Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, established National Performance Management Framework

- Included instructing FHWA to develop safety performance measures and processes for States and MPOs to establish targets
- Established timeline for States and MPOs to set targets
- Continued in Fixing America’s Surface Transportation (FAST) Act in 2015

Safety performance measure rules published by Federal Highway Administration in March 2016 which established:

- Five performance measures (five-year rolling average) for all public roads
- Data requirements
- Methodology for determining significant achievement of targets
Five Safety Performance Measures

- Number of fatalities
- Rate of fatalities per 100 million vehicle miles travelled (HMVMT)
- Number of serious injuries
- Rate of serious injuries per HMVMT
- Number of non-motorized (pedestrians/bicyclists) fatalities and serious injuries
Safety Performance Target Setting

- Targets are short-term (2 years)
  - Set for following year based on previous year’s data
- Targets set annually
- WisDOT established baseline data/performance targets for State
  - Published in 2017 Annual HSIP Report on August 31, 2017
  - 2 percent reduction for fatality-related safety targets and 5 percent reduction for remaining targets

YEAR 2014-2018 STATEWIDE BASELINE LEVELS AND TARGETS FOR THE NATIONAL SAFETY PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Year 2012-2016 Baseline 5-Year Average</th>
<th>Year 2014-2018 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>567.4</td>
<td>556.1</td>
</tr>
<tr>
<td>Fatalities Per 100 Million Vehicle-Miles Travelled</td>
<td>0.936</td>
<td>0.917</td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>3,183.0</td>
<td>3,023.9</td>
</tr>
<tr>
<td>Serious Injuries Per 100 Million Vehicle-Miles Travelled</td>
<td>5.260</td>
<td>4.997</td>
</tr>
<tr>
<td>Number of Non-Motorized Fatalities and Serious Injuries</td>
<td>361.4</td>
<td>343.3</td>
</tr>
</tbody>
</table>
Safety Performance Target Setting (continued)

- Commission establishes baseline safety data/targets by February 27, 2018, for same time period as WisDOT
  - Accept State’s targets or set own targets
  - Metropolitan Planning Area
  - Commission will report targets in manner agreed to with State

- Commission must document system performance and progress to achieving targets in Regional Plan (VISION 2050)
  - Unlike State, no consequences for not making progress towards targets
  - Commission only needs to demonstrate that our planning processes are meeting Federal requirements
Set separate areawide targets (rather than accepting State targets)

Set long-range targets to year 2046-2050
- Set short-term trends for metropolitan planning area based on long-range targets

Amend long-range targets into VISION 2050

Monitor annually in Annual Report and on website

Review and update long-range targets:
- Every 4 years as part of interim review and update (next to be completed in 2020)
- Every 10 years as part of major review and update (next to be completed in 2026)
Establish baseline data (2012-2016)

Establish year 2046-2050 targets for Region (including portion of Dodge and Jefferson Counties)

- Review historical trends
- Review safety related recommendations (Strategic Highway Safety Plan and VISION 2050)
- Develop alternative methods for safety targets
  - Alternative rate-related long-range targets based on applying projected VMT to alternatives developed for number of fatalities and number of serious injuries targets
- Set preliminary recommended targets based on evaluation of alternatives
Baseline Data

YEAR 2012-2016 BASELINE LEVELS FOR THE NATIONAL SAFETY PERFORMANCE MEASURES: SEVEN-COUNTY SOUTHEASTERN WISCONSIN REGIONa

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Year</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>162</td>
<td>125</td>
<td>145</td>
<td>150</td>
<td>179</td>
<td>152.2</td>
</tr>
<tr>
<td>Fatalities Per 100 Million Vehicle-Miles Travelled</td>
<td>1.039</td>
<td>0.789</td>
<td>0.926</td>
<td>0.931</td>
<td>1.080</td>
<td>0.953</td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>898</td>
<td>834</td>
<td>745</td>
<td>716</td>
<td>798</td>
<td>798.2</td>
</tr>
<tr>
<td>Serious Injuries Per 100 Million Vehicle-Miles Travelled</td>
<td>5.758</td>
<td>5.265</td>
<td>4.759</td>
<td>4.444</td>
<td>4.813</td>
<td>5.008</td>
</tr>
<tr>
<td>Number of Non-Motorized Fatalities and Serious Injuries</td>
<td>183</td>
<td>168</td>
<td>151</td>
<td>165</td>
<td>169</td>
<td>167.2</td>
</tr>
</tbody>
</table>

aIncludes the portion of Jefferson County within the Milwaukee urbanized area and the portion of Dodge County within the West Bend urbanized area.

- About 25 percent of the State’s fatalities and serious injuries (about 25 percent of State’s VMT)
- About 45 percent of the State’s non-motorized fatalities and serious injuries (about 35 percent of State’s population)
- Reduction in crashes in Region would contribute to State achieving its targets
Historic Trends

- Fatalities (1975-2016)
  - Long-term decline
  - Fluctuated since 1998 (overall slight decline)
  - Short-term increase since 2013

- Serious Injuries (1994-2016)
  - Steady long-term decline
  - Exception between 2011 and 2016

- Non-motorized fatalities and serious injuries (1994-2016)
  - Long-term decline
  - Flatter decline since 2003

- Reductions accomplished based on past efforts in reducing crashes
Framework for all State planning and programming related to reducing fatalities and serious injuries

Last updated in 2017 and covers years 2017-2020

Identifies types of crashes to be emphasized over the next four years (for example: distracted drivers, intersection crashes, speed-related crashes, alcohol/drug-related crashes)

Recommends measures and policies to address each of the emphasized crash types (engineering, enforcement, and education)
Recommendations for reducing crashes, including fatalities and serious injuries

Regional Safety Implementation Plan
- Assist State and local governments in identifying priority corridors and intersections

Future crash estimates did not take into account long-term trend
- Difficult to estimate without rigorous analysis of crash benefits of project and system-level improvements
- Regional Safety Improvement Plan could assist in estimating

VISION 2050 Safety Recommendations

- Minimize total traffic crashes
- Minimize crashes involving fatalities and serious injuries
- Minimize bicycle and pedestrian-related crashes
- Reduce conflicts between automobiles and public transit
- Reduce vehicle traffic conflicts with traffic engineering measures, including:
  - Freeway modernization
  - Congestion mitigation
  - Alternative intersections
  - Access management standards
- Regional Safety Implementation Plan
Goal: meet aspirational nature of VISION 2050, while recognizing effectiveness of past efforts to reduce crashes

Three Alternative target-setting methods developed

- Based on State targets
- Based on long-term trends
- Based on short-term trends
Alternative Safety Targets 2046-2050 – Fatality Related Performance Measures

- Commission staff preliminarily recommends Alternative 2 (based on long-term trend)

Historic Estimate
Alternative 1 (State)
Alternative 2 (Long-Term Trend)
Alternative 3 (Short-Term Trend)
Alternative Safety Targets 2046-2050 – Serious Injury Related Performance Measures

- Commission staff preliminarily recommends Alternative 2 (based on long-term trend)
Alternative Safety Targets 2046-2050 – Non-Motorized Related Performance Measures

- Commission staff preliminarily recommends Alternative 2 (based on long-term trend)
## Preliminary Recommended 2046-2050 Targets

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>2012-2016 Baseline Data</th>
<th>Preliminary Recommended 2046-2050 Target</th>
<th>Percent Change from 2012-2016 Base Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>152.2</td>
<td>91.9</td>
<td>-39.6</td>
</tr>
<tr>
<td>Fatalities Per 100 Million Vehicle-Miles Travelled</td>
<td>0.953</td>
<td>0.485</td>
<td>-46.8</td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>798.2</td>
<td>144.1</td>
<td>-82.0</td>
</tr>
<tr>
<td>Serious Injuries Per 100 Million Vehicle-Miles Travelled</td>
<td>5.008</td>
<td>0.762</td>
<td>-84.8</td>
</tr>
<tr>
<td>Number of Non-Motorized Fatalities and Serious Injuries</td>
<td>167.2</td>
<td>45.7</td>
<td>-72.7</td>
</tr>
</tbody>
</table>

- To assist in achieving safety targets, Commission will initiate work on Region Safety Implementation Plan (RSIP)
  - Include estimating crash reduction benefits of RSIP recommendations
## Resulting 2014-2018 Targets

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Metropolitan Planning Area</th>
<th>Seven-County Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012-2016 Baseline Data</td>
<td>Resulting 2014-2018 Target</td>
</tr>
<tr>
<td>Number of Fatalities</td>
<td>137.2</td>
<td>133.2</td>
</tr>
<tr>
<td>Fatalities Per 100 Million Vehicle-Miles Travelled</td>
<td>0.887</td>
<td>0.869</td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>743.8</td>
<td>672.5</td>
</tr>
<tr>
<td>Serious Injuries Per 100 Million Vehicle-Miles Travelled</td>
<td>4.829</td>
<td>4.390</td>
</tr>
<tr>
<td>Number of Non-Motorized Fatalities and Serious Injuries</td>
<td>161.0</td>
<td>149.2</td>
</tr>
</tbody>
</table>
Next Steps of TPM Target Setting

- **Inclusion in VISION 2050**
  - Public Comment (February 2018)
  - Advisory Committee Vote on Revised Draft (March 2018)
  - Commission Meeting (March 2018)

- **Short-term targets**
  - Commission’s Executive Committee (February 15th)
VISION 2050
One Region, Focusing on Our Future

QUESTIONS?
JANUARY 18, 2018