

Caltrain Downtown Extension Study

Ridership Forecast Summary

presented to

Transbay Joint Powers Authority

presented by

Cambridge Systematics

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Project Summary

- **Began with Transbay (Bay Bridge/BART) Study**
 - AC Transit – physical space requirements @ TTC
 - Transit crowding analysis
 - More refined transit forecasting approach
 - Included staff participation from BART, AC Transit, WETA
- **Most recent effort also analyzed Peninsula Corridor**
 - Focus on Caltrain riders
 - Included on-board survey of passengers @ 4th/Townsend
 - Modes of access/egress @ TTC – Caltrain, AC Transit, HSR



Caltrain TTC DTX - Project Benefits Summary

- **Links workers to Downtown SF Jobs**
 - Over 300,000 jobs within ½ mile of TTC (Year 2030)
- **Over 8,000 cars removed each work day**
 - Vehicle hours of travel reduced by almost 5% in corridor
- **Makes transit work better**
 - Substantial travel time savings for existing riders
- **Air quality/energy savings**
 - Substantial GHG gas reductions (nearly 5% in corridor)
 - Gasoline consumption reduced by 3,800,000 gallons (annual)

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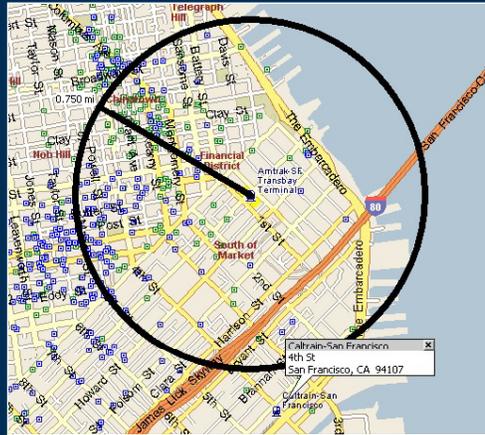
Setting

- **Downtown San Francisco projected to add over 145,000 jobs between 2005 and 2030**
 - About 10% of the region's job growth
- **Traffic congestion is projected to get much worse**
 - 1.7 million new people; 1.5 million new jobs in Bay Area
- **Job growth and economic vitality for San Francisco will be predicated on improved accessibility**

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Transbay Transit Center Proximity to Jobs

| Caltrain Station | 2030 Jobs within ¼ mile of station |
|--------------------------|------------------------------------|
| 4th & King | 100,000 |
| Transbay Terminal Center | 330,000 |



TTC will serve 3 times more jobs than 4th & King Station

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Caltrain Ridership Forecasts

| Scenario | 4th & King | Transbay Terminal | Total | Growth from 2005 |
|---|---------------|-------------------|---------------|------------------|
| 2005 Observed | 14,200 | --- | 14,200 | --- |
| 2030 No Project | 30,900 | --- | 30,900 | 125% |
| TTC Extension (6 trains to TTC)* | 17,100 | 31,500 | 48,500 | 242% |
| TTC + \$8 gas | 21,300 | 37,600 | 58,900 | 315% |

*TTX extension trips are interpolated from forecasts of 5- and 7-train scenarios.

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DTX Air Emission/Energy Benefits

- 8,700 daily vehicles taken off area highways
 - Daily vehicle miles of travel (VMT) reduced by 300,000
 - 8,400 fewer vehicle hours of travel (VHT)
- Annual benefit is 42,000 tons of CO²
 - Each vehicle mile of travel emits ~ 425 grams of CO²
 - Assumes a Caltrain annualization factor of 300
- Project will save 3.8 million gallons of gas / year
 - 90,000 less barrels of oil consumed



Travel Times to SF Financial District

Origin: Mountain View

| Mode of Travel | Travel Time (minutes) |
|--|-----------------------|
| Caltrain to 4th & King + Bus/Muni | 65 |
| Caltrain to 4th & King + walk to destination | 70 |
| Caltrain to Millbrae + BART | 75 |
| Drive Alone (30-35 mph speed) | 80 |

Direct Caltrain to TTC = 50 minutes

15-30 minutes travel time savings



High Speed Rail – The Connection to LA

- Provides direct connection between Downtown San Francisco/Silicon Valley to Los Angeles
 - Also improves accessibility for Central Valley workers
- Los Angeles Union Station to San Francisco in 2 ½ hrs
 - Express trains
 - Service to San Jose, Central Valley, Sacramento, San Diego
- Over 26,500 daily HSR riders at TTC in 2030
 - ~20% of riders travel w/in Bay Area
 - Rest of riders are from outside Bay Area

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Caltrain Ridership Forecasts

Benefits of Jobs in Downtown San Francisco

- Downtown San Francisco is well-served by mass-transit
 - Commuters more likely take transit than in suburban locations
 - Commuters more likely to walk to lunch / for errands than in suburban locations
 - Caltrain connects Silicon Valley; HSR connects the state to SF
- Some statistics:
 - Trip lengths for downtown SF residents < ½ regional average
 - Transit shares to SF are 4 x regional average (all trips)
 - New Federal report confirms actual reductions in daily trip-making for transit-oriented development

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Summary

- **Caltrain Downtown Extension to Transbay Transit Center has many benefits**

- High ridership – Brings 31,500 daily riders to the Transbay Transit Center
 - Over 8,000 daily autos removed in Peninsula Corridor
- Accessibility - Links workers to Downtown SF Jobs
 - Over 300,000 jobs within ½ mile of TTC (Year 2030)
- Substantial travel time savings for existing transit riders
- GHG gas reduced by nearly 5% in corridor