BART Special Board Meeting
December 10, 2009
Item 1 - Approval of Port Agreements
Item 2 - Recommendation for Contract Award
2009 in Review

- OAC Selected by MTC for $70M ARRA Funding  Feb
- BART Board approved Project full funding plan  May
- Released Request for Qualifications / Proposals  May
- Pre-qualified four teams  July
- Four Proposals received  Sept
- Best Value Evaluation & Buy America Audit  Oct-Nov

Today

- Item 1 - Approval of Port Agreements
- Item 2 - Authorize Contract Awards
Automated People Mover System (APM)

Replace AirBART with:

- Automated People Mover (APM)
- Exclusive 3.1 mile guideway
- Extremely consistent & reliable
- Seamless ticketing
- Comfortably carry 3.2 Million Annual Passengers (MAP)
- Expandable to 4.9 MAP
- Trains every 3.5 – 4.5 minutes (technology dependent)
- Ride time 6 – 9 minutes (technology dependent)
Item 1 - Port of Oakland Agreements

Two Agreements

Development Agreement
  - Allows Construction, Testing and Startup on Airport Property

Use Agreement
  - Allows for Operation and Maintenance of the OAC on Airport Property
Item 1 - Development Agreement

Key Terms

- Provides access to the Airport to construct the Project
- Provides for funding contribution $45.4M ($1.5M Spent)
- Port funding limited to Passenger Facility Charges (PFCs)
- FAA expected to approve collection PFCs in December 2009 and to approve use of PFCs by May 2010
- Contributions are tied to Airport landings ($1.73 per person or ~ $7.5M to 8.5M per year)
- Port will own all facilities paid with PFC funds as required by the FAA
Item 1 - Use Agreement

Key Terms

- Allows BART to operate and maintain the Connector on Airport property for twenty-five (25) years at a cost of $1 per year.
- Non-compete clause
  - Port will not operate competing bus system
  - Minimum parking rate of $12 per day for parking within walking distance of Terminals including the economy lot
- Maintains 6 minute walk time if a new third terminal is constructed.
Item 2 – Recommendation for Contract Award

One Proposal - Two Contracts

**Design / Build Construction Contract (3 1/2 years)**
- Includes all design and construction
- Installation of AGT system, testing and startup to revenue service

**Operations and Maintenance (O&M) Contract (20 years)**
- 20 years Operations & Maintenance
- 20 years of Capital Asset and Replacement Program (CARP) costs
- Must meet high availability (99.5%) requirements for full payment
### Pre-qualified Teams & Technologies

<table>
<thead>
<tr>
<th>Prime</th>
<th>Shimmick Skanska Herzog JV</th>
<th>Walsh Construction Co.</th>
<th>Kiewit Pacific Co.</th>
<th>Flatiron/Parsons JV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Designer</strong></td>
<td>STV, Inc.</td>
<td>T.Y.Lin Intl.</td>
<td>HNTB</td>
<td>Parsons Transp.</td>
</tr>
<tr>
<td><strong>Constructor</strong></td>
<td>Shimmick Skanska Herzog JV</td>
<td>Walsh Construction Co.</td>
<td>Kiewit Pacific Co.</td>
<td>Flatiron West Inc</td>
</tr>
<tr>
<td><strong>Vehicle</strong></td>
<td>Leitner – POMA</td>
<td>Mitsubishi</td>
<td>Bombardier</td>
<td>Doppelmayr Cable Car</td>
</tr>
<tr>
<td><strong>O&amp;M</strong></td>
<td>Leitner - POMA</td>
<td>Crystal Mover Services</td>
<td>Bombardier</td>
<td>Doppelmayr Cable Car</td>
</tr>
</tbody>
</table>
Part One – Selecting the best value proposal
Review of the entire proposal including:
  Team
  Technology
  Operations and Maintenance
  Financial - including Total Price
  (Total Price = Construction Bid Price + 20 years of O&M)

Part Two – Project Affordability
Proposer’s Total Price + BART Delivery Costs + Financing cost

Compare Funding/Financial Plan Approved in May 2009 to the Funding/Financial Plan Today
Part One
Pre-Proposal Activity

- RFP required all questions, clarifications and requests for changes be made prior to the proposal due date.
- Held full day meetings with each prequalified team.
- Staff restated intent not to negotiate.
- 309 Questions received and answered.
- 12 Addendums issued.
- RFP made no provisions for a Best and Final Offer (BAFO) process
Part One
Proposal Review

- Four proposals received September 22nd
- All four proposers signed the Contract Proposal forms indicating acceptance of all Contract terms and conditions.

However the Kiewit Proposal:
1. Included a letter, with twenty (20) significant “clarifications” (deviations) from the Districts terms
2. Omitted or modified required elements of the Price Proposal

Selection Committee determined Kiewit proposal was non-responsive:
- Failed to provide a required element of the Price Proposal
- Clarifications had significant and material adverse impact on cost & operability of the project
- Proposal was incomplete and indeterminate
- Procurement process did not allow for BAFO process
## Part One
### Summary of Responsive Proposals

<table>
<thead>
<tr>
<th>Proposer</th>
<th>Estimated</th>
<th>Shimmick Skanska Herzog JV</th>
<th>Walsh Construction Co.</th>
<th>Flatiron/Parsons JV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Provider</td>
<td></td>
<td>Leitner-Poma</td>
<td>Mitsubishi</td>
<td>Doppelmayr</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>Cable</td>
<td>Self Propelled</td>
<td>Cable</td>
</tr>
<tr>
<td>Design-Build Price</td>
<td>$416,000,000</td>
<td>$421,200,000</td>
<td>$404,315,174</td>
<td>$361,0221,150</td>
</tr>
<tr>
<td>Annual O&amp;M Pymt</td>
<td>$4,900,000</td>
<td>$6,450,306</td>
<td>$7,173,848</td>
<td>$4,906,865</td>
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<tr>
<td>Annual CARP Pymt</td>
<td>$900,000</td>
<td>$400,000</td>
<td>$1,056,929</td>
<td>$768,397</td>
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<tr>
<td>Total Price</td>
<td>$480,000,000 (TARGET)</td>
<td>$517,104,284</td>
<td>$519,546,052</td>
<td>$440,475,810</td>
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<tr>
<td>Best Value Rating</td>
<td>Acceptable -</td>
<td>Acceptable +</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Proposal Ranking</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Best Value Proposal = Flatiron/Parsons JV**
Flatiron/Parsons JV Proposal

- Complete proposal - no exceptions or clarifications
- $440M Total Price is below the $480M Target
- Proposal met all system performance requirements
- Provided evidence of financial strength
- Letters from surety companies supporting bonding requirements
- Pre-Award Audit found Flatiron/Parsons JV Buy America compliant

Disadvantaged Business Enterprise Program (DBE)
- Civil Construction & Trucking Goal 18% - Commitment = 20.21%
- Professional Services (no goal) - Commitment = 33.1%
Flatiron/Parsons JV Proposal
Flatiron & Parsons

**Flatiron**
- Heavy civil construction
- Design-build experience
- Regional Headquarters in Benicia

**Parsons**
- Planning & Transit design
- Bay Area for over 50 years
- Design-build experience
- California-based

Bay Bridge East Span
Carquinez Suspension Bridge
MIA Mover APM, Miami
- Doppelmayr/Garaventa Group is the world leader in ropeway engineering
- Production facilities and sales and service locations in over 33 countries
- More than 14,500 installations in over 80 countries.
- Doppelmayr Cable Car (DCC) designs and constructs functional, reliable Automated People Mover (APM) systems since 1996
## Doppelmayr Cable Car Systems

<table>
<thead>
<tr>
<th>System Name</th>
<th>Location</th>
<th>Application</th>
<th>Start of Operation</th>
<th>Capacity</th>
<th>Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandalay Bay Tram</td>
<td>Las Vegas, USA</td>
<td>Casino</td>
<td>1999</td>
<td>1,900 pphpd*</td>
<td>4</td>
</tr>
<tr>
<td>Air-Rail Link, Birmingham, UK</td>
<td></td>
<td>Airport</td>
<td>2003</td>
<td>1,608 pphpd*</td>
<td>2</td>
</tr>
<tr>
<td>International Airport Link</td>
<td>Toronto, Canada</td>
<td>Airport</td>
<td>2006</td>
<td>2,150 pphpd*</td>
<td>3</td>
</tr>
<tr>
<td>International Airport Shuttle, Mexico City, Mexico</td>
<td></td>
<td>Airport</td>
<td>2007</td>
<td>600 pphpd*</td>
<td>2</td>
</tr>
<tr>
<td>MGM CityCenter Shuttle, Las Vegas, USA</td>
<td></td>
<td>Casino</td>
<td>2009</td>
<td>3,000 pphpd*</td>
<td>3</td>
</tr>
<tr>
<td>Tronchetto - Piazzale Roma Shuttle, Venice, Italy</td>
<td></td>
<td>Urban</td>
<td>2010</td>
<td>3,200 pphpd*</td>
<td>3</td>
</tr>
<tr>
<td>Cabletren Bolivariano, Caracas, Venezuela</td>
<td></td>
<td>Urban</td>
<td>2012</td>
<td>3,500 pphpd*</td>
<td>5</td>
</tr>
<tr>
<td>New Doha International Airport Shuttle, Doha, Qatar</td>
<td></td>
<td>Airport (airside)</td>
<td>2012</td>
<td>6,000 pphpd*</td>
<td>2</td>
</tr>
</tbody>
</table>

* People per hour per direction
Flatiron/Parsons JV Proposal
Doppelmayr Cable Car

- 8 min 12 sec in vehicle travel time
- Trains arrive every 4 min 35 sec (headways)
- Bart platform to Airport Terminal door travel time 14 min 30 sec
- 4 – 3 car trains (expandable to 4 car trains)
- Open steel truss guideway
- Maintenance, control center and cable drive machines at the future Doolittle Station site
<table>
<thead>
<tr>
<th>Category</th>
<th>May 2009 (Estimated)</th>
<th>Dec 2009 (Bid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Construction Cost</td>
<td>$416M</td>
<td>$361M (Bid)</td>
</tr>
<tr>
<td>BART Spent to Date</td>
<td>$33M</td>
<td>$34M</td>
</tr>
<tr>
<td>BART Delivery Costs</td>
<td>$42M</td>
<td>$46M</td>
</tr>
<tr>
<td>Construction Contingency*</td>
<td>$38M</td>
<td>$43M</td>
</tr>
<tr>
<td>Project Capital Cost</td>
<td>$529M</td>
<td>$484M</td>
</tr>
<tr>
<td>Financing Costs (construction)</td>
<td>$2M</td>
<td>$9M</td>
</tr>
<tr>
<td><strong>Project Cost during construction</strong></td>
<td><strong>$531M</strong></td>
<td><strong>$492M</strong></td>
</tr>
<tr>
<td>Annual O&amp;M + CARP Cost</td>
<td>$5.8M</td>
<td>$5.7M</td>
</tr>
<tr>
<td>Max. Cumulative BART Subsidy</td>
<td>$22M</td>
<td>$2M</td>
</tr>
<tr>
<td>BART Debt Financing (TIFIA)</td>
<td>$101M</td>
<td>$79M</td>
</tr>
</tbody>
</table>

*The Estimated May 2009 and assume 9.14% contingency. Proposed (Bid) case assumes 12% contingency. Note: Some figures may not sum due to rounding
## Update of Funding Sources

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
<th>Share</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Federal Recovery Act (ARRA)</td>
<td>70.0</td>
<td>14.2%</td>
<td>Grant Pending</td>
</tr>
<tr>
<td>FTA Small Starts (formerly &quot;P5&quot;)</td>
<td>25.0</td>
<td>5.1%</td>
<td>Grant Pending</td>
</tr>
<tr>
<td><strong>Total Federal</strong></td>
<td>95.0</td>
<td>19.3%</td>
<td></td>
</tr>
<tr>
<td><strong>State</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Transportation Improvement Program (STIP)</td>
<td>20.7</td>
<td>4.2%</td>
<td>Received</td>
</tr>
<tr>
<td>MTC/State Local Partnership Program (SLPP) Prop 1B</td>
<td>20.0</td>
<td>4.1%</td>
<td>Committed</td>
</tr>
<tr>
<td>MTC/PTMISEA (Prop 1B)</td>
<td>12.8</td>
<td>2.6%</td>
<td>Committed</td>
</tr>
<tr>
<td><strong>Total State</strong></td>
<td>53.5</td>
<td>10.9%</td>
<td></td>
</tr>
<tr>
<td><strong>Local</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alameda County Measure B ½ cent sales tax</td>
<td>89.1</td>
<td>18.1%</td>
<td>Committed</td>
</tr>
<tr>
<td>Port of Oakland Passenger Facility Charges (PFCs) [1]</td>
<td>29.5</td>
<td>6.0%</td>
<td>Pending</td>
</tr>
<tr>
<td>MTC Regional Measure 1 &amp; 2 Bridge Tolls</td>
<td>146.2</td>
<td>29.7%</td>
<td>Committed</td>
</tr>
<tr>
<td><strong>Total Local</strong></td>
<td>264.8</td>
<td>53.8%</td>
<td></td>
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<tr>
<td><strong>Sub-total agency/public grant funding</strong></td>
<td>413.2</td>
<td>84.0%</td>
<td></td>
</tr>
<tr>
<td><strong>TIFIA draws [2]</strong></td>
<td>78.8</td>
<td>16.0%</td>
<td>Requested</td>
</tr>
<tr>
<td><strong>Total sources of funds [3]</strong></td>
<td>492.1</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total Received or Committed</strong></td>
<td>288.8</td>
<td>58.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total Pending or Requested</strong></td>
<td>203.3</td>
<td>41.3%</td>
<td></td>
</tr>
</tbody>
</table>

[1] Assumes $15.9 million is received during the first 2-3 years of operations
[2] TIFIA interest expense is capitalized during construction and added to TIFIA loan balance
Note: Some figures may be slightly off due to rounding
Project Benefits

- Oakland unemployment at 17.5% (35,000 residents)
- Jobs Start in 2010
- Creates: 2500 to 5000 direct, indirect and induced jobs
- Project Stabilization Agreement includes local hiring goals
- ~27 full time jobs when system opens for service in 2013
Project Benefits

- OAC project will take cars and diesel powered buses off Oakland streets and freeways
- Support growth on BART and Oakland Airport
- ARRA legacy project for the benefit of future generations
Motion

That the General Manager or her designee be authorized to execute, consistent with the terms described in the executive decision document:

1) the Development Agreement with the Port of Oakland in connection with the Oakland Airport Connector Project and

2) the Use, Operation and Maintenance Agreement with the Port of Oakland in connection with the Oakland Airport Connector Project.
Motion 1:
Upon certification by the Controller/Treasurer that sufficient ARRA and Small Starts funds have been committed by the Federal Transit Administration for the Project and are available for this contract, the General Manager is authorized to award Contract No. 01ZK-110 to Flatiron/Parsons, JV, for the Design-Build of the Oakland International Airport Connector, for the not to exceed price of $361,022,150, pursuant to notification to be issued by the General Manager and subject to the District's protest procedures and FTA's requirements related to protest procedures.

Motion 2:
Concurrent with the award of Contract No. 01ZK-110, the General Manager is authorized to award Contract No. 01ZK-120 to Doppelmayr Cable Car, Inc., to Operate and Maintain the Oakland International Airport Connector, for the not to exceed price of $4,906,865 and Capital Asset Replacement Program (CARP) costs of $768,396, both paid annually for a period of twenty (20) years and subject to escalation, pursuant to notification to be issued by the General Manager and subject to the District's protest procedures.
Staff Recommendations
Stipends

Motion 3:
Authorize the General Manager to execute two separate stipend agreements with Walsh Construction Company and Shimmick/Skanska/Herzog, JV in the amount of $500,000 each ($1,000,000 total).
Flatiron/Parsons JV Proposal Coliseum Connector Station
Flatiron/Parsons JV Proposal
Doppelmayr Cable Car Vehicle
Flatiron/Parsons JV Proposal
Guideway & Vehicle
Flatiron/Parsons JV Proposal
Airport Connector Station
Bogie

- DCC’s Train Set Bogies are constructed following the Jacob’s Technology.
- Jacob’s bogies are placed between two car body sections. The cars on either side spread their weight on one half of the Jacob’s bogie each.
Vehicles are attached to the cable
Sheaves manage the haul rope loop that powers the train. They carry the rope along the straight sections of the guideway, guide the rope around curves along the guideway and deflect the rope to and from the drive- and return-bullwheels.
Cable Drive Machinery
Part Two
May 2009 Funding Plan

SOURCES
Public Funding Capital Contribution $315M
Public Funds for BART Costs & Contingency $113M
BART Debt (TIFIA) including Interest During Construction $103M
Total Sources $531M

USES
Capital Construction & Civil Cost (includes Doolittle tunnel) $416M
BART Spent to Date, Delivery & Contingency Cost $113M
Finance Costs during Construction $2M
Total Uses $531M

Ridership Scenario
WS Medium $6 Initial Fare
with scaled back growth
& some debt optimization

Maximum Cumulative Shortfall (through 2048) $22M
Surplus after all Debt and O&M Payments $44M
Present Day Value of Net Cash Flows @ 6% $2M

Note: In May 2009, $22M of interest capitalized during operations was included in project cost which is excluded here.
Part Two
December 2009 Funding Plan

SOURCES
Public Funding Capital Contribution $290M*
Public Funds for BART Costs & Contingency $123M
BART Debt (TIFIA) including Interest During Construction $79M*
Total Sources $492M

USES
Capital Construction & Civil Cost (includes Doolittle tunnel) $361M
BART Spent to Date, Delivery & Contingency Cost $123M
Finance Costs during Construction $9M**
Total Uses $492M

Ridership Scenario
WS Medium $6 Initial Fare
with scaled back growth
& some debt optimization

Maximum Cumulative Shortfall (through 2048) $2M
Surplus after all Debt and O&M Payments $106M
Present Day Value of Net Cash Flows @ 6% $16M

*Public Funding Capital Contribution excludes $15.9M from the Port of Oakland which is received during operations; TIFIA borrowing is increased to bridge these contributions and is included in the TIFIA debt amount. Port contributions during the first few years of operations are used to directly pay down BART debt.

**Includes addition of TIFIA subsidy (assumed to be 5% of loan amount).

Note: Financial plan assumes 10 years of principal payment deferral; May 2009 plan assumed 15 years of principal payment deferral.
No Port PFCs

SOURCES
Public Funding Capital Contribution $274M
Public Funds for BART Costs & Contingency $111M
BART Debt (TIFIA) including Interest During Construction $97M
Total Sources $482M

USES
Capital Construction & Civil Cost (includes Doolittle tunnel) $361M
BART Spent to Date, Delivery & Contingency Cost $111M
Finance Costs during Construction $10M*
Total Uses $482M

Ridership Scenario WS Medium $6 Initial Fare with scaled back growth & some debt optimization

Maximum Cumulative Shortfall (through 2048) $30M
Surplus after all Debt and O&M Payments $28M
Present Day Value of Net Cash Flows @ 6% $4M

*Includes addition of TIFIA subsidy (assumed to be 5% of loan amount).
Note: Financial plan assumes 10 years of principal payment deferral; May 2009 plan assumed 15 years of principal payment deferral.
## Connector Ridership Studies

### FEIR/EIS Study
- Still valid
- Used to plan OAC service
- Assumes interim stations
- Reflected in the proposal request

### Financial Ridership Study
- For investment purposes
- Basis for financial model
- Conservative by nature
- Reflects current downturn
- Assumes worst case
  - no interim stations ever
  - continued downturn
  - slow growth

<table>
<thead>
<tr>
<th>YEAR (operations)</th>
<th>FEIR w/ 4 stations (Pass per day)</th>
<th>FEIR w/ 2 Stations (Pass per day)</th>
<th>2009 Financial Ridership Study PPD</th>
<th>Financial Model PPD</th>
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</thead>
<tbody>
<tr>
<td>2013 (1)</td>
<td>-</td>
<td>2700</td>
<td>2474</td>
<td></td>
</tr>
<tr>
<td>2014 (2)</td>
<td>-</td>
<td>3210</td>
<td>2840</td>
<td></td>
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<tr>
<td>2015 (3)</td>
<td>-</td>
<td>3720</td>
<td>3267</td>
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<tr>
<td>2016 (4)</td>
<td>-</td>
<td>3840</td>
<td>3589</td>
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<tr>
<td>2020 (8)</td>
<td>13,540</td>
<td>9,360</td>
<td>4350</td>
<td>3847</td>
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<td>2025 (13)</td>
<td>-</td>
<td>4890</td>
<td>4195</td>
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<td>2030 (18)</td>
<td>-</td>
<td>6030</td>
<td>4576</td>
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<td>2035 (23)</td>
<td>-</td>
<td>6960</td>
<td>4990</td>
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<td>2040 (28)</td>
<td>-</td>
<td>8033</td>
<td>5635</td>
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<td>2045 (33)</td>
<td>-</td>
<td>9272</td>
<td>5936</td>
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<tr>
<td>2047 (35)</td>
<td>-</td>
<td>9820</td>
<td>6145</td>
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</table>
What’s Changed – Intermediate Stations

Airport Connector
Not a duplicate of AC Transit Service
Two Stations Cleared in FEIR
FEIR based upon MetroPort Plan
Funded by the Development
Station design completed
WalMart developed instead
What’s Changed - Airport Station Location

Many Airport Plans
- Grand Terminal Scrapped
- Terminals 1 & 2 remodeled and expanded to accommodate 20MAP
- 440 foot walk from OAC train to Airport front door
- Street level covered walkway
- Future Terminal anyone's guess?