Presentation to TJPA Board

Transit Center Rail Program Update

March 12, 2009

Transbay Transit Center

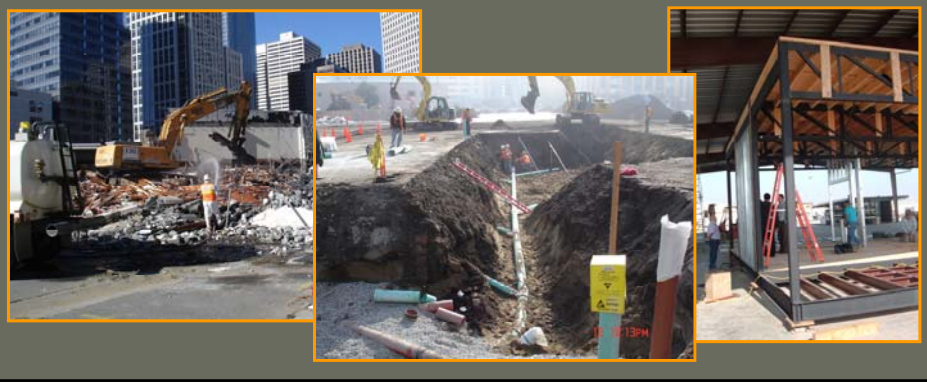
TJPA

Transbay Transit Center

Program Status - Schedule

Temporary Terminal

- Issued NTP on November 1, 2008
- Phase 1 completion scheduled July 31, 2009

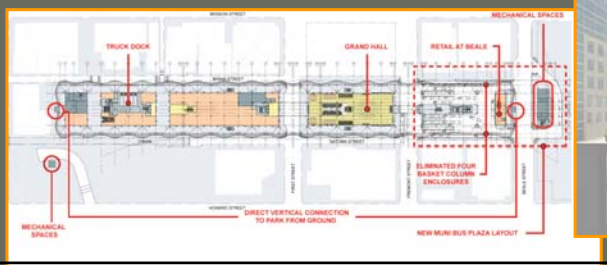


Transbay Transit Center

Program Status - Schedule

Transit Center

- Schematic Design completion April 3, 2009
- Design Development completion October 28, 2009
- Initial Construction package to be advertised October 19, 2009



Transbay Transit Center

Program Status - Schedule

DTX

- Preliminary Engineering continuing through Q2 of 2010
- Award Final Design Q3 2010
- Award Initial Construction Package Q2 2011

Transbay Program
Rail Capacity

- ✓TTC design supports the Caltrain ridership projections reported by Cambridge Systematics and CHSRA projections in their EIS/EIR
- ✓TTC meets all the programmatic needs of Caltrain and CAHSR identified through January 30, 2009

CHSRA Program Changes

CHSRA Program Changes

On January 30, 2009, CHSRA informed TJPA of new program requirements:

- All trains coming to Bay Area will go into the Transbay Transit Center (TTC)
- All high-speed rail platforms must be fully-tangent and a minimum of 400 meters in length
- The scheduled turn-around times will be 40 minutes per train with a 30 minute minimum dwell time
- The TTC should accommodate 12 trains per hour
- The TTC should provide 8 to 10 platform tracks for HSR

Accommodating CHSRA Program Changes

Transbay Transit Center

Current TTC Design

Two-Level Train Box

Transbay Transit Center

TTC Modifications

Changes:

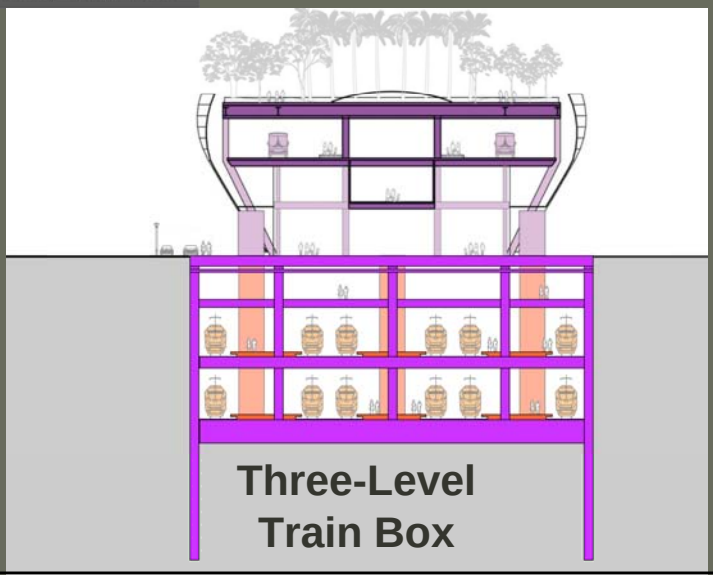
- From 4 trains per hour to 12 trains per hour
- Lengthen Platforms
- From 4 platform tracks to 10 platform tracks

Solution:

- Add another train box level below the currently planned one

Transbay Transit Center

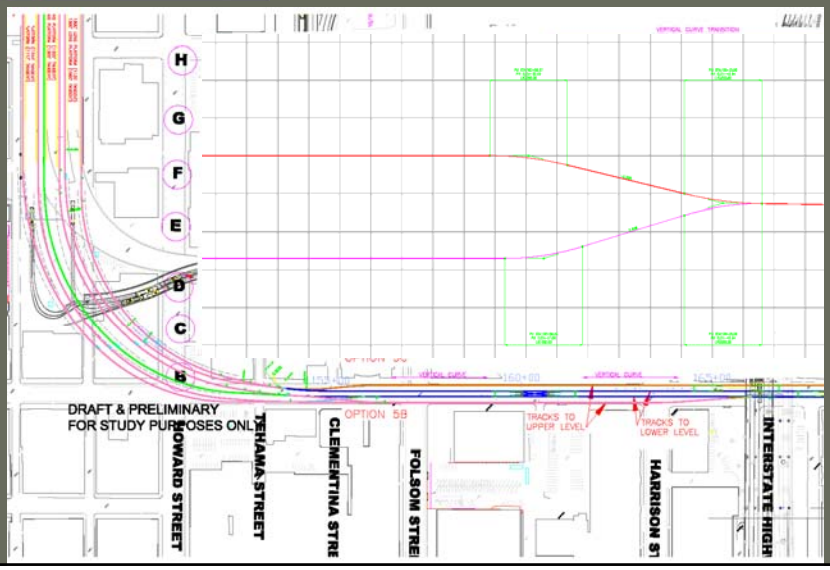
Revised TTC Section



Three-Level
Train Box

Transbay Transit Center

Revised DTX Approach



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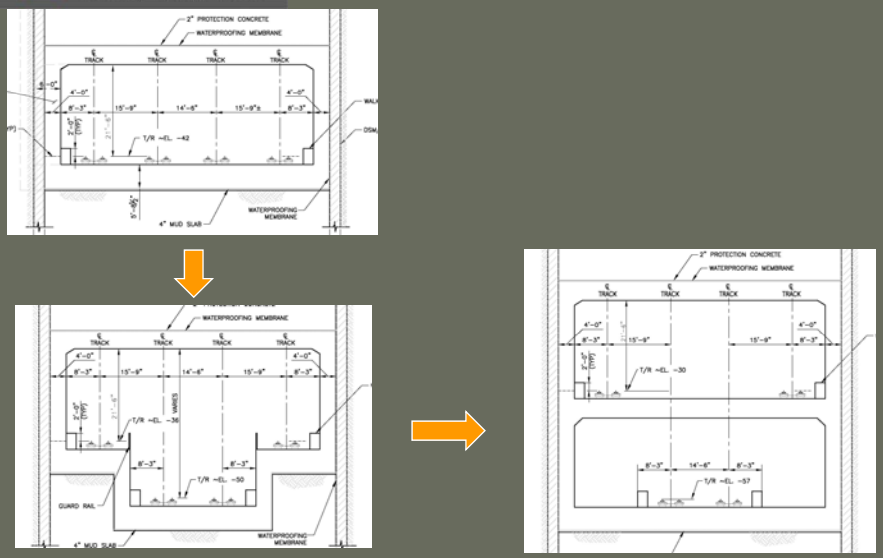
Revised DTX Approach



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Financial Impact of New Requirements

- The cost to build the 3-level train box with bottom-up construction is $894 million
  - approximately $500 million more than the bottom-up cost of the 2-level train box
- The increased cost of the DTX to serve a 3-level train box would be approximately $500 million
- Total program cost increase of $1 billion
- The program cost impact will be greater if the box is not built in Phase 1

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Evaluating CHSRA Program Changes

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Bay Area to Los Angeles Air / HST Traffic Comparison

- In 2005 there were 8,562,048 total air trips from the three Bay Area airports to four Los Angeles airports
- CHSRA projects 8,358,500 total HST trips and 5,572,820 air trips between Bay Area and Los Angeles in its base case for 2030
- In its high end case, CHSRA projects 14,478,090 HST trips and 836,215 air trips

Peak Hour Operation CHSRA 2030

- Peak operating hours will include 3 hours in the AM and 3 hours in the PM
- Operating 12 trains per peak hour
  - 1,000 seats per train
  - 12,000 inbound and 12,000 outbound seats per peak hour
- Projecting 12.7 million passengers annually, an average of 34,800 per day

Operations of Established HSR Systems

Tokyo

- Operates 183 trains per day
- Operates 13 trains on 6 tracks in the peak hour
- Tokyo to Osaka line carries 145 million passengers annually
- Japan's Population is 127 million
- Japan HSR has been in operation since 1964

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CHSRA
Capacity vs Ridership

Maximum ridership projection at TTC is 12.7 million boardings and alightings per year in 2030, an average of 34,800 passengers per day

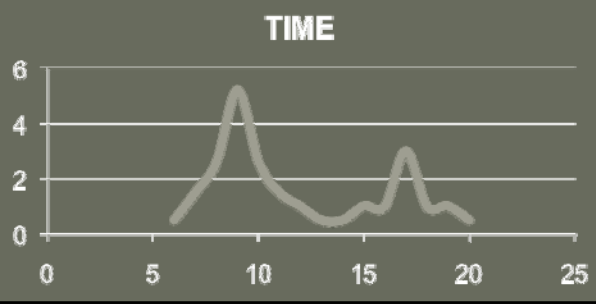
Assuming on a given day that 2/3 of passengers are moving in one direction would equate to 23,200 trips in one direction in one day

Transbay Transit Center

Capacity vs Ridership

CHSRA has indicated that they will have 6 hours of peak service with 12 trains per hour

Assuming that 2/3 of daily trips happen in these peak hours



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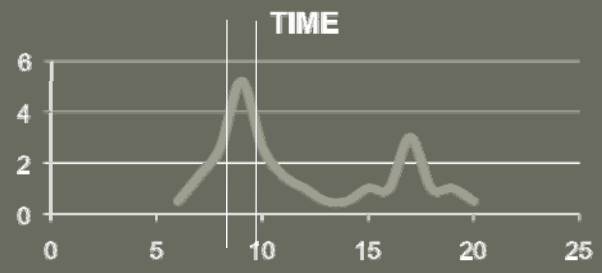
Capacity vs Ridership

Further assuming that 2/3 of

daily peak trips occur in a single peak



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Capacity vs Ridership

Trips High Direction	Total Trips in Peaks	Total Trips in Peaks	Higher Peak Trips	Higher Peak Trips	Highest Hour Trips	Highest Hour Trips	Seat Use
23,200	67%	15,470	67%	10,310	50%	5,155	43%

Even at this highest hour, with 12 trains per hour, the trains would be operating less than half full

Transbay Transit Center

Transbay Program Status

Transbay Transit Center

Transbay Program Capacity

- TTC can support:
  - 6 HSR trains/hour on 4 platforms
  - 40 minute scheduled and 30 minute minimum dwell times
  - 400 meter platforms
- Increased demand could be addressed by:
  - Operational changes to decrease dwell times
  - Adding capacity

Transbay Program Design

- Transbay Program is beyond “Shovel Ready” – we are in construction
- Design of Transit Center is nearing critical decision juncture in Design Development
- Points of interface between TTC and DTX being defined

Program Schedule

- Considering Award of Construction Manager - General Contractor for the Transit Center Today
- Demolition Package prepared for advertisement
- Scheduled to advertise First Transit Center Construction Package on October 19, 2009
- Provide Direction to Design Team by end of May 2009 on whether to include Train Box construction in Phase 1

Job Creation

- Phase 1 will create approximately 570 construction jobs in 2009 and 2010
- The current Phase 1 scope will create more than 6,100 total jobs
- The Transbay Transit Center Program and the associated redevelopment projects will create almost 38,000 construction jobs

Status Summary

- Current rail design capacity exceeds all 2030 ridership projections for Caltrain/CHSRA
- $390 million required to construct the current train box in Phase 1
- New CHSRA operational requirements, without adequate justification
- Identified technically viable solution to address new CHSRA operating requirements at $1 billion plus cost increase to program

Objective

- Continue to advance the Transit Center Program because:
  - Phase 1 is fully funded
  - Supports Caltrain ridership projections of 31,500 per day
  - Exceeds the CHSRA EIS/EIR ridership projection of 12.7 million per year
  - Creates immediate jobs and avoids delay costs

Next Steps

- Have Board provide direction to the design team whether or not to include the 2-level or 3-level train box in Phase 1 construction by end of May
- Continue to work with CHSRA to cost effectively optimize operations at the Transit Center
- Continue to pursue funding to build train box in Phase 1