</th>
<th>Length (mi)</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80 W</td>
<td>13th St to 84th St</td>
<td>3.83</td>
<td>8.8</td>
<td>PM</td>
</tr>
<tr>
<td>I-680 S</td>
<td>Dodge St to I-680</td>
<td>3.34</td>
<td>3.0</td>
<td>PM</td>
</tr>
<tr>
<td>I-80 S</td>
<td>I-80/I-680 to county line</td>
<td>3.27</td>
<td>2.6</td>
<td>PM</td>
</tr>
<tr>
<td>I-80 E</td>
<td>I-80/I-680 to 60th St</td>
<td>2.99</td>
<td>5.1</td>
<td>PM</td>
</tr>
<tr>
<td>I-480 S</td>
<td>US-75 S to Martha St</td>
<td>2.40</td>
<td>1.6</td>
<td>PM</td>
</tr>
</tbody>
</table>
Table 11: Truck Travel Time Most Unreliable Segments | 2020*

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Max. TTTR</th>
<th>Length (mi)</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80 W</td>
<td>42nd to 72nd St</td>
<td>2.81</td>
<td>3.1</td>
<td>PM</td>
</tr>
<tr>
<td>I-80 S</td>
<td>I-80/I-680 to county line</td>
<td>2.58</td>
<td>2.6</td>
<td>PM</td>
</tr>
<tr>
<td>I-80 E</td>
<td>I-80/I-680 to 72nd St</td>
<td>2.08</td>
<td>2.8</td>
<td>PM</td>
</tr>
<tr>
<td>I-480 W</td>
<td>Capitol Avenue</td>
<td>1.71</td>
<td>0.3</td>
<td>PM</td>
</tr>
<tr>
<td>I-480 S</td>
<td>Harney St to Martha St</td>
<td>1.63</td>
<td>1.63</td>
<td>PM</td>
</tr>
</tbody>
</table>
Positive Contributing Factors

Traffic Incident Management

As with the non-interstate travel time reliability measure, truck travel time reliability is directly impacted by non-recurring congestion caused by crashes and other incidents. The deployment of additional DMS and cameras along the metro’s interstates, particularly those providing enough advance warning to enable drivers to take another route should help reduce the impact of these incidents.

Travel Demand Management

Although unplanned, the change in overall traffic volume in response to the pandemic can be seen when comparing Tables 8 and 9. Not only does the maximum TTTR drop for each segment, the beginning and ending points of the unreliable segment change as well. Any strategy which reduces interstate travel during the PM peak will support truck travel reliability.

Seasonal Variation

The TTTR varies seasonally, and is clearly impacted by severe winter weather. Figure 11 on the following page shows this variation by month from 2018 to September of 2020.
Recommended Target

Given that 2019 and 2020 were both extreme years, a straight line analysis was conducted for the entire period of 2011-2019. The summer of 2018 was impacted by maintenance from I-80/I-680 interchange as well as 24th Street to 13th Street on I-80. The remaining years have some variation, but generally showed improvement year over year. Figure 12 shows the recommended new predicted values, with a predicted TTTR for 2020, as well as a 4-year target of 1.28 in 2021.
Figure 12: Recommended new MAPA Truck Travel Time Reliability 4-Year Target