

Transbay Ridership Analysis

presented to
Transbay Joint Powers Authority

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Transbay Ridership Study - Overview

- Determine future transit ridership at Transbay Transit Center
 - AC Transit (bus bay requirements)
 - Caltrain
- Analyze the impact of capacity constraints on Transit
- More accurate ridership estimates with improved travel forecasting tools
- Provide analysis needed for the TIFIA loan application
- Project study team includes TJPA, AC Transit, BART, MTC and WTA

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Tasks

- Update MTC model components
 - Add all transit submodes (BART, Ferry, Caltrain, Express Bus, LRT and Local Bus)
- Update Networks, Time-of-Day Models and Assignment procedures
- Detailed Model Validation in the Transbay Corridor
- Future Year ridership forecasts
 - Apply Capacity Constraints on BART and MUNI
 - Perform sensitivity tests

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Projected Growth in Travel in the Corridor

- Growth in jobs faster than population in San Francisco County
- Huge increases in commuter trips and total person trips in the corridor
- Increased Transbay travel demand – Can BART meet demand for service?

Type	Increase from 2005 - 2030
Population in SF	16%
Employment in SF	44%
Commuter Trips to SF	51%
Total Person Trips to SF	43%

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2005 6-9 AM Bay Bridge/BART Tube Travel

Mode	Vehicles	% of total	Persons	% of total
Single Occupant Cars	21,608	63%	21,608	21%
2 Person Car Pools	5,703	17%	11,406	11%
3+ Car Pools	6,708	20%	21,754	22%
Buses	N/A	0%	3,508	3%
BART	N/A	0%	41,554	41%
Ferries	N/A	0%	1,043	1%
Total	34,119	100%	100,873	100%

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Innovative Features of This Project

- New capability to model Transit crowding
 - Model passenger perception that travel time is more onerous when they have to stand or when the vehicle is crowded
 - Increased wait times when passengers are unable to board a crowded vehicle
- Apply a range of capacity assumptions for BART and MUNI
- Analyze ridership and traffic volumes for 4-hour AM and PM peak periods and peak hours

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Status

- Base year model validation is underway

Mode	2005 Observed	2005 Modeled	% Difference
Bus Ridership			
Bay Bridge	11,841	14,255	20%
Dumbarton Bridge	789	1,016	29%
Ferry Ridership			
All East Bay Ferries	3,302	3,712	12%
BART Ridership			
Transbay Ridership	150,814	137,687	-9%
All Transit	166,745	156,671	-6%

Target = +/- 15% or 500 riders

- Preliminary work on Future Year Forecasts has begun

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