

# Tri-Valley/San Joaquin Valley Regional Rail Authority Valley Link Project – APTA Economic Impact Analysis



PGH Wong Engineering, Inc. May 13, 2020





### Agenda

- Project Goals/Description
- American Public Transportation Association (APTA) Economic Impact Tool
- Valley Link Project Inputs/Assumptions
- Results
  - Scenario A High Range Costs
  - Scenario B Low Range Costs
  - Economic Impact Jobs and Revenues
- Sources





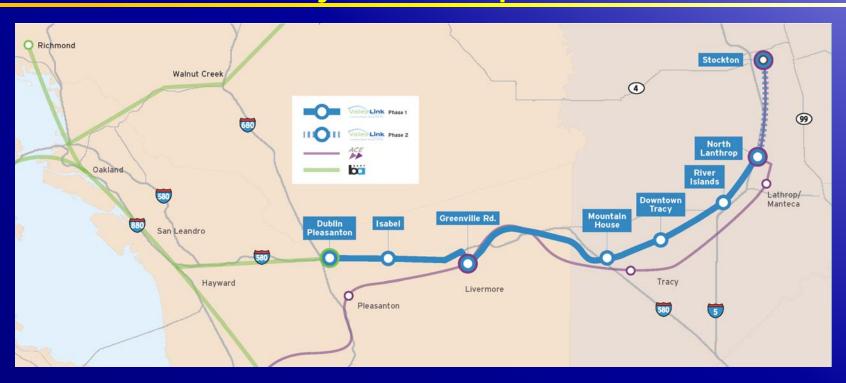
### **Project Goals/Description**

- Improve connectivity: Housing, People and Jobs.
- Provide rail connectivity between the BART system and the Altamont Corridor Express commuter service in the Tri-Valley.
- Implement a project that is fast, cost-effective.
- Execute a project that meets sustainability goals in design, construction, and operations.
- Support the vision of the California State Rail Plan to connect the Northern California Megaregion to the State rail system.





# **Project Description**



- Phase I
  - 42 miles from the Dublin/Pleasanton Station to North Lathrop
  - Facilities
    - Seven Passenger Stations
    - Operations and Maintenance Facility





## APTA – Economic Impact Tool

- Calculates Economic Impacts of transit services through web
  - Presents jobs, wages, sales, and value-added support to both Agency Operations and Capital Expenditures
  - Insight to direct and subsequent (multiplier) effects as Agency activities ripple through the local economy
  - Identify diverse occupational mix of jobs supported by Agency operations and capital activities
- Establishes the role of the public transit agency plays in the service area
- Provides how Public Money invested in Transit returns economically, in terms of jobs and income, to the community





## APTA – Economic Impact Tool

Uses regional economic data to translate agency activities into supported economic activity, tracking within broader economy

expenditures → directed effects → subsequent multiplier effects

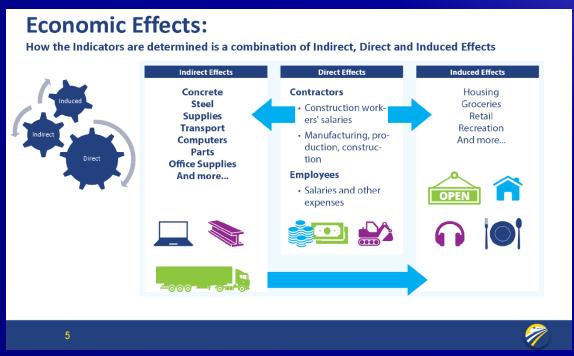


Illustration courtesy of California High Speed Rail Authority - 2019 ECONOMIC IMPACT REPORT





### APTA – Economic Impact Tool

- Inputs
  - Specific Geographic Study area Alameda and San Joaquin Counties
  - Type of Service Heavy Rail\*
  - Project Capital Costs Valley Link Feasibility Report
  - Agency Operating Costs Adjusted to current year\*\*
- Tool provides two (2) levels of data requirements
  - Standard Mode requires detailed budget information
  - Easy Mode requires basic information

#### 12. Capital and Operating Costs

#### **Initial Valley Link Service Capital Costs**

VALLEY LINK CAPITAL COST COMPONENT	CAPITAL COST (LOW RANGE FY18)	CAPITAL COST (HIGH RANGE FY18)	CAPITAL COST (LOW RANGE, IN \$YOE FOR 2022-2028)	CAPITAL COST (HIGH RANGE, IN \$YOE FOR 2022-2028)	
Alignment	\$1.34 billion	\$1.83 billion	\$1.71 billion	\$2.33 billion	
Stations	\$0.21 billion	\$0.27 billion	\$0.29 billion	\$0.36 billion	
OMF	\$0.08 billion	\$0.10 billion	\$0.10 billion	\$0.13 billion	
Hybrid MU Vehicles	\$0.25 billion	\$0.31 billion	\$0.31 billion	\$0.39 billion	
Total Cost	\$1.88 billion	\$2.51 billion	\$2.42 billion	\$3.21 billion	





<sup>\*</sup> Economic Impact Tool How-To Guide (page 6) recommends using Heavy Rail in Commuter Rail Projects

<sup>\*\*</sup> Adjusted to \$YOE 2018 applied ACE factors to O&M Cost

### **Economic Impact Tool – Easy Mode**

- Annual Operating Budget
  - Labor Expenses (e.g., Agency Payroll)
  - Purchased Transportation (e.g., O&M Outsourcing)
  - Other Operating Expenses (e.g., Fuel)
- Project Capital Expenditures
  - Construction (e.g., includes Design costs)
  - Vehicle Purchase (e.g., Rolling Stock)
  - Other Equipment Purchase (e.g., Non-revenue vehicles)

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	Bus	BRT	Light Rail	Heavy Rail	Paratransit	Ferry	Other	Totals
Annual Operating Budget Amounts								
Labor expenses (wages, benefits) (\$M)	0	0	0	2.92	0	0	0	3
Purchased transportation (\$M)	0	0	0	7.19	0	0	0	7
Other operating expenses (\$M)	0	0	0	17.21	0	0	0	17
Annual Capital Project Amounts								
Construction (\$M)	0	0	0	2,200	0	0	0	2,200
Vehicle Purchases (\$M)	0	0	0	310	0	0	0	310
Other Equipment Purchases (\$M)	0	0	0	0	0	0	0	0





### APTA – Economic Impact Tool – Results

- Detailed Results
  - Project Capital
  - On-going Operations and Maintenance
- Local Economic Impacts Categories
  - Employment # of Jobs, not Full Time Equivalents
  - Labor Income Total wages plus fringe benefits
  - Value Added Business profit and personal income generated
  - Output (production) Business Revenues or Sales
- Jobs by Sectors





#### Scenario A – High Range FY2018

## High Range Local Economic Impacts Summary

- Capital Project creates 22,000 jobs with worker income of approximately \$1.35 billion
- Capital Project generates \$3.5 billion of local business sales
- Operations supports approximately 400 jobs/year with labor income of over \$19 million/year
- Operations generates \$69 million of business sales annually

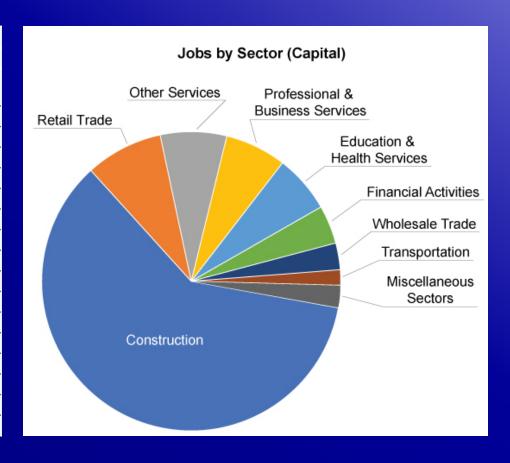
		Local Economic I	mpacts Summary X		
	Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)
~	Direct Effect	13,338	892.32	1,186.68	2,252.03
	Transit Operations & Maintenance	88	2.92	2.92	27.32
	Transit Capital Investment	13,250	889.40	1,183.76	2,224.71
~	Indirect (Supplier) Effect	3,850	221.49	354.89	598.76
	Driven by Operations & Maintenance	245	13.40	17.63	33.18
	Driven by Capital Investment	3,605	208.09	337.27	565.58
~	Induced (Income Respending) Effect	5,219	255.83	456.42	729.58
	Driven by Operations & Maintenance	63	3.08	5.50	8.80
	Driven by Capital Investment	5,156	252.75	450.92	720.78
~	Total Effect	22,407	1,369.64	1,997.99	3,580.37
	Driven by Operations & Maintenance	396	19.40	26.05	69.30
	Driven by Capital Investment	22,011	1,350.24	1,971.94	3,511.07
		,	1,5001.		0,011101





# High Range Jobs by Sector (Capital)

Jobs by Sector (Capital)		
SECTOR	JOBS	%
Construction	13,303	60.4%
Retail Trade	1,844	8.4%
Other Services	1,579	7.2%
Professional & Business Services	1,458	6.6%
Education and Health Services	1,380	6.3%
Financial Activities	914	4.2%
Wholesale Trade	635	2.9%
Transportation	366	1.7%
Miscellaneous Sectors		
Manufacturing	215	1.0%
Postal & Warehousing	138	0.6%
Media and Information	119	0.5%
Government	40	0.2%
Agriculture & Extraction	12	0.1%
Utilities	8	0.0%
TOTAL JOBS	22,011	100%

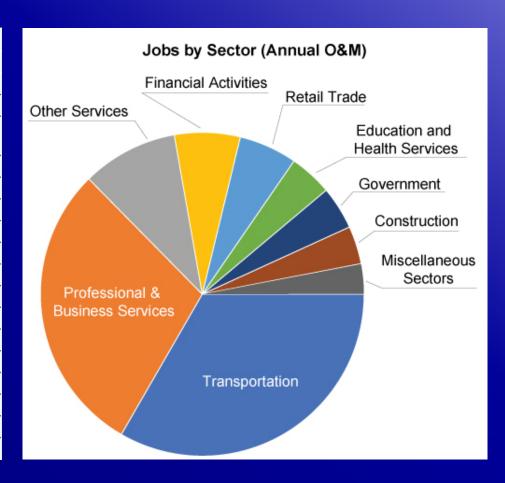






## High Range Jobs by Sector (Annual O&M)

Jobs by Sector (Annual O&M)					
SECTOR	JOBS	%			
Transportation	132	33.3%			
Professional & Business Services	116	29.3%			
Other Services	38	9.6%			
Financial Activities	26	6.6%			
Retail Trade	23	5.8%			
Education and Health Services	17	4.3%			
Government	17	4.3%			
Construction	15	3.8%			
Miscellaneous Sectors					
Wholesale Trade	4	1.0%			
Postal & Warehousing	3	0.8%			
Utilities	2	0.5%			
Media and Information	2	0.5%			
Manufacturing	1	0.3%			
Agriculture & Extraction	0	0.0%			
TOTAL JOBS	396	100%			







#### Scenario B - Low Range FY2018

## Low Range Local Economic Impacts Summary

- Capital Project creates over 16,300 jobs with worker income of approximately \$1.0 billion
- Capital Project generates \$2.6 billion of local business sales
- Operations supports 330 jobs/year with labor income of approximately \$16.1 million annually

		Local Economic I	mpacts Summary X		
	Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)
~	Direct Effect	9,892	661.71	879.86	1,672.66
	Transit Operations & Maintenance	73	2.43	2.43	22.74
	Transit Capital Investment	9,819	659.28	877.43	1,649.92
~	Indirect (Supplier) Effect	2,878	165.53	264.85	447.19
	Driven by Operations & Maintenance	204	11.15	14.67	27.62
	Driven by Capital Investment	2,674	154.38	250.17	419.57
~	Induced (Income Respending) Effect	3,875	189.95	338.88	541.70
	Driven by Operations & Maintenance	52	2.57	4.58	7.32
	Driven by Capital Investment	3,822	187.38	334.30	534.37
~	Total Effect	16,645	1,017.18	1,483.58	2,661.55
	Driven by Operations & Maintenance	330	16.15	21.69	57.68
	Driven by Capital Investment	16.315	1.001.04	1,461.90	2,603.87
	, ·	16,315	1,001.04		





### **Economic Impact – Jobs and Revenues**

### **Jobs**

Revenues

Capital Project

16,300 - 22,200

\$2.6 B - \$3.5 B

O&M (on-going)

330 - 395

\$56 M - \$69 M





### Sources

- Tri-Valley Project Feasibility Report, October 2019
   <a href="https://www.dropbox.com/s/fp34e3tr8uj4mut/Combined\_ValleyLinkFinalFeasibilityReport\_10-8-2019\_Reduced.pdf?dl=0">https://www.dropbox.com/s/fp34e3tr8uj4mut/Combined\_ValleyLinkFinalFeasibilityReport\_10-8-2019\_Reduced.pdf?dl=0</a>
- Altamont Corridor Express National Transit Database 2018 Agency Profile: <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/transit\_agency\_profile\_doc/2018/90182.pdf">https://www.transit.dot.gov/sites/fta.dot.gov/files/transit\_agency\_profile\_doc/2018/90182.pdf</a>
- American Public Transit Association "My Economic Impact Tool" (APTA membership required)
   https://www.apta.com/research-technical-resources/my-economic-impact-tool/economic-impact-tool/
- My Economic Impact Tool How to Use it <a href="https://www.apta.com/wp-content/uploads/Resources/resources/APTA-My-Economic-Impact-Tool-How-to-Use-It.pdf">https://www.apta.com/wp-content/uploads/Resources/resources/APTA-My-Economic-Impact-Tool-How-to-Use-It.pdf</a>
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### **THANK YOU**



