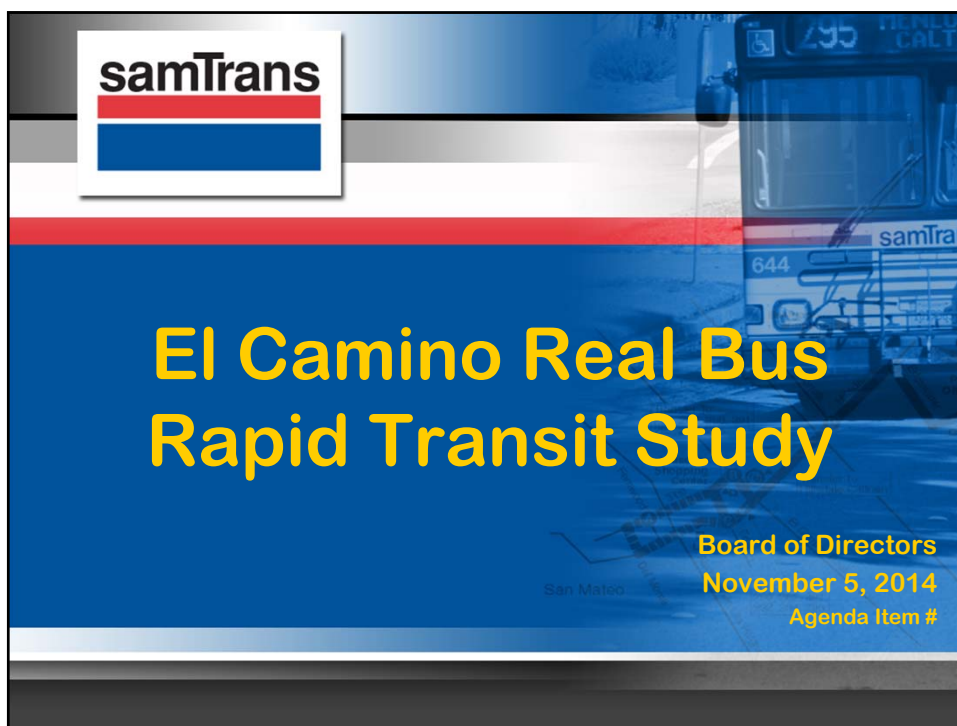
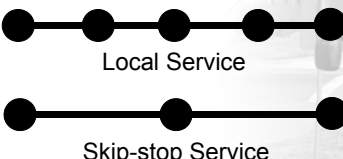




What is Bus Rapid Transit?



- **Rapid Bus**
 - Mixed-flow operations
 - Skip-stop service
 - Signal/street priority
- **Full BRT**
 - Dedicated lanes
 - Enhanced stations
 - Rail-like operations
 - High capital outlay
 - Challenges




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Background



- **Caltrans 2013 Planning Grant**
 - Board briefed August 2013
 - Focus is long-term BRT implementation phasing plan
 - Short-term Rapid Bus service opportunities
 - Build off SSP, Grand Boulevard Initiative
- **An opportunity to**
 - Improve experience for current customers
 - Attract new riders
 - Support planned growth per the Grand Blvd. Initiative
 - Improve options for Caltrain riders
- **Feasibility study, non-binding results**

3

Phasing Plan



- **Short-term operating plan focused on Rapid service**
- **Potential long-term operating plan focused on intensive “Full BRT” service**



ECR

Now



Rapid

Short Term



BRT

Long Term

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Study Goals

samTrans

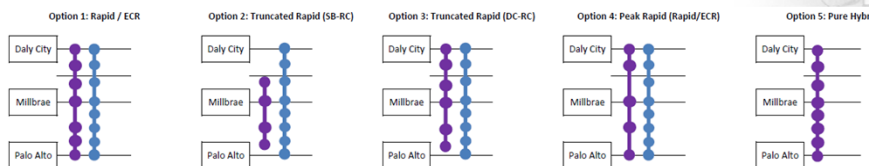
- Essential system components
- Impacts to customer
- Ridership forecasts
- Capital and operating costs
- Funding strategy

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Service Concepts

samTrans

- How many stops?
- How frequent?
- What about ECR?
- Maximum ridership, minimize costs



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Rapid Bus Alternatives

samTrans

- **ECR: 102-104 stops in each direction**
- **Service concepts**
 - **Overlay Rapid over current ECR**
 - Full Overlay with 37 stops (Daly City – Palo Alto)
 - Truncated Overlay with 32 stops (Daly City – Redwood City)
 - Truncated Overlay with 23 stops (San Bruno – Redwood City)
 - **Hybrid Route (ECR with fewer stops)**
 - Hybrid A: 76 stops, 10 to 12 minute frequency
 - Hybrid B: 50 stops, 7.5 to 12 minute frequency

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Key Study Findings

samTrans

- **Ridership Forecasts**
 - **Fewer stops = reduced travel time**
 - Can save 15-30 minutes per trip
 - **Transit priority at signals**
 - Can save up to 15 minutes per trip
 - Technologically viable
- **Rapid Service can reduce travel times by 25%**

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Rapid Overlay of ECR

samTrans

- **ECR ridership in 2020**
 - 16,600 daily boardings
 - \$14.5 million annual net operating cost
 - 15% of fixed-route system
- **Impact of Rapid Bus overlay**
 - Ridership grows 19% to 34%
 - 19,700 to 22,200 daily boardings
 - 3,100 to 5,600 new daily boardings
 - Operating costs increase 34% to 59%
 - \$5.7 million to \$10.3 million annually
 - Capital costs potentially minimal

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Rapid Hybrid Replaces ECR

samTrans

- **Hybrid bus ridership**
 - 25% to 50% fewer stops
 - Ridership grows 6% to 35%
 - 17,700 to 22,500 daily boardings
 - 1,100 to 5,900 new daily boardings
 - Operating costs increase 8% to 51%
 - \$1.3 million to \$8.4 million annually
 - Capital costs potentially minimal
- **Difference with Rapid overlay**
 - Ridership growth similar
 - 18% to 77% lower in operating costs

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Rapid Bus Capital Costs

samTrans

- **Optional features**
 - **Enhanced stops (\$11 million)**
 - Canopy, benches, windscreen, lighting, signage
 - Real-time information
 - About \$150,000 per stop
 - **Transit signal priority (\$2.4 million)**
 - 120 signals
 - Reduces travel time by another 15 minutes

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Full BRT Concept

samTrans

- **Potential long-term option**
 - Exclusive bus lanes in each direction
 - Queue jumps, transit signal priority
 - 37 stops, maintain ECR
 - 15-minute frequency for both ECR and BRT
- **Ridership grows 27%**
 - 33,800 daily boardings in 2040
- **Operating costs increase \$6.9 million annually**
- **Capital costs \$100 million for bus lanes, \$47 million for 74 enhanced stops**
- **Engineering and other challenges**

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Next Steps



- **Public input**
 - **Public meetings**
 - Nov 13 – South San Francisco Council Chambers
 - Nov. 18 – SamTrans
 - **GBI Task Force and Working Committee**
 - **SamTrans CAC**
 - **Cities and others upon request**
- **Transit signal priority**
 - **Ongoing coordination with Caltrans, C/CAG**
 - **Pursue grants**
- **Monitor system performance and consider within context of Strategic Plan**

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