



The US Transit Bus Manufacturing Industry

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Buses provide more rides annually than all other public transit modes combined.

Manufacturing buses for the US transit market has been a challenging business over the last several decades. It is a small market with volatile demand. The

purpose of this report is to provide policy makers with an update on the state of the industry, an analysis of how government policies are impacting the industries, and suggestions for policies that can help the industry move forward to best serve the transit-riding public.

Study Methods

The research methodology consisted of interviews with industry experts, an analysis of data from the Federal Transit Administration's (FTA) National Transit Database (NTD) and the American Public Transportation Association (APTA), and a literature review. Semi-structured interviews were conducted with six transit agencies, four manufacturers, and one supplier representing variation in size and geographic region.

Findings

Buses provide more rides annually than all other public transit modes combined. Specifically, over 5.3 billion unlinked transit trips were taken on buses in 2014, accounting for 50% of all trips on transit.

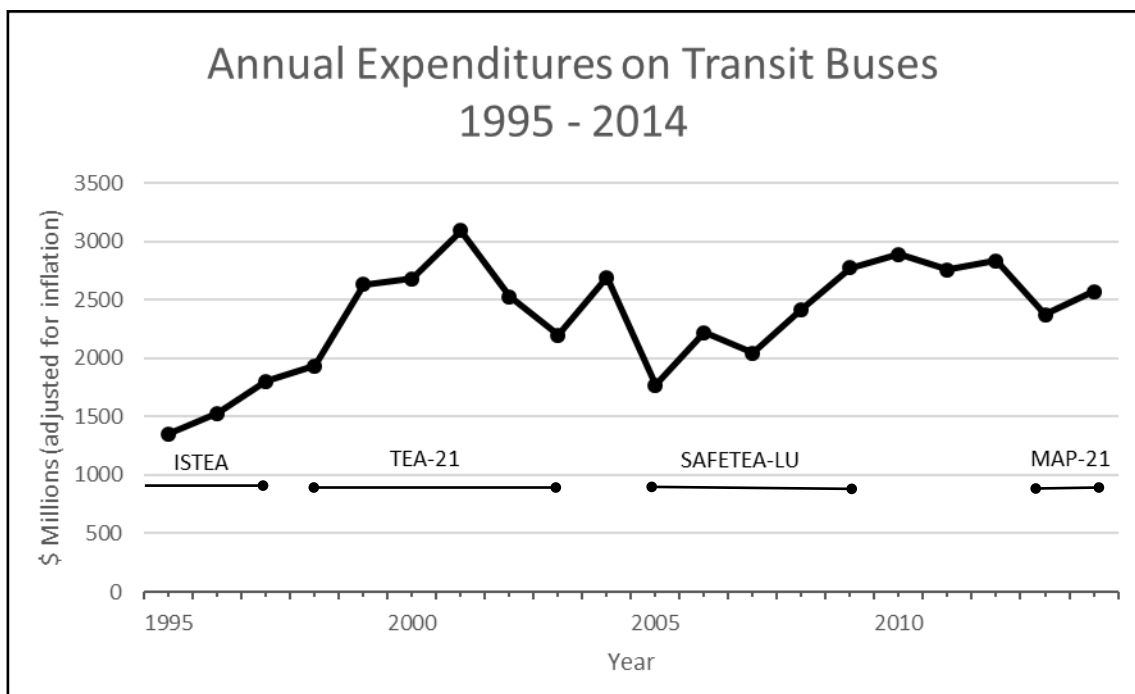
Between 1995 and 2014, annual spending on buses by US transit agencies ranged between \$1.4 billion and \$3.1 billion. This extreme range in spending has resulted in many manufacturers going bankrupt, leaving the market, or being acquired by competitors. Today, only three major transit bus manufacturers remain serving the heavy-duty transit bus market, and a similar number serve the market for small- to mid-sized transit buses. Yet despite the many companies that have left, recently the industry has seen notable new entrants bring battery-electric bus technology to the US market.

Manufacturers of transit buses in the US must comply with a wide range of operational and design regulations. The most salient policy areas include regulating emissions, disabled access, procurement, alternative fuels, the Altoona Test, pooled purchases and piggybacking, spare ratios, workforce training, minimum useful life, Buy America, and research and development (R&D).

Policy Recommendations

The industry is heavily regulated, and policy makers can have a profound impact on it. To ensure a thriving transit bus manufacturing industry that continues to improve the quality of buses, invests in R&D, and best serves the riding public, policy makers should:

- Work to ensure long-term funding. To the extent possible, policy makers should work to build on the passage of the FAST Act and ensure that long-term funding continues for public transit.
- While transit has been at the vanguard of testing and implementing hybrid, fuel cell, and battery electric vehicles, policy makers should consider the reality that the transit bus market may be too small to effectively spur the R&D required for improved diesel emissions technology.
- Continue to support experimentation with, and adoption of, alternative fuels. Many of the transit agencies interviewed benefited from government funding for alternative-fuel vehicles. These funds, in turn, have spurred R&D across a range of alternative-fuel technologies for transit buses.
- Facilitate an industry-wide conversation around standardization of battery-electric charging infrastructure. Standards require the cooperation of all stakeholders: suppliers, manufacturers, and transit agencies.
- Implement policies so that transit agencies are not penalized financially for adopting battery-electric technology. Experts indicated a number of policies that may deter the widespread adoption of battery-electric buses.



About the Authors

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To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/project/1234.html

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