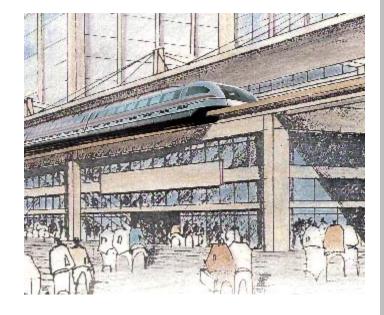
Maryland Mass Transit Administration, KCI, and Parsons, Brinckerhoff, Quade and Douglas: Baltimore-Washington Maglev

Services Provided: Ridership and revenue forecast, financial and economic impact.

Description of Project: TEMS developed the demand forecast for the Baltimore-Washington Maglev study, one of seven U.S. projects competing for Federal Railroad Administration Maglev Deployment funding. The analysis identified ridership and operating revenues for the Project (between Baltimore and Washington) and for eventual build-out to the entire corridor from Charlotte, NC, to Boston,



MA. TEMS also identified potential project and corridor economic, environmental and resource benefits.

- TEMS developed an extensive database of person-trips and highway, transit, and proposed Maglev networks by aggregating the detailed zone structures, trip tables and networks of the two regional Metropolitan Planning Organizations.
- TEMS performed an extensive stated preference survey effort of local residents and visitors, commuter rail and intercity rail passengers, airport passengers at two regional airports, and highway users to identify specific regional travel characteristics.
- TEMS supplemented the regional data with a "special generator" analysis of regional airport operations and the likely impact of Maglev. An associated analysis of visitor volume to the region (business and tourist) further validated the forecasts that were developed.
- TEMS surveyed regional businesses to identify the likely Maglev market for rapid and reliable goods distribution along the corridor. TEMS then projected Corridor freight revenues using the GOODS® model and estimated the associated operating and capital costs.
- TEMS tested policy strategies for the Project such as fares, frequencies, different access times to stations, and additional stations to identify the trade-



offs for each option and design appropriate operating strategies.

- TEMS developed the revenue strategy for the Project financial plan that meets FRA requirements for self-funding and provides sufficient net operating revenue to fund bond obligations from the initial capital acquisition.
- TEMS identified and quantified economic benefits to system riders and to nonusers of the system (for the Project and the Corridor) in terms of consumer surplus, reduced delay, reduced fuel consumption, and reduced pollution.
- TEMS is proceeding with the Investment Grade phase of the program, which will include
 - 1. Refinement of the networks and databases to represent more explicitly the mode of access and similar characteristics,
 - 2. An extensive automobile origin-destination survey to validate synthesized data, and
 - 3. A comprehensive peer review from national experts to verify the reasonableness of the model and the forecasts.

Project Start Date

October 1999

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