



Streetcar Glossary

Articulated Bus - A bus, usually 55 feet or more in length, with two connected passenger compartments that bend at the connecting point when the bus turns a corner

Cantilever - A component of the overhead catenary system (OCS) - the arm that extends from the pole to hold the wire in place

Car Barn - Building used for housing and maintenance of streetcars

Catenary - An overhead contact wire system that supplies power from a central power source to an electric vehicle

Design-Build - Project delivery method in which project design and construction are completed by a single contractor, known as the design-builder

Fare - Payment in the form of coins, bills, tickets, passes, tokens and smart cards, required of passengers to board transit

Farebox - A device that accepts the coins, bills, tickets, passes, tokens and smart cards given by passengers as payment for rides

Headway - Time between streetcars operating on single route

Level Boarding - The height of the stop or station is at the same level as the passenger floor of a transit vehicle, allowing for fast, convenient and accessible boarding and alighting without the need for wheelchair lifts, ramps or high platforms.

Overhead Catenary System (OCS) - System of wires supplying power from central power source to an electric vehicle

Pantograph - A device that maintains electrical contact with the catenary wire and transfers power from the wire to the traction unit of a trolley bus, light rail vehicle or streetcar, mounted on the roof of the vehicle

Span Wire - A component of the overhead catenary system (OCS) where wire connects directly to the pole as opposed to connecting to a cantilever. Used for achieving correct turning radius

Substation - Power station used to distribute electricity to OCS

Turnaround - Area where streetcar reverses direction by traveling a loop

Right Of Way (ROW) - A strip of land that is granted through an easement or other mechanism for transportation purposes. ROW is reserved for purposes of maintenance or expansion of existing services

Get Connected

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FAQs

About Streetcars

What is a streetcar?

Streetcars are passenger vehicles that operate on fixed rails on public streets. The vehicles can operate in mixed traffic and/or a separate right of way. The DC Streetcar is a "modern streetcar" – air conditioned with a low-floor center section for wheelchair accessibility. The low floors also allow for faster and easier boarding.

How big is a streetcar?

Streetcars are about the same length as an articulated bus, but hold more people. See the comparison chart below:

	Width	Length	Passenger Capacity
Circulator Bus	8'6"	40'	49
Articulated Bus	8'6"	60'	94
Streetcar	8'9"	66'	144
Metrocar	10'	75'	120

(Vehicle dimensions are based on industry averages and specific vehicles used in DC, when known.)

How many people will a streetcar hold?

Each streetcar vehicle can accommodate a range of 144-160 seated and standing.

Do streetcars produce vibrations you can feel when it passes by, like a large truck or a bus?

Yes. Vibrations from a streetcar are about the same as a DC Circulator bus.

Are streetcars noisy?

Streetcars are no louder than a typical bus. Powered by quiet electric motors, streetcars use a pole and the pantograph, to collect power from an electrified wire that is suspended approximately 20 feet over the lane in which the streetcar runs. Noise from a streetcar is generated from the wheel to track movement, rather than from the engine, like a bus.

How fast does a streetcar go?

Modern streetcars operate at average speeds of 13 to 15 mph in mixed traffic on city streets, stopping at designated station platforms. Streetcar operating speeds will be similar to a local bus, not exceeding the posted speed limit and keeping up with the flow of traffic.

How is a streetcar different from light rail or a train?

Although streetcars and light rail vehicles use similar technologies they do differ. Streetcars are typically smaller, lighter, less expensive, and usually operate in mixed traffic, rather than in their own exclusive right of way. Streetcar systems can be built more rapidly, are more cost-effective, and cause less disruption to businesses and communities during construction in comparison to light rail. They can stop more frequently and offer a more flexible service appropriate for city neighborhoods.

Light rail is generally used for regional transit with relatively fast-moving, large cars designed to transport high numbers of people rapidly between suburban and urban areas. Heavy rail (similar to MetroRail here in the DC metro area) can also be used for regional and long distance transit.

About Your Neighborhood and Traffic

Will putting in streetcar tracks reduce the number of parking spaces in my neighborhood?

Possibly, but not drastically. Because streetcars operate in mixed traffic, existing travel and parking lanes will not need to be removed unless the space is needed for a streetcar stop or to provide an adequate turning radius. A streetcar stop platform is equal to about 2-3 parking spaces.

What does "mixed-use" traffic mean?

Mixed-use means that something can be used for multiple purposes or serve multiple functions. Streetcars do not require their own dedicated right of way and operate in the same lanes as other vehicles. This is referred to as "mixed-use" traffic as all traffic is using the same space.

Will the use of overhead catenaries (power lines) reduce the tree canopy in my neighborhood?

Potentially, but not drastically. DDOT will work to minimize any impact to neighborhood trees on all projects.

Depending on the specific street being served, it is possible that isolated trees may need to be removed or relocated during construction and installation of the overhead wires. Conflicts may arise with relocation of existing utilities or adequate clearance to meet code requirements. In other cities where

streetcar systems are in place, shade trees are typically trimmed, not removed. Streetcar overhead wires and shade trees are compatible.

After construction is completed, operations and maintenance provisions will require that the contractor maintain/trim trees to minimize impacts to the overhead wire system.

Will there be special streetcar only signals?

DDOT is working on the best way to integrate streetcar operations into the existing traffic network and signalized intersections. Final traffic signal systems have not been finalized. One option under consideration is that the streetcar vehicle may be configured with traffic signal controls or priority that enables the streetcar to clear congested intersections and maintain schedule during heavy traffic.

About Streetcar Service

How long will I have to wait at a streetcar stop before I can board?

Streetcars will operate frequently, current plans call for every 10 to 20 minutes.

What will the fare structure look like?

Fares will be comparable to the cost of riding the DC Circulator or a Metrobus.

How will fares be collected? Will I be able to use my SmarTrip card?

DDOT is evaluating several on- and off-board fare collection systems. Integration with existing methods of payment, to include SmarTrip, is one of several evaluation criteria.

What happens when it snows?

Streetcars can operate effectively in snow conditions, but similar to all vehicles (including buses) they are subject to service limitations in severe weather and snowstorms. DDOT will develop and implement a snowstorm operating policy and contingency plans.

About Safety and Accessibility

Are the streetcars ADA compliant?

Yes. The modern streetcar's interior layout is designed to accommodate wheelchairs using wide passenger doors that are level with the station platforms. The streetcars have level floor areas with substantial standing areas that can be used by wheelchairs. In addition, vehicles will also accommodate bikes and strollers.

Can I bring a stroller onto the streetcar?

Yes. The modern streetcar's interior layout is designed to allow strollers to be brought on board using wide passenger doors that are level with the station platforms. In addition, vehicles will also accommodate bikes and wheelchairs.

Can bikes be brought onto the streetcar?

Yes. The modern streetcar's interior layout will be designed to allow bicycles to be brought on board using wide passenger doors that are level with the station platforms. In addition, vehicles will also accommodate strollers and wheelchairs.

Are the rails in the pavement safe for bicyclists and pedestrians?

Yes the rails embedded in the travel lanes are safe for bicyclists and pedestrians. As with any street infrastructure, bicyclists and pedestrians should use caution when travelling parallel or perpendicular to the streetcar tracks. DDOT is currently developing an awareness campaign to educate bicyclists and pedestrians when moving across and adjacent to the streetcar embedded rail. The awareness campaign will identify the potential hazards and safe practices to cross or move adjacent with the streetcar embedded rail.

