Oakland Airport Connector

MAKING THE CONNECTION

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

Prime	**Shimmick Skanska Herzog JV**	**Walsh Construction Co.**	**Kiewit Pacific Co.**	**Flatiron/Parsons JV**
Designer	STV, Inc.	T.Y.Lin Intl.	HNTB	Parsons Transp.
Constructor	Shimmick Skanska Herzog JV	Walsh Construction Co.	Kiewit Pacific Co.	Flatiron West Inc
Vehicle	Leitner – POMA	Mitsubishi	Bombardier	Doppelmayr Cable Car
O&M	Leitner - POMA	Crystal Mover Services	Bombardier	Doppelmayr Cable Car

Two Parts to the Decision to Award

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.

<u>However the Kiewit Proposal:</u>

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

<u>Selection Committee determined Kiewit proposal was non-responsive:</u>

- 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

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

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

<u>Disadvantaged Business Enterprise Program (DBE)</u>

- 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

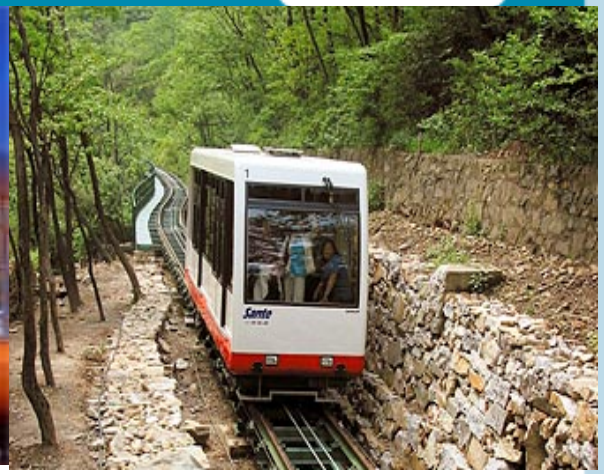
- Planning & Transit design
- Bay Area for over 50 years
- Design-build experience
- California-based

Bay Bridge East Span

Carquinez Suspension Bridge

MIA Mover APM, Miami

Flatiron/Parsons JV Proposal
Doppelmayr Cable Car



- 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

Mandalay Bay Tram
Las Vegas, USA

Application: Casino
Start operation: 1999
Capacity: 1,900 pphpd*
Stations: 4

Air-Rail Link,
Birmingham, UK

Application: Airport
Start of operation: 2003
Capacity: 1,608 pphpd*
Stations: 2

International Airport Link
Toronto, Canada

Application: Airport
Start of operation: 2006
Capacity: 2,150 pphpd*
Stations: 3

International Airport
Shuttle,Mexico City, Mexico

Application: Airport
Start of operation: 2007
Capacity: 600 pphpd*
Stations: 2

MGM CityCenter Shuttle,
Las Vegas, USA

Application: Casino
Start of operation: 2009
Capacity: 3,000 pphpd*
Stations: 3

Tronchetto - Piazzale Roma
Shuttle, Venice, Italy

Application: Urban
Start of operation: 2010
Capacity: 3,200 pphpd*
Stations: 3

Cabletren Bolivariano,
Caracas, Venezuela

Application: Urban
Start of operation: 2012
Capacity: 3,500 pphpd*
Stations: 5

New Doha International
Airport Shuttle, Doha, Qatar

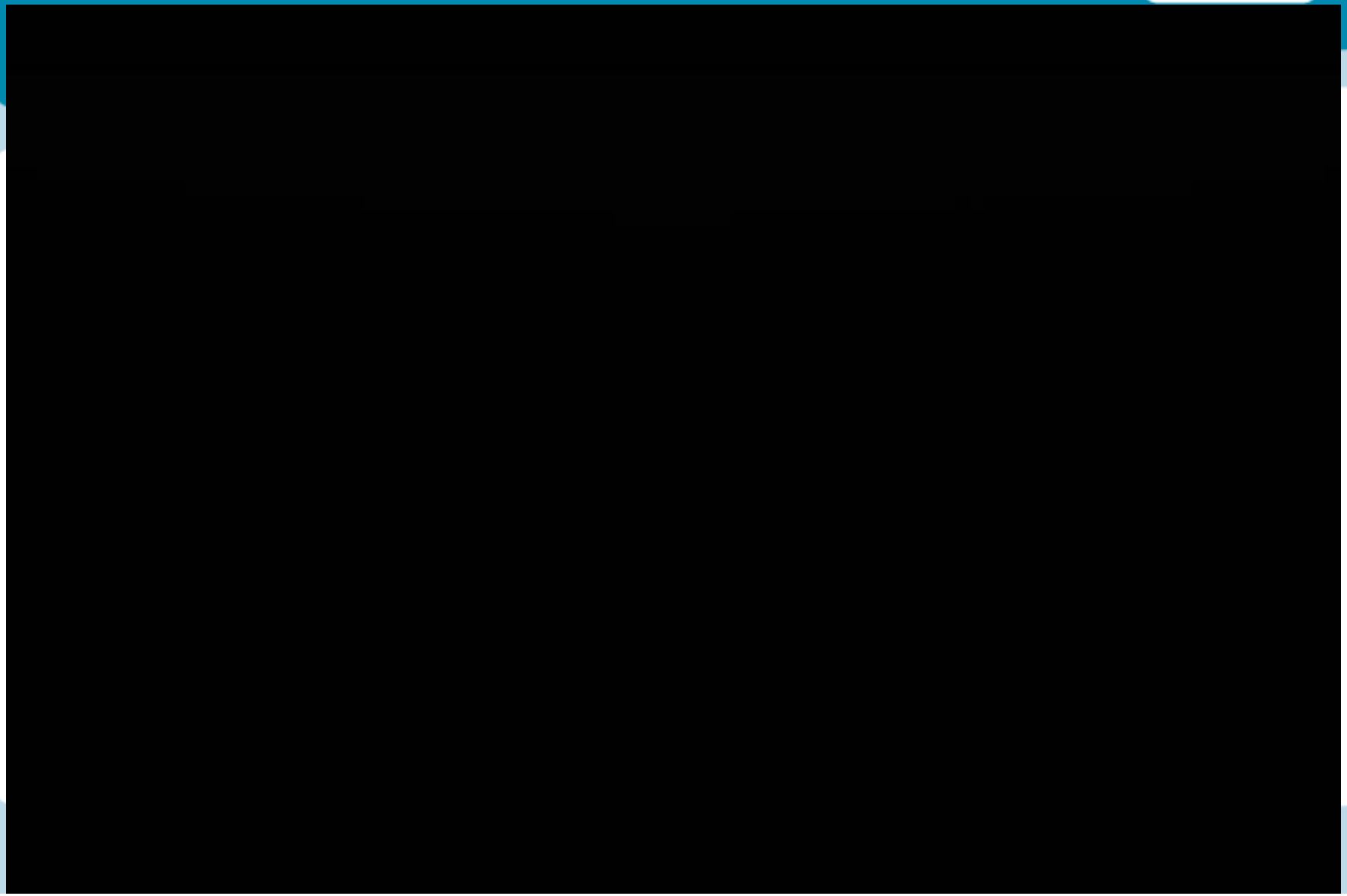
Application: Airport (airside)
Start of operation: 2012
Capacity: 6,000 pphpd*
Stations: 2

* 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

Flatiron/Parsons & DCC Proposal



PART Two
Estimated vs Proposed Financial Summary

	May 2009 (Estimated)	Dec 2009 (Bid)
Capital Construction Cost	$416M	$361M (Bid)
BART Spent to Date	$33M	$34M
BART Delivery Costs	$42M	$46M
Construction Contingency*	$38M	$43M
Project Capital Cost	$529M	$484M
Financing Costs (construction)	$2M	$9M
Project Cost during construction	**$531M**	**$492M**
Annual O&M + CARP Cost	$5.8M	$5.7M
Max. Cumulative BART Subsidy	$22M	$2M
BART Debt Financing (TIFIA)	$101M	$79M

**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

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

[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

Staff Recommendations
Port Agreements

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.

Staff Recommendations
Award of Contracts

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).

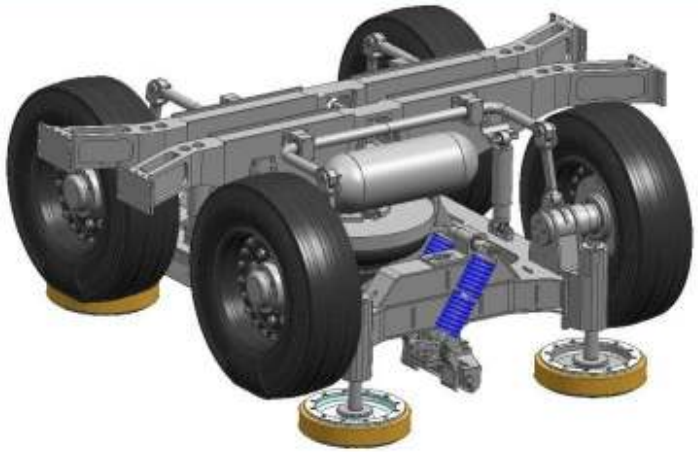
Flatiron/Parsons JV Proposal
Coliseum Connector Station

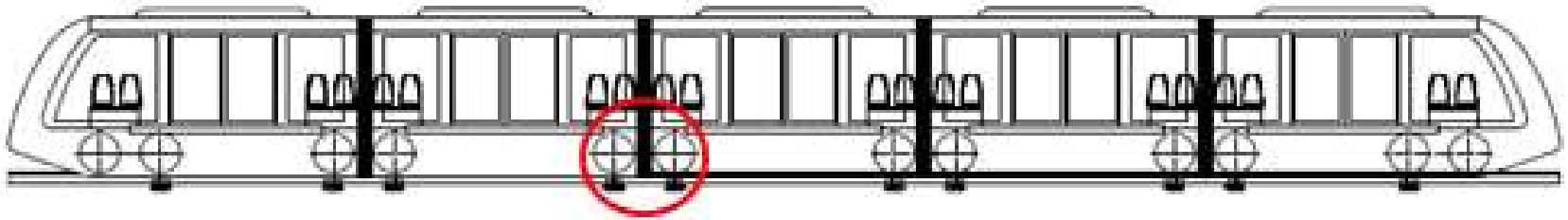
Flatiron/Parsons JV Proposal
Doppelmayr Cable Car Vehicle

Flatiron/Parsons JV Proposal
Guideway & Vehicle

Flatiron/Parsons JV Proposal
Airport Connector Station

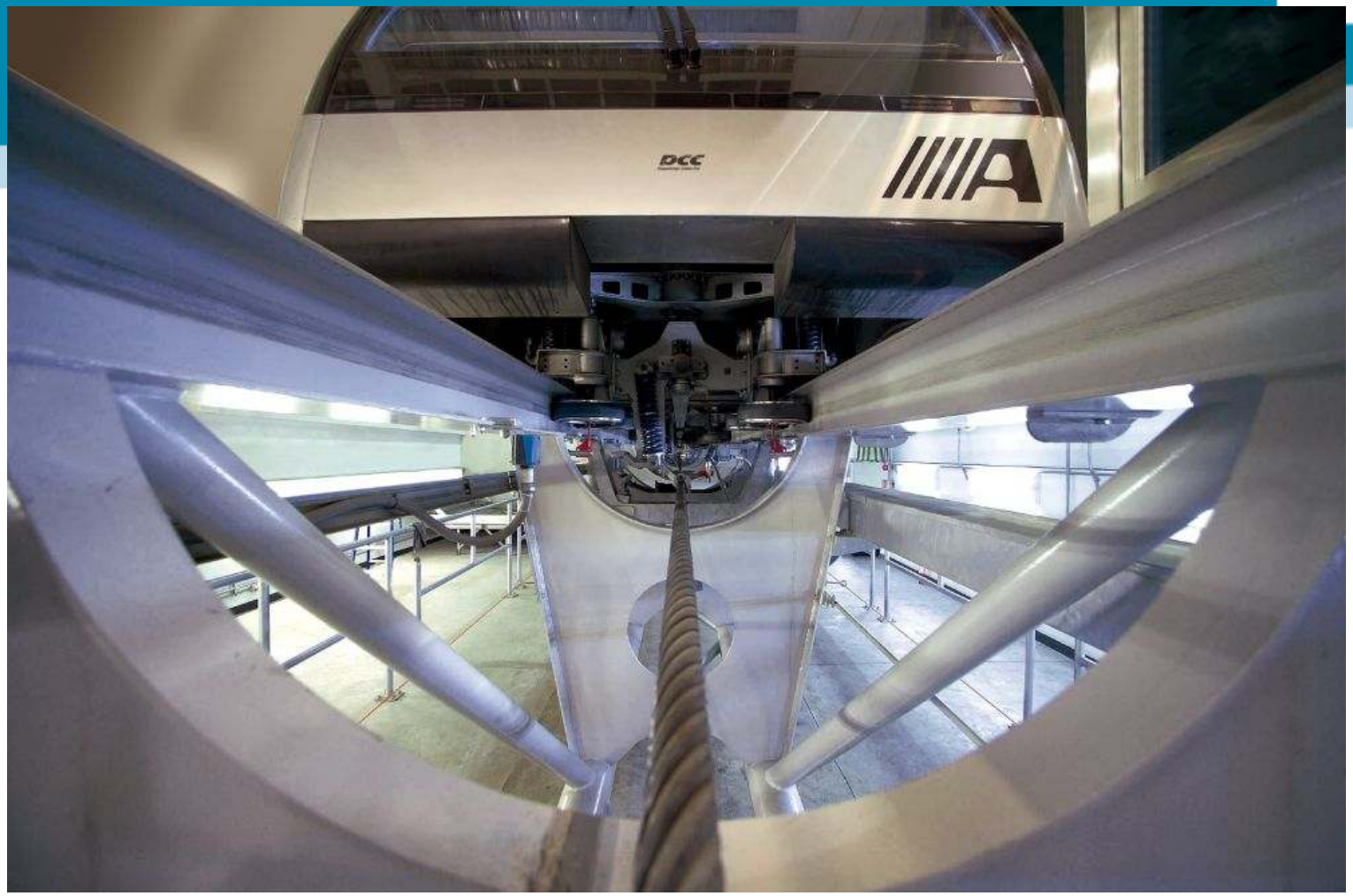
Bogie





- 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.

Car Bogie Attached to the Cable



Vehicles are attached to the cable

Cable Guide way Sheaves

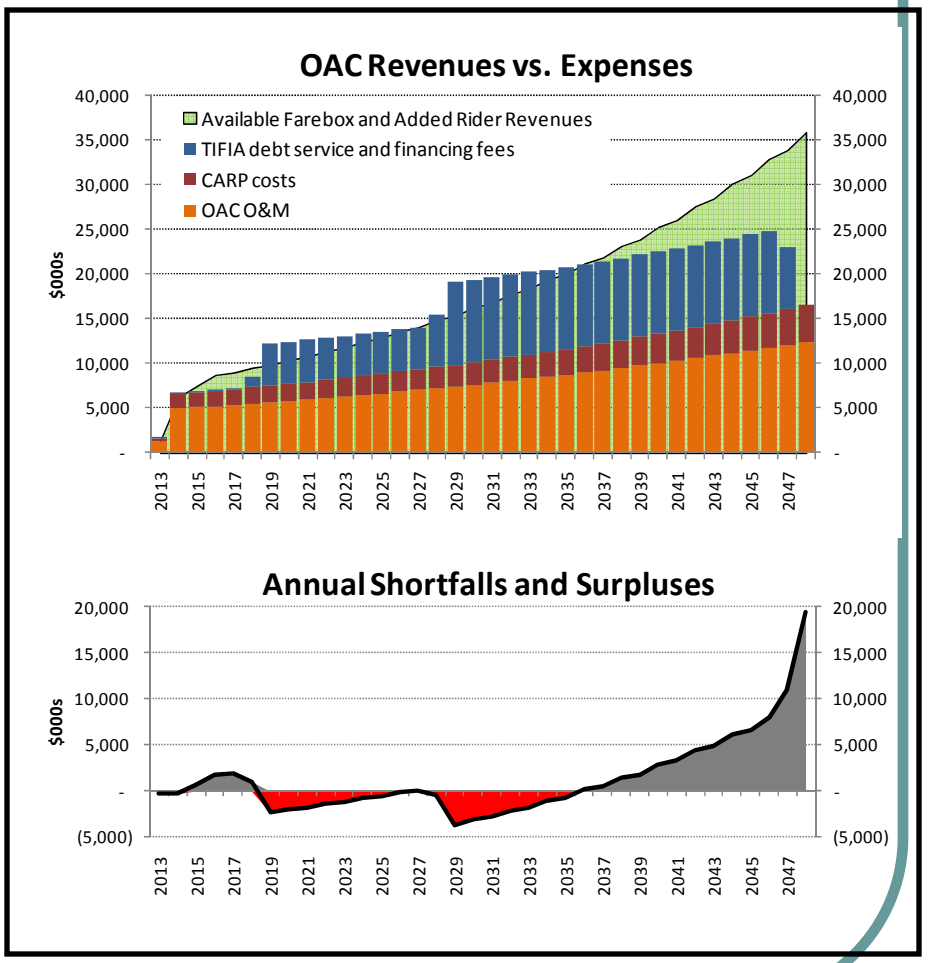
Sheaves manage the haul rope loop that powers the train. They carry the rope along the straight sections of the guideway, guide the rope around curves along the guideway and deflect the rope to and from the drive- and return-bullwheels.

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.



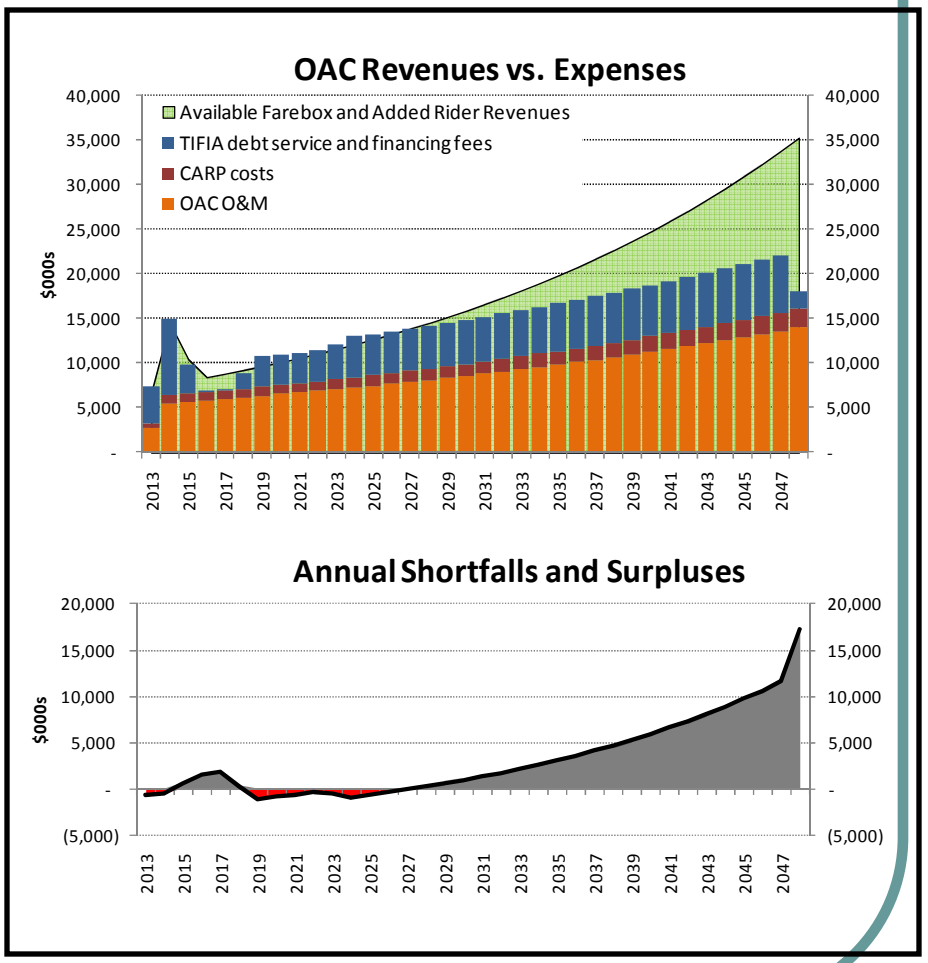
Part Two
December 2009 Funding Plan

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.

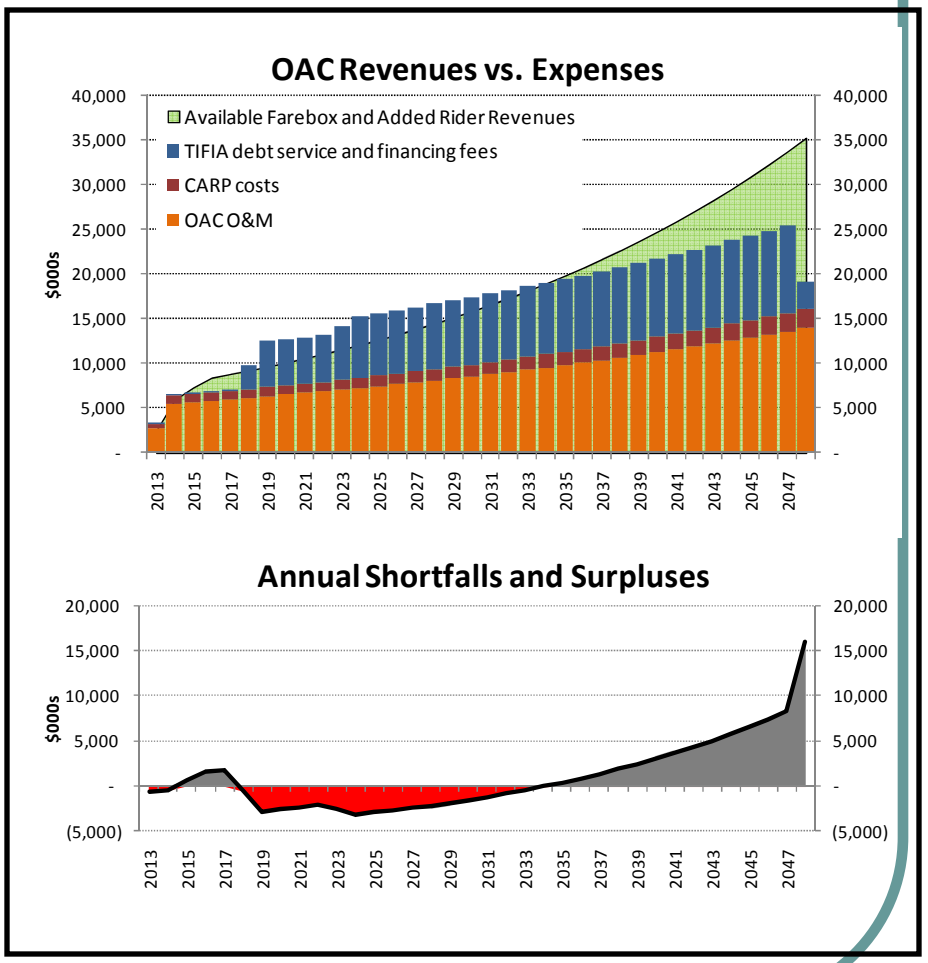


No Port PFCs

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 interm. 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 interm. stations ever
  - continued downturn
  - slow growth

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

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

Coliseum Station

I-880

Edgewater Station

Hegenberger Rd.

Doolittle Drive

Oakland Airport Runway

Doolittle Station

OAK

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?