

*NOTE: The following is the narrative section of the original proposal, discussing needs and rationale for the project. Since the proposal was awarded only \$700,000 out of the total \$1.388 requested, the sections on major tasks, timeline and budget are undergoing revision and are not included.*

**3/12/99**

**Type of Project Request: Planning Grant**

**Project Name and Location: Preparing Modern Intermodal Freight Infrastructure to Support Brownfield Economic Redevelopment – Northern New Jersey**

**Organization: North Jersey Transportation Planning Authority, Inc. (NJTPA)**

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**Grant Request Planning Grant: \$ 1.388 million**

## **ABSTRACT**

This innovative, regional-level planning effort will facilitate the redevelopment of abandoned industrial brownfield sites by freight related businesses which are participating in the dramatic growth in trade through the port, airport and rail terminals in northern New Jersey. With the help of a wide range of agencies and regional stakeholders, the project will leverage statewide and regional resources to overcome current constraints affecting brownfield redevelopment. The project team will conduct a market analysis, compile an inventory of promising brownfield sites, perform outreach to communities and carry out detailed case studies. Upon completion of these tasks, state, regional and community planners will be able to address needed transportation access to brownfield sites and effectively market the sites for freight related activities. This will help to provide new employment opportunities for urban residents, avert inefficient sprawl, reduce the volume of trucks on regional roads and safeguard the environment. Insights gained during the course of the project will provide the basis for a regional action plan that identifies transportation improvements and strategies needed to promote brownfields reuse and the development of methodologies applicable to brownfields efforts nationwide.

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## **DESCRIPTION**

### ***Vision***

This project seeks to harness a major economic development opportunity brought about by the huge projected growth of freight traffic at the port, airport and rail terminals in northern New Jersey. The challenges posed by this growth present the region with two starkly different futures:

- 1) Freight traffic doubles over the next decade creating welcome economic benefits for some business sectors but many freight businesses move operations to “greenfields” on the fringes of the region and in neighboring states. Open spaces in these areas are consumed by sprawl development. Long-distance trucking of goods to and from the core port district increases, compounding already difficult congestion, worsening air quality and wearing out aging infrastructure. Residents of urban areas near the port are left with precious few job opportunities as former industrial sites sit idle and crumbling. Ultimately, the region’s problems depress further growth in trade and economic development.
- 2) Large numbers of businesses taking part in the expansion of trade in the region redevelop and locate in abandoned industrial brownfield sites scattered in and around the port district and along major routes leading to it. Upgraded transportation infrastructure allows goods from these businesses to move efficiently around the region with truck trips kept to a minimum distance while facilitating maximum use of rail intermodal services to more distant markets. Regional air quality improves. Residents of Newark, Elizabeth and other urban areas gain access to a host of new job opportunities as warehousing, packaging and other freight related companies expand operations nearby. Cities gain new ratables through the reinvestment in infrastructure, school systems and neighborhoods. Ultimately, the progress of the region attracts further growth in trade and economic development.

The first scenario is the likely outcome of an unguided and haphazard response to events. The second scenario, as detailed in this proposal, can be the result of a broad-based, coordinated planning effort to encourage freight businesses to locate in the region’s many abandoned industrial “brownfield” sites. In effect, this project’s main purpose is to reclaim and put to productive economic use the transportation and land assets that underpinned the earlier vibrant industrial economy of northern New Jersey, thus re-enlivening economic opportunities for the urban centers that have historically grown around these old industrial sites.

It would do this by marshalling the expertise and participation of a wide range of transportation and technical specialists and state and regional stakeholders. Federal support for this project would enable the region to conduct the necessary research, public outreach, case studies and other planning activities that will provide a focused transportation planning approach that can overcome agency jurisdictional boundaries and thereby combine and leverage the current disparate state and local programs targeted at brownfield redevelopment.

The lead organizations for conducting the project will be: the North Jersey Transportation Planning Authority, Inc. (NJTPA) which is the metropolitan planning organization (MPO) responsible for coordinating transportation plans for 5.8 million residents of the 13 northern counties and two largest cities in New Jersey; and its host agency, New Jersey Institute of Technology, the state's technological university and headquarters to the Institute for Transportation funded by TEA 21 and the EPA-funded Northeast Hazardous Substance Research Center (NHSRC). The Center is a leader in using state-of-the-art analytical field technologies for assessing brownfield site contamination. The project being proposed is therefore groundbreaking for several reasons: it approaches brownfield issues from a regional metropolitan planning perspective; it brings together local and regional planning assets and private sector expertise; and it employs the advanced technical resources of a university with expertise in the field.

### ***Purpose***

The project seeks to achieve the following goals:

- Prepare for and support increased freight activity in and around Newark International Airport, the Port of NY-NJ and other major transportation facilities;
- Reduce freight-driven sprawl in greenfield areas in outer regions by developing freight and trade related distribution facilities within existing transportation corridors;
- Improve the efficiency of existing road and rail systems;
- Increase community awareness and acceptance of brownfield redevelopment initiatives;
- Increase job opportunities for workers with limited skills living in the inner city communities surrounding the major transportation facilities and examine new strategies to provide access for urban workforce to such areas;
- Reclaim abandoned brownfields sites for productive freight related use;
- Promote patterns of development that improve air quality and protect the environment; and
- Develop a methodology for performing a regional assessment of freight transportation issues related to brownfield redevelopment.

### ***The Need***

Northern New Jersey has the largest port on the North American Atlantic seaboard and one of the fastest growing air cargo hubs in North America. The port of New York and New Jersey is experiencing strong trade growth spurred by recent free trade agreements such as GATT and NAFTA. It is the distribution platform to the largest consumer market in North America, encompassing the New York-New Jersey-Connecticut metropolitan area and much of the mid-Atlantic and New England regions. The port's traffic reaches 34 percent of the North American population and its service to more distant North American markets is expanding as it becomes a focal point for growth in Canadian and Midwest cargoes. Its trans-Atlantic maritime traffic is also growing as a result of robust European trade, geographic shifts in world production centers to Southeast and South Asia, and increased trade with South America, Africa and the Middle East.

Recently released information by the Port Authority of New York and New Jersey (PANY&NJ), as it finalizes its comprehensive Port Master Plan, bears out staggering projections of growth in this port's trade (see Appendix). The port's current volume of approximately 2.5 million twenty-

foot equivalent container units (TEUs) will double within ten years, even allowing for occasional economic downturns. By the year 2040, according to most conservative projections, port container traffic will increase more than sixfold over current levels to as many as 17 million TEUs. The latter level of traffic is expected to generate over 230,000 new port-related jobs in addition to the 166,500 jobs currently related to NY-NJ’s port industry. The Port Authority’s analysis of the economic impact of this traffic stream is that it will eventually add more than \$30 billion to the port’s current \$20 billion economic impact in the region. To handle this huge increase in maritime cargo, the port must implement new technologies to move cargo more efficiently through its existing terminals. However, even with new efficiencies, the port, over time, will need to add a minimum of 1,200 acres of new marine terminals to handle the traffic. On the landside, some analysts forecast that the projected growth in rail and port freight traffic will require an additional 1,000 to 1,500 acres of rail intermodal terminal capacity.

Newark International Airport, the northeast’s major hub for package airfreight services is located adjacent to the port complex. The airport has recently passed the one million ton level in air cargo. Its air freight traffic will expand significantly with the completion of a 2,800 foot runway extension in the year 2000, which will give the airport the ability to handle heavy 747 aircraft year-round to all international destinations. Major carriers such as FedEx, UPS, Airborne, Continental and Scandinavian airlines are expanding services at the airport in anticipation of increased cargo flow. Based on its natural advantages in road access to broad regional markets, it is expected to overtake JFK International Airport as the northeast’s largest air cargo center within the next few years.

Northern New Jersey is also at the center of expanding railroad operations resulting from the acquisition of Conrail by Norfolk-Southern and CSX railroads. The railroads have projected that they will divert an additional one million domestic containers now being trucked into the northeast off main roadway arteries. Much of this traffic is destined to the NY-NJ metro area where it will be transferred from rail terminals to other distribution centers for final delivery by truck. The railroads have great financial incentive to increase other traffic as well. For instance, one rail terminal where traffic is expected to grow is the APL terminal in South Kearny, which is the dedicated terminus for transcontinental “landbridge” operations from major West Coast ports.

It is therefore clear that with its concentration of major marine, air and landside freight facilities, northern New Jersey’s freight distribution industries are poised for dramatic growth in both number and capability. This is the result of major structural changes taking place in national and international trade as well as the operational efficiencies the region offers in serving markets from a strategic core location. Indeed, because the NY-NJ metro area is such a huge market and is both an attractor and generator of freight, the region stands to experience a “juggernaut” of increased freight activity in the not too distant future.

Yet it is also clear that the projections for growth in port, air, and rail traffic do not fully take into account the need for landside freight support services or the strategic question of *where* those services can best be located. Based on similar experience in other hub port areas on the West Coast, large volumes of port and air cargo will, in turn, generate intense demand for new distribution support services and light manufacturing activities within short distances from key terminals and major freight routes. This includes the creation and expansion of “spin-off” businesses performing assembly, packaging and other value-added functions for goods that

usually employ unskilled and semi-skilled workers. While some of these activities are already present in the NY-NJ region, increased trade through New Jersey's port and airport complex is expected to add dramatically to demand for such services in the region-- potentially creating many thousands of jobs beyond the increases projected by the Port Authority.

However, the region's ability to capture this economic development is not assured. The region's congested and aging transportation infrastructure limits mobility, frustrates new business activity and hampers the achievement of air quality goals. And, after decades of de-industrialization in the region, there are significant numbers of large property parcels that remain abandoned, awaiting cleanup and rehabilitation. While many of these parcels are very near major transportation terminals and arteries and are, therefore, promising sites for new or expanded freight related businesses, their redevelopment is complicated by the need to clean up contaminants and upgrade often outdated and deteriorated transportation infrastructure.

Absent well-targeted and coordinated initiatives leading to new investments that address these issues and bring about positive land use patterns, the efficiencies and related environmental and energy-use benefits of northern New Jersey's centralized freight service system are at risk. In particular, there is a threat that transportation companies and businesses that provide value-added distribution services will locate their operations in greenfield locations on the fringe of the region and in adjacent states. Large scale greenfield development outside this core area would lead to massive new trucking over greater distances on congested highways feeding into the metro area and its port and airport facilities. Longer truck trips exacerbate the region's status as a non-attainment air quality region. The EPA has determined that the largest in-state contributors to poor air quality in New Jersey are emissions from mobile sources (i.e. cars and trucks). Increased truck trips to extra-regional intermodal facilities would also hamper the region's efforts to increase intermodal freight rail services at the 14 major rail yards and terminals in its core industrial region. In economic development terms, the large scale development of greenfields by freight related businesses would mean that large tracts of land would likely remain off urban tax rolls, accompanied by the loss of sorely needed employment opportunities for large numbers of urban residents near the port district.

To reduce negative transportation and land development impacts on the region, safeguard existing transportation industries and jobs, and to capture the economic development potential of the expected growth in freight activity, the region has no choice but to increase the efficiency of its transportation infrastructure and to take advantage of available land assets that can add capacity to the freight distribution system in the core port district.

Significant efforts to achieve transportation efficiencies in the port/airport area are on the drawing board. Governor Christine Todd Whitman has announced that the New Jersey Department of Transportation is in the early planning stages of a major roadway project dubbed the "Portway Project" that will create a semi-dedicated truck corridor that would link major port, warehouse, and rail intermodal terminals in northern New Jersey. The Portway project is seen as a part of a larger federally financed freight corridor development program in northern New Jersey called the "International Intermodal Transportation Center and Corridor" that is earmarked in TEA 21. The Port Authority of NY&NJ is planning more than \$6 billion in waterside and port infrastructure investments over the next twenty years. In addition, the northern New Jersey five

year Transportation Improvement Program currently includes over \$800 million for maintaining and upgrading existing roadway, bridge and highway landside access in the general port area.

While these efforts have focused upon using transportation investments to accommodate increased highway and rail traffic, they have paid relatively little attention to using these same investments to promote brownfields redevelopment by freight related businesses that will generate much of the traffic. One key reason is that the MPO, state and localities lack effective methodologies and planning tools to evaluate projects for their economic and land use impacts. This leaves the numerous brownfield sites scattered throughout the region largely neglected as resources not only for accommodating the tremendous potential for freight related economic development but for insuring the future efficiency of the transportation system and meeting economic, social and environmental goals. This project will close the gap in knowledge and capabilities needed to achieve brownfields redevelopment through a coordinated, regional-level planning effort.

### ***An Innovative Leveraged Approach to Brownfields Issues***

This project is grounded in a recognition that with key public works improvements and private sector support, redevelopment of the large number of brownfield sites in municipalities surrounding the core airport, rail, and port areas and along major freight routes can be encouraged. While state-level coordination of brownfields activities is underway through the Brownfields Team composed of five members from state agencies and six members of the public, this task force is focusing on broad legislative and policy matters and the compilation of a state wide inventory of brownfield sites. The proposed NJTPA/NJIT project, coordinating closely with this state-level task force, will pursue a specific and particularly promising approach to site redevelopment tied to freight related cargo growth at the region's port, airport, and rail complexes. This approach can only be effective with the involvement of all levels of government and a variety of stakeholders coordinating on a regional level.

This region-level approach has not been tried in large part due to constraints on the use of available funds. While the MPO is charged with undertaking “comprehensive” regional planning, the transportation funding sources on which it relies, in practice, limit its ability to undertake such a project. In particular, while transportation planning funds can be used for general analyses of freight industry infrastructure needs, they cannot be directly applied to economic development and remediation analysis for specific brownfield sites. Other agencies participating in the project face similar institutional funding constraints as well as practical difficulties in assigning staff to work on projects outside of their core agency mandates.

This makes the proposed NJTPA/NJIT project appropriate for grant funding to demonstrate the value of such a multidisciplinary, regional approach. The knowledge and experience gained through the project will suggest whether on-going efforts that cross agency jurisdictional lines and focus on regional-level freight needs are warranted and how this can be accomplished. It will also suggest new elements and directions for the MPO planning process and for brownfields development efforts in New Jersey and other states.

To pursue the project, the NJTPA and NJIT have gained commitments for participation from key state and local agencies with jurisdiction over various aspects of brownfields development as well as from non-traditional participants with an interest or expertise in brownfields issues. This

collaborative effort is detailed in the PARTNERS section. The project will draw upon these agency and organizational resources to augment and build upon the localized brownfields efforts now underway in the region. These include EPA grant-funded projects which are being carried out with assistance from NJIT’s Northeast Hazardous Substance Research Center in the cities of Elizabeth, Newark, Jersey City, Perth Amboy and Paterson and in the counties of Hudson, Middlesex and Morris

The project will “overlay” such localized efforts with an innovative regional approach to find ways to enhance the match between the expected regional demand for developable land created by the growth of freight related business with the regional supply of appropriate brownfield sites.

### ***Major Tasks***

[This section is being revised – Contact the NJTPA for further details]

## **TCSP OBJECTIVES**

### ***Improve the Efficiency of the Transportation System***

Promoting and facilitating the location of freight related businesses activities in brownfield locations will enhance the efficiency of the regional transportation system by allowing the firms to take advantage of the growth of the domestic rail intermodal freight market in and around the port district while reducing the region's reliance on long distance trucking services.

The public and private transportation improvement needs and strategies identified in the project will become part of a Transportation and Community Action Plan, containing recommendations for the plans and programs of the NJTPA, state and local agencies, private sector organizations and other entities for facilitating brownfields redevelopment. Among the strategies likely to be explored, in cooperation with TRANSCOM, a New York/New Jersey regional traffic management agency, are ITS tools for fleet routing so that freight carriers can move loads through the region without increasing congestion.

### ***Reduce the Impacts of Transportation on the Environment***

If the projected growth in freight traffic, discussed earlier, occurs without adequate planning, there will be further sprawl, loss of open space, and exacerbation of the region's congestion, air quality and other problems. In contrast, channeling economic development to brownfield areas adjacent to or readily accessible to the port, airport, and major intermodal facilities will shorten and reduce needed truck trips and foster greater use of rail, leading to a lowering of contaminants from vehicle emissions. In addition, the exploration of ITS measures as part of transportation systems providing access to brownfields promises improved efficiency in the core metro area, further helping to lower emissions. This is especially important in the context of freight corridor planning such as the proposed “Portway” project. Another effect on the environment will be the reclamation of abandoned and often-contaminated brownfield sites in the region.

### ***Reduce the Need for Costly Future Investments in Public Infrastructure***

Making use of existing land and infrastructure in areas adjacent to the port will avoid the inefficiencies and public costs associated with new freight-related development in suburban “greenfield” locations. While many brownfield sites may require significant investment prior to redevelopment, these investments will be offset by the benefits to be realized by successful

redevelopment — reduced wear to roads from truck traffic, lower social welfare and unemployment costs, avoidance of mounting suburban congestion, among other benefits. Recognizing this fact, the state offers a variety of tax incentives for site reclamation. In addition, Newark, Elizabeth and other cities in the region with large numbers of brownfields have been designated Urban Empowerment and Urban Enterprise Zones, providing variety of tax incentives for new business development. This project will seek to effectively leverage these incentives for freight related brownfields redevelopment.

***Ensure Efficient Access to Jobs, Services and Centers of Trade***

The cities that surround existing brownfields in the region, including Newark, Elizabeth, Jersey City and Paterson, are home to large numbers of people who are not currently active in the workforce or who are underemployed. With the planned end to traditional welfare programs over the next few years, state and local agencies are working to provide these people with training that will allow them to be employed at a living wage. Hence, a revitalization of the brownfields areas for freight-related uses, coupled with appropriate training programs, could expand the job base in close proximity to a large number of unemployed and underemployed residents and welfare recipients in surrounding urbanized areas.

The New Jersey State Employment and Training Commission (SETC) has indicated its commitment to work with regional Workforce Investment Boards (WIB) to enhance the skill levels of the workforce in freight-related occupations. This training, coordination and assistance could become a significant “selling point” and lure for freight related businesses considering brownfields locations. In addition to helping to provide a ready pool of trained workers, the project will use transportation analysis to investigate the options and needs for insuring workforce access to each site.

***Examine Development Patterns and Identify Strategies to Encourage Private Sector Development Patterns which Achieve the Goals of the TCSP***

If the project can achieve even a small number of successes in making brownfield sites attractive to new private-sector investments in freight support services such as value-added manufacture, warehousing and other freight-related activities, this could set an example and precedent for other firms to seriously consider brownfield sites. The result could be a self-reinforcing trend that would create beneficial new patterns of land use in the region.

To help set such a trend in motion, the project proposes to undertake detailed case studies. With the help of the advisory committee, these will be chosen to be representative of the varied brownfields opportunities in the region. One such case study will likely be a site within the jurisdiction of the Hackensack Meadowland Development Commission (HMDC), which coordinates development policies in portions of 14 municipalities and has an explicit mandate to preserve and protect sensitive wetlands while exercising authority over final development plans, including many brownfields sites. Such a case study would demonstrate the benefits of coordinated efforts among municipalities. Other case studies are likely to focus on sites, which have already undergone some level of study by county or municipal governments. The case studies will yield a methodology and insights applicable to redeveloping other promising sites identified in the region.



## **MPO AND STATE COORDINATION**

The Board of Trustees of the NJTPA approved this grant proposal for submission on March 8, 1999. The project will be closely coordinated with major state agencies (see PARTNERS section). A key product will be a Transportation and Community Action Plan that will include recommendations for modifications to the NJTPA Regional Transportation Plan, State Transportation Plan, State Development and Redevelopment Plan, and county and local plans.

## **PARTNERS**

The following partners in the project that will serve on the Steering Committee (discussed in the *Major Tasks* section of this proposal):

***North Jersey Transportation Planning Authority*** - project sponsor

***New Jersey Institute of Technology*** - project sponsor

***New Jersey Department of Environmental Protection*** - will provide data and assistance, particularly for market analysis, identification and assessment of promising sites and case studies.

***New Jersey Department of Transportation*** - will provide data and assistance, particularly in conducting the market analysis and assessing transportation needs.

***New Jersey Office of State Planning*** - will provide data and assistance, particularly in assessing land use issues, coordinating the project with efforts of the state-level Brownfields Team and compiling information obtained into the statewide GIS Brownfields database.

***Port Authority of New York & New Jersey*** - will provide data and assistance particularly in conducting the market analysis and assessing transportation needs.

***New Jersey Commerce & Economic Growth Commission*** - will provide data and assistance, particularly on economic development issues.

As discussed in the *Major Tasks: Steering/Advisory Committee* section the project advisory committee will include a variety of agencies, regional stakeholders and non-traditional organizations. A number of these participants have committed to fulfilling specific roles, either through in kind contributions or on a per-fee basis. They are as follows:

***New Jersey State Employment and Training Commission*** - will convene local Workforce Investment Boards to implement regional human resource planning for individuals within reasonable commuting distance of targeted brownfield sites. The regional plans would deal with education and training programs for all citizens who may participate in the freight industry workforce.

***New Jersey Alliance for Action*** (a statewide organization representing business and labor) - will provide assistance in outreach to freight related businesses.

***Tri-State Transportation Campaign*** (an environmental organization) - will provide perspective on environmental issues and assistance in outreach to communities.

In addition to these partners, letters of support expressing interest in participation in the project have been received from the following: mayors of the cities of Elizabeth, Linden, and Newark; PSE&G, the energy utility company; Maher Terminals, Inc, a major port tenant and employer; Lucent Technologies, a division of Bell Labs and an intermodal client; and the Victoria Foundation, a philanthropic agency. Others are expected to join the project.

**SCHEDULE [BEING REVISED]**

**EVALUATION**

The tables below provide, in summary form, the significant process, product and outcome goals and performance measures that will be used to evaluate the grant. These evaluation elements will be refined with the help of an independent evaluation consultant at the beginning of the grant period. An administrative assistant will be assigned to compile and maintain information needed for evaluation of activities throughout the grant period. A final evaluation report will be prepared.

**A. Summary of Process Goals and Performance Measures**

<b>Goal</b>	<b>Performance measure</b>
1. Increase community and business awareness and acceptance of brownfield redevelopment initiatives	<ul style="list-style-type: none"> <li>• Number of, and attendance at focused community events held</li> <li>• Number/type of groups involved</li> <li>• Survey and sample responses of community / businesses</li> <li>• Participation in Advisory Committee and Task Forces</li> </ul>
2. Facilitate cross-jurisdictional transportation planning approaches for regionwide brownfields redevelopment	<ul style="list-style-type: none"> <li>• Participation by state and local agencies with involvement in brownfields issues</li> <li>• Consensus reached on activities , strategies and plans</li> <li>• In-kind contributions provided by partners and advisory group members</li> <li>• Attendance at meetings and final conference</li> <li>• Documentation of new planning approaches relative to prior efforts</li> </ul>
3. Establish criteria and baseline data for outcome goals (brownfields in project region, reclamation parameters, workforce availability, skill levels, and current means of transportation access to site areas, etc.)	Identify and assess the completeness, reliability and relevance of data from tasks, with input from advisory group

**B. Summary of Product Goals and Performance Measures**

<b>Goal</b>	<b>Performance measure</b>
1. Market Analysis: Prepare for and support increased freight activity.	<ul style="list-style-type: none"> <li>• Market analysis completed</li> <li>• Advisory Committee accepts market analysis</li> <li>• Information provides tools for effective selection of promising sites from state brownfield inventory</li> </ul>
2. Produce reports, workbooks, presentations, videos and other materials containing information and methodologies on freight related brownfield redevelopment	<ul style="list-style-type: none"> <li>• Number and type of materials produced</li> <li>• Number and type of requests and inquiries received from communities and businesses</li> <li>• Attendance at meetings and events</li> <li>• Tabulated responses to questionnaires distributed at meetings and events</li> <li>• Documented follow-up activities conducted by communities making use of project materials</li> </ul>
3. Action Plan: recommendations for specific transportation projects, strategies and procedures to improve brownfield redevelopment opportunities	<ul style="list-style-type: none"> <li>• Acceptance of the Action Plan recommendations by the Advisory Committee</li> <li>• Modification of project selection criteria by MPO</li> <li>• Adoption or consideration of project recommendations by state and local agencies and the MPO</li> <li>• Tabulated questionnaires and surveys of community and business response to Action Plan</li> </ul>

**C. Summary of Outcome Goals and Performance Measures**

Some outcomes resulting from this planning grant -- e.g. businesses locating in brownfield sites -- will likely occur after the grant period. As a result, the Outcomes table below includes Interim Performance Measures, which indicate trends towards the achievement of the desired outcomes.

<b>Goals</b>	<b>Interim Performance Measures</b>	<b>Outcome Measures</b>
1. Improve Economic Activity	Number and type of inquiries received from businesses about freight related brownfields redevelopment.	Change in: <ul style="list-style-type: none"> <li>• Number and type of companies doing business in the port region</li> <li>• output of companies</li> <li>• Number and skills level of unemployed and welfare recipients</li> </ul> Trucking and rail traffic

<b>Goals</b>	<b>Interim Performance Measures</b>	<b>Outcome Measures</b>
2. Reclaim abandoned brownfields sites for productive freight related use	<ul style="list-style-type: none"> <li>• Number and type of inquiries received from companies on specific sites targeted by the grant</li> <li>• Site redevelopment activities which may include number of permits applied for site testing, development plans proposed etc.</li> <li>• Community consideration or acceptance of recommendations for transportation and other site improvements</li> <li>• Industrial real estate listings and inquiries in target areas</li> </ul>	<ul style="list-style-type: none"> <li>• Change in the number of freight related companies locating in targeted brownfield sites.</li> </ul>
3. Reduce freight-driven sprawl	<ul style="list-style-type: none"> <li>• Sites suitable for various reclamation programs are identified in close proximity to the region’s core port/airport/rail terminals</li> <li>• (same as C2)</li> </ul>	Change in number of freight related businesses choosing greenfield verses brownfields locations
4. Increase Job Opportunities for Workers with Limited Skills	<ul style="list-style-type: none"> <li>• Business inquiries about workforce availability &amp; site transit options</li> <li>• Change in State Employment Training Commission plans or programs</li> <li>• Projections of jobs created from sites examined in case studies</li> </ul>	Change in the numbers of unskilled and semiskilled jobs available to urban residents
5. Improve the efficiency of existing road and rail systems	<ul style="list-style-type: none"> <li>• Recommended transportation plans and strategies are adopted or actively considered</li> <li>• Potential ITS applications identified or planned within target areas</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced reliance on trucking and greater use of rail for goods movement</li> <li>• Lower congestion on freight routes</li> <li>• Estimates of costs of goods movement in and around the region decline</li> </ul>
6. Promote patterns of development that improve air quality and protect the environment	Computer modeling of the change in truck drayage as a result of projected redevelopment of promising sites (same as C2)	<ul style="list-style-type: none"> <li>• Lower congestion on freight routes</li> <li>• Modeling of air quality impacts of freight brownfields development</li> <li>• Shift in freight development from greenfields to brownfields</li> </ul>
7. Develop a methodology for performing a regional assessment	<ul style="list-style-type: none"> <li>• Number of communities making use of methodology or its elements</li> <li>• Survey of state and local planners</li> <li>• Inquiries received from outside the region</li> </ul>	<ul style="list-style-type: none"> <li>• Sites redeveloped in the region and across the country where the methodology and tools were employed</li> </ul>