# Harbor Subdivision Technical Feasibility Analysis

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Planning and Programming Committee

January 17, 2007



## **Purpose**

- Identify passenger transit services that could be operated with and without existing BNSF freight operations.
- Examine viability and issues affiliated with each potential mode: Heavy Rail, Diesel Multiple Units-DMUs (Metrolink), LRT, and BRT/Rapid Bus.
- Perform a high-level analysis: no in-depth environmental review or community outreach; rough order-of-magnitude of cost and patronage estimates.



# **Harbor Subdivision Route Map**



- Purchased in 1992 from AT&SF
- 26-mile corridor
- 96 grade crossings
- Tracks and crossing signals maintained for low-speed freight service
- Width varies from 30 ft to 150 ft
- Varied land uses



# **Existing BNSF Train Movements**





# **Key Findings**

- Except for Heavy Rail, no fatal flaws to implementing passenger transit service.
- Depending upon service selected, right-of-way may need to be acquired and BNSF operating hours restricted in part of the Subdivision.
- All types of rail service would require track, grade crossings, and crossing warning devices to be upgraded. A wayside train control signaling system would be required.
- With the construction of the Alameda Corridor, the connection to Union Station was severed. Access to Union Station would require a flyover of the Corridor.



### **Key Findings (cont'd)**

- Ridership estimates were extremely sensitive to service frequencies and access to downtown LA.
- LRT had the highest estimated capital costs and assumed a connection to the Metro Blue Line 7<sup>th</sup> Street / Metro Center station.
- BRT had the lowest estimated capital expenses and the flexibility to operate on city streets. BRT assumed a connection to the Metro Blue Line at Long Beach and Slauson Avenues.



#### **Key Findings (cont'd)**

- Non Federal Railroad Administration (FRA) Compliant DMUs also assumed a connection with the Metro Blue Line, resulting in shorter route and lower capital costs than FRA Compliant DMUs.
- The FRA Compliant DMUs would connect to Union Station via a newly constructed flyover of the Alameda Corridor.
- All alternatives would likely generate environmental impacts; FRA Compliant DMUs and BRT would likely generate the least.



#### **Conclusions**

- Except for Heavy Rail, there are no fatal flaws to implementing passenger transit service on the Harbor Subdivision.
- The LRT connection to the Metro Blue Line 7<sup>th</sup> Street / Metro Center station may be difficult due to track capacity issues.
- BNSF retains operating rights in perpetuity, resulting in the need to have discussion/negotiations regarding timed separation of freight and some transit services.



#### **Conclusions**

• Implementation of transit service on the Harbor Subdivision could be done in phases so as to minimize costs and maximize benefits.



#### **Next Steps**

- Proceed with the Alternatives Analysis phase of the environmental process as included in the adopted 2007 Supplemental Budget.
- Develop a scope of work for this effort to address the technical feasibility study's recommendations.

