

2007 TCIF Funding Nomination for
the 7th Street Grade Separation and Roadway Improvements
submitted by Port of Oakland

A. Project description and background (including purpose and need).

7th Street is the key road accessing the Port of Oakland from the east. It parallels the Bay Area Rapid Transit (BART) aerial structure and crosses above the BART line where it dives below ground into the transbay tube. As it runs through the Port complex, 7th Street includes a Class I bicycle path out to the Middle Harbor Shoreline Park and Port View Park.

The Outer Harbor Intermodal Terminals (OHIT), a proposed extension of Port of Oakland intermodal rail terminals, is planned to be located on 160 acres of the former Oakland Army Base, which has become part of the Port of Oakland (the "Port") through the Base Realignment and Closure process. The 7th Street Grade Separation will separate truck traffic on 7th St., one of three freeway gateways into the Port, from increased rail movements between OHIT and the rail mainline to the north of 7th St. and the existing rail facilities to the south, thereby eliminating conflicts between trucks and trains at a major intersection adjacent to OHIT. This project will also improve safety for pedestrian, bicycle and automobile movements to and from Middle Harbor Shoreline Park, a major public access point along the shore of San Francisco Bay.

In anticipation of the acquisition of portions of the former Oakland Army Base and of other development opportunities, the Port completed a Maritime Development Alternative Study (MDAS) in 2004 to help guide it through infrastructure decisions. The MDAS reviewed the marine terminals, intermodal yards and roadway network in the Port complex, and made recommendations on improvement projects and the sequencing of each such project. The MDAS estimates that "the existing rail system will constrain Port capacity at between 2.5 and 3.5 million TEU per year." (MDAS, p. 2). The MDAS recommended improving the 7th Street and Maritime Street intersection (among others) to dramatically increase the Port roadway network capacity.

The Port of Oakland's cargo volume makes it the fourth busiest container port in the United States, handling 99% of the waterborne goods moving through Northern California, the nation's sixth largest metropolitan market. The Port has been, and continues to be, the premier export seaport for California's agricultural goods from the Central Valley and the wine country. However, imports have grown by over 80% between 2001 and 2006, nearly 8 times faster than the growth in exports. The outsourcing of manufacturing to foreign countries with low labor costs, primarily in Asia, has increased trans-Pacific imports at the Port of Oakland and other ports of entry. The recent weakness in the dollar has led to faster growth in exports than imports in 2007, but the Port's continued strength in exports leaves it well positioned for the future with a healthy balance between exports and imports. Based on the Port's historical growth pattern of four to five percent annually, the Port anticipates handling more than five million TEUs by 2025. See Exhibit A.

Eight container terminals and two intermodal rail facilities currently serve the Port. The Union Pacific (UP) and BNSF railroad facilities are located adjacent to the heart of the marine terminal areas to provide a reliable and efficient movement of cargo between the marine terminals and the intermodal rail facilities. UP's existing intermodal rail facility at the Port is the "Railport Oakland" and BNSF's intermodal rail facility at the Port is the "Oakland International Gateway" (OIG). The rail facilities also serve regional or "transload" warehouse facilities. (Container goods are unloaded, sorted, consolidated and transferred to railcars or domestic 53' truck trailers).

The Port has three key motor vehicle access points in the south, east and north, at Adeline Street, 7th Street and West Grand Avenue, respectively. All three access points connect to highways, including Interstates 80, 880, 580 and State Route 24. The internal Port roadway network has sufficient redundancy to allow vehicles to use any of the three access points, regardless of which Port terminal they are working at. 7th Street parallels the Bay Area Rapid Transit (BART) aerial structure and crosses above the BART line where it dives below ground into the transbay tube. As it runs through the Port complex, 7th Street includes a Class I bicycle path out to the Middle Harbor Shoreline Park and Port View Park.

Current rail TEU capacity at the Port is for 700,000 lifts (1 million TEUs) per year. The Port will need capacity to accommodate an additional 2 million TEUs per year to meet the projected rail need of 3 million TEUs per year around 2020-2025. The Port seeks to respond with high priority rail development projects, coordinated with railroads and shipping lines. While OHIT will provide expanded capacity for the transfer of containers to and from trains, the functionality of the facility will be severely limited without a safe, grade separated crossing of 7th Street. Without the 7th Street Grade Separation, the benefits of OHIT would be off-set by a new bottleneck in the form of long, slow train movements conflicting with at-grade truck traffic running through and bifurcating the Port complex.

B. Project scope, function and anticipated benefits.

The proposed 7th Street Grade Separation will provide new grade separated rail crossings of 7th Street for BNSF and UP terminals, including replacement of the damaged former Southern Pacific overhead and the addition of rail expansion capacity. The Project will also improve traffic operations and expand roadway capacity through the reconstruction of 7th Street along a new alignment, in a deeper trench section, between Cedar Street and Maritime Street, reconfiguration of 7th /Maritime Street intersection into 2 3-way intersections, realignment of Maritime Street, and bicycle and pedestrian access improvements. See a map of the 7th Street Grade Separation and Roadway Improvements in Exhibit B.

Currently, the Union Pacific and the BNSF intermodal rail facilities at the Port are accessed from the north across a single railroad bridge over 7th Street, the former Southern Pacific overhead. To reach the BNSF intermodal terminal, trains must negotiate an extremely sharp curve from the Southern Pacific overhead, threading through BART columns then west, parallel to BART, and into the BNSF terminal. There is only a single lead track into the BNSF terminal, restricting BNSF's facility capacity to no more than one train at a time entering or leaving the terminal. UP's Oakland terminal is bifurcated by 7th Street, with all yard activity forced through the former Southern Pacific overhead, including not only UP's intermodal cargo, but other regional cargo that is sorted and managed at UP's Oakland hub.

The Port's ability to enhance access to either the BNSF or UP terminals across 7th Street is physically restricted. Any new connection across 7th Street is limited by 7th Street's physical profile which quickly rises from its nadir below the overhead, limiting the railroad's ability to stay clear of the roadway traffic, and remain under the BART aerial structure. The Port cannot easily improve access and terminal capacities without significantly modifying 7th Street.

Regardless of the Port's rail plans, there are multiple safety concerns in the 7th Street corridor that require improvement. The former Southern Pacific overhead on 7th Street between Maritime Street and Bay Street, a critical element to the Port's transportation network, has been physically damaged by excessively tall trucks and other vehicles. The flow of goods to and from the Port complex would be severely hindered if this structure were damaged to the point of failure. In addition, the structure's narrow underpass increases the risk of collisions between two vehicles, collisions with the structure itself, and traffic delays associated with disabled vehicles.

Pedestrian and bicycle access is also limited by the narrow sidewalk on the westbound 7th Street subway beneath the former Southern Pacific overhead, on the main route for pedestrians and bicyclists to Middle Harbor Shoreline Park. Bicyclists are required to dismount and walk through the subway sidewalk or ride through the subway in the street.

Construction of the proposed 7th Street Grade Separation will be the most cost-effective solution to the issues it addresses because:

1. Of all the portals into the Port, 7th Street is currently most constrained due to the old railroad bridge. The width and number of lanes is completely inadequate for the projected capacity need.
2. The other two portals (Adeline to the East and West Grand to the North) are at the extreme ends of the Maritime Area. Traffic through those portals only serve a limited area (Outer Harbor for West Grand and Inner Harbor for Adeline). 7th Street is centrally located and serves both Inner and Outer Harbors.
3. The improvements to 7th Street are necessary for the expansion of the Rail Yards (both for the UP and the BNSF). The connections between the new and existing yards cannot be made without the 7th Street project.
4. The cost for the upgrade of the other portals would be large, but would not provide the same benefits there for the return on investment would be less.

C. Project satisfies TCIF screening criteria

Eligibility: Included in appropriate adopted regional goods movement or transportation plan and has commitment of 1:1 funding match.

- Project is included in GMAP, Cal-MITSAC, trade infrastructure and goods movement plans adopted by regional transportation planning agencies, or an adopted regional transportation plan.

Project	GMAP	Cal-MITSAC	Adopted Regional Goods Movement Plan	RTP
7 th Street Grade Separation	X	X	X	X Proj # 22082

*****Check the box if Project is identified in the above plan.*****

This project is part of the State Goods Movement Action Plan.

Many of the regional transportation planning agencies in Northern California, led by the Metropolitan Transportation Commission, Sacramento Area Council of Governments (COG), San Joaquin COG, and Stanislaus COG have worked together to develop a Northern California Trade Corridors Strategy. This strategic vision, coupled with a specific program of projects, aims to address the growing needs of goods movement along the primary trade corridors in Northern California. The coalition is also supported by the six remaining Councils of Government in the Central Valley, including Kern County, the Ports of Oakland, Stockton and Sacramento, and business leaders from throughout Northern California. This coalition identified the 7th Street Grade Separation as a top tier priority for Northern California for the TCIF program.

- Specific description of entire cost

Project	Total project cost	TCIF request	Identified matching funds	State of matching funds*	Match source	Other funding	Source
7 th Street Grade Separation	\$427 million	\$175 million	\$252 million	Approved by Port	User fees		

*If match is in any way questionable, identify issues here.

On December 17, 2007, the Executive Committee of the Board of Port Commissioners approved a plan to develop a Port-based user fee program that would use fees levied on containers moving through the Port as a source of match funding on this project. The Executive Committee specifically resolved, in part:

[T]he Executive Director or his designee is hereby authorized to represent that the Port plans to adopt a container fee (subject to all requirements under the law) in an amount not to exceed the either (i) the amount recommended in the Martin Study as described in the Agenda Report dated December 17, 2007, or (ii) the average container fee charged by the ports at San Pedro Bay in Southern California, all for the purpose of financing the Port's share of the Projects that will not be funded by TCIF Funds. Such container fee may include a charge to the beneficial users of the rail systems at the Port[.]

- Description of public benefit.

The Port has been deepening its harbor to accommodate the newer, larger vessels. Along with the terminal enhancements the Port has made, the harbor deepening has positioned the Port to be able to bring in first port-of-call vessels which enable more cargo to flow through the Port's facilities. However, to allow these improvements to deliver jobs, tax revenue and other benefits to the region and the state, the Port and the Railroads must also implement landside access improvements, such as the 7th Street Grade Separation.

The 7th Street Grade Separation project relieves the rail bottleneck at the 7th Street / former Southern Pacific overhead (which is currently shared by both UP and BNSF) and mitigates the anticipated decrease in level of service at the 7th / Maritime St. intersection. The rail bottleneck will be alleviated by removing BNSF traffic from the crossing and providing BNSF with a new grade separated structure at a new intersection. The rail bottleneck will be further alleviated by improving the roadway profile so that additional bridges can be installed above the trench, without conflicting with excess height vehicles. The new roadway will allow UP to more efficiently manage its Oakland hub, allowing for expanded intermodal capacity that is unimpeded by the regional carload business. As roadway traffic volumes continue to grow throughout the Port complex, this project will upgrade the traffic signals and roadway geometrics to increase roadway capacity to meet the projected demand and mitigate congestion. The new grade separated rail-road crossings prevent conflicts between trucks and trains at a major intersection adjacent to OHIT.

The 7th Street project, when combined with OHIT will potentially increase the rail fraction of containers handled in Oakland, further reducing the impact of trucks on the public highways and thereby mitigating traffic congestion and air quality impacts. In addition to the traffic impacts, trucking uses over 5 times more fuel, emits twice as much PM-10 and 4 times more CO₂ per ton-mile than a train.

Construction of the project is anticipated to involve hundreds of construction workers for a period of nearly three years. Once built, the grade separation project will not require any employed staff. Though

the completed grade separation will not provide any direct employment, it's indirect benefits to the Port will allow continued growth and increased economic impact. Continued growth in trade at the Port of Oakland will proportionally increase the number of jobs in the region, and local and state tax revenues.

Deliverability: See also Gant Chart in Exhibit C

As has been described above, the 7th Street project is directly related to the OHIT project. The project schedule and project delivery methods are closely related for these two projects. The success of each project will greatly compliment the success of the other. Risks to the project include the health of the global economy and the continued demand for goods movement through the Port of Oakland. This risk is thought to be relatively minor, as the long term trend in goods movement has been steady, stable annual growth.

The 7th Street Grade Separation is currently in the design phase, with further design, environmental analysis and property negotiations scheduled to commence in early 2008. In 2009, the first phase of construction is planned, with the relocation and protection of major utilities. Since the existing street is a major utility corridor, these utilities must be relocated and protected prior to construction of the roadway. Such utility work is anticipated to be completed in 2010, though the Port anticipates that the roadway contractor can start on portions of the grade separation project as early as the midpoint of the utility work. Completion of the roadway relocation and grade separation structures are anticipated to take approximately 2 years, with completion scheduled by the end of 2012.

The 7th Street Grade Separation project was described within the Oakland Army Base Redevelopment Area Environmental Impact Report (EIR) approved in 2002. However, the Port plans to prepare a supplemental EIR to discuss specific impacts that were not directly addressed in that document. Certification of a supplemental EIR is expected in early 2009.

The project includes property currently outside of the existing 7th Street public right of way. A portion of this property is owned by the Port, and a portion is owned by the Union Pacific. The Port will be required to modify multiple leases with US Customs & Border Protection, the Berths 25-26 terminal, and the Berth 24 terminal. The Port will also negotiate with Union Pacific on the new street location, and with the City of Oakland on the vacation and rededication of the public right of way. Lastly, the Port will have to negotiate an access agreement with BART, which currently has access to the transbay tube off of 7th Street. All these property issues are anticipated to take 1.5 years and will be commenced in 2008. Construction risks include the extent of potential remediation and removal of contaminated soils required within the project area and the potential escalation of material prices for steel, concrete and fuel. These risks have been anticipated by the Port, with escalation factors assumed for materials and labor on an annual basis. Since the funding for this project is dependent on TCIF monies, delay in the appropriation of money may lead to project delays and additional material cost escalations accordingly.

D. Project addresses the TCIF evaluation criteria.

1. Freight System (Goods Movement)

- Throughput: Project provides for increased volume of freight traffic through capacity expansion or operational efficiency.

Based on the Port's planning estimates, "the existing rail system will constrain Port capacity at between 2.5 and 3.5 million TEU per year." (MDAS, p. 2). The 7th Street and Maritime Street intersection is one of 5 key intersections that the MDAS recommended for improvement to dramatically increase the Port

roadway network capacity. Without construction of the 7th Street project, the OHIT facility cannot be adequately constructed to provide additional rail capacity.

The western portion of the project will allow the BNSF lead tracks to be extended, creating full length arrival and departure tracks. The expanded arrival and departure tracks will allow for multiple trains to be assembled, disassembled, and inspected prior to departure or immediately following arrival at the terminal.

According to the OAB EIR, level of service at the 7th / Maritime St intersection will reach LOS F in the year 2025 based on redevelopment plans at the former Oakland Army Base. Reconstruction of 7th Street and the associated intersection improvements will improve conditions to LOS D or better during the peak hour.

- Velocity: Project increases the speed of freight traffic moving through the distribution system.

The elevated portion of the 7th Street Grade Separation project will allow the BNSF leads to be reconfigured for improved access to the main line. Currently, trains must negotiate a tight curve under BART and across the existing 7th Street underpass. Construction of the elevated western portion of the project will allow BNSF trains to take a more direct route, around the BART West Oakland portal, and directly into the main line, along a higher speed route with less risk of derailment.

- Reliability: Project reduces the variability and unpredictability of travel time.

According to the OAB EIR, level of service at the 7th / Maritime St intersection will reach LOS F in the year 2025 based on redevelopment plans at the former Oakland Army Base. Reconstruction of 7th Street and the associated intersection improvements will improve conditions to LOS D or better during the peak hour. This will improve the reliability of truck travel time through the intersection.

The western portion of the project will allow the BNSF lead tracks to be extended, creating full length arrival and departure tracks. The expanded arrival and departure tracks will allow for multiple trains to be assembled, disassembled, and inspected prior to departure or immediately following arrival at the terminal. This will decrease the likelihood of rail cargo delay, increasing reliability.

2. Transportation System (Priorities)

- Safety: Project increases the safety of the public, industry workers, and traffic.

There are multiple safety concerns in the 7th Street corridor that requiring improvement which the 7th Street Grade Separation will address. The former Southern Pacific overhead on 7th Street between Maritime Street and Bay Street has been physically damaged by excessively tall trucks and other vehicles. The structural integrity of the overhead has not been analyzed; however, further damage by excessive height vehicles will increase the risk of its failure.

In addition to the low vertical clearance, the horizontal clearance through the structure is severely limited by traffic lanes that are less than 11' wide and minimal shoulders. The narrow underpass increases the risk of collisions between two vehicles and collisions with the structure itself.

Relocation of BNSF leads will reduce the number of trains at the Maritime Street at-grade crossing. All the BNSF OIG traffic currently travels through an at-grade crossing with Maritime Street. Creation of the 7th Street grade separation project will dramatically reduce the number of trains entering this crossing, and

the associated conflicts they may have with the heavy truck traffic along Maritime Street, and the significant queuing at 7th Street that can back vehicles up into the at-grade crossing.

The 7th Street Grade Separation will improve safety for pedestrian, bicycle and automobile movements to and from Middle Harbor Shoreline Park, a major public access point along the shore of San Francisco Bay. Pedestrian and bicycle access is also limited by the narrow sidewalk on the westbound 7th Street subway beneath the former Southern Pacific overhead, on the main route for pedestrians and bicyclists to Middle Harbor Shoreline Park. Bicyclists are required to dismount and walk through the subway sidewalk or ride through the subway in the street.

- **Congestion Reduction/Mitigation:** Project reduces daily hours of delay on the system and improves access to freight facilities.

In 2006, approximately 31 percent of the Port's total container traffic was transported by rail through its intermodal rail yards. As the Port grows, it anticipates that the percentage of intermodal cargo could increase to approximately 50 percent. However, this critical bottleneck for both rail and truck traffic must be addressed for rail service to be effective. Increasing intermodal transport will reduce the relative volume of Port containers transported by truck on regional roadways, which are already constrained and expected to be come even further constrained from future local and regional growth. Any cargo that is moved by train from the Port benefits the overall transportation system by reducing truck trips to or from the Port of Oakland.

The proposed project will reduce the potential delay and improve level of service at the crossing. Anticipated growth in shipping will result in additional congestion at the 7th St / Maritime Street intersection. By reconfiguring this intersection, the Port anticipates reducing total vehicular delay by 62,000 hours annually when compared to the no-build scenario. See Exhibit D for more information about this delay reduction.

In sum, the proposed project would facilitate the movement of cargo to rail facilities, notably the proposed OHIT, and is therefore key to leveraging the benefits of rail transport for additional future throughput. Additionally, the project will reduce existing congestion and delays on local roadways, which currently results in undesirable environmental effects such as truck and other vehicle idling.

- **Key Transportation Bottleneck Relief:** Project relieves key freight system bottlenecks where forecasts of freight traffic growth rates indicate infrastructure or system needs are inadequate to meet demand.

The 7th Street Grade separation will eliminate the delays in traffic movements due to the current and future volume of rail movements. The rail growth forecast in the MDAS indicates that the LOS will degrade to level F when Port of Oakland TEU volume is between 2.6 and 3.5 million. The Port is currently moving 2.4 million TEUS. During peak traffic periods there are delays to traffic along 7th Street when rail movements occur at the current TEU volume. It is projected that the Port will grow to 2.8 million TEUs within the next five years.

Currently all Port intermodal traffic is forced to thread below the BART columns a 7th Street grade separation structure that has only a limited width and has the risk of being further damaged by excess height vehicles because of its low vertical clearance. Construction of the 7th Street grade separation project will allow the undercrossing to be expanded for new tracks, and so accommodate the projected increase in vehicle traffic.

- Multi-modal Strategy: Project employs or supports multi-modal strategies to increase port and transportation system throughput while reducing truck vehicle miles/hour traveled (VMT/VHT).

Every train that is loaded at the Port can eliminate 750 truck trips, encompassing westbound and eastbound cargo movements, bob-tail moves associated with one-way truck trips, and chassis repositioning required with off-dock transfers. This calculation makes the following assumptions, which are conservative to avoid overestimating truck reduction benefits: eastbound train carries 280 containers, westbound carries 240 containers, bob tail moves add 35% and chassis repositioning adds 10% to the total truck trips. The Port intermodal yards could eliminate over 10,000 truck trips for every 3,500 intermodal containers unloaded and 3,000 intermodal containers loaded at the wharf.

- Interregional Benefits: Project links regions/corridors to serve statewide or national trade corridor needs.

OHIT will improve the efficiency of Northern California's freight rail service, which is part of the transcontinental freight rail system. This will decrease the burden borne for such service by Southern California ports and communities, while increasing the West Coast's ability to accommodate increased transcontinental freight rail traffic. The 7th Street Grade Separation is necessary minimize the impacts of OHIT on the local freight delivery system.

3. Community Impacts

- Air Quality Impact

With development of the 7th Street Grade Separation, the Port of Oakland will be prepared to efficiently handle intermodal cargo growth through the foreseeable planning horizon while minimizing environmental impacts.

The Port of Oakland has estimated the air quality benefits of the proposed project by evaluating the impacts of traffic congestion and delay. Based on previous traffic analyses, the Port projected the no build scenario to be LOS D by 2015 rising quickly to LOS F in 2020. In performing its analysis, the Port assumed full implementation of the ARB Port Truck Rule, which was adopted by ARB on 12/6/07. Emissions from trucks in 2020 are not expected to differ significantly from those in 2030 because the ARB rule making will be fully implemented by 2020.

The Port's preferred design alternative (i.e. proposed project) is a combination of two development scenarios previously studied by the Port and identified in Table 1 as "Alt. 1-2" and "Alt. 6-0." Because traffic analyses had been previously conducted for these two alternatives separately, the Port evaluated emission benefits for the same two alternatives, recognizing that emission benefits of the proposed project are likely to be bounded by the benefits of the two scenarios as evaluated independently. The emissions benefits of the proposed project are presented in Exhibit E.

- Community Impact Mitigation

The 7th Street grade separation should be largely constructed prior to starting construction on the southern portion of the OHIT and tail tracks. Once the roadway is separated from the rail grade, rail construction can proceed with minimal impact to roadway operations.

The 7th Street Grade Separation will also improve safety for pedestrian, bicycle and automobile movements to and from Middle Harbor Shoreline Park, a major public access point along the shore of San Francisco Bay.

Prior to construction of the OHIT, the Port will establish a 15 acre parcel within the development for local truck parking and trucking related services. The 15 acre parcel will be provided in combination with a similar sized parcel adjacent to the Port of Oakland within the City of Oakland's East Gateway portion of the former Oakland Army Base. The combined 30 acres of truck parking will help to minimize the number of truck related businesses in surrounding residential communities.

The Port's Truck Management Plan includes grants to truckers for the purchase of cleaner burning diesel engines that meet today's emissions standards. This program helps to reduce smog from older, higher pollution truck engines with more efficient, less polluting new vehicles. This program reduces the pollutants produced at the Port from older trucks.

- Economic/Job Growth

The Port has been deepening its harbor to accommodate the latest generation of larger container shipping vessels. Along with recent Port-funded terminal enhancements, including redevelopment of former military facilities, the harbor deepening has positioned the Port to be able to bring in first port-of-call vessels that enable more cargo to flow through the Port's facilities. However, to allow these improvements to deliver jobs, tax revenue and other benefits to the region and the state, the Port and the railroads must also implement landside access improvements, such as the 7th Street Grade Separation.

Construction of the 7th Street project is anticipated to involve hundreds of construction workers for a period of approximately three years. The Port's local hiring goals for public works projects, such as 7th Street, are targeted at ensuring that local residents in the communities surrounding the Port benefit the most from construction jobs. The adopted goal is for:

- 50% of the total hours worked by residents of the Port's Local Impact Area (LIA) (Oakland, Alameda, San Leandro and Emeryville).
- 20% of apprentice hours worked by LIA residents.
- Local Business Area residents (Alameda and Contra Costa Counties) to work when LIA residents are not available.

Although the completed grade separation will not provide any direct employment, it's indirect benefits to the Port and community will allow continued trade growth and increased economic impact. Continued growth in trade at the Port of Oakland will proportionally increase the number of jobs in the region, and local and state tax revenues.

To ensure that local residents benefit from growth in international trade, the Port's Employment Resources Development Program (ERDP) conducts extensive outreach to match Oakland residents with jobs provided by Port tenants. ERDP staff work closely with local job seekers to improve their skills and provide training opportunities. In addition to providing employment services, ERDP also helps to educate and train local youth on Port development and career opportunities by coordinating with various schools and training programs for internships within the Port. For the purpose of developing career opportunities in logistics and transportation, SRD and ERDP are involved in community collaborations that address specific issues related to workforce and economic development; such as working with the Chambers, local government, education and community agencies. See Exhibit F for more information regarding economic impacts of the project.

EXHIBIT A

Port of Oakland Container Thruput History (1985-2006)
and 2025 Forecast

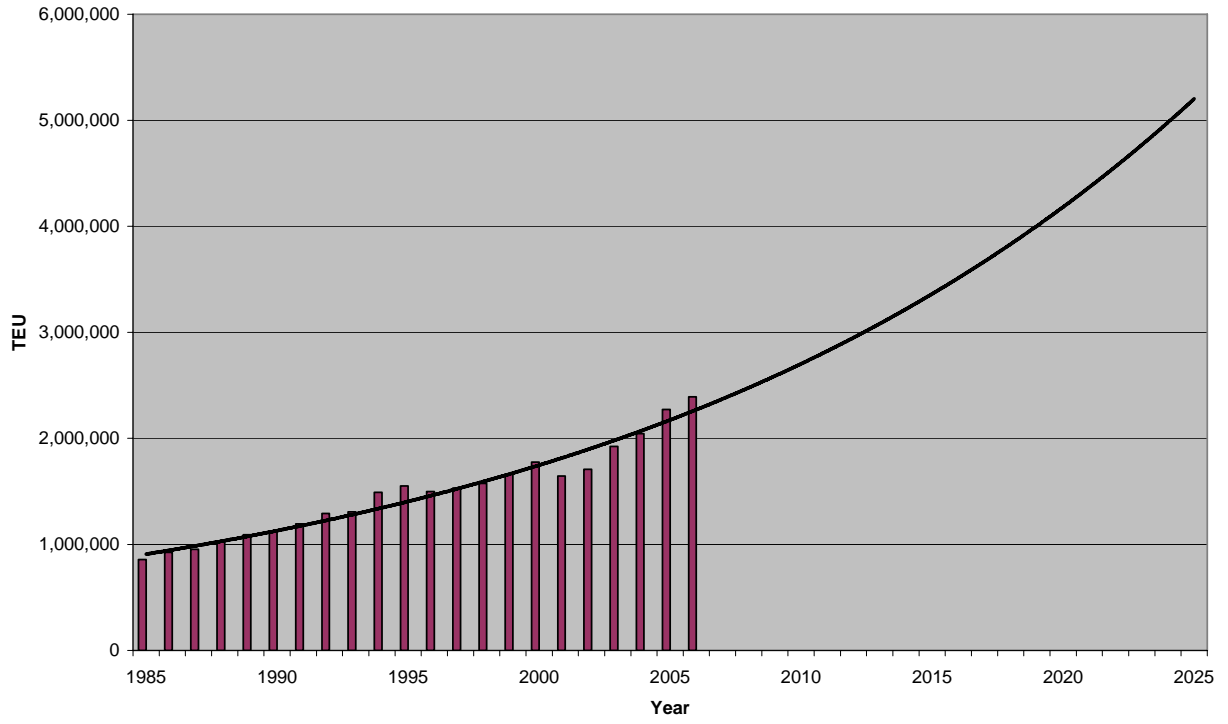
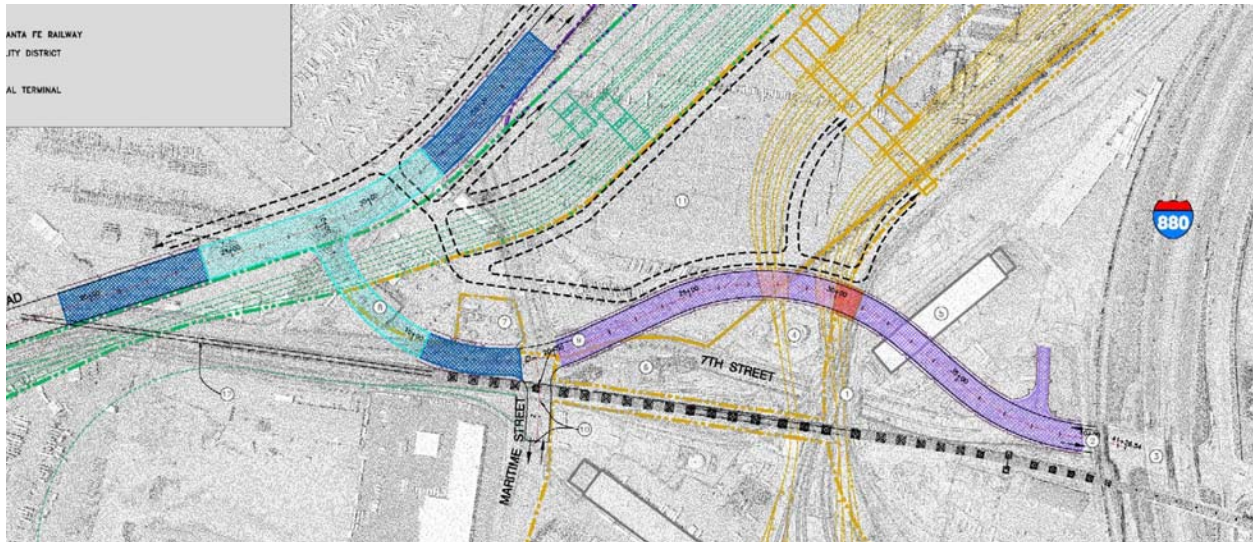


EXHIBIT B

PROJECT MAP & DESCRIPTION



As shown in the figure above, the purple area indicates the new trench location, which will swing to the north of the existing alignment in order to reduce complications keeping traffic moving on 7th Street during construction. The red space in the middle of the purple area indicates the new and future bridge locations for the proposed OHIT. Additional bridge structures can be constructed east of these locations at such a time as further north-south connections are deemed necessary. The trench rises back up to the surface at the existing 7th / Maritime St intersection. The north leg of the existing 7th / Maritime St intersection will be eliminated.

The light and dark blue areas indicate the location of a new roadway overpass. From the existing 7th / Maritime St intersection, 7th Street will rise into an overpass, bridging over the new OHIT-BNSF terminal rail connection and rising to a new 3-way intersection with the northern portion of Maritime Street. From this new intersection, traffic will descend back to existing grade and continue along either 7th Street or Maritime Street.

EXHIBIT C

PROJECT SCHEDULE

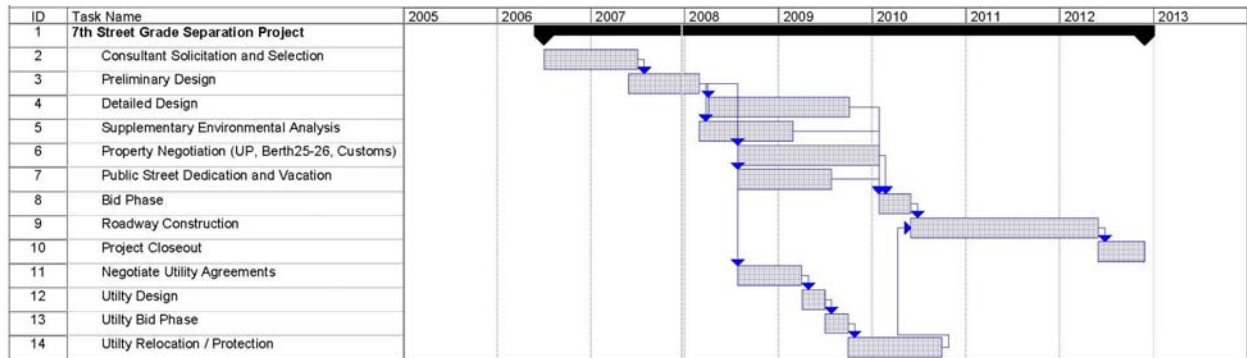


EXHIBIT D

DELAY REDUCTION DUE TO PROJECT

	Intersection	Unmitigated 2025 Peak Hour Average Vehicle Delay (sec)		Mitigated 2025 Peak Hour Average Vehicle Delay (sec)	
		AM	PM	AM	PM
		7th Street	I-880 / Frontage Road	43.1	33
7th Street	Maritime Street	126.8	78.5	53.1	31.9

	Intersection	Estimated Future Peak Hour Volume (veh/hr)	
		AM	PM
		7th Street	I-880 / Frontage Road
7th Street	Maritime Street	1,149	1,226

	Intersection	Estimated Future Unmitigated Annual Vehicle Delay (hrs)	Estimated Future Mitigated Annual Vehicle Delay (hrs)
		7th Street	I-880 / Frontage Road
7th Street	Maritime Street	105,000	43,000

EXHIBIT E

AIR POLLUTION MITIGATION DUE TO PROJECT

Average emissions and emissions benefit.

Scenario	Emissions (tons/year)				
	ROG	CO	NOx	PM10	CO2
No build	1.0	8.8	5.5	0.20	4,718
Alt. 1-2	0.8	8.0	4.9	0.18	4,176
Alt. 6-0	0.8	7.9	4.8	0.17	4,076
2015 – 2030 Cumulative Emission Reductions (tons)					
Alt. 1-2	3.3	13.3	10.0	0.4	8,677
Alt. 6-0	3.8	15.7	11.8	0.5	10,267

Note: ARB Port Truck Rule built into the analysis. That is, we have calculated benefits above and beyond those expected to come from implementation of the Port Truck Rule

EXHIBIT F

ECONOMIC BENEFITS OF 7TH STREET
(AS AN ENHANCEMENT TO OHIT)

Job Category	Number Generated
Direct jobs	3,773
Induced jobs	5,152
Indirect jobs	3,437
Total jobs	12,362

Income Category	Dollars (millions)
Direct personal earnings	\$169.1
Respending and consumption	\$456.9
Indirect income	\$141.8
Total income	\$767.8

Direct Local Economic Impact	Dollars (millions)
Business revenue	\$1,582.2
Local purchases	\$375.8
State & local taxes	\$79.1