

[FTA Definitions](#) [at bottom of the online page]

2.2.1 Light Rail

The term light rail refers more to this mode's relative simplicity and operational flexibility than to actual vehicle weight or cost. With an overhead power supply, light rail systems can operate in mixed traffic and widely ranging alignment configurations. Vehicles can also be operated in single or multi-unit trains of standard and articulated vehicle fleets, permitting service levels to closely match passenger demand.

... light rail transit systems developed in the United States during the 1980's. Over this decade, seven light rail systems were constructed or significantly reconstructed including:

- San Diego
- Buffalo
- Portland
- Sacramento
- San Jose
- Los Angeles
- Pittsburgh.

2.2.2 Heavy Rail

The term heavy rail refers to a mode of transportation that is defined less by its vehicle weight than by its complexity and operational rigidity. Heavy rail systems typically consist of steel-wheeled, electric powered vehicles operating in trains of two or more cars on a fully grade-separated right-of-way. Vehicles are usually powered by a low-level third rail. Loading and unloading of passengers generally takes place at stations featuring fixed platforms at floor level permitting rapid entry and exit.

... These cities include:

- Atlanta
- Chicago
- Miami
- Boston
- Baltimore
- Los Angeles
- Washington, D.C.

The following is from the City's Oahutrans2k website. [However, with some amusement we now note they have removed the entire glossary. They must be embarrassed after talking all the time about "light rail" when they mean "heavy rail."]

<http://www.oahutrans2k.com/info/glossary/>

heavy rail 1. An electric railway with the capacity for a "heavy" volume of traffic and characterized by exclusive rights-of-way, multi-car trains, high speed and rapid acceleration, sophisticated signaling and high-platform loading. 2. High-speed, passenger rail cars operating

singly or in trains of two or more cars on fixed rails in separate rights-of-way from which all other vehicular and pedestrian traffic is excluded. **3.** "Rapid rail" transit service using rail cars powered by electricity which is drawn from a third rail and usually operated on exclusive rights-of-way. It generally uses longer trains and has longer spacing between stations than light rail.

light rail transit (Or LRT) **1.** An electric railway with a "light volume" traffic capacity compared to heavy rail. Light rail may use shared or exclusive rights-of-way, high or low platform loading and multi-car trains or single cars. Also known as "streetcar," "trolley" and "tramway.")

2. Lightweight passenger rail cars operating singly (or in short, usually two-car trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail vehicles are driven electrically with power being drawn from an overhead electric line via a trolley or pantograph **3.** Streetcar: urban transit which uses predominantly reserved but not always grade-separated rights-of-way with electrically powered rail vehicles that operate alone or in trains. **4.** A rail transit system that can operate on a variety of rights-of-way, from on-street to grade-separated. It typically uses articulated vehicles powered by an overhead electric catenary and connects activity centers within an urbanized area.

The following are the definitions from the American Public Transportation Association.

<http://www.apta.com/research/stats/rail/definitions.cfm>

Heavy rail (metro, subway, rapid transit, or rapid rail) is an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails; separate rights-of-way from which all other vehicular and foot traffic are excluded; sophisticated signaling, and high platform loading. If the service were converted to full automation with no onboard personnel, the service would be considered an automated guideway.

Light rail (streetcar, tramway, or trolley) is lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph.

http://www.fta.dot.gov/31_ENG_HTML.htm

Light Rail

Lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail vehicles are driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph.

Heavy Rail

High-speed, passenger rail cars operating singly or in trains of two or more cars on fixed rails in separate rights-of-way from which all other vehicular and foot traffic are excluded.

The City and County of Honolulu has recently changed its definition of rail types as has the American Public Transportation Association.

[Federal Transit Administration definitions of rail types.](#)

Light Rail

The term light rail refers more to this mode's relative simplicity and operational flexibility than to actual vehicle weight or cost. With an overhead power supply, light rail systems can operate in mixed traffic and widely ranging alignment configurations. Vehicles can also be operated in single or multi-unit trains of standard and articulated vehicle fleets, permitting service levels to closely match passenger demand.

The FTA's Capital Cost Database documents actual construction, systems procurement, and related developmental costs for light rail transit systems developed in the United States during the 1980's. Over this decade, seven light rail systems were constructed or significantly reconstructed including:

- San Diego
- Buffalo
- Portland
- Sacramento
- San Jose
- Los Angeles
- Pittsburgh.

Only five of the agencies contributed pertinent capital cost information for the Capital Cost Database (data was not obtained from San Diego and Buffalo).

Heavy Rail

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Data was collected from seven different transit authorities responsible for heavy rail lines which were either constructed, significantly reconstructed, or extended over the last two decades. These cities include:

- Atlanta
- Chicago
- Miami
- Boston
- Baltimore
- Los Angeles
- Washington, D.C.