TRANSIT
ASSET
MANAGEMENT

2022 TAM Data Summary

A Snapshot of Asset-Related Data
Reported to the National Transit Database

March 2024

U.S. Department of Transportation
Federal Transit Administration

Disclaimer

The Transit Asset Management (TAM) Data Summary report provides a national snapshot of asset conditions. The Federal Transit Administration (FTA) summarizes and compiles data self-reported directly by agencies to the National Transit Database (NTD) in the Asset Inventory Module (AIM), and publishes an annual summary report. While all agencies report performance metrics and targets for the same performance measures, they have discretion over the methods that they use to set their targets. FTA verifies the data to resolve discrepancies such as values reported outside of the expected range, but does not model or extrapolate this data. Please refer to the TAM Performance Management webpage for additional context on the TAM Data Summary, its intended use, and limitations.

If you or your agency reference data from this report, please consider including the following abbreviated disclaimer: 'This statistic is from the TAM Data Summary report. Please refer to the TAM Performance Management webpage for additional context on the TAM Data Summary, its intended use, and limitations.'

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Introduction

This report summarizes data that transit agencies reported to the National Transit Database (NTD), providing an inventory and assessment of the condition of assets used to provide transit service nationally. This report provides a snapshot of the data submitted for Report Year 2022, with some references and comparisons to data from the previous four years. Report Year 2018 was the first year in which transit agencies reported this information on transit assets, in accordance with the requirements of the Transit Asset Management (TAM) rule (49 CFR 625).

BACKGROUND ON TAM REQUIREMENTS AND REPORTING

The Moving Ahead for Progress in the 21st Century Act (MAP-21) amended Federal transit law to require the Department of Transportation to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures. On July 26, 2016, FTA published the Transit Asset Management (TAM) Final Rule. The purpose of the TAM Rule is to help achieve and maintain a state of good repair (SGR) for the nation's public transportation assets. Transit asset management is a business model that uses transit asset condition to guide the optimal prioritization of funding.

The regulations apply to all transit providers that are recipients or subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 and own, operate, or manage transit capital assets used in the provision of public transportation. The TAM Rule groups providers into two categories: Tier I and Tier II.

Figure 1 lists the criteria for an agency to be categorized

Figure 1: Tier I and Tier II Agency Definitions

Tier I	Tier II
Operates rail **OR** ≥ 101 vehicles across all fixed route modes **OR** ≥ 101 vehicles in one non-fixed route mode	Subrecipient of 5311 funds **OR** American Indian Tribe **OR** ≤ 100 vehicles across all fixed route modes **OR** ≤ 100 vehicles in one non-fixed route mode

as Tier I or Tier II. Some Tier II agencies participate in Group Plans, which are designed to reduce the burden on smaller transit providers by consolidating the administrative and reporting efforts to the sponsor agency. The remainder of Tier II agencies produce and report their TAM plans independently. Regardless of tier, each agency subject to the rule is required to develop a compliant TAM Plan (first required in October 2018), submit an annual data report to the NTD

with performance targets and status (inventory and condition assessment), and submit an annual narrative report (first required in October 2019).

Agencies fulfill this requirement through an individual or group TAM plan. Group Plans are designed to collect TAM information about groups (typically subrecipients of 5311 or 5310 grant programs) that do not have a direct financial relationship with FTA. Group Plan sponsors include direct or designated recipients of section 5311, 5307, and 5310 funds with at least one subrecipient that is a provider of public transportation. State Departments of Transportation (State DOTs) are the most common sponsors, but Metropolitan Planning Organizations (MPOs) or transit agencies can also sponsor Group Plans. Group Plan sponsors are required to include their Tier II subrecipients that do not have a direct funding relationship with FTA; sponsors have the option of inviting Tier II recipients of 5307 funds to join the Group Plan.

This report highlights data that transit agencies reported, providing a comprehensive look at the wide range of capital assets supporting transit service, including revenue vehicles, equipment (service vehicles), facilities, and infrastructure (guideway and track). The data include information on count and age of assets, as well as current condition and expectations of agencies' ability to maintain assets in a state of good repair, as indicated by the reported performance targets. The data are self-reported to the NTD by transit agencies based on the best quality information available to them.

This report focuses on the TAM component of the NTD requirements and the data in the Asset Inventory Module (AIM). The data in this TAM NTD snapshot report are distinct from those documented in the "Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance Report," which FHWA and FTA jointly produce and publish. The Conditions and Performance report also uses data from the AIM, as well as additional information from a sampling of transit agencies across the country to model the nationwide condition of transit and cost of deferred replacement needs. The most recent edition of that report is available online for download.[1]

Report Overview

This report begins with an introduction of TAM requirements as well as the TAM performance measures. It continues with a discussion of NTD reporting requirements and terminology. The report proceeds with a discussion of the data reporting, analysis, and results for the four asset categories of revenue vehicles, service vehicles, facilities, and track and infrastructure. The report concludes with a discussion of Group Plan participation before walking through the data reporting, analysis, and results for the TAM performance targets.

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[1] https://www.transit.dot.gov/research-innovation/status-nations-highways-bridges-and-transit-condition-and-performance

Table 1 summarizes the overall transit asset inventory and the percentage of assets in SGR between 2018 and 2022.[2] The percentage of facilities in SGR shows slight, consistent increase over the past five years. The percentage of revenue vehicles in SGR remains relatively stable with around 78% to 80% of assets in SGR while equipment shows more fluctuation from year to year with 61% to 66% of assets in SGR. The percentage of facilities in SGR has consistently increased from 87% in SGR in 2018 to 92% in SGR in 2022. Finally, the percentage of track miles in SGR varies over time partly due to how agencies report infrastructure condition to the SGR. See the Track and Infrastructure section for more information.

Table 1: Overall Transit Asset Inventory and Percentage of Assets in SGR

Asset Category	Year	Total Number of Assets	Assets with Capital Responsibility	Percentage of Assets in SGR
Revenue Vehicles	2018	173,733	151,035	79.2%
	2019	176,824	150,446	80.0%
	2020	172,845	147,879	79.8%
	2021	168,235	145,731	80.1%
	2022	165,626	143,113	78.3%
Equipment (Service Vehicles)	2018	29,480	29,332	65.9%
	2019	30,676	30,509	62.9%
	2020	30,926	30,754	63.8%
	2021	31,202	30,996	63.4%
	2022	31,012	30,942	61.2%
Facilities	2018	12,506	10,720	87.1%
	2019	13,318	11,323	87.8%
	2020	13,795	11,721	88.9%
	2021	14,094	11,938	89.6%
	2022	14,472	12,269	91.9%
Infrastructure (Track Miles)	2018	13,086	11,442	93.9%
	2019	13,839	11,729	97.0%
	2020	13,917	11,752	96.3%
	2021	13,634	11,457	95.7%
	2022	13,941	11,763	96.0%

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[2] SGR metrics in this table are based only on assets with corresponding, published targets.

NTD REPORTING

Reporting TAM data to NTD is a relatively new process. FTA expects that there may be some reporting variability in the first several years of annual reports. Just as transit agencies are continuing to refine their methods and approaches for collecting and reporting the data, FTA is also continuing to refine its methodology and approach to analyzing and representing the TAM-related data.

TAM Performance Measures

The NTD is the primary source for the inventory and condition of the country's public transportation systems. FTA requires transit agencies to measure asset performance by asset class, a subgroup of capital assets within an asset category.

Table 2 shows assets that must be reported to the NTD and the applicable performance measures. Assets whose condition is beyond the associated performance metrics (e.g., vehicles beyond useful life benchmark, track with performance restrictions, and facilities below the 3.0 TERM rating) are considered not in SGR. Transit agencies report on asset condition for the current year and set targets for each asset class for the coming year. The targets reflect an agency's expectation of its ability to keep assets in a state of good repair, based on current conditions, anticipated funding, and internal agency decision making procedures. While FTA provides resources and technical assistance to support target setting, there is no prescribed process that agencies must use. Further, there are no rewards for meeting the targets and no penalties for not meeting the targets. Note that the raw data is reported to NTD as percentages not in SGR; this report simplifies the data to present the percentages of asset classes in SGR.

Table 2: Asset Categories and Performance Measures

Asset Category	Performance Measure	Key Metric
Rolling Stock: **Revenue vehicles by mode**	**Percentage of revenue vehicles (by type) that exceed the ULB.**	**Useful Life Benchmark (ULB):** **The expected lifecycle of a capital asset for a particular transit provider's operating environment, or the acceptable period of use in service for a particular transit provider's operating environment.**
Equipment: **Nonrevenue support-service and maintenance vehicles**	**Percentage of nonrevenue service vehicles (by class) that exceed the ULB.**	**Same as above.**
Facilities: **Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities**	**Percentage of facilities that are rated less than 3.0 on the TERM scale.**	**Transit Economic Requirements Model (TERM) scale for defining asset condition: 1-poor, 2-marginal, 3-adequate, 4-good, and 5-excellent.**
Infrastructure: **Only rail fixed-guideway track, signals, and systems**	**Percentage of track segments (by mode) with performance restrictions.**	**Performance restriction: Exists on a segment of rail fixed guideway when the maximum permissible speed of transit vehicles is set to a value that is below the guideway's full-service speed. These restrictions are often referred to as "slow zones."**

Capital Replacement Responsibility

Transit agencies are required to inventory all assets used in provision of public transportation but are only required to assess the condition of and set targets on the assets for which they have direct capital responsibility. Agencies have direct capital responsibility of an asset if they:

- Own the asset;
- Jointly own the assets with another entity; or
- Are responsible for replacing, overhauling, refurbishing, or conducting major repairs on that asset, or the costs of those activities are itemized as a capital line item in their budget.

Calculating Performance Metrics and Targets

Transit agencies report condition information at the individual asset level for the current year and set performance targets for all assets within each asset class for the following year. For this snapshot report, FTA has calculated the current year SGR metrics for each asset class across the country, based on the reported performance and condition of each asset. For example, this means calculating the total number of buses that all transit agencies have capital responsibility for, and the percentage of those buses that are beyond their agency-defined ULBs. Similarly, FTA compared the total number of buses for each agency to the SGR target to calculate a national total number of buses and percentage in SGR for the following year target. These results for buses are presented in the Revenue Vehicles and Performance Targets sections.

NTD vs. TAM Terminology

While the TAM and NTD requirements overlap at data reporting, they are each their own programs with distinct timelines, requirements, and terminology. This report focuses on the TAM component of the NTD requirements and the data in the Asset Inventory Module (AIM). It does not include data or information from other NTD modules. In general, this report may frame or discuss NTD data reporting through the lens of the TAM program, rather than using the specific language found in the NTD reporting forms.

GLOSSARY

Asset Category: A grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities.

Asset Class: A subgroup of capital assets within an asset category. For example, buses, trolleys, and cutaway vans are all asset classes within the rolling stock asset category.

Asset Inventory Module (AIM): NTD forms used to report on transit assets.

> **A-15**: Facility Inventory Form
>
> **A-20**: Transitway Mileage Form
>
> **A-30**: Revenue Vehicle Inventory Form
>
> **A-35**: Service Vehicle Inventory Form
>
> **A-90**: Transit Asset Management Performance Measures Form

Direct Capital Responsibility: Transit agencies have direct capital responsibility for assets that they own, jointly own with another entity, or for assets that they are responsible for replacing, overhauling, refurbishing, or conducting major repairs on that asset, or the cost of those activities are itemized as a capital line item in the agency's budget.

FTA Funding Programs:

> **5307, Urbanized Area Formula Grant Program**: makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census.
>
> **5310, Grant Program for special services to the elderly and disabled**: provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.
>
> **5311, Rural Area Formula Grant Program**: provides capital, planning, and operating assistance to states and federally recognized Indian tribes to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations. It also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program.

Tribal, Tribal Transit Program: A set-aside from the Formula Grants for Rural Areas program that consists of a formula program and a competitive grant program subject to the availability of appropriations.

Group Plan: A single TAM plan that is developed by a sponsor on behalf of at least one Tier II provider.

Group Plan Participant: A Tier II transit agency participating in a TAM Group Plan.

Group Plan Sponsor: A State, a designated recipient, or a direct recipient that develops a Group TAM Plan for at least one Tier II provider.

National Transit Database (NTD): Repository of data about the financial, operating and asset conditions of American transit systems. The NTD records the financial, operating, and asset condition of transit systems helping to keep track of the industry and provide public information and statistics.

Performance Restriction: Exists on a segment of rail fixed guideway when the maximum permissible speed of transit vehicles is set to a value that is below the guideway's full-service speed. These restrictions are often referred to as "slow zones".

State of Good Repair (SGR): The condition in which a capital asset is able to operate at a full level of performance. A capital asset is in a state of good repair when that asset:

- Is able to perform its designed function,
- Does not pose a known unacceptable safety risk, and
- Its lifecycle investments have been met or recovered.

Tier I: A recipient that owns, operates, or manages either (a) one hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode, or (b) rail transit.

Tier II: A recipient that owns, operates, or manages (a) one hundred (100) or fewer vehicles in revenue service during peak regular service across all non-rail fixed route modes or in any one non-fixed route mode, (b) a subrecipient under the 5311 Rural Area Formula Program, (c) or any American Indian tribe.

Transit Asset Management (TAM): The strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation. TAM is a business model that prioritizes funding based on the condition of transit assets to achieve and maintain a state of good repair for the nation's public transportation assets. The 2016 TAM Final Rule develops a framework for transit agencies to monitor and manage public transportation assets, improve safety, increase reliability and performance, and establish performance measures in order to help agencies keep their systems operating smoothly and efficiently.

Transit Economic Requirements Model (TERM): An analysis tool developed for FTA designed to estimate transit capital investment needs to maintain a state of good repair across the nation's transit systems.

Useful Life Benchmark (ULB): The expected life cycle or the acceptable period of use in service for a capital asset, as determined by a transit provider, or the default benchmark provided by FTA.

Revenue Vehicles

Revenue vehicles are the largest capital asset category used in the provision of public transit, and the most familiar assets to the public. There are 24 classes of revenue vehicles (Table 3) reported to the NTD. This fact sheet combines those 24 classes into four asset types: rail vehicles, buses, vans, and other vehicles.

Table 3: Categorization of Revenue Vehicles by Asset Type and Class

Asset Type	Asset Classes	
Rail Vehicles	**Automated Guideway Vehicle**	**Heavy Rail Passenger Car**
	Cable Car	**Inclined Plane Vehicle**
	Commuter Rail Locomotive	**Light Rail Vehicle**
	Commuter Rail Passenger Coach	**Monorail Vehicle**
	Commuter Rail Self-Propelled Passenger Car	
Buses	**Articulated Bus**	**School Bus**
	Bus	**Trolleybus**
	Double Decker Bus	**Vintage Trolley**
	Over-the-road Bus	
Vans/Cutaways	**Cutaway**	**Van**
Other Vehicles	**Aerial Tramway**	**Minivan**
	Automobile	**Other**
	Ferryboat	**Sports Utility Vehicle**

DATA REPORTING

Agencies report revenue vehicles to the NTD as fleets, providing information such as date of manufacture, useful life benchmark (ULB), and the number of vehicles in each fleet. Agencies also report whether they hold capital replacement responsibility for each vehicle fleet. For the number of vehicles, agencies report both the number of fleet vehicles and "active" fleet vehicles. Active fleet vehicles exclude vehicles that are slated for disposal or out of commission. The analysis below considers active fleet vehicles only. In 2022, 2,756 agencies reported revenue vehicles to the NTD.

Total Revenue Vehicles

Nationwide, transit providers reported over 165,000 revenue vehicles in 2022. Figure 2 and Table 4 show the breakdown of asset types by agency tier, with Table 4 further distinguishing between Tier II agencies submitting their own TAM plan and Tier II agencies participating in Group Plans.[3] Agencies with rail vehicles are automatically classified as Tier I agencies.[4]

Figure 2: Number of Revenue Vehicles (Thousands)
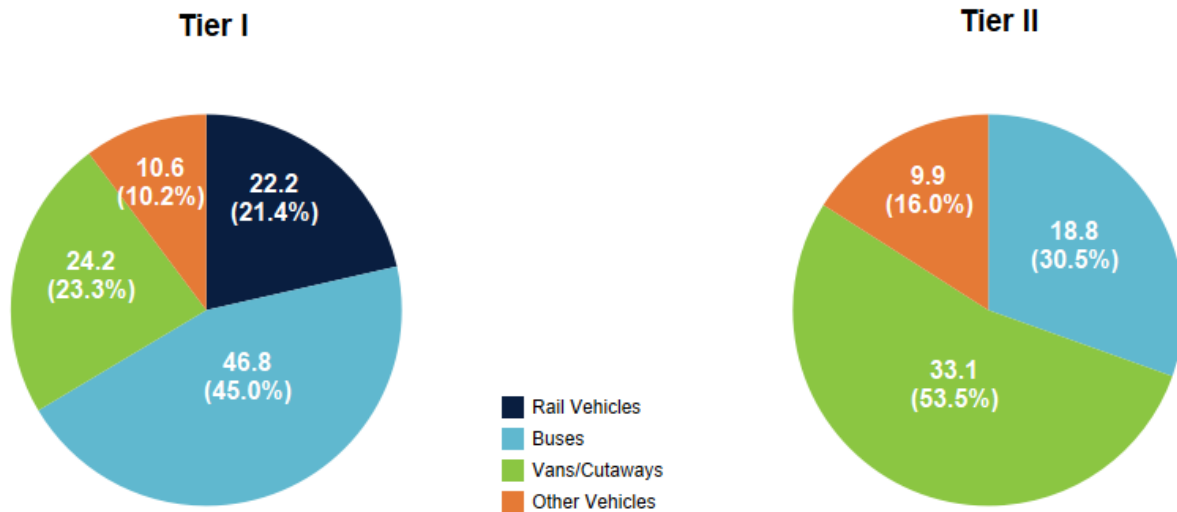
Table 4: Number of Revenue Vehicles by Tier

Asset Type	2021 Total	2022			
		Tier I	Tier II Individual	Tier II Group Plan	Total
Rail Vehicles	22,018	22,230	n/a	n/a	22,230
Buses	67,127	46,761	11,243	7,602	65,606
Vans/Cutaways	58,386	24,194	9,274	23,823	57,291
Other Vehicles	20,704	10,626	2,484	7,389	20,499
Grand Total	168,235	103,811	23,001	38,814	165,626

[3] Numbers in tables and figures throughout the report may not add exactly to 100% due to rounding.
[4] Two inclined plane vehicles were removed from this analysis as they were mistakenly reported as part of an agency's active fleet but did not accrue any vehicle miles traveled as the system was undergoing an overhaul during the 2022 report year.

Table 5 further breaks down the assets and presents the number of revenue vehicles by asset class and agency tier. As stated above, by definition, Tier II agencies do not have any class of rail vehicles.

Table 5: Number of Revenue Vehicles by Asset Class and Tier

Asset Type	Asset Class	Tier I	Tier II	Total
Rail Vehicles	Automated Guideway Vehicle	114	n/a	114
	Cable Car	37	n/a	37
	Commuter Rail Locomotive	899	n/a	899
	Commuter Rail Passenger Coach	3,750	n/a	3,750
	Commuter Rail Self-Propelled Passenger Car	3,281	n/a	3,281
	Heavy Rail Passenger Car	11,412	n/a	11,412
	Inclined Plane Vehicle	4	n/a	4
	Light Rail Vehicle	2,725	n/a	2,725
	Monorail Vehicle	8	n/a	8
Buses	Articulated Bus	5,494	266	5,760
	Bus	36,224	16,704	52,928
	Double Decker Bus	210	11	221
	Over-the-road Bus	4,242	1,759	6,001
	School Bus	1	60	61
	Trolleybus	518	45	563
	Vintage Trolley	72	0	72
Vans/Cutaways	Cutaway	13,636	25,585	39,221
	Van	10,558	7,512	18,070
Other Vehicles	Aerial Tramway	2	71	73
	Automobile	3,387	1,379	4,766
	Ferryboat	30	241	271
	Minivan	4,786	7,311	12,097
	Other	0	46	46
	Sports Utility Vehicle	2,421	825	3,246
Grand Total	All Revenue Vehicles	103,811	61,815	165,626

Of the 165,626 revenue vehicles, agencies reported having capital responsibility for 143,113 revenue vehicles, as presented in Table 6. The subsequent discussion and analysis in this section only focuses on the revenue vehicles for which agencies report having capital responsibility.

Table 6: Number of Revenue Vehicles by Tier (Capital Responsibility Only)

Asset Type	2021 Total	2022			
		Tier I	Tier II Individual	Tier II Group Plan	Total
Rail Vehicles	19,185	19,366	n/a	n/a	19,366
Buses	65,484	45,817	10,729	7,218	63,764
Vans/Cutaways	48,375	16,158	8,351	22,889	47,398
Other Vehicles	12,687	4,655	1,275	6,655	12,585
Grand Total	145,731	85,996	20,355	36,762	143,113

Useful Life Benchmark (ULB)

The ULB is the age at which a vehicle asset class is estimated no longer to be in SGR. The ULB can also be interpreted as the estimated replacement cycle for a specific asset class. FTA established default ULBs for each vehicle asset class, using the average age at which it would reach the midpoint (a rating of 2.5) on the FTA Transit Economic Requirements Model (TERM) scale. Transit agencies may set a customized ULB if FTA defaults do not accurately reflect their operating environment. Assets that are beyond the ULB, whether it is the FTA default or a custom value, are considered not to be in SGR and therefore need to be replaced.

Table 7 below shows the number of agencies that set a custom ULB for at least one revenue vehicle asset class.

Table 7: Agencies Setting a Custom ULB for At Least One Revenue Vehicle Asset Class (Capital Responsibility Only)

Report Year	Number of Agencies Reporting Custom ULB	Total Number of Agencies Reporting Revenue Vehicles	Percentage of Agencies Reporting Custom ULB
2018	1,294	2,549	50.8%
2019	1,416	2,666	53.1%
2020	1,437	2,684	53.5%
2021	1,414	2,685	52.7%
2022	1,377	2,669	51.6%

Reported ULBs vary across agencies and reflect their expected replacement cycles and unique operating environments. Table 8 lists the default, average, and range of reported ULBs for each revenue vehicle asset class. For most asset classes, the average ULB (including customized values) is lower than the default ULB, indicating that agencies need to replace vehicles sooner than the FTA-estimated lifespan. Note that in this table, the percentage of agencies reporting an asset reflects the number of agencies that report at least one asset of that class to NTD, out of the total number of agencies that report to NTD (capital responsibility only). For example, of the agencies reporting revenue vehicles under capital responsibility, 3.18% reported Articulated Bus assets. Of those agencies that reported Articulated Buses, 57.6% of them set a custom ULB.

Table 8: Default and Custom ULBs (Capital Responsibility Only)

Asset Type	Asset Class	Percentage of Agencies Reporting Asset	Default ULB (Years)	Average ULB (Years)	Percentage of Agencies Setting Custom ULBs	ULB Range for All Assets (Years)
Rail Vehicles	Automated Guideway Vehicle	0.19%	31	42.9	80.0%	25 - 50
	Cable Car	0.04%	112	112.0	0.0%	112 - 112
	Commuter Rail Locomotive	0.82%	39	34.3	72.7%	20 - 80
	Commuter Rail Passenger Coach	0.90%	39	34.3	66.7%	25 - 111
	Commuter Rail Self-Propelled Passenger Car	0.52%	39	36.6	50.0%	30 - 77
	Heavy Rail Passenger Car	0.60%	31	39.2	75.0%	22 - 77
	Inclined Plane Vehicle	0.07%	56	126.5	50.0%	56 - 197
	Light Rail Vehicle	1.42%	31	32.1	55.3%	25 - 45
	Monorail Vehicle	0.04%	31	80.0	100.0%	80 - 80
Buses	Articulated Bus	3.18%	14	13.1	57.6%	4 - 25
	Bus	35.97%	14	13.2	53.3%	3 - 26
	Double Decker Bus	0.30%	14	15.5	37.5%	12 - 20
	Over-the-road Bus	3.75%	14	13.8	38.0%	10 - 25
	School Bus	0.52%	14	13.1	42.9%	7 - 14
	Trolleybus	0.19%	13	15.1	80.0%	13 - 18
	Vintage Trolley	0.41%	58	64.8	27.3%	45 - 122
Vans/ Cutaways	Cutaway	81.68%	10	8.4	44.8%	1 - 20
	Van	42.56%	8	7.1	36.4%	3 - 15
Other Vehicles	Aerial Tramway	0.07%	12	25.7	100.0%	25 - 50
	Automobile	7.12%	8	6.5	36.8%	4 - 10
	Ferryboat	1.39%	42	38.0	62.2%	10 - 105
	Minivan	44.32%	8	7.3	35.2%	2 - 13
	Other	0.34%	14	8.0	100.0%	4 - 14
	Sports Utility Vehicle	6.22%	8	7.7	21.1%	4 - 12

Revenue Vehicle Replacement

Assets fall out of SGR and are considered due-for-replacement when their age (calculated from date of manufacture) reaches the ULB value. Table 9 summarizes the percentage of revenue vehicles within their ULB, and thus in SGR, over the past five years.[5]

Table 9: Percentage of Revenue Vehicles in SGR by Year (Capital Responsibility Only)

Asset Type	2018	2019	2020	2021	2022
Rail Vehicles	82.3%	82.3%	82.1%	84.1%	83.6%
Buses	81.0%	82.8%	83.2%	83.1%	82.6%
Vans/Cutaways	76.3%	76.8%	76.3%	76.2%	72.6%
Other Vehicles	76.0%	74.7%	72.1%	73.1%	69.8%

Figure 3 shows the average age (bars) and average ULB (lines) of vehicles in each asset class. Light blue bars indicate that the age of the average revenue vehicle in that asset class is less than the average ULB while dark blue bars indicate that average age exceeds the average ULB. In 2022, the average vehicle age exceeds average ULB for the cable car, school bus, and vintage trolley asset classes.

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[5] For consistency with the Performance Targets section, SGR metrics in this table are based only on assets with corresponding, published targets.

Figure 3: Average Revenue Vehicle Age (Bars) and ULB (Lines) (Capital Responsibility Only)

Category	Vehicle Type	Average Age	ULB
Rail Vehicles	Automated Guideway Vehicle	37.2	42.9
	Cable Car	114.0	112.0
	Commuter Rail Locomotive	23.4	34.3
	Commuter Rail Passenger Coach	25.8	34.3
	Commuter Rail Self-Propelled Passenger Car	19.7	36.6
	Heavy Rail Passenger Car	24.5	39.2
	Inclined Plane Vehicle	77.0	126.5
	Light Rail Vehicle	19.7	32.1
	Monorail Vehicle	60.0	80.0
Buses	Articulated Bus	7.0	13.1
	Bus	7.7	13.2
	Double Decker Bus	7.6	15.5
	Over-the-road Bus	7.5	13.8
	School Bus	16.1	13.1
	Trolleybus	6.5	15.1
	Vintage Trolley	83.1	64.8
Vans/Cutaways	Cutaway	5.4	8.4
	Van	5.2	7.1
Other Vehicles	Aerial Tramway	21.9	25.7
	Automobile	4.6	6.5
	Ferryboat	21.0	38.0
	Minivan	5.5	7.3
	Other	4.4	8.0
	Sports Utility Vehicle	4.7	7.7

■ Average Age Greater Than Average ULB
■ Average Age At or Below Average ULB

Years (0 10 20 30 40 50 60 70 80 90 100 110 120 130)

Equipment

NTD reporting for equipment focuses on service vehicles, which indirectly support transit service by helping to maintain revenue vehicles and perform transit-related administrative activities. Examples include transit tow trucks, rail track de-icing vehicles, and supervisor cars used by the transit agency.

DATA REPORTING

Agencies report service vehicles to the NTD as fleets, providing information such as date of manufacture, useful life benchmark (ULB), and the number of vehicles in each fleet. The three classes of service vehicles are: automobiles, rubber tire vehicles (or "bus service vehicles"), and steel-wheel vehicles (or "rail service vehicles"). Agencies report the proportion of capital responsibility they have for each asset class. Agencies also report the replacement costs for each fleet of assets, including a year for the estimate. In 2022, 1,008 agencies reported service vehicles to the NTD.

ANLAYSIS AND RESULTS

Total Service Vehicles

Nationwide, transit providers use over 31,000 vehicles to support transit service (including more than 5,600 automobiles, 1,300 rail service vehicles, and 23,900 trucks and other bus service vehicles). These vehicles are used to maintain tracks, provide transportation for workers between sites, and support other crucial functions. Figure 4 and Table 10 show the number of service vehicles by class.

Figure 4: Number of Service Vehicles (Thousands)
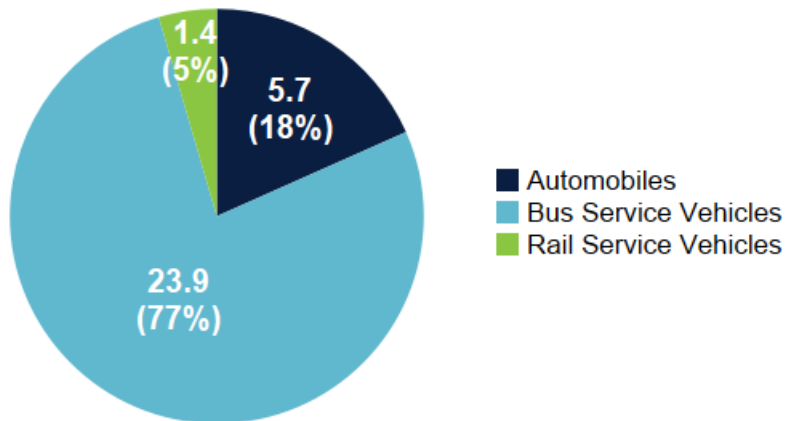
Table 10: Number of Service Vehicles by Tier

Asset Class	2021 Total	2022			
		Tier I	Tier II Individual	Tier II Group Plan	Total
Automobiles	6,049	3,906	1,097	685	5,688
Bus Service Vehicles	23,715	19,874	2,397	1,654	23,925
Rail Service Vehicles	1,438	1,339	n/a	n/a	1,399
Grand Total	31,202	25,179	3,494	2,339	31,012

Of the 31,012 service vehicles, agencies reported having capital responsibility for 30,942 service vehicles, as presented in Table 11. The subsequent discussion and analysis in this section only focuses on the service vehicles for which agencies report having capital responsibility.

Table 11: Number of Service Vehicles by Tier (Capital Responsibility Only)

Asset Class	2021 Total	2022			
		Tier I	Tier II Individual	Tier II Group Plan	Total
Automobiles	6,012	3,905	1,095	669	5,669
Bus Service Vehicles	23,551	19,865	2,386	1,623	23,874
Rail Service Vehicles	1,433	1,399	n/a	n/a	1,399
Grand Total	30,996	25,169	3,481	2,292	30,942

Useful Life Benchmark (ULB)

Agencies report ULBs for service vehicles similarly to revenue vehicles (see discussion of ULBs in Revenue Vehicle section above). As with revenue vehicles, FTA establishes default ULBs for each service vehicle asset class; however, transit agencies may set a customized ULB. Assets that are beyond the ULB, whether it is the FTA default or a custom value, are considered to not be in SGR and therefore need to be replaced. Table 12 below shows the number of agencies that set a custom ULB for at least one service vehicle asset class.

Table 12: Agencies Setting a Custom ULB for At Least One Service Vehicle Asset Class (Capital Responsibility Only)

Report Year	Number of Agencies Reporting Custom ULB	Total Number of Agencies Reporting Service Vehicles	Percentage of Agencies Reporting Custom ULB
2018	365	885	41.2%
2019	453	932	48.6%
2020	470	951	49.4%
2021	505	975	51.8%
2022	510	998	51.1%

Agencies set a wide range of ULBs across the three asset classes that make up service vehicles. Table 13 displays the default and average ULBs, as well as the range of reported ULBs for each service vehicle asset class. In this table, the percentage of agencies reporting each asset class is out of all 998 agencies reporting equipment under capital responsibility. Accounting for agency custom ULBs, the average ULB across all service vehicles is 7.8 years for automobiles, 10.6 years for bus service vehicles, and 23.2 years for rail service vehicles.

Table 13: Default and Custom ULBs (Capital Responsibility Only)

Asset Class	Percentage of Agencies Reporting Asset	Default ULB (Years)	Average ULB (Years)	Percentage of Agencies Setting Custom ULBs	ULB Range for All Assets (Years)
Automobiles	56.0%	8	7.8	34.9%	3 - 40
Bus Service Vehicles	88.7%	14	10.6	51.8%	3 - 40
Rail Service Vehicles	3.5%	25	23.2	65.7%	8 - 45

Service Vehicle Replacement

Table 14 summarizes how the percentage of service vehicles within their ULB, and thus in SGR, has changed since 2018.[6] For all asset classes, the percentage of service vehicles in SGR has decreased over the past two years.

Table 14: Percentage of Service Vehicles in SGR by Year (Capital Responsibility Only)

Asset Class	2018	2019	2020	2021	2022
Automobiles	57.2%	55.5%	56.5%	55.0%	51.0%
Bus Service Vehicles	70.7%	66.2%	66.8%	66.6%	64.6%
Rail Service Vehicles	47.5%	49.8%	48.2%	45.5%	43.5%

Figure 5 shows the average age (bars) and average ULB (lines) of service vehicles in each asset class. Light blue bars indicate that the age of the average service vehicle in that asset class is less than the average ULB while dark blue bars indicate that average age exceeds the average ULB. In 2022, the average vehicle age exceeds average ULB for rail service vehicle and therefore is overdue for replacement. For automobiles, the average age is equal to the average ULB while the average bus service vehicle is within three years of requiring replacement.

[6] For consistency with the Performance Targets section, SGR metrics in this table are based only on assets with corresponding, published targets.

Figure 5: Average Service Vehicle Age (Bars) and ULB (Lines) (Capital Responsibility Only)
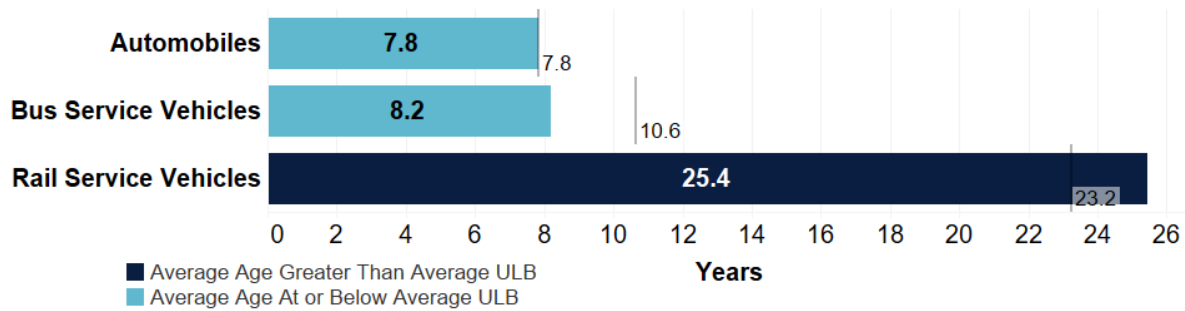
Finally, Figure 6 shows the distribution of the average years until replacement across the entire fleet for each asset class. As above, light blue bars mark assets that have years remaining before reaching their ULB while dark blue bars indicate that assets have exceed their ULB and are overdue for replacement.

Figure 6: Range of Useful Life Remaining by Asset Class (Capital Responsibility Only)
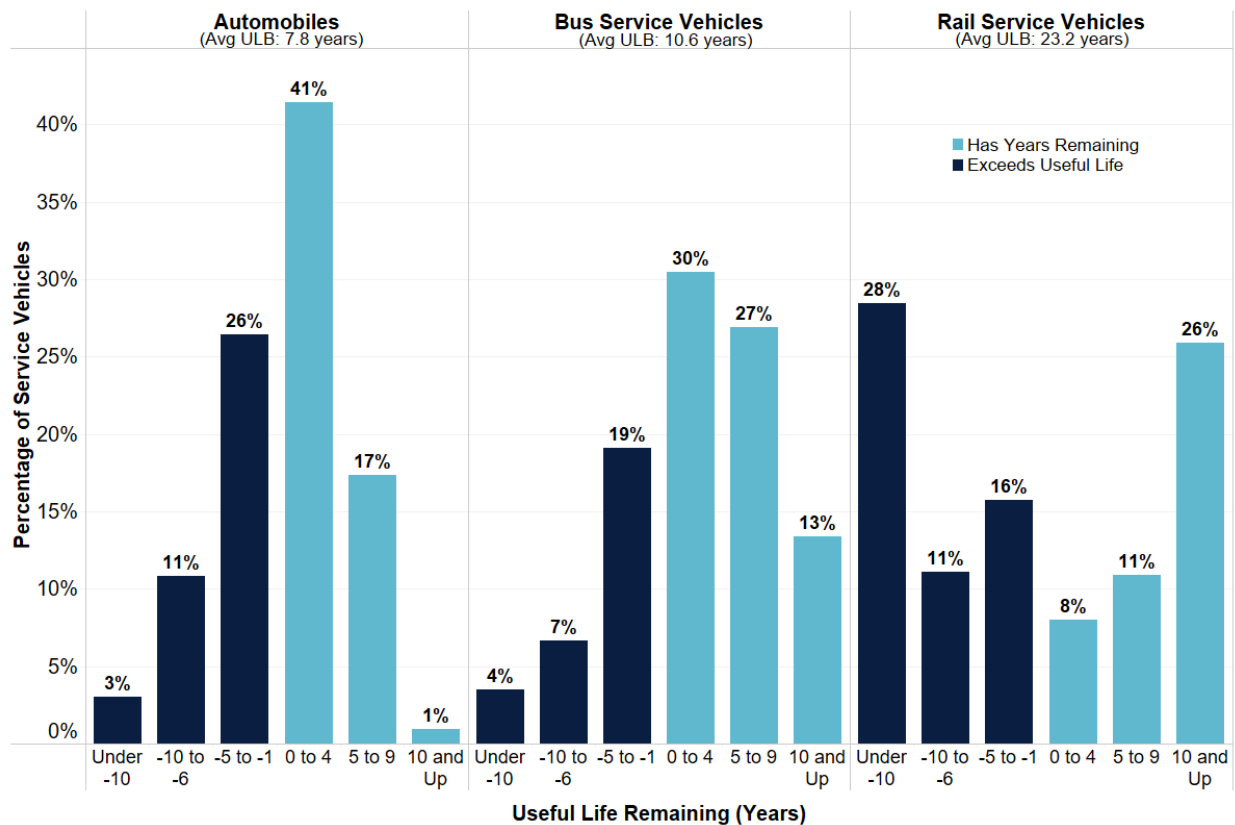
Facilities

As reported to the NTD, there are over 14,000 facilities supporting transit service in the U.S. On average, facilities are approximately 28 years old, with 1% of all facilities in use today built in 1900 or earlier. Of facilities under capital responsibility, approximately 92% are in a state of good repair and, on average, facilities have a condition rating of 3.5 on the 1-5 TERM scale.

DATA REPORTING

Transit agencies report information on four classes of facilities that are used to support transit: maintenance, passenger, administrative, and parking. Agencies report information on the year of construction, percentage of capital responsibility, condition, and date of condition assessment. In 2022, 1,395 agencies reported facilities to the NTD.

Facility Condition and Responsibility

Transit agencies are required to conduct regular condition assessments of their assets for which they have capital responsibility. The condition assessment process involves inspections that evaluate asset physical conditions, performance characteristics, and potential risks and impacts of failures. Agencies self-assess the condition for each of their facilities on the 1-5 TERM scale, and submit condition ratings, which are then aggregated to calculate the facility condition performance measure metric. This condition rating is based on the TAM Facility Performance Measure Reporting Guidebook requirements.

Transit agencies assess and report facility condition to the NTD based on the five-point scale used in the Transit Economic Requirements Model (TERM). The TERM scale indicates that an asset is considered in a state of good repair if it has a rating of 3 (adequate), 4 (good), or 5 (excellent) on this scale. Likewise, a facility is deemed to not be in good repair if it has a rating of 1 (poor) or 2 (marginal).

Phase-in of Facility Condition Assessment Reporting

Facility condition assessments must be updated every four years at minimum. FTA allowed agencies to phase in the reporting of facility condition assessments over the first TAM Plan reporting period to reduce the burden of data collection processes that were new for many agencies. Since 2021, agencies have been required to report condition assessment ratings for 100% of their facilities.

ANALYSIS AND RESULTS

Figure 7 and Table 15 show a breakdown of facility counts by asset class. Agencies reported a total of 14,472 facilities to their asset inventories in 2022, including 75 newly constructed facilities.

Figure 7: Number of Facilities (Thousands)
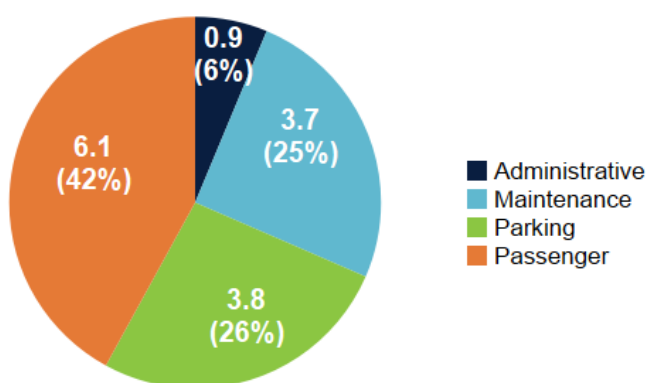
Table 15: Number of Facilities by Tier

Asset Class	2021 Total	2022			
		Tier I	Tier II Individual	Tier II Group Plan	Total
Administrative	840	438	164	307	909
Maintenance	3,589	2,199	590	866	3,655
Parking	3,757	3,411	248	167	3,826
Passenger	5,908	5,138	582	362	6,082
Grand Total	14,094	11,186	1,584	1,702	14,472

In 2022, agencies reported having partial or full capital responsibility for 12,269 facilities, as presented in Table 16. Of this total, agencies reported condition ratings for 12,086 facilities. The subsequent discussion and analysis only include those facilities that have reported condition ratings in NTD.

Table 16: Number of Facilities by Tier (Capital Responsibility Only)

Asset Class	2021 Total	2022			
		Tier I	Tier II Individual	Tier II Group Plan	Total
Administrative	839	438	164	307	909
Maintenance	3,581	2,197	590	863	3,650
Parking	2,386	2,086	192	141	2,419
Passenger	5,132	4,530	463	298	5,291
Grand Total	11,938	9,251	1,409	1,609	12,269

FTA used the condition ratings reported by transit agencies to assess the percentage of facilities in SGR. Table 17 provides summary statistics for these facilities in 2022. The average condition rating of facilities is 3.5 in 2022. This average rating has remained the same since 2018.

Table 17: Summary of Facilities with Condition Ratings (Capital Responsibility Only)

	Tier I	Tier II	Total
Facilities with Condition Ratings	9,127	2,959	12,086
Mean Age	30	22	28
Average Condition Rating	3.5	3.8	3.5

Table 18 details the number of reported condition assessments and the average reported condition of transit facilities by facility type.

Table 18: Percentage of Facilities in SGR by Facility Type (Capital Responsibility Only)

Asset Class	Facility Type	Average Condition Rating	Percentage of Facilities in SGR	Facilities with Condition Assessment
Administrative	Administrative Office / Sales Office	3.7	92.0%	866
	Revenue Collection Facility	3.7	93.1%	29
Maintenance	Combined Administrative and Maintenance Facility (describe in Notes)	3.6	92.7%	808
	General Purpose Maintenance Facility/Depot	3.6	89.7%	805
	Heavy Maintenance & Overhaul (Backshop)	3.1	81.9%	94
	Maintenance Facility (Service and Inspection)	3.4	87.6%	637
	Other, Administrative & Maintenance	3.2	81.2%	833
	Vehicle Blow-Down Facility	3.3	66.7%	6
	Vehicle Fueling Facility	3.6	93.2%	191
	Vehicle Testing Facility	4.0	100.0%	5
	Vehicle Washing Facility	3.5	89.4%	218
Parking	Other, Passenger or Parking	3.8	97.4%	195
	Parking Structure	3.8	96.0%	226
	Surface Parking Lot	3.5	93.2%	1,959
Passenger	At-Grade Fixed Guideway Station	3.6	95.8%	1,692
	Bus Transfer Center	3.7	94.9%	867
	Elevated Fixed Guideway Station	3.3	87.9%	644
	Exclusive Platform Station	3.5	96.8%	378
	Ferryboat Terminal	3.7	95.2%	166
	Simple At-Grade Platform Station	3.9	98.5%	913
	Underground Fixed Guideway Station	3.1	82.1%	554
Grand Total	All Facilities	3.5	91.9%	12,086

Condition Rating

A facility is in SGR if it receives a rating of at least 3 on the TERM scale. Altogether, in 2022, 91.9% of reported facilities were in SGR, including 91% of Tier I facilities and 93% of Tier II facilities. Table 19 summarizes the percentage of facilities in SGR by asset class over the past five years.[7] The percentage of administrative/maintenance facilities in SGR has remained steady since 2018 while the percentage of passenger/parking facilities in SGR has slightly increased each year.

Table 19: Percentage of Facilities in SGR by Year (Capital Responsibility Only)

Asset Type	2018	2019	2020	2021	2022
Administrative / Maintenance	87.0%	86.0%	87.0%	87.3%	88.8%
Passenger / Parking	87.1%	88.9%	90.1%	90.9%	93.8%

Outdated Condition Assessments

As of 2022, agencies have reported condition assessments for 99% of all facilities with partial or full capital responsibility. However, condition ratings recorded prior to 2019 are considered outdated. Figure 8 shows that 4.4% of facilities have assessments recorded prior to the January 1, 2019 cutoff date. Note that this Snapshot report considers all reported condition assessments even if out of date.

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[7] For consistency with the Performance Targets section, SGR metrics in this table are based only on assets with corresponding, published targets.

Figure 8. Number of Facility Condition Assessments Reported in 2022 (Capital Responsibility Only)
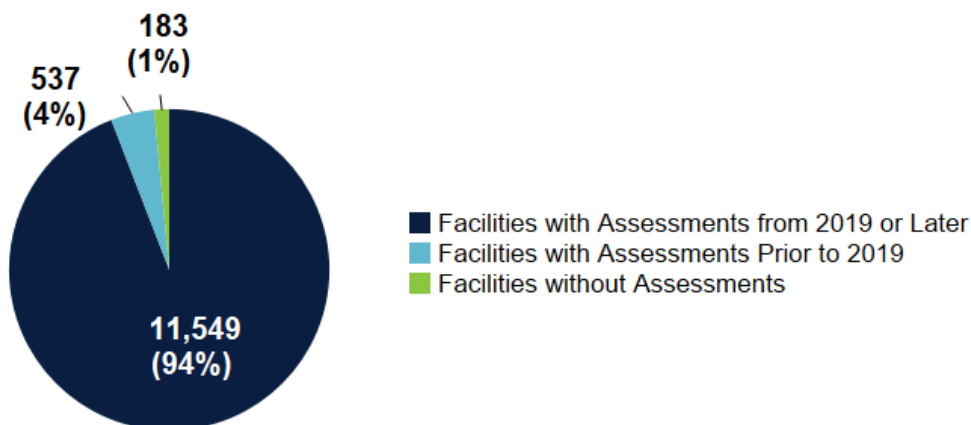
State of Good Repair and Age of Transit Facilities

The 2022 NTD data offer a snapshot of the 12,086 transit facilities with reported condition assessments. FTA assessed the percentage of facilities in SGR by construction year using condition and construction year data provided to the NTD. Note that the number of facilities reported for each decade may differ across report years as agencies update their reporting methods and acquire new facilities. Figure 9 shows that over 93% of facilities built since the 1950s and almost 97% of facilities built since 2000 remain in SGR.

Figure 9: Percentage of Facilities in SGR by Decade of Construction (Capital Responsibility Only)
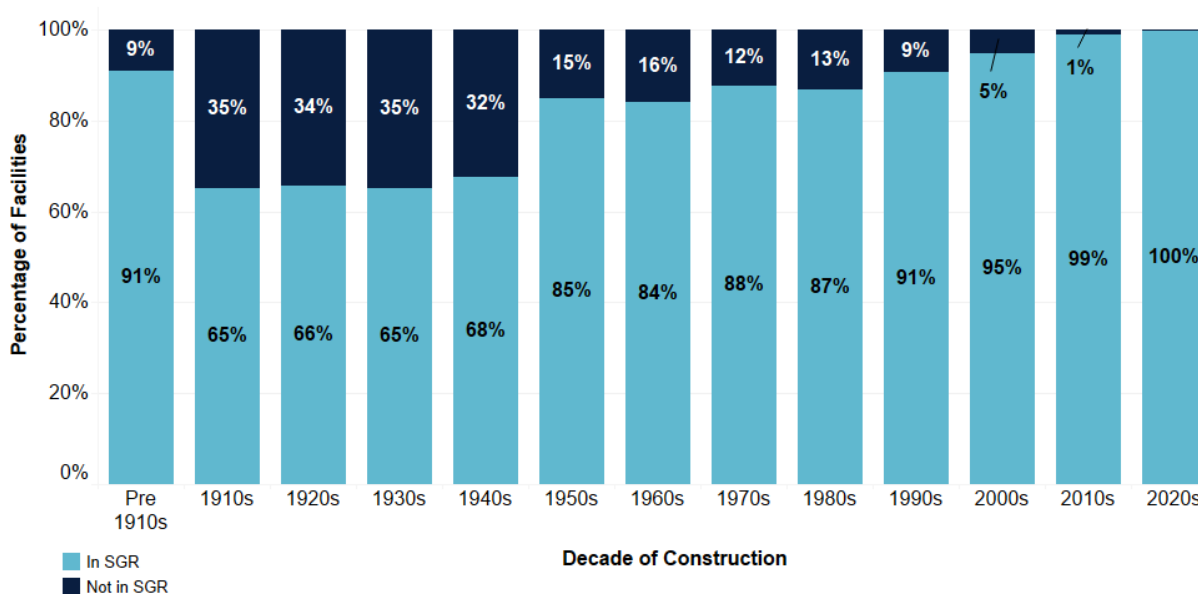
Similarly, FTA was able to determine the total number of facilities in SGR based on their decade of construction. Transit agencies underwent a construction boom from the 1980's to the present, building more than 10,200 facilities, of which 94% are in SGR. Figure 10 and the accompanying Table 20 show the breakdown of facilities built by decade and the number of those that are in or not in SGR.

Figure 10: Number of Facilities in SGR by Decade of Construction (Capital Responsibility Only)
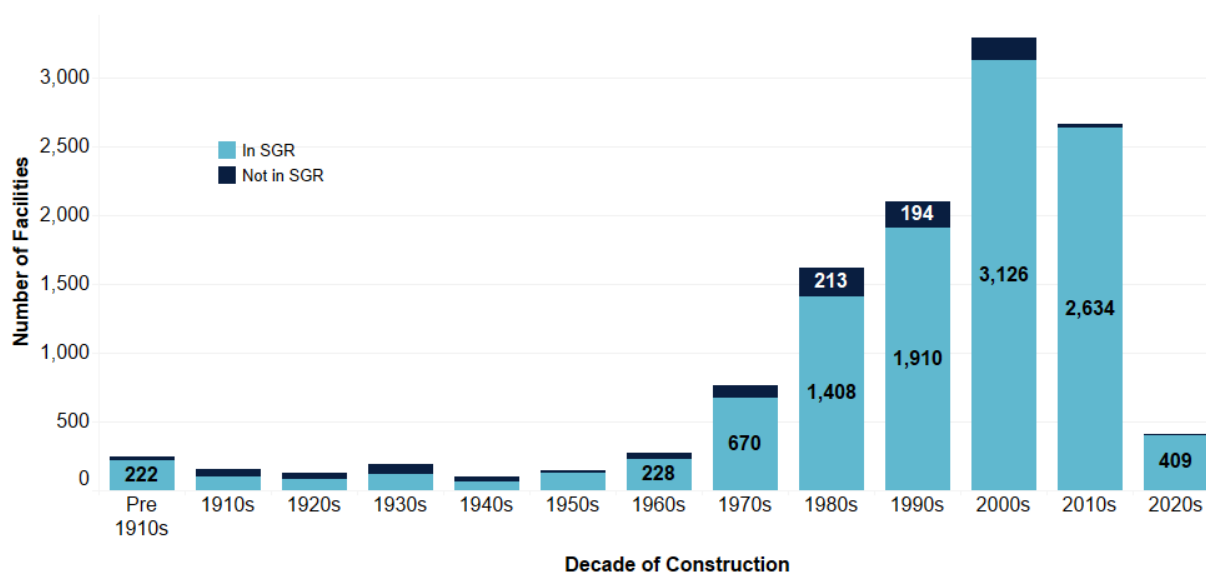
Table 20: Number of Facilities in SGR by Decade of Construction (Capital Responsibility Only)

	In SGR	Not in SGR	Not Yet Assessed
Pre 1910s	222	22	4
1910s	101	54	1
1920s	86	45	0
1930s	122	65	0
1940s	67	32	3
1950s	125	22	2
1960s	228	43	3
1970s	670	94	16
1980s	1,408	213	33
1990s	1,910	194	44
2000s	3,126	166	42
2010s	2,634	28	32
2020s	409	0	3

Track + Infrastructure

As reported to the NTD, there are over 13,900 miles of track used to provide transit service in the U.S. Track elements can be sorted by mode into commuter rail, heavy rail, light rail, and other rail modes (articulated rail, cable car, inclined plane, monorail/automated guideway, streetcar rail, and hybrid rail).

DATA REPORTING

Transit agencies report on rail infrastructure in two ways. In reporting for guideway elements, agencies provide information on the age, mileage, and characteristics of the fixed guideway right of way (ROW) on which the rail service runs. In reporting for track elements, agencies provide data on track mileage and performance. As transit agencies continue to gain more experience in reporting and analyzing TAM-related data, the total reported numbers may continue to shift. In 2022, 78 agencies reported track to the NTD.

Guideway Miles

For each rail mode, agencies report the decade of construction, as either before 1940 or in one of the decades from the 1940s through the 2020s, and the expected service years (ESY) of the guideway. Between 2018 and 2019, FTA updated the reporting requirements for guideway elements, making the method for counting mileage more consistent. In addition to the changes in NTD reporting methodology, some transit agencies updated the data sources used to calculate guideway miles, which impacted the total number of miles reported, as well as the allocation among the decades of construction for guideway elements.

Track Miles

For each rail mode, agencies report on the number of miles for three track elements: Tangent (Revenue Service), Curve (Revenue Service), and Non-revenue Service. The sum of these three elements comprises the total track mileage. Within this total, transit agencies also indicate the miles of revenue track for which they have no capital replacement responsibility, and the miles of track with performance restrictions. While transit agencies report all track used to provide public transit service in their asset inventory, they only report on condition of and set targets for the track mileage with capital responsibility.

Rail providers are required to establish a target for the infrastructure asset category – the percentage of track under performance restriction – and report the performance measure to the NTD. A performance restriction is defined to exist on a segment of rail fixed guideway when the maximum permissible speed of transit vehicles is set to a value below the guideway's full service speed. These restrictions are often referred to as "slow zones."

The TAM Infrastructure Reporting Guidebook details the following requirements for reporting performance restrictions:

➢ Agencies must measure the length of track miles under performance restrictions each month based on a snapshot of conditions that existed as of 9:00 AM local time on the first Wednesday of the month. This calculation must be performed separately for each combination of rail fixed guideway mode (or type of system) and type of service.
➢ All performance restrictions that can be applied to a specific section of track (excluding system-wide restrictions for inclement weather, for example) must be included in the calculation, regardless of cause or duration. This includes temporary speed restrictions placed due to construction or maintenance activity.
➢ Agencies are required to report an annual value for length of track miles under performance restrictions to FTA by averaging the values calculated each month over the course of the year.

ANALYSIS AND RESULTS

Figure 11 and Table 21 present total track miles by mode. Of the more than 13,900 miles of track reported in 2022, there are approximately 8,500 miles of commuter rail (62%), 2,300 miles of heavy rail (17%), 1,800 miles of light rail (13%), and 1,300 miles (9%) in other rail modes.

Figure 11: Total Track Miles (Thousands)
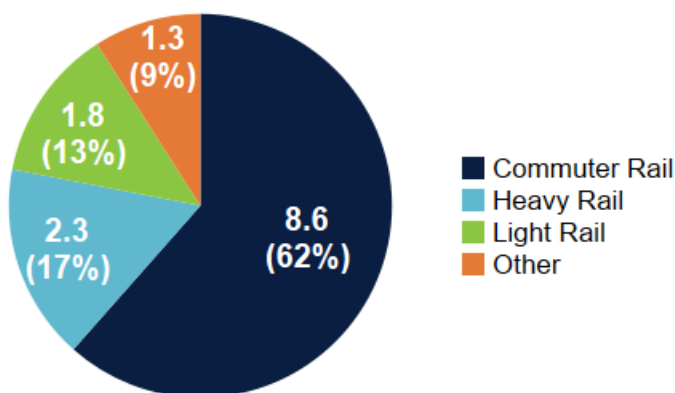
Table 21: Total Track Miles in 2020-2022 by Mode[8]

Mode	Track Miles (2020)	Track Miles (2021)	Track Miles (2022)
Commuter Rail	8,646	8,347	8,578
Heavy Rail	2,300	2,307	2,302
Light Rail	1,760	1,769	1,799
Other	1,211	1,210	1,262
Grand Total	13,917	13,634	13,941

Age of Guideway Miles

Figure 12 with the accompanying Table 22 show the total miles of guideway infrastructure constructed by rail mode and by decade. Most guideway constructed before the 1980s was for heavy rail and commuter rail systems, with nearly all light rail construction since the 1980s. Note that the year of construction could include both expansion projects as well as replacement of even older guideway elements.

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[8] Agencies remeasured their track in Report Year 2021 resulting in a decrease in mileage from Report Year 2020.

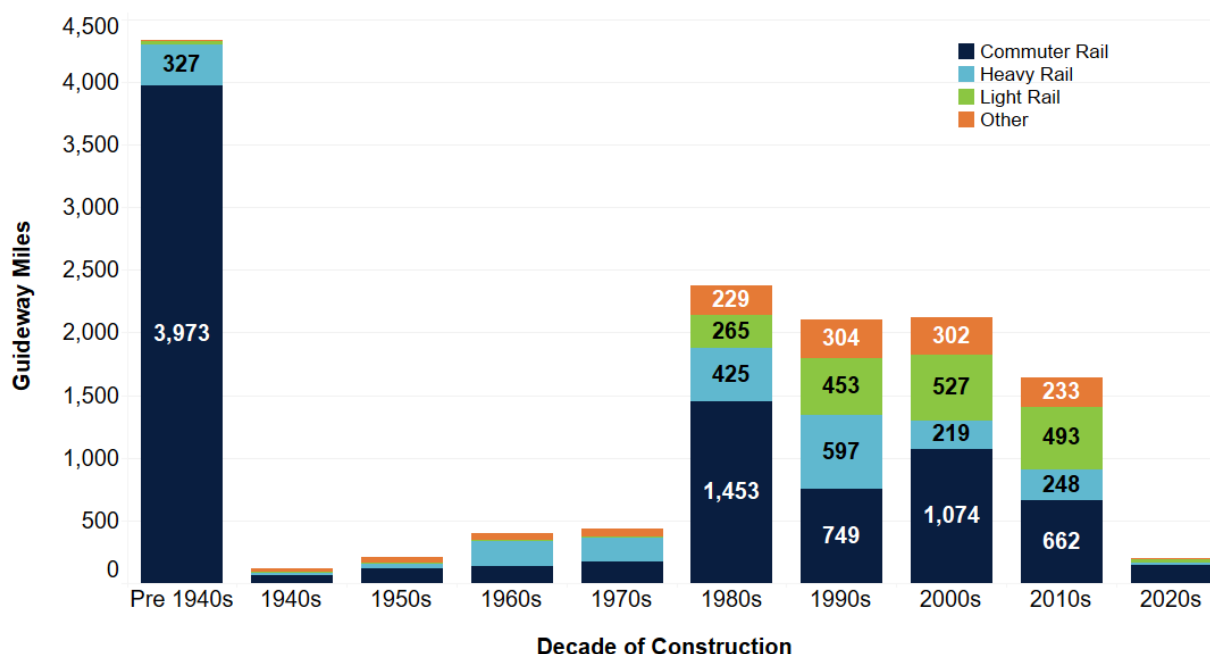*Figure 12: Decade of Guideway Construction by Rail Mode*

Table 22: Guideway Miles by Decade of Construction

Mode	Pre 1940s	1940s	1950s	1960s	1970s	1980s	1990s	2000s	2010s	2020s
Commuter Rail	3,973	65	120	135	177	1,453	749	1,074	662	147
Heavy Rail	327	27	45	207	190	425	597	219	248	16
Light Rail	26	0	0	0	1	265	453	527	493	27
Other	8	25	45	57	62	229	304	302	233	5

The average reported expected service years (ESY) for guideway across all modes was 64 years. FTA estimated the percentage of guideway miles currently in use beyond their ESY. Because age is reported by decade rather than by a specific year, FTA assigned the miles constructed in each decade group to the midpoint year of that decade (e.g., all guideway constructed in the 1980s was assigned the year 1985). Once assigned to a specific year, FTA compared the construction year plus ESY to the current report year (2022), to identify guideway currently beyond ESY. Figure 13 summarizes this estimate by rail mode using the current report year. Approximately 48% of all reported fixed guideway miles are beyond the ESY, most of which are associated with commuter rail and heavy rail. Commuter rail and heavy rail together represent 6,129 miles of guideway needing replacement or major rehabilitation.

Figure 13: Percentage of Guideway Infrastructure Beyond Expected Service Years (Capital Responsibility Only)
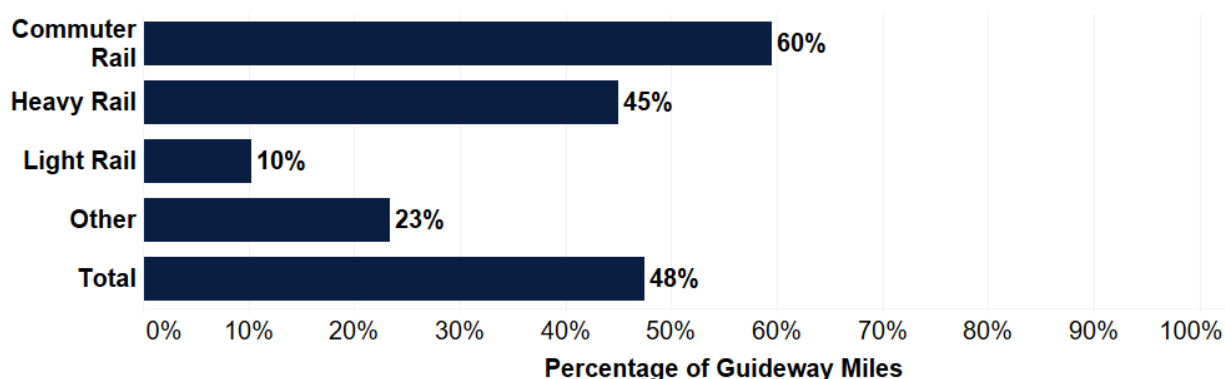
Track Condition and Responsibility

The miles of track in SGR are measured as the percentage of track miles without performance restrictions. Table 23 summarizes how the percentage of track miles without performance restrictions has changed since 2018.[9] Note that the miles under performance restriction is a measure of performance at a specific point in time, and therefore, may vary more than the performance metrics for other asset categories which are based on age or asset condition.

Table 23: Percentage of Track Miles Without Performance Restrictions by Year (Capital Responsibility Only)

Asset Type	2018	2019	2020	2021	2022
Commuter Rail	93.4%	97.5%	96.5%	95.7%	96.2%
Heavy Rail	95.3%	94.2%	97.5%	98.2%	97.5%
Light Rail	92.7%	97.2%	93.8%	92.3%	92.5%
Other	96.3%	98.6%	96.7%	96.6%	96.8%

The miles of track with performance restriction applies only to the revenue track for which agencies have capital replacement responsibility.

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[9] For consistency with the Performance Targets section, SGR metrics in this table are based only on assets with corresponding, published targets.

Table 24 shows the total track miles with capital responsibility and the percentage with performance restrictions in 2022. Transit agencies reported that more than 96% of track is without performance restriction for all rail modes except for light rail, which has about 92% of track not under performance restriction.

Table 24: Track Miles with Performance Restrictions in 2021 (Capital Responsibility Only)

Mode	Total Track Miles	Track Miles with Capital Responsibility	Percentage of Track Miles with Performance Restrictions
Commuter Rail	8,578	6,432	3.8%
Heavy Rail	2,302	2,283	2.5%
Light Rail	1,799	1,799	7.5%
Other	1,262	1,249	3.2%
Grand Total	13,941	11,763	4.1%

Figure 14 shows the percentage of track miles under performance restriction in 2021 and 2022 by mode. Across modes, agencies reported a total of 414 miles of track with slow zones in 2022, compared to 427 miles in 2021.

Figure 14: Track Miles with Performance Restrictions in 2021 and 2022 (Capital Responsibility Only)
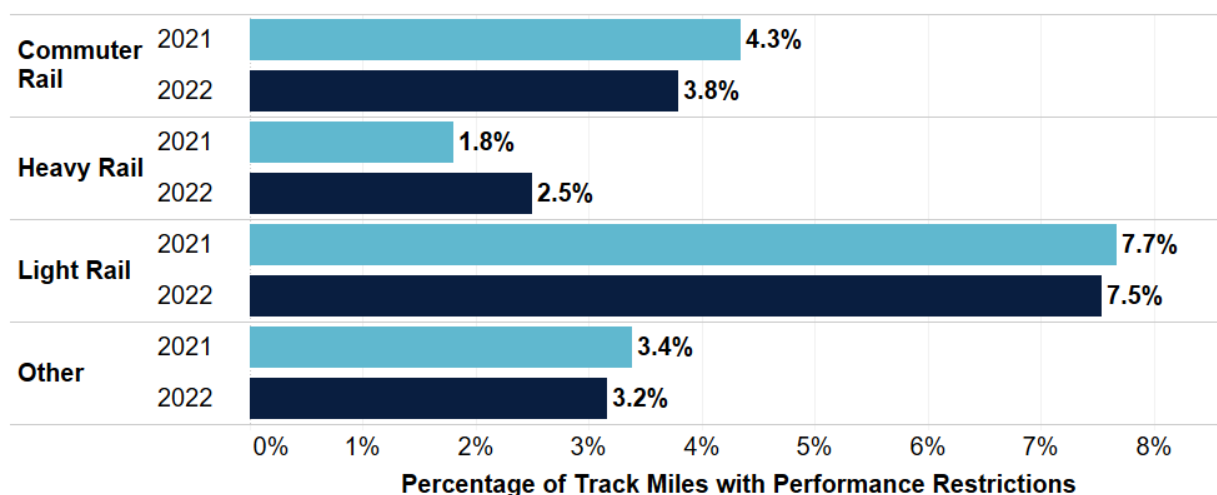
Group Plans

Group Plans are designed to reduce the burden on smaller transit providers by consolidating the administrative and reporting efforts of TAM to the sponsor agency. State DOTs are the most common sponsors, but MPOs and larger transit agencies also sponsor Group Plans. In 2022, there were a total of 75 Group Plan sponsors – 50 State DOTs and 25 other sponsoring agencies – covering a total of 2,063 Tier II participants.

DATA REPORTING

Agencies Reporting in Group Plans

The number of participants in each Group Plan ranged from 1 to 147, with approximately 43% of plans having fewer than 15 participants. There were two plans with 100 or more participants. Figure 15 shows the distribution of the number of participants in Group Plans.

Figure 15: Distribution of Participants in Group Plans

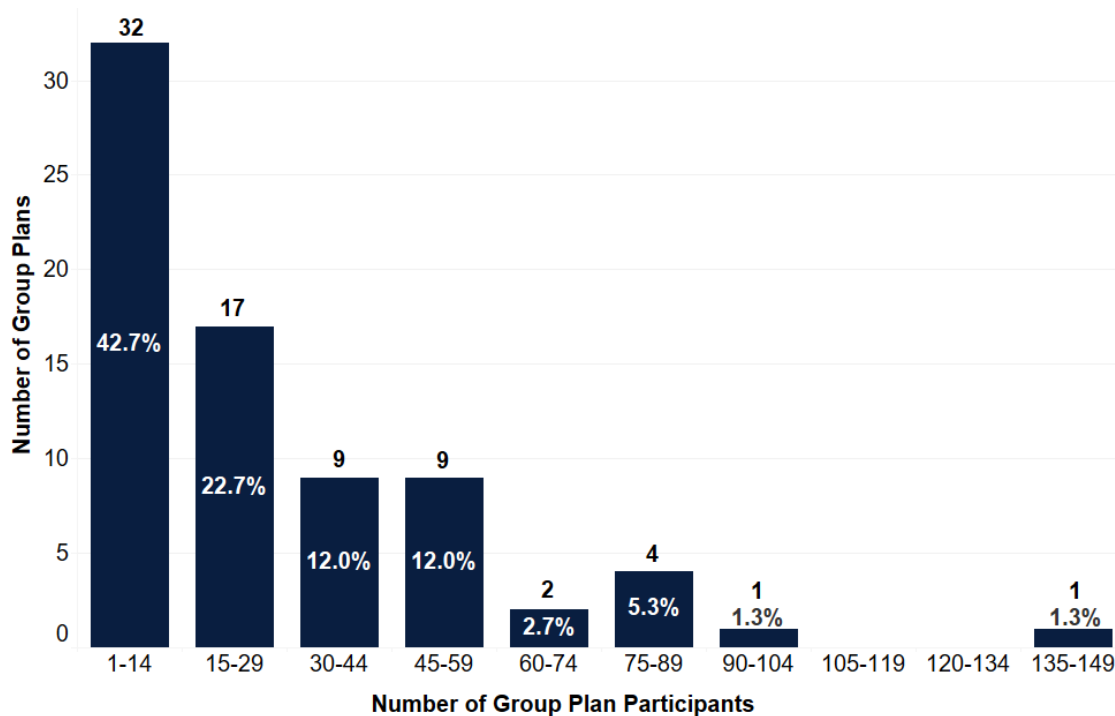www.transit.dot.gov/TAM | TAM@dot.gov

Table 25 breaks down the 2,063 participating agencies by type. Group Plan sponsors are required to include their Tier II subrecipients that do not have a direct funding relationship with FTA (5310 and 5311 funding recipients) and have the option of inviting other Tier II recipients of 5307 funds to join the Group Plan. State DOTs are required to include a Tribal transit agency if it requests to join the Group Plan, regardless of funding relationship.

Table 25: Participating Tier II Agencies by Type

Agency Type	Number of Participating Agencies	Percentage of Total Participating Agencies
5310	572	27.7%
5311	1,076	52.0%
Tribal	38	1.8%
Tier II 5307	382	18.5%

ANALYSIS AND RESULTS

Number and Condition of Transit Assets Included in Group Plans

Nationally, about 20.3% of all transit assets are included in Group Plans. As shown in Table 26, this has increased slightly from 19.7% in 2020.

Table 26: Percentage of Total Assets Included in Group Plans in 2020-2022

Asset Category	Percentage in Group Plans (2020)	Percentage in Group Plans (2021)	Percentage in Group Plans (2022)
Revenue Vehicles	22.6%	23.2%	23.4%
Equipment	7.1%	7.4%	7.5%
Facilities	11.7%	11.6%	11.8%
Grand Total	19.7%	20.1%	20.3%

Table 27 shows the number of assets included in Group Plans and the percentage that are in SGR. Comparing the percentage of assets in SGR in Group Plans to the percentage of assets in SGR across all agencies, Group Plans have a lower percentage of revenue vehicles and service vehicles in SGR, with 71% of revenue vehicles in Group Plans in SGR versus 78% across all agencies, and 58% of service vehicles in Group Plans in SGR versus 61% across all agencies. However, Group Plans have an equal percentage of facilities in SGR, with about 92% of facilities in SGR both in Group Plans and across all agencies. Because Group Plan participants are all Tier II agencies, there are no rail-related assets included in Group Plans.

Table 27: Assets Included in Group Plans and in SGR

Asset Category	Asset Type	Total Number of Assets in Group Plans	Assets with Capital Responsibility	Percentage of Assets with Capital Responsibility in SGR
Revenue Vehicles	Bus	7,602	7,218	76.9%
	Vans/Cutaways	23,823	22,889	70.6%
	Other Vehicles	7,389	6,655	63.8%
	Total	38,814	36,762	70.6%
Equipment	Automobiles	685	669	47.5%
	Bus Service Vehicles	1,654	1,623	63.0%
	Total	2,339	2,292	58.5%
Facilities	Administrative	307	307	93.2%
	Maintenance	866	863	91.8%
	Parking	167	141	90.1%
	Passenger	362	298	92.3%
	Total	1,702	1,609	92.0%

Performance Targets

Transit agencies set performance targets for the coming year, which reflect their expectation of their ability to keep assets in SGR. FTA encourages transit agencies to set targets based on available asset condition data and anticipated financial resources from all sources. For some agencies, the projections reflect increasing SGR goals; in other cases, they may reflect an expectation of decreasing SGR based on the agency's constraints. FTA has clearly explained there are no rewards for meeting the targets and no penalties for not meeting the targets.

DATA REPORTING

Agencies set performance targets and report them to the NTD aggregated by asset class, rather than individually by each asset. In 2022, transit agencies reported 4,159 targets across 37 transit asset classes, representing their expected SGR in the upcoming 2023 report year. Transit agencies set targets only on the assets with capital replacement responsibility.

The performance metrics included in this report are calculated from the asset class condition and performance that transit agencies provide to the NTD. Performance metrics represent the percentage of assets in SGR and are calculated based on the current report year data, while performance targets are forecasts of assets' percentage in SGR set for the following year. Note that in this section all SGR metrics are based only on assets with corresponding, published targets.

ANALYSIS AND RESULTS

Table 28 shows the performance targets that agencies set in 2021 to forecast 2022 conditions, the calculated performance metrics for 2022, and the targets that they have set for 2023. For this report, performance targets are calculated as an average of agencies' reported targets weighted by the number of assets to which a target applies. For example, if one agency is targeting 100% in SGR for two buses and a second agency is targeting 80% in SGR for 8 buses, the average target for these two agencies is (2 buses x 1.0 + 8 buses x 0.8) / 10 buses, which equals an average target of 84%. Please note that the average 2022 targets below are calculated using the number of assets reported in 2021 to ensure that the published targets are consistent across the 2021 and 2022 Snapshot reports. The average targets across agencies reflect a national snapshot of agencies' expectations in their ability to maintain or improve the condition of transit assets in the near future.

Table 28: Targets and Metrics for Percentage of Assets in SGR by Asset Class (Capital Responsibility Only)

Asset Category	Asset Class	2022 Target	2022 Metric	2023 Target
Revenue Vehicles	Rail Vehicles	81.5%	83.6%	83.5%
	Buses	84.9%	82.6%	83.1%
	Vans/Cutaways	76.4%	72.6%	72.5%
	Other Vehicles	74.4%	69.8%	70.9%
	Total	80.7%	78.3%	78.6%
Equipment	Automobiles	59.7%	51.0%	55.0%
	Bus Service Vehicles	65.8%	64.6%	64.6%
	Rail Service Vehicles	44.0%	43.5%	44.7%
	Total	63.6%	61.2%	61.9%
Facilities	Administrative / Maintenance	86.0%	88.8%	86.9%
	Passenger / Parking	89.1%	93.8%	91.6%
	Total	87.9%	91.9%	89.9%
Infrastructure	Commuter Rail	96.5%	96.2%	96.6%
	Heavy Rail	96.2%	97.5%	96.2%
	Light Rail	96.6%	92.5%	93.0%
	Other	98.3%	96.8%	96.2%
	Total	96.6%	96.0%	96.0%

Comparing Metrics and Targets

Figure 16 compares the 2022 performance targets (set in 2021) and the metrics calculated based on the 2022 data submissions, broken down by asset class. Facilities are the only category in which the average performance metric exceeds the 2022 target for every asset class. Still, for most asset classes, the average percentage of assets in SGR is within a few percentage points of the average target. Automobiles (under Equipment) show the largest gap with 51% of assets in SGR compared to an average target of 60%.

Figure 17 compares the 2022 performance metrics and the 2023 performance targets by asset class. In general, transit agencies are setting targets close to their current levels of SGR.

Figure 16: 2022 Average Metrics (Bars) and 2022 Average Targets (Reference Lines) (Capital Responsibility Only)
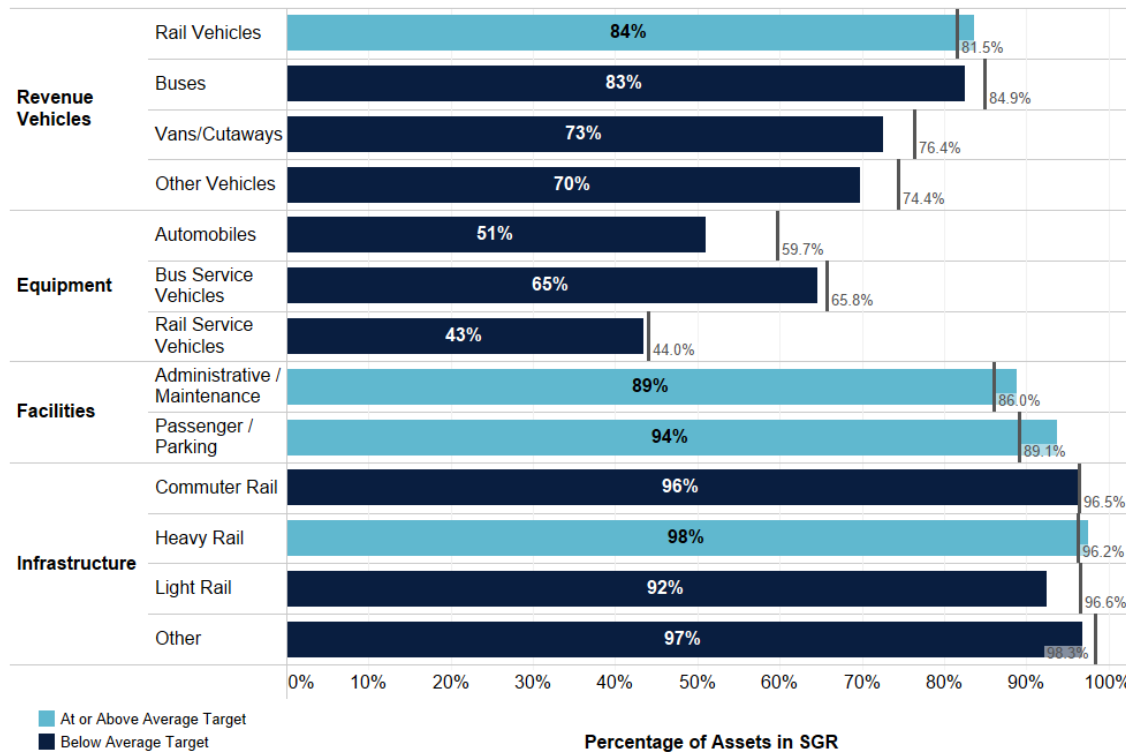

Figure 17: 2022 Average Metrics (Bars) and 2023 Average Targets (Reference Line) (Capital Responsibility Only)
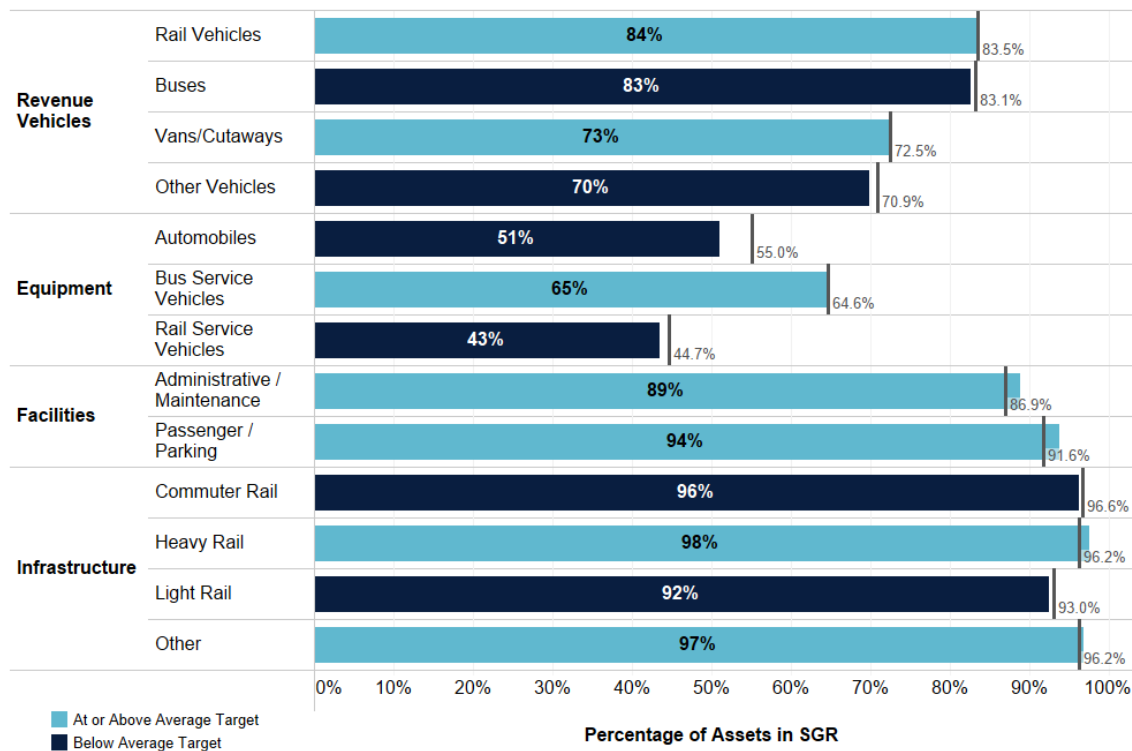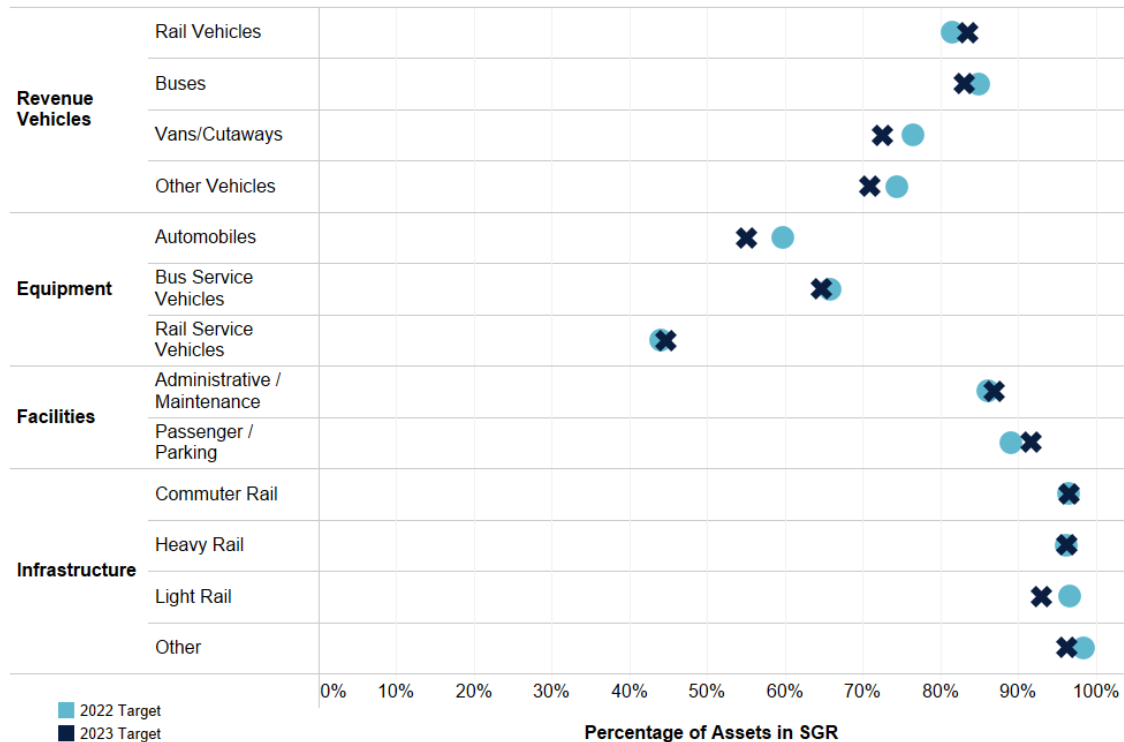
Figure 18 plots the targets for 2022 and 2023 side-by-side. The average targets decreased for a majority asset classes with automobiles showing the largest decrease.

Figure 18: 2022 and 2023 Average Targets (Capital Responsibility Only)

Expected Increases and Decreases in SGR for the Next Year

For each asset class reported by each agency, FTA compared the 2022 metric to the 2023 target, and determined whether the target was lower, higher, or the same as the 2022 metric. For purposes of this analysis, a target lower than the current reported metric indicates an expected decrease in SGR for that asset class for the following year; a target higher than the current reported metric indicates an expected increase in SGR for the following year.

Table 29 provides the number of assets (e.g., vehicles, facilities, or track miles) that would be newly in SGR or not in SGR based on a comparison of the 2022 calculated metric and the 2023 target.[10] The first column shows the additional assets that will no longer be in SGR if every agency that set a 2023 target lower than their 2022 metric achieves their target exactly. The second column shows the additional assets that will attain SGR if every agency that set a 2023 target higher than their 2022 metric achieves their target. The third column provides the net

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[10] This calculation assumes the total number of assets stays the same from 2022 to 2023.

change between the two. The data show that more revenue vehicles and service vehicles are projected to enter SGR in 2023 than to fall out of SGR. In contrast, more facilities and track miles are projected to fall out of SGR than to enter.

Table 29: Anticipated Increases and Decreases in Assets in SGR for 2023 Relative to 2022 (Capital Responsibility Only)

Asset Category	Assets Projected to No Longer be in SGR in 2023	Assets Projected to Enter SGR in 2023	Projected Net Change in Assets in SGR in 2023
Revenue Vehicles	-8,101	8,715	614
Equipment	-1,298	1,574	276
Facilities	-270	122	-148
Infrastructure	-134	130	-4

Figure 19 provides another representation of the projected change in SGR between 2022 and 2023, by number of assets in each class. The line where "Change in Number of Assets" equals 0 represents a baseline of the 2022 calculated metric. The bars to the right of this line show the number of assets projected to newly enter SGR while the bars to the left show the number of assets projected to no longer be in SGR.

Figure 19: Anticipated Increases and Decreases in Assets in SGR for 2023 Relative to 2022 (Capital Responsibility Only)