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New Jersey Department of Transportation  
Bureau of Research

## Technical Brief



### Quantifying Patron Needs at Intermodal Facilities

*Research conducted in the United States and abroad has documented traveler needs at transit transfer facilities, as well as best practices in facility design, customer information and technologies that support transit transfers. This research study builds on the existing body of research to determine which features of the transit transfer experience are most important to New Jersey's transit customers.*

### Background

New Jersey has a varied network of commuter rail, light rail, bus, paratransit, county, and private shuttle services. These services meet a range of needs including commuter travel to major employment centers, local bus service for various trip purposes, and specialized services for people with special transportation needs. With such a rich network, there are many opportunities for making multi-link transfers between modes and services. In the mature NJ TRANSIT system, it is unlikely that significant additional capacity will be added in the near future. At the same time, increasing development and maturity of suburban centers will create the demand for more complex, multi-link trips.

### Research Objectives and Approach

- Document typical design, information and service characteristics of transit transfer points in New Jersey.
- Determine the needs, wants and concerns of transferring passengers.
- Recommend ways to improve customers' transfer experiences in order to increase the number of riders willing to make multilink trips.



To achieve these objectives the research team conducted a literature review and series of expert interviews, developed a typology of transit transfer points and facilities in New Jersey, and implemented a customer intercept survey.

## Findings & Conclusions

- The literature review highlighted that certain principles of customer-oriented transit are universal, especially for passengers transferring from one mode or service to another.
- Interviews with New Jersey transportation experts revealed a number of institutional barriers that make planning for transit transfer trips and facilities challenging.
- Field work and site inspections at transit facilities throughout the state yielded a typology of transit transfer locations that can be used by decision-makers to categorize and plan transit transfer locations throughout the state.
- Data from the intercept survey found that customers overall were most satisfied with station/stop access and customer information and least satisfied with facility maintenance, amenities and service levels. At the same time customers valued service features most. In particular, conditions at local facilities showed significant room for improvement. Customers using these facilities reported lower than average levels of satisfaction with virtually all the features they cited as highly important.
- The findings from this study provide important insights and valuable data to help transportation decision makers understand how to improve the experience of transit transfer customers in New Jersey and to potentially grow ridership by encouraging patrons to make multi-link trips while using the transit system. Implement access and safety improvements around identified transfer facilities.

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A final report is available online at: <http://www.state.nj.us/transportation/refdata/research/>.  
If you would like a copy of the full report, send an e-mail to: [Research.Bureau@dot.state.nj.us](mailto:Research.Bureau@dot.state.nj.us).

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