



CITY OF BANGOR

# COMMUNITY CONNECTOR

Public Transportation Agency Safety Plan

PTASP

Transit Safety Performance Measures and Targets

FY 2021

# Safety Performance Measures

The **Public Transportation Agency Safety Plan (PTASP)** regulation, at 49 C.F.R. Part 673, requires covered public transportation providers and State Departments of Transportation (DOT) to establish **safety performance targets (SPTs)** to address the **safety performance measures (SPMs)** identified in the **National Public Transportation Safety Plan (NSP)** (49 C.F.R. § 673.11(a)(3)).

As described in the **NSP**, transit providers must establish by mode seven **SPTs** in four categories:

- **Fatalities:** Total number of reportable fatalities reported to NTD and rate per total vehicle revenue miles (VRM) by mode.
- **Injuries:** Total number of reportable injuries reported to NTD and rate per total VRM by mode.
- **Safety Events:** Total number of reportable safety events reported to NTD and rate per total VRM by mode.
- **System Reliability:** Mean distance between major mechanical failures by mode.

The thresholds for “reportable” fatalities, injuries, and events are defined in the NTD Safety and Security Reporting Manual.

A **Safety Performance Measure (SPM)** is a quantifiable indicator of performance or condition that used to establish targets related to safety management activities, and to assess progress toward meeting the established targets.

# Safety Performance Targets

A **Safety Performance Target (SPT)** is a quantifiable level of performance or condition expressed as a value for the measure related to safety management activities to be achieved within a set time period.

When establishing SPTs for total numbers, transit providers may consider the total number of fatalities, injuries, and safety events they expect to experience per year (calendar, fiscal, or NTD reporting year). The annual timeframe may be established to ensure consistency with the state/regional planning process. Likewise, in setting rates per VRM, transit providers may use total annual VRM, or another number (100,000 VRM, 1,000,000 VRM, or 10,000,000 VRM) as needed for consistency with state/regional planning requirements.

Injuries Rate:

$\text{Total SPT Injuries} * 100,000 \text{ VRM (or whatever you set for your VRM rate)} / \text{annual or expected VRM} = \text{Injuries per 100,000 VRM}$

Safety Event Rate:

$\text{Total SPT of Safety Events} * 100,000 \text{ VRM} / \text{annual or expected VRM} = \text{Safety Events per 100,000 VRM}$

System Reliability:

$\text{Total VMR} / \text{Failures} = \text{Miles between major failures}$

Establishing SPTs, transit providers may choose to set aspirational SPT's however, FTA recommends that transit providers set realistic SPT's. Three sample strategies for the initial SPT's include: Setting SPT's based on five-year trends such as NTD or NSP data, Number and rate reduction, and or benchmark peers.

**Data of the initial development of this plan was determine by using the National Transit Database (NTD). The safety performance targets were compiled using the five-year average methodology based on data from 2014-2018 National Transit Database (NTD) reporting years. *The exception to this is data on major mechanical failures, as reduced reporters are not required to submit that information to the NTD.* The Community Connector will provide historical data from their maintenance record. Rates were calculated per 100,000 vehicle revenue miles (VRM). The two modes of transit are defined as Fixed Route (MB) and Non-**

Fixed Route [Demand Response (DR)]. City of Bangor, Community Connector operates both MB and DR service.

<b>City of Bangor, Community Connector</b> <b>SAFETY PERFORMANCE TARGETS</b>							
Targets below are based on review of the previous five-year average of NTD safety performance data. (2014-2018)							
Mode of Transit Service	Fatalities per NTD Reporting Year (total)	Fatalities (per 100 thousand VRM)	Injuries per NTD Reporting Year (total)	Injuries (per 100 thousand VRM)	Safety Events per NTD Reporting Year(total)	Safety Events (per 100 thousand VRM)	System Reliability (VRM / failures)
<b>MB</b>	0.00	0.00	1.2	0.20	1.40	0.23	13,336
<b>DR</b>	0.00	0.00	0.20	0.38	0.20	0.38	52,080

<b>Safety Performance Target Coordination</b>		
Community Connector’s Accountable Executive will transmit our Safety Performance Targets (SPT) by email (which are included in our PTASP), to the State DOT and MPO in our service area each year after it is updated. Community Connector’s Accountable Executive will coordinate with the MDOT and MPO to support the selection of State and MPO transit safety performance targets to the maximum extent practicable.		
<b>ASP and Targets Transmitted to the State</b>	State of Maine Department of Transportation (MDOT)	<b>Date Targets Transmitted</b> November 2020
<b>ASP and Targets Transmitted to the Metropolitan Planning Organization</b>	Bangor Area Comprehensive Transportation System (BACTS)	<b>Date Targets Transmitted</b> November 2020

### Community Connector Fixed Route (MB) 5-year Trend (2014-2018)

Year	Fatalities	Injuries	Events	VRM	Major Mechanical Failures
2014	0	0	0	612481	34
2015	0	0	0	602553	38
2016	0	0	0	605083	53
2017	0	0	0	598955	61
2018	0	0	0	594879	40
<b>5 Year Avg</b>				<b>602790</b>	<b>45.2 / 13336</b>
2019	0	0	0	594879	54
2020	0	0	0	603367	28

### Community Connector Demand Response (DR) 5 Year Trend (2014-2018)

Year	Fatalities	Injuries	Events	VRM	Major Mechanical Failures
2018	0	0	0	37021	0
2019	0	0	0	67138	0
<b>5 Year Avg</b>				<b>52080</b>	<b>0/ 52080</b>
2020	0	0	0	87120	0

#### NTD Data Fix Route MB-DO

	2015	2016	2017	2018	2019	2020*
UPT	888223	875807	821827	799726	791981	620930
VRM	602553	605083	598955	631900	594879	603367
VRH	47210	46893	46095	47096	45794	47119
VOMS	14	14	14	14	14	14

\*COVID 19

#### NTD Data ADA Paratransit DR

	2018-DT-PT	2018-DR-PT	2019-DR-PT	2019-DT-PT	2019-DR-DO	2020-DR-DO*
UPT	3756	3989	621	831	6996	7875
VRM	23421	13600	2439	6353	58346	87120
VRH	772	530	541	725	4320	6234
VOMS	6	8	8	6	5	5

\*COVID-19