PM 1: SAFETY PERFORMANCE MEASURES
SNHPC 2020

Southern New Hampshire Planning Commission
Metropolitan Planning Organization
January 28, 2020

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Background Info – Safety Performance

Why Safety Performance measures and targets?

Federal Legislation
MAP-21 - Moving Ahead for Progress in the 21st Century Act

- Passed in 2012

- Sought to increase the transparency and accountability related to states' investment of federal taxpayer dollars into transportation infrastructure and services nationwide,

- To ensure that states distribute funds to transportation projects that collectively make progress toward the achievement of national goals.

- Aimed to achieve set objectives by assessing the performance of state transportation systems compared to national goals and enforcing minimum requirements.

- Requires DOTs to measure and report performance in the following areas:

  Safety, pavement and bridge, system performance/congestion, freight movement, and congestion mitigation and air quality (CMAQ).
MAP-21 - Moving Ahead for Progress in the 21st Century Act

National performance goals for Federal highway programs:

**Safety**—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

**Infrastructure condition**—To maintain the highway infrastructure asset system in a state of good repair.

**Congestion reduction**—To achieve a significant reduction in congestion on the NHS.

**System reliability**—To improve the efficiency of the surface transportation system. development.

**Freight movement and economic vitality**—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic

**Environmental sustainability**—To enhance the performance of the transportation system while protecting and enhancing the natural environment.

**Reduced project delivery delays**—To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.
FAST - Fixing America's Surface Transportation Act

- Passed in 2015

- Continues MAP-21’s overall performance management approach, within which States invest resources in projects that collectively will make progress toward national goals.

Tweaked...

- **Performance period adjustment** to the timeframe for States and MPOs to make progress toward meeting their performance targets under the National Highway Performance Program

- **Clarifies the significant progress timeline** for the Highway Safety Improvement Program (HSIP) performance targets. [FAST Act § 1406(a)(1) and (b); 23 U.S.C. 119(e)(7) and 148(i)]

- **Five federally-required safety measures** for transportation.
Background Info – Federal Legislation and Safety Performance

What are the Five Federally-required safety measures?

1. **Number of Fatalities**: The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.

2. **Rate of Fatalities**: The ratio of the number of fatalities to the number of vehicle miles traveled (VMT, in 100 Million VMT) in a calendar year.

3. **Number of Serious Injuries**: The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.

4. **Rate of Serious Injuries**: The ratio of the number of serious injuries to the number of VMT (in 100 Million VMT) in a calendar year.

5. **Number of Non-Motorized Fatalities and Non-motorized Serious Injuries**: The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.
Federal Legislation and State-level Safety Performance Targets

**States set safety performance targets**

- MPOs including SNHPC are allowed the flexibility to set their own safety targets

**OR**

- MPOs may support the State-level performance targets

Last year, on January 22, 2019, SNHPC adopted the State of New Hampshire’s Safety Performance Targets for 2019

SNHPC Recommended Targets for 2020: **Support State Targets**

*It is recommended that SNHPC again adopt the State Performance Targets for 2020*
Measure 1: Number of Fatalities
(Five-Year Moving Average)

Five-Year Average: 19.2
Ten-Year Average: 17.7
Number of SNHPC Fatalities

Annual # of fatalities

R² = 0.0136
Measure 1: Proposed Target for the Number of Fatalities

*These figures represent proportional distributions of the state’s targets and are for illustrative purposes only.
Measure 2: Fatality Rate
(Five-Year Moving Average)

Five-Year Average: 0.715
Ten-Year Average: 0.669
Measure 2: Proposed Target Fatality Rate

5-Year Moving Average

- Target FY 2019: 0.879
- Proposed Target FY 2020: 0.885
Measure 3: Number of Serious Injuries
(Five-Year Moving Average)

Five-Year Average: 117.0
Ten-Year Average: 134.0
Number of SNHPC Serious Injuries

Annual # of serious injuries

R² = 0.4788
Measure 3: Proposed Target for the Number of Serious Injuries

5-Year Moving Average

Target FY 2019 94.0*

Proposed Target FY 2020 95.7*

*These figures represent proportional distributions of the state’s targets and are for illustrative purposes only.
Measure 4: Serious Injury Rate
(Five-Year Moving Average)

Five-Year Average: 4.364
Ten-Year Average: 5.490
Change in the Serious Injury Rate

Annual serious injury rate (Indexed at 100 for 2009)

- SNHPC
- Statewide
Measure 4: Proposed Target Serious Injury Rate

Proposed Target FY 2020: 3.269

5-Year Moving Average

Target FY 2019: 3.207

Proposed Target FY 2020: 3.269
Measure 5: Number of Non-motorized Fatalities and Serious Injuries (Five-Year Moving Average)

Five-Year Average: 14.8
Ten-Year Average: 14.8
Number of SNHPC Non-motorized Fatalities and Serious Injuries

R² = 0.0432
Change in the Number of Non-motorized Fatalities and Serious Injuries

Annual # of non-motorized fatalities and serious injuries (Indexed at 100 for 2009)

Statewide

SNHPC

Measure 5: Proposed Target for the Number of Non-motorized Fatalities and Serious Injuries

*These figures represent proportional distributions of the state’s targets and are for illustrative purposes only.*
N.H. Traffic Deaths Down by More Than 30% in 2019

By ASSOCIATED PRESS - JAN 2, 2020

New Hampshire safety officials say traffic fatalities in the state were down by more than 30% in 2019.

State police and the Office of Highway Safety said that as of Dec. 31, there were 99 traffic-related fatalities and 88 fatal crashes.

NH 2019 Fatal Crashes: 88
Lowest since 2007

Oslo, Norway
Pop. 690,335
2019 Traffic deaths: 1

Antall trafikkdrepte i Oslo

Oslo, Norway
Pop. 690,335
2019 Traffic deaths: 1

Siste 20 år og hvert femte år siden 1975

Kilde: Statens vegvesen

143 traffic-related fatalities and 130 fatal crashes. Bc more than 30 percent. Impaired driving, speeding are top contributing factors to crashes and fatalities in N
### 2020 State-level Safety Performance Targets

<table>
<thead>
<tr>
<th>Safety Measures</th>
<th>State Five-Year Rolling Averages</th>
<th>Trends</th>
<th>State Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>116.4</td>
<td>118.8</td>
<td>↑</td>
</tr>
<tr>
<td>Fatality Rate per 100 Million VMT</td>
<td>0.881</td>
<td>0.885</td>
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<tr>
<td>Number of Serious Injuries</td>
<td>457.2</td>
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<tr>
<td>Serious Injury Rate per 100 Million VMT</td>
<td>3.342</td>
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<tr>
<td>Non-Motorized Fatalities and Serious Injuries</td>
<td>58.8</td>
<td>56.4</td>
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### 2020 Proposed SNHPC Safety Performance Targets

<table>
<thead>
<tr>
<th>Safety Measures</th>
<th>SNHPC Five-Year Rolling Averages</th>
<th>Trends</th>
<th>State Target</th>
<th>SNHPC Recommended Target</th>
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</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>18.0</td>
<td>19.2</td>
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<tr>
<td>Fatality Rate per 100 Million VMT</td>
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<tr>
<td>Number of Serious Injuries</td>
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<tr>
<td>Serious Injury Rate per 100 Million VMT</td>
<td>5.0</td>
<td>4.4</td>
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<tr>
<td>Non-Motorized Fatalities and Serious Injuries</td>
<td>17.0</td>
<td>14.8</td>
<td>↓</td>
<td>↓</td>
</tr>
</tbody>
</table>

- **Support State Target** (approx. regionally):
  - Number of Fatalities: 18 regionally
  - Fatality Rate per 100 Million VMT: 96 regionally
  - Number of Serious Injuries: 96 regionally
  - Serious Injury Rate per 100 Million VMT: 96 regionally
  - Non-Motorized Fatalities and Serious Injuries: 13 regionally
SNHPC 2020 Safety Performance Targets (Proposed)

<table>
<thead>
<tr>
<th>Safety Measures</th>
<th>State Target</th>
<th>SNHPC Regional Target</th>
<th>Action</th>
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<tbody>
<tr>
<td>Number of Fatalities</td>
<td>118.8</td>
<td>18.3</td>
<td>Support State Target</td>
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<tr>
<td>Fatality Rate per 100 Million VMT</td>
<td>0.885</td>
<td>0.885</td>
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<tr>
<td>Number of Serious Injuries</td>
<td>448</td>
<td>95.7</td>
<td>Support State Target</td>
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<td>Serious Injury Rate per 100 Million VMT</td>
<td>3.269</td>
<td>3.269</td>
<td>Support State Target</td>
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<tr>
<td>Non-Motorized Fatalities and Serious Injuries</td>
<td>51.6</td>
<td>13.3</td>
<td>Support State Target</td>
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Supporting State’s Safety Performance Targets

What does supporting mean for SNHPC?

For 2020, staff is recommending that the SNHPC again adopt the State of New Hampshire’s Safety Performance Targets. In supporting the State-level targets, the SNHPC would be agreeing to:

• Work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the SNHPC metropolitan planning area;

• Coordinate with the State and include the safety performance measures and HSIP targets for all public roads in the metropolitan area in the SNHPC Long-Range Transportation Plan; and

• Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the Strategic Highway Safety Plan.
Questions?