PERFORMANCE MEASURES TARGET SETTING: ROADWAY SAFETY AND TRANSIT ASSET MANAGEMENT

Surface Transportation Technical Committee

Kevin Kroll and David Garcia
North Central Texas Council of Governments
Information Item
January 24, 2020
Background

Federal legislation specifies quantitative performance measures that must be tracked and reported annually or biennially.

• 2018 Performance Targets approved by RTC in December 2017
• Performance Targets Reaffirmed by RTC February 2019
  • Highway Safety Improvement Program (PM1)
  • Transit Asset Management

Established Regional Safety Position:

Even one death on the transportation system is unacceptable. Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.

• Re-emphasized focus on safety-related improvements and funding
• RTC approved funding for future Safety project implementations
Roadway Safety Performance Targets

- Target: Number of Fatalities
- Target: Rate of Fatalities
- Target: Number of Serious Injuries
- Target: Rate of Serious Injuries
- Target: Number of Non-motorized Fatalities plus Serious Injuries

(Targets based on a five-year rolling average)
## TxDOT Safety Performance Targets and Projections

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.4% Reduction</td>
<td>0.8% Reduction</td>
<td>1.2% Reduction</td>
<td></td>
<td>1.6% Reduction</td>
<td>2.0% Reduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Fatalities</td>
<td>3,703.08</td>
<td>665.2</td>
<td>3,791.0</td>
<td>599.2</td>
<td>4,068</td>
<td>589.3*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fatality Rate</td>
<td>1.432</td>
<td>0.960</td>
<td>1.414</td>
<td>0.838</td>
<td>1.48</td>
<td>0.803*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No. of Serious Injuries</td>
<td>17,565.4</td>
<td>3,647.8</td>
<td>17,751.0</td>
<td>3999.6</td>
<td>18,602</td>
<td>3,514.7*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Serious Injury Rate</td>
<td>6.740</td>
<td>5.180</td>
<td>6.550</td>
<td>5.568</td>
<td>6.56</td>
<td>4.768*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No. of Non-motorized Fatalities and Serious Injuries</td>
<td>2,150.6</td>
<td>560.0</td>
<td>2,237.6</td>
<td>582.4</td>
<td>2,477</td>
<td>595.0*</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Indicates preliminary estimate.

Targets are based on a five-year rolling average (2016 – 2020) for 2020. Proposed reduction from original trend line projections.
# NCTCOG Actual Safety Performance 2018 - Preliminary

<table>
<thead>
<tr>
<th>Safety Performance Targets</th>
<th>NCTCOG 2018 Targets</th>
<th>NCTCOG PY 2018 Actual Performance*</th>
<th>NCTCOG PY 2012-2016 Baseline Performance</th>
<th>Met Target?</th>
<th>Better than the Baseline?</th>
<th>Met or Made Significant Progress?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>665.2</td>
<td>541.6</td>
<td>496.2</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Rate of Fatalities</td>
<td>0.960</td>
<td>0.783</td>
<td>0.768</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>3,647.8</td>
<td>3,717.6</td>
<td>3,754.0</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Rate of Serious Injuries</td>
<td>5.180</td>
<td>4.768</td>
<td>5.399</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Number of Non-motorized Fatalities and Serious Injuries</td>
<td>560.0</td>
<td>543.2</td>
<td>497.2</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

*PY Actual Performance calculated as PY 2014-2018 five-year rolling average

Final 2018 Safety Performance for NCTCOG region will be presented in late spring 2020
A state has met or made significant progress towards its safety performance targets if the actual performance is less than or equal to the target or if the performance is better than the baseline performance (2012-2016). Either of these must be true for four of the five safety performance measures.

States that did not meet or make significant progress toward meeting 2014-2018 HSIP targets must submit an HSIP Implementation Plan to FHWA and use obligation authority equal to the Fiscal Year 2017 HSIP apportionment only for highway safety improvement projects.

FHWA does not make determinations for MPO targets.

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### Safety Performance Targets Next Steps

<table>
<thead>
<tr>
<th>Action</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Safety Advisory Committee – Information</td>
<td>January 24, 2020</td>
</tr>
<tr>
<td>STTC Information</td>
<td>January 24, 2020</td>
</tr>
<tr>
<td>RTC Information</td>
<td>March 12, 2020</td>
</tr>
<tr>
<td>FHWA Reports Findings to States on Performance Status for 2018 Targets (Met, Significant Progress, or Did Not Meet)</td>
<td>March 2020</td>
</tr>
<tr>
<td>NCTCOG Reports Final Findings on Performance Status for 2018 Regional Targets</td>
<td>April 2020</td>
</tr>
</tbody>
</table>
Transit Asset Management (TAM)

Images: DART, DCTA, FWTA, and NCTCOG
## Transit Asset Management Regional Targets Adopted

<table>
<thead>
<tr>
<th>Asset Category</th>
<th>Target</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolling Stock (transit vehicles)</td>
<td>0%</td>
<td>Vehicles that meet or exceed the industry standard, defined as the Federal Transit Administration’s Default Useful Life Benchmark</td>
</tr>
<tr>
<td>Infrastructure (rail track)</td>
<td>0%</td>
<td>Rail track segments with performance restrictions</td>
</tr>
<tr>
<td>Equipment (transit support vehicles)</td>
<td>0%</td>
<td>Vehicles that meet or exceed the industry standard, defined as the Federal Transit Administration’s Default Useful Life Benchmark</td>
</tr>
<tr>
<td>Facilities (buildings, stations, park and rides)</td>
<td>0%</td>
<td>Transit facilities rated below “Adequate” (3.0) on the industry standard Transit Economic Requirements Model (TERM) scale.</td>
</tr>
</tbody>
</table>
Transit Performance Measure: Rolling Stock

1RTC Policy Emphasis Area
2Rolling stock assets include a small number of vehicles reported to the National Transit Database as “inactive”
3Bus group also includes “Articulated Bus” group
4Includes assets rebuilt near the end of their useful life with the assumption of a minimum extension of 10 years of useful life, which may be too conservative (i.e. vehicles may be in better condition than expected based on rebuild)
RTC Policy Emphasis Area

Total refers to revenue track miles

Trinity Metro data not included. Also, “hybrid rail” as defined by NTD was combined with “commuter rail” for simplification purposes.

Transit Performance Measure: Infrastructure

Infrastructure Performance FY18

<table>
<thead>
<tr>
<th></th>
<th>% of Track Miles with Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuter Rail¹</td>
<td>0.8%</td>
</tr>
<tr>
<td>Light Rail</td>
<td>0.2%</td>
</tr>
<tr>
<td>Streetcar Rail</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

¹RTC Policy Emphasis Area
²Total refers to revenue track miles
³Trinity Metro data not included. Also, “hybrid rail” as defined by NTD was combined with “commuter rail” for simplification purposes.
Transit Performance Measure: Equipment

Equipment Performance FY18

% Exceeding Useful Life

- Automobiles: 24%
- Trucks/Other Rubber Tire Vehicles: 18%
- Steel Wheel Vehicles: 0%

Target
Transit Performance Measure: Facilities

Facilities inventoried and assessed:

- Admin/Maintenance: 13 inventoried, 22 assessed
- Passenger/Parking: 64 inventoried, 52 assessed

All assessed facilities meet the target of 0%.

Footnotes:
1 Trinity Metro’s rail facilities not included
2 Total facilities for which transit providers have capital responsibility and require a conditions assessment.
3 Total facilities that have undergone a conditions assessment to determine facility performance. Overall, 42% of reported facilities have undergone a conditions assessment.
Transit Asset Management Next Steps

Continue to Coordinate with Transit Providers

Consistent Transit Asset Management Definitions

Consistent Transit Asset Management Targets

Potential Enhanced Performance Measures for the Region’s Transit System

Public Transportation Agency Safety Plans

Observe Data and Adjust Actions Based on Performance
## Performance Measures Tentative Schedule

<table>
<thead>
<tr>
<th>Action</th>
<th>Date</th>
</tr>
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<tr>
<td>STTC Information: Roadway Safety &amp; Transit Asset Management</td>
<td>January 24, 2020</td>
</tr>
<tr>
<td>RTC Information: Roadway Safety &amp; Transit Asset Management</td>
<td>March 12, 2020</td>
</tr>
<tr>
<td>STTC Information: Public Transportation Agency Safety Plan (PTASP)</td>
<td>Summer 2020</td>
</tr>
<tr>
<td>RTC Workshop/Information: All Performance Measures</td>
<td>Summer 2020</td>
</tr>
<tr>
<td>STTC Action: PTASP, Pavement, Bridge, and System Performance</td>
<td>October 23, 2020</td>
</tr>
<tr>
<td>RTC Action: PTASP, Pavement, Bridge, and System Performance</td>
<td>November 12, 2020</td>
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</tbody>
</table>
Contacts

Roadway Safety

Kevin Kroll
Senior Transportation Planner
817-695-9258
kkroll@nctcog.org

Camille Fountain
Transportation Planner
817-704-2521
cfountain@nctcog.org

Sonya J. Landrum
Program Manager
817-695-9273
slandrum@nctcog.org

Transit Asset Management

David Garcia
Transportation Planner
817-640-3300
DGarcia@nctcog.org

Shannon Stevenson
Senior Program Manager
817-608-2304
sstevenson@nctcog.org

Performance Measures Website

www.nctcog.org/pm/fed