

# Modal Optimization

## Strategy: Optimize Modal Use: Rail and Barge

Applies to trucks traveling on highways/major roadways or local streets



### Geographic Area



Rural



Suburban



Urban

### Type of Truck



Semi-trailer



Single Unit

### Time of Day



Day



Night

### Issues



Environment



Congestion



Development

### Description

Rail and waterways can be appropriate for moving bulk commodities, and can also serve as part of an intermodal movement. In some cases, the infrastructure may exist (such as a rail right of way or waterfront access) to add these options.

### Goal

Optimize the movement of goods by ensuring that several modal options are available to companies in an area. For example, rail and waterway options where economically feasible can be used to reduce truck trips.

### Usually Combined With

- Low Emission Zones
- Freight Village

### Implementers

- Transportation operators
- Property owners and developers
- Government agencies
- Shippers and businesses

### Supporting Stakeholder

- Varies based on implementers

### Action Items

- Identify key local industries and businesses with commodities that could be moved by rail or water and discuss modal choice considerations.
- Identify existing infrastructure and assess the potential (including costs) for optimizing modal options.
- Consider methods for addressing capital investment requirements, regulatory requirements, and ongoing costs for optimizing modal choices.

### Challenges

- Implementation can take a long time.
- Could require significant capital investment and lengthy processes where public investment is required.
- Labor and facility operational costs might increase for adding trans-loading operations.



SIMS MUNICIPAL RECYCLING

## Examples

### Sunset Park Material Recovery Facility

New York City Economic Development Corporation

[www.simsmunicipal.com/locations/sunset-park-mrf/](http://www.simsmunicipal.com/locations/sunset-park-mrf/)

A solid waste recycling facility at the South Brooklyn Marine Terminal enables recyclable materials to be shipped by barge instead of by truck. NYCEDC estimates the facility reduces truck travel by 260,000 vehicle miles annually.



PANYNJ

### Cross Harbor Freight Program

The Port Authority of NY & NJ

[www.panynj.gov/port/cross-harbor.html](http://www.panynj.gov/port/cross-harbor.html)

In an effort to reduce the reliance on trucks to move goods, the Port Authority formed New York New Jersey Rail (NYNJR), a short line marine railroad service that uses rail barge to cross New York Harbor. The 4-mile, 45-minute waterway trip replaces a 200+ mile road trip between Greenville Yard in New Jersey and Brooklyn, NY. One car float can transport 14 freight cars, the equivalent of 56 trucks. Further investments are planned to increase capacity.



BESTFACT

### Inner City Barge Transport

Mokum Mariteam, Amsterdam, Netherland

[www.bestfact.net/wp-content/uploads/2016/01/CL1\\_127\\_QuickInfo\\_MokumMariteam-16Dec2015.pdf](http://www.bestfact.net/wp-content/uploads/2016/01/CL1_127_QuickInfo_MokumMariteam-16Dec2015.pdf)

Mokum Mariteam, a freight operator, uses canals to transport goods, waste and collect returned goods in inner city Amsterdam. Vessels or barges are fitted with silent and clean electric engines. Saan, a highway infrastructure business, and Lcova, a large waste and recycling business, created the program to address the need for a sustainable transportation mode. Mokum Mariteam performs three full sailing days per week for Lcova, in addition to several smaller businesses.



ERZ

### Cargo-tram and E-tram

Entsorgung + Recycling Zürich (ERZ), Switzerland

[www.stadt-zuerich.ch/ted/de/index/entsorgung\\_recycling/sauberes\\_zuerich/wo\\_%2Bwann\\_entsorgen/cargo-tram\\_und\\_e-tram.html](http://www.stadt-zuerich.ch/ted/de/index/entsorgung_recycling/sauberes_zuerich/wo_%2Bwann_entsorgen/cargo-tram_und_e-tram.html)

Zürich began moving goods by tram in 2003. Using a special trailer hauled by a passenger-carrying tramcar, the cargo tram collects recyclables from residents for free, including bulk goods, stoneware, large metal and flat glass. The E-tram is used to collect electrical appliances. There are 11 tram stations where residents can drop goods. The trams visit each station 10 to 12 times a year.