



2022 TRANSIT AGENCY SAFETY TARGETS - DRAFT

Performance-Based Planning and Programming

Eric Randall
TPB Transportation Engineer

TPB Technical Committee
November 4, 2022



Presentation Items

- Transit Agency Safety Plans Rule
- Transit Safety Performance Measures
- Applicability
- Adopted 2021 Regional Targets
- 2021 Safety Performance
- Under Development 2022 Regional Targets
- Next Steps

Federal Requirement – Transit Agency Safety Plans

- Federal Performance Based Planning and Programming (PBPP) regulations requires applicable providers of public transportation to develop and certify an agency safety plan
- Applicable transit providers are required to annually set targets for four (4) Transit Safety performance measures
- MPOs have 180 days following to adopt Transit Safety targets for the metropolitan planning area (i.e., regional targets)



Transit Safety Performance Measures

	Performance Measures
Fatalities	Total number of reportable fatalities and the rate per total vehicle revenue miles by mode
Injuries	Total number of reportable injuries and the rate per total vehicle revenue miles by mode
Safety Events*	Total number of reportable events and the rate per total vehicle revenue miles by mode
System Reliability	Mean distance between major mechanical failures by mode

*Collisions, derailments, fires, or life safety evacuations



Calculation of Regional Safety Targets

Targets for the region are based on those adopted or identified by each applicable provider of public transportation

Measures are calculated for each mode:

- **Number of Fatalities/Serious Injuries/Incidents** – total number for all providers of that mode
- **Rate of Fatalities/Serious Injuries/Incidents** – total number for all providers of the mode divided by the total number of Vehicle Revenue Miles (VRM) for that mode (reported in rate per 100,000 VRM)
- **Mean Distance Between Failure (MDBF)** – the total number of VRM for that mode divided by the total number of failures for all providers of the mode



Applicable Regional Agencies

- Transit safety requirements apply to providers of public transportation that are recipients and sub-recipients of federal Section 5307 funding under FTA regulation
 - WMATA: Metrorail, Metrobus, MetroAccess
 - DDOT: DC Circulator, DC Streetcar
 - MDOT-MTA: MTA Commuter Bus
 - PRTC: Bus and paratransit
 - and local systems in Suburban Maryland:
 - VanGo (Charles Co.)
 - TransIT (Frederick Co.)
 - Ride On (Montgomery Co.)
 - The Bus (Prince George's Co.)
- Northern Virginia local bus systems do not use federal funds, so the safety targets requirements are not applicable*



2021 Regional Transit Safety Targets

Final targets for the region adopted by the TPB on November 17, 2021

	Fatalities		Serious Injuries		Safety Events		Reliability
	Number	Rate	Number	Rate	Number	Rate	MDBF
Heavy Rail (HR)	0	0	244	0.31	84	0.11	254,000
Streetcar Rail (SR)	0	0	0	0.00	4	0.27	672
Urban Bus (MB)	0	0	411	0.69	463	0.78	13,654
Commuter Bus (CB)	0	0	6	0.07	20	0.23	13,265
Demand Response (DR)	0	0	40	0.19	18	0.08	0
Vanpools (VP)	0	0	6	0.05	118	1.05	9,500

Rate - Per 100,000 Vehicle Revenue Miles

MDBF = Mean Distance Between Failures



2021 Regional Transit Safety Performance

From the FTA NTD Safety & Security time-series data

	Fatalities*		Serious Injuries		Safety Events	
	Number	Rate	Number	Rate	Number	Rate
Heavy Rail (HR)	2	0.002	13	0.016	97	0.12
Streetcar Rail (SR)	0	0	0	0	5	4.68
Urban Bus (MB)	6	0.011	0	0	217	0.43
Commuter Bus (CB)	0	0	0	0	1	0.015
Demand Response (DR)	0	0	0	0	30	0.16
Vanpools (VP)	0	0	0	0	0	0

Rate - Per 100,000 Vehicle Revenue Miles

* Excludes suicides

2022 Regional Transit Safety Targets - **DRAFT**

Some agencies are still formalizing their targets

	Fatalities		Serious Injuries		Safety Events		Reliability
	Number	Rate	Number	Rate	Number	Rate	MDBF
Heavy Rail (HR)	0	0	255	0.29	23	0.04	14,000
Streetcar Rail (SR)	0	0	0	0.00	4	0.27	1,000
Urban Bus (MB)	0	0	268	0.49	404	0.74	10,918
Commuter Bus (CB)	0	0	4	0.06	2	0.03	18,596
Demand Response (DR)	0	0	46	0.24	39	0.20	22,903
Vanpools (VP)	0	0	4	0.04	0	0.00	53,000

Rate - Per 100,000 Vehicle Revenue Miles

MDBF = Mean Distance Between Failures



Schedule

- October – Collect 2022 targets, previous year’s performance vs. target information from applicable Transit Agencies
- October – TPB Regional Public Transportation Subcommittee briefed on draft 2022 targets
- **November** – Technical Committee briefed on requirements and draft 2022 regional safety targets
- November – TPB briefed on requirements and draft 2022 regional safety targets
- December – TPB will be asked to adopt resolution with final regional transit safety targets



Eric Randall

TPB Transportation Engineer

(202) 962-3254

erandall@mwcog.org

MWCOG.ORG/TPB

777 North Capitol Street NE, Suite 300

Washington, DC 20002



National Capital Region
Transportation Planning Board