HEAVY RAIL

Description
Heavy rail (also called metro rail, subway, rapid transit, or rapid rail) is an electric railway on devoted rights-of-way that handles many passengers at once. Tracks may be placed in subway tunnels (like in New York City), on elevated structures (like in Chicago), or on fenced-off, ground-level tracks that do not cross roads.

Target Market
Heavy rail works best in very dense urban settings, where large populations primarily want to move toward and within a major city’s central business district. Heavy rail needs a population of 3 million to 15 million people to be successful.

How Will This Help?
• Provides faster speeds and greater capacity than other transit modes.
• Provides a competitive alternative to driving.
• Promotes transit-oriented development.
• Contributes to increasing property values and preserves urban land for taxable development.

Implementation Issues
Heavy rail remains extremely expensive to build due to its need for tunnels, elevated structures, or other fully devoted rights-of-way. However, high ridership offsets high costs. Although a heavy-rail system is, on average, more than four times as expensive as a light-rail system, heavy rail costs less per rider and per passenger mile.

When implementing a heavy-rail transit plan, public support is critical. Supportive public policies maximize heavy rail’s benefits over time. Additionally, proper zoning and parking regulation increase system ridership and development around new and existing stations.

SUCCESS STORIES

New York City, New York
The New York City subway is one of the world’s oldest public transit systems and is also the busiest rapid rail transit system in the United States.

Chicago, Illinois
1892
Chicago and the South Side Rapid Transit Railroad opened the first L line.

1947
The Chicago Transit Authority acquired the right to operate the system.

For the next 40 years, annual ridership remained remarkably stable.

By 2012, ridership exceeded 231 million.

More Information: tti.tamu.edu/policy/how-to-fix-congestion