Bottom Line

- State-of-Good Repair essential for reliable transit service – large funding shortfalls
- BART **not** out of capacity today
- Ridership could dramatically grow
- Capacity improvements not in regional plan (T2035)
- MPO’s need to consider transit capacity in regional Sustainable Communities Strategy (SCS)
BART Basics

- 360,000 daily riders
- 104 miles
- 43 stations
- 1.3 billion annual passenger miles
Bay Area 2035 Forecast Growth

Population 2035
- 2 million more
- 37% of regional growth in SJ, SF and OAK
- 2/3 of regional in “Urban Core” (around Bay)

Employment 2035
- 1.8 million more
- Of top 10 growth areas, 2/3 of regional growth will be in SJ, SF and OAK
California Climate Policy Framework

- AB32 CA Global Warming Solutions Act
  - 1990 emissions levels by 2020

- Executive Order #S-3-05 (2005)
  - 80% below 1990 emissions by 2050

- SB375 Sustainable Communities Strategy (2008)
  - Regional GHG Emission Targets for Autos / Light Trucks
California SB 375

- Reforms Regional Transportation Plan (RTP)
- California Air Resources Board (CARB) establishes regional GHG targets for cars and light duty trucks (travel)
- Regions design Sustainable Communities Strategies (SCS) as part of their RTP
- Consistency between transportation investments, land use, and housing allocations
Emission Impacts of Proposed Targets

- Current plans
- Proposed targets
- Vehicles, Fuels, and SB375
% reduction in GHG / capita from 2005 levels

- Established for 2020 and 2035

<table>
<thead>
<tr>
<th>MPO</th>
<th>2020 Target</th>
<th>2035 Target</th>
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<tbody>
<tr>
<td>Bay Area</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Sacramento</td>
<td>7%</td>
<td>16%</td>
</tr>
<tr>
<td>San Diego</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>8%*</td>
<td>13%*</td>
</tr>
</tbody>
</table>

* Subject to SCAG board approval
50+ Years of History, 35+ Years of Service

1946: Bay Area Council & others begin discussions
1957: BART District Created
1962: Voters Approve BART Plan
1964: Construction Begins
1970: BART Car Prototype Created
1972: BART Carries First Passenger
Critical Reinvestment Needs

- After 35 years, reinvestment and upgrades are vital
- Investment projects include:
  - Replace/Add Rail cars
  - Station Modernization
  - Track Improvements
  - Traction Power
  - Capacity Enhancements
  - Train Control/Communication systems
BART Capital Program for Core System
Major Funding Shortfalls

BART Capital Program (a)
($billion)

Core Infrastructure Renovation: $12 billion
Existing Fleet Replacement: $4 billion
Capacity Modifications: $6 billion

Not shown are $30 million in Security improvements and $30 million in Quality Enhancements
Funding as "programmed" in MTC 2035 Regional Transportation Plan
BART Ridership

**Current Travel Markets**

2/3rds of BART trips to/from Market Street stations

Weekday Trips by Sub-Area
- 48%: Transbay
- 28%: intra-West Bay
- 24%: intra-East Bay
BART Average Daily Ridership
Historic Trends and Projections

BART Ridership and SF Job Growth

SF Jobs (1)

2035 High: 660,000
2035 Low: 536,000

Daily BART Riders

SF Jobs (1)

(1) US Bureau of Labor Statistics
Patrons Entering & Exiting BART (15-Minute Intervals)

Source: BART DAS data, April 2008
1) Policy (pricing, parking)

2) Land Use / Job Centers
   - Expand where ample transit capacity
     - reverse commute
     - regional employment sub-centers
     - off-peak
Capacity Constraints

**Where Could BART See Problems in the Future?**

- **On-Board Train Crowding**
  - Passenger per Seat or per Car (Load Factors)
  - Train Control System
  - Vehicles

- **SF Downtown Stations**
  - Platform Crowding (PM)
  - Stair, Escalator & Faregate Queuing (AM)
  - Emergency Exiting

- **Yards & Shops**

- **Station Access**
## Transbay Corridor Management

**Illustrative – Phased Improvements over 50 Years**

<table>
<thead>
<tr>
<th>Max. Load Point in peak direction (future peak hour increase)</th>
<th>Short &lt; 2,500</th>
<th>Medium 2,500 – 7,500</th>
<th>Long 7,500 – 12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BART</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Remove Train Seats</td>
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<tr>
<td>Demand Management Strategies</td>
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<td>Station Access</td>
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<td>Station Capacity</td>
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<td>3-Door Train Fleet</td>
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<td>Train Control Improvements</td>
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<tr>
<td>Expand Train Fleet</td>
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<tr>
<td>Construct New Transbay Tube + Stations</td>
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<tr>
<td><strong>Bus</strong></td>
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<tr>
<td>Transbay Terminal</td>
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<tr>
<td>Bay Bridge Contra-Flow Lane</td>
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</table>
JR Railway (Japan)
Supply-Side Strategy
Questions?