

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

Altamont Regional Rail Working Group

DATE: Wednesday, March 8, 2017
PLACE: Diana Lauterback Room LAVTA Offices
1362 Rutan Court, Suite 100, Livermore, CA

Please Note Teleconference Location:
San Joaquin County Administration Building
44 N. San Joaquin Street, Room 637
Stockton, CA 95202

TIME: 1:30pm – 4:00pm

Working Group Members:

Alameda County – Supervisor Scott Haggerty, Chair
City of Tracy – Mayor Pro Tem Veronica Vargas, Vice Chair
San Joaquin County – Supervisor Bob Elliott
City of Dublin – Mayor David Haubert
City of Livermore – Mayor John Marchand
City of Pleasanton – Mayor Jerry Thorne
SJRR/ACE – Board Chair Bob Johnson (Lodi)
BART – Board Member John McPartland
LAVTA – Board Chair Steven Spedowski (Livermore)
Innovation Tri-Valley Leadership Group – Dale Kaye, CEO
East Bay Leadership Group – Josh Huber, Policy Director
San Joaquin Partnership – Michael Ammann, CEO

AGENDA

- 1. Call to Order and Pledge of Allegiance**
- 2. Roll Call of Members**
- 3. Public Comment**
 - Members of the audience may address the Advisory Group on any matter within the general subject matter jurisdiction of the Altamont Regional Rail Working Group.
 - Speaker cards are available at the entrance to the meeting room and should be submitted to the Executive Director of the Livermore Amador Valley Transit Authority.
 - Public comments should not exceed three (3) minutes.
- 4. Minutes**

Recommendation: Approve minutes
- 5. Project Options/DMU Concept and Legislation**

Recommendation: Approve legislative language
- 6. Adjournment. The next meeting date is scheduled for April 12, 2017**

I hereby certify that this agenda was posted 72 hours in advance of the noted meeting.

/s/ Jennifer Suda

3/3/17

LAVTA, Administrative Assistant

Date

On request, the Livermore Amador Valley Transit Authority will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. A written request, including name of the person, mailing address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service should be sent at least seven (7) days before the meeting. Requests should be sent to:

Executive Director

Livermore Amador Valley Transit Authority

1362 Rutan Court, Suite 100

Livermore, CA 94551

Fax: 925.443.1375

Email: frontdesk@lavta.org

AGENDA

ITEM 4



LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

Altamont Regional Rail Working Group

DATE: January 11, 2017
PLACE: Tracy City Hall, Conference Room 203
333 Civic Center Plaza, Tracy CA 95376
TIME: 1:30pm – 4:00pm

Working Group Members:

Alameda County – Supervisor Scott Haggerty, Chair
San Joaquin County – VACANT
City of Dublin – Mayor David Haubert
City of Livermore – Mayor John Marchand
City of Pleasanton – Mayor Jerry Thorne
City of Tracy – Councilmember Veronica Vargas
ACE – VACANT
BART – Board Member John McPartland
LAVTA – Board Member Steven Spedowfski (Livermore)
Innovation Tri-Valley Leadership Group – Dale Kaye, CEO
East Bay Leadership Group – Josh Huber, Policy Director
San Joaquin Partnership – Michael Ammann, CEO

MINUTES

1. Call to Order and Pledge of Allegiance

Committee Chair Scott Haggerty called the meeting to order at 1:42pm.

2. Roll Call of Members

Members Present

Supervisor Scott Haggerty (Chair), Alameda County
Councilmember Don Biddle, City of Dublin (alternate for David Haubert)
Mayor John Marchand, City of Livermore
Mayor Jerry Thorne, City of Pleasanton
Councilmember Veronica Vargas, City of Tracy
Board Member John McPartland, BART
Board Member Steven Spedowfski (Livermore), LAVTA
CEO Dale Kaye, Innovation Tri-Valley Leadership Group
Policy Director Josh Huber, East Bay Leadership Group
CEO Michael Ammann, San Joaquin Partnership

Members Absent

Mayor David Haubert, City of Dublin

3. Public Comment

No comments

4. Minutes

Approved: Vargas/Spedowski

Aye: Haggerty, Biddle, Marchand, Vargas, McPartland, Spedowski, Thorne

No: None

Abstain: None

Absent: Haubert

* After Agenda Item 4 Supervisor Scott Haggerty requested an emergency item be added to the agenda, the election of a Vice-Chair for the Working Group, since he likely would not be present at the February Working Group meeting. The Working Group unanimously added the emergency agenda item and Councilmember Veronica Vargas was nominated as Vice Chair. No other nominations were received. The Working Group unanimously approved Councilmember Veronica Vargas as Vice-Chair as follows:

Approved: Marchand/Thorne

Aye: Haggerty, Biddle, Marchand, Vargas, McPartland, Spedowski, Thorne

No: None

Abstain: None

Absent: Haubert

5. Standing Updates:

a. ACE Forward

ACE Manager of Regional Initiatives, Dan Leavitt, noted that the ACE Forward EIR document will be released in February. The EIR will be widely available for review. There will be five open houses in the following locations: Tracy, Livermore, Alameda County, San Jose, and in Modesto. The draft EIR will not identify a preferred alternative, but will show all options and the impacts. ACE forward initiated a study looking at the Alameda County owned right of way over the Altamont Pass for a potential DMU type service. The findings from this work will be in the next month or two. Additionally, ACE has initiated planning work for ACE extending to Sacramento. ACE has a public meeting in Pleasanton at the Senior Center on Wednesday, January 18, 2017 at 6:30pm regarding a quiet zone for Sunol and Castlewood area.

b. BART to Isabel EIR Update

BART Principal Planner Andrew Tang provided a PowerPoint presentation regarding the BART to Isabel project. Andrew Tang announced that the BART to Isabel EIR will be released in the spring of 2017. On February 9th the BART Board will have a meeting regarding an update on the BART activities in the Tri-Valley. At the meeting there will be an action item regarding the expansion of the Dublin garage project. BART met with the FTA Region 9 in November 2016 and gave an update on BART to Livermore project and the technical analysis. Dan Leavitt and Andrew Tang will meet regarding coordinating the two EIR's for BART and ACE.

6. Introduction of Executive Frank Wilson and Strategic Planning

Supervisor Scott Haggerty introduced Executive Frank Wilson to the Altamont Regional Rail Working Group (ARRWG) and noted a resume that had been passed around outlining Mr. Wilson's extensive experience. Supervisor Scott Haggerty commented that from his personal stand point if Frank Wilson was not in the interviews for the ARRWG executive position that they did not have another viable candidate. Supervisor Scott Haggerty also explained that Frank Wilson knows a lot about BART, rail, and transportation and that he is excited about the future. Councilmember Veronica Vargas, who was part of the hiring team with Supervisor Haggerty, said that she feels the same way Supervisor Haggerty does regarding Frank Wilson. Councilmember Veronica Vargas also stated that Mr. Wilson's knowledge, resume, and references are outstanding. Supervisor Scott Haggerty then welcomed Executive Consultant Frank Wilson to the ARRWG.

Executive Consultant Frank Wilson stated that he hasn't been on his assignment very long, but from what he understands the ARRWG wants to build a railroad. Mr. Wilson gave a brief overview of his experience from 1989 to today. He noted that he wants to build a railroad here and has special interest in it.

Mr. Wilson explained that the way to get things accomplished is to have good leadership resourced properly, embrace innovation, creativity, and not be denied. Mr. Wilson said that Assemblywoman Catharine Baker reaching out to the ARRWG regarding how to write the legislation for the BART to ACE extension gives them the opportunity to create something in an organization that does not exist today. Mr. Wilson noted that Assemblywoman Baker gave the ARRWG the freedom to organize any way they want as long as they deliver. Mr. Wilson explained to the ARRWG that there are key components of work that must be organized and advanced which are: Technical, Financial, Decision-Making, Political, Process, Stakeholders, and Legal. In order to go forward the ARRWG will need to decide on how to proceed technically and financially. Mr. Wilson discussed the next three month expectations and the different working models with the ARRWG. Mr. Wilson requested comments or questions from the ARRWG.

Councilmember Veronica Vargas would like the ARRWG to make a project decision before the end of the meeting. Councilmember Veronica Vargas would like BART to go down the I-580 corridor from Dublin to Greenville in Livermore and connect with ACE. She is not opposed to BART going to Isabel to start with, but would like to make it a priority to connect BART to ACE at some point.

LAVTA Board Member Steven Spedowfski added that the goal is to eventually have BART connect to Greenville, but does not want it to hold up BART coming to Isabel. LAVTA Board Member Steven Spedowfski wants Isabel to be the first step in this project.

Supervisor Scott Haggerty stated that the ARRWG received the most traction when they discussed connecting ACE to BART, so he feels it is imperative to complete that connection somehow.

BART Director John McPartland stated that the dialog must be changed to priority for connecting BART to ACE, since Isabel is already going to take place. Mayor John Marchand stated that he believes it should be one seat one ride and that BART should connect to ACE at Greenville or Vasco.

The ARRWG discussed completing Phase 1 BART to Isabel. Phase 2 would be ACE connecting to BART, but this would still need to be discussed at further length. Supervisor Scott Haggerty stated that the region only has so much funding and that the ARRWG cannot be too greedy. He explained that BART going to Greenville and connecting with ACE right now will stop the project.

Representative Tim Sbranti from Congressman Swalwell's office stated that the best potential option is connecting at Isabel and that the focus should not be on Greenville currently. Representative Tim Sbranti expressed that the DMU is an intriguing option, if it came directly from Tracy connecting people from the San Joaquin Valley.

Supervisor Scott Haggerty noted that the ARRWG should receive an update from BART regarding the "Bay Fair Y" project, due to changes. Inadvertently Mayor John Marchand brought up a one seat ride and Supervisor Scott Haggerty explained that for the Tri-Valley that does not seem to be an option.

7. Set Working Group Meeting Schedule for 2017

Supervisor Scott Haggerty provided the Altamont Regional Rail Working Group (ARRWG) meeting schedule for 2017. The ARRWG approved the meeting schedule to meet monthly on the 2nd Wednesday of every month. It was briefly discussed to have the meetings in Tracy every three months, but no decision was made.

Approved: Marchand/Vargas

Aye: Haggerty, Biddle, Marchand, Vargas, McPartland, Spedowski, Thorne

No: None

Abstain: None

Absent: Haubert, Hernandez

8. Adjournment. The next meeting date is scheduled for February 8, 2017

Meeting adjourned at 3:36pm.

AGENDA

ITEM 5





ACEforward



Altamont DMU Study
March 2017





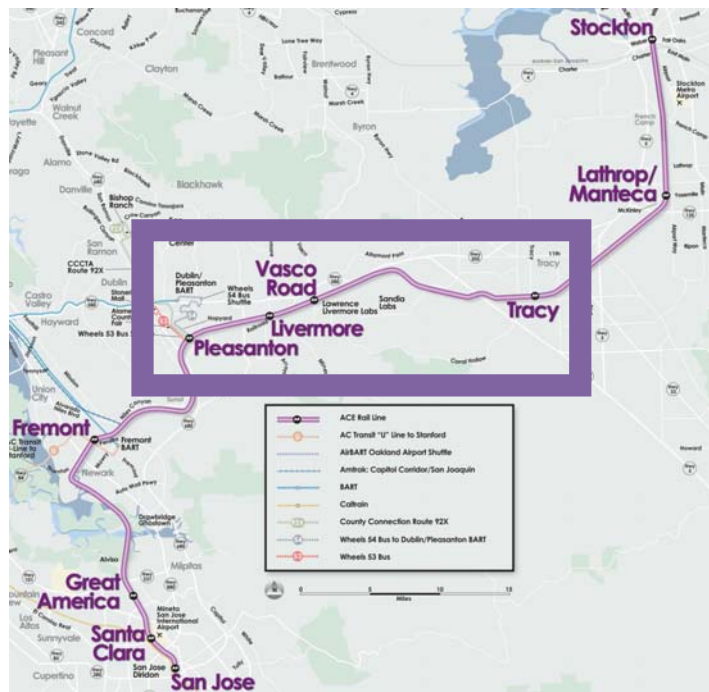
Agenda

Altamont DMU

- Alignment
- Operations
- Rolling Stock
- Capital Costs

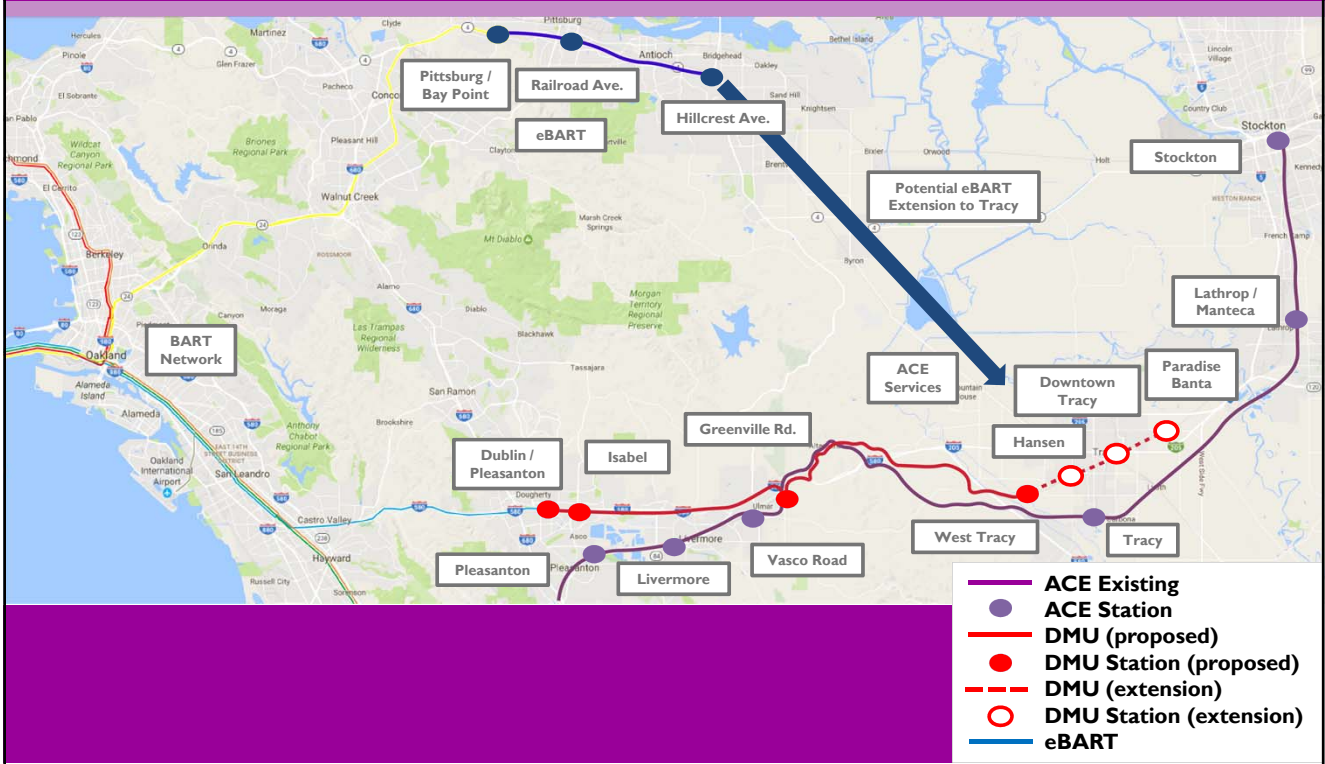
Key Decision Points

Next Steps



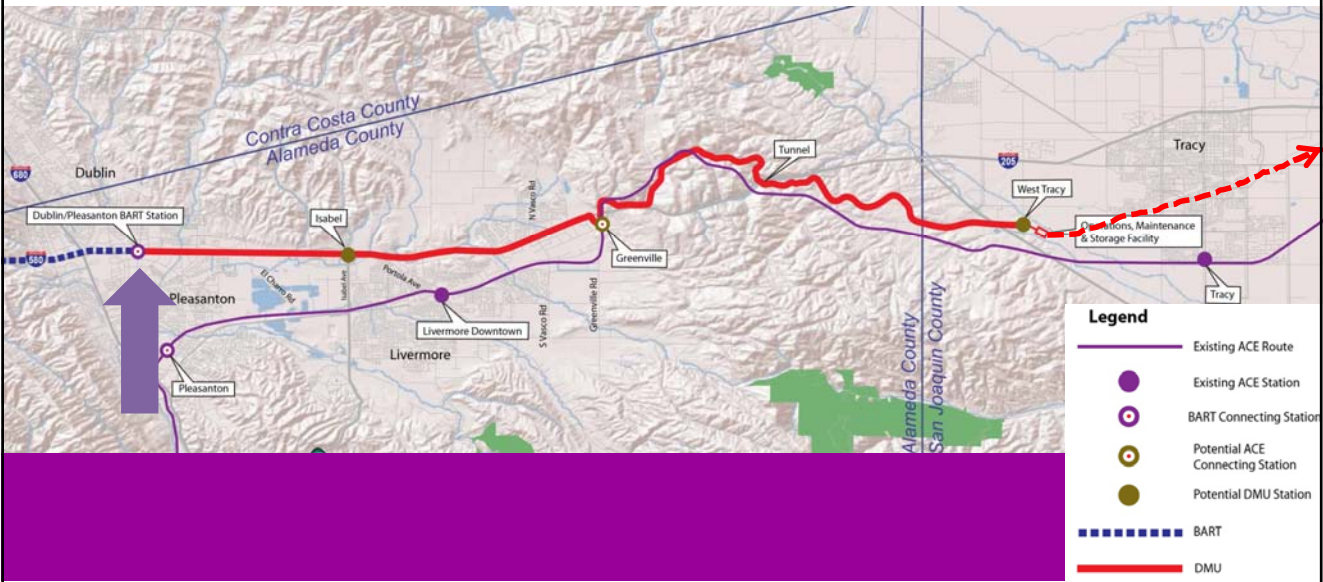
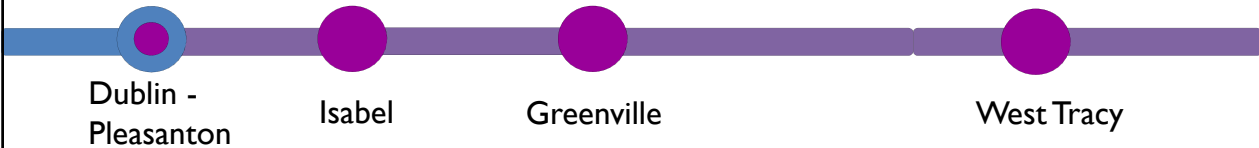


Altamont DMU – Regional Connections



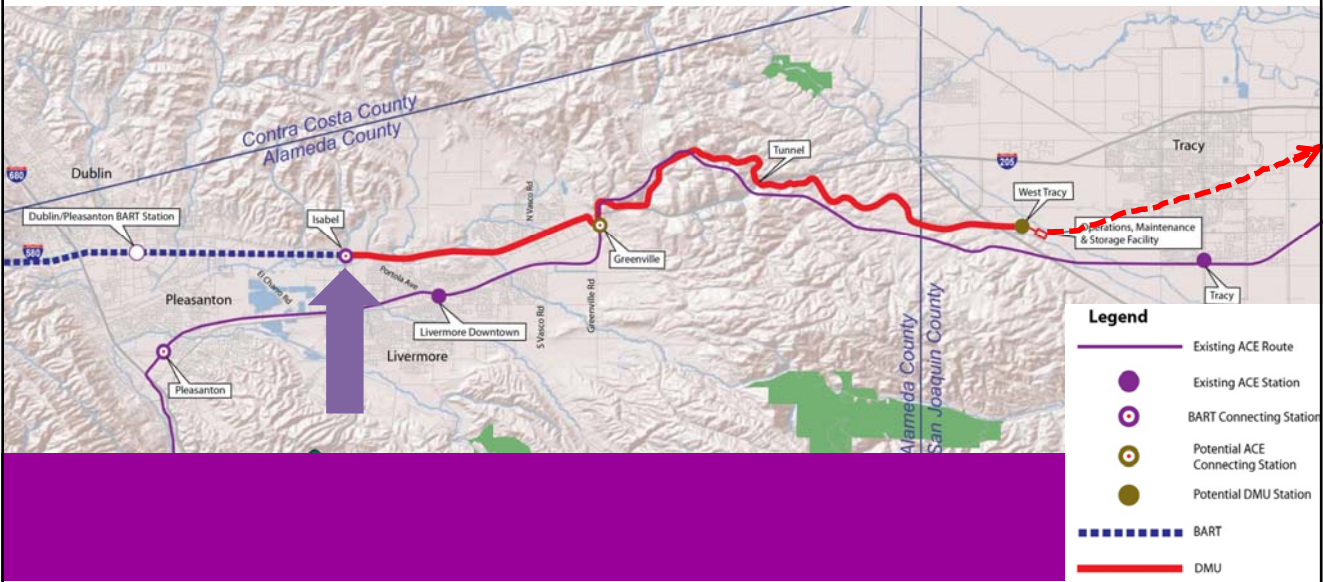
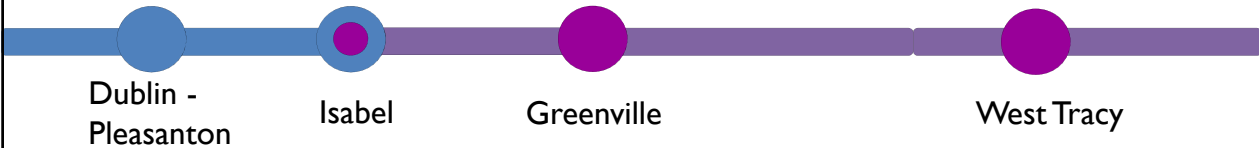


Altamont DMU BART to West Tracy





Altamont DMU BART to West Tracy



Legend

- Existing ACE Route
- Existing ACE Station
- BART Connecting Station
- Potential ACE Connecting Station
- Potential DMU Station
- BART
- DMU





Altamont DMU Travel Times

Dublin -
Pleasanton

Isabel

Greenville

West Tracy

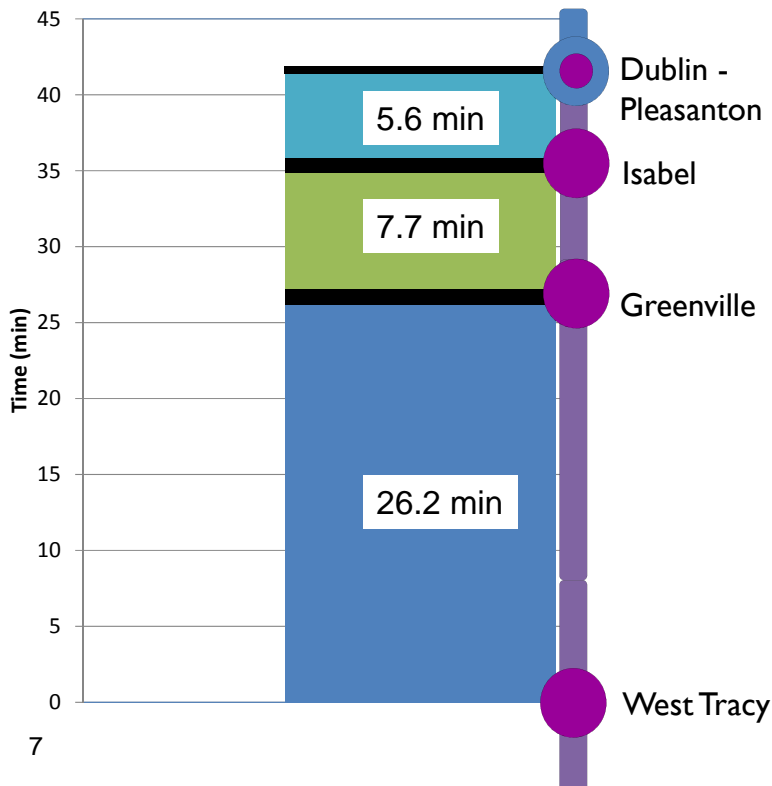
Altamont DMU during Peak

- West Tracy to BART: 42 minutes
- Greenville to BART: 14.3 minutes
- Isabel to BART: 5.6 minutes





Travel Time by Segment



End-to-End Travel Time: 42 mins
(with Greenville ACE/DMU transfer)
- 1 minute dwell at Greenville and Isabel Stations

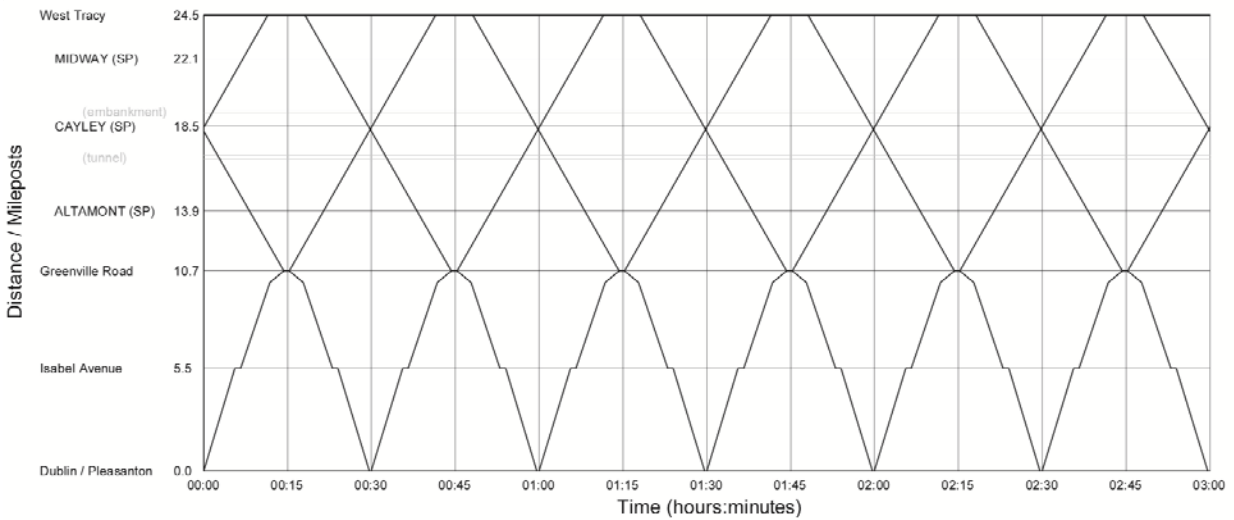




Altamont DMU Proposed Operations

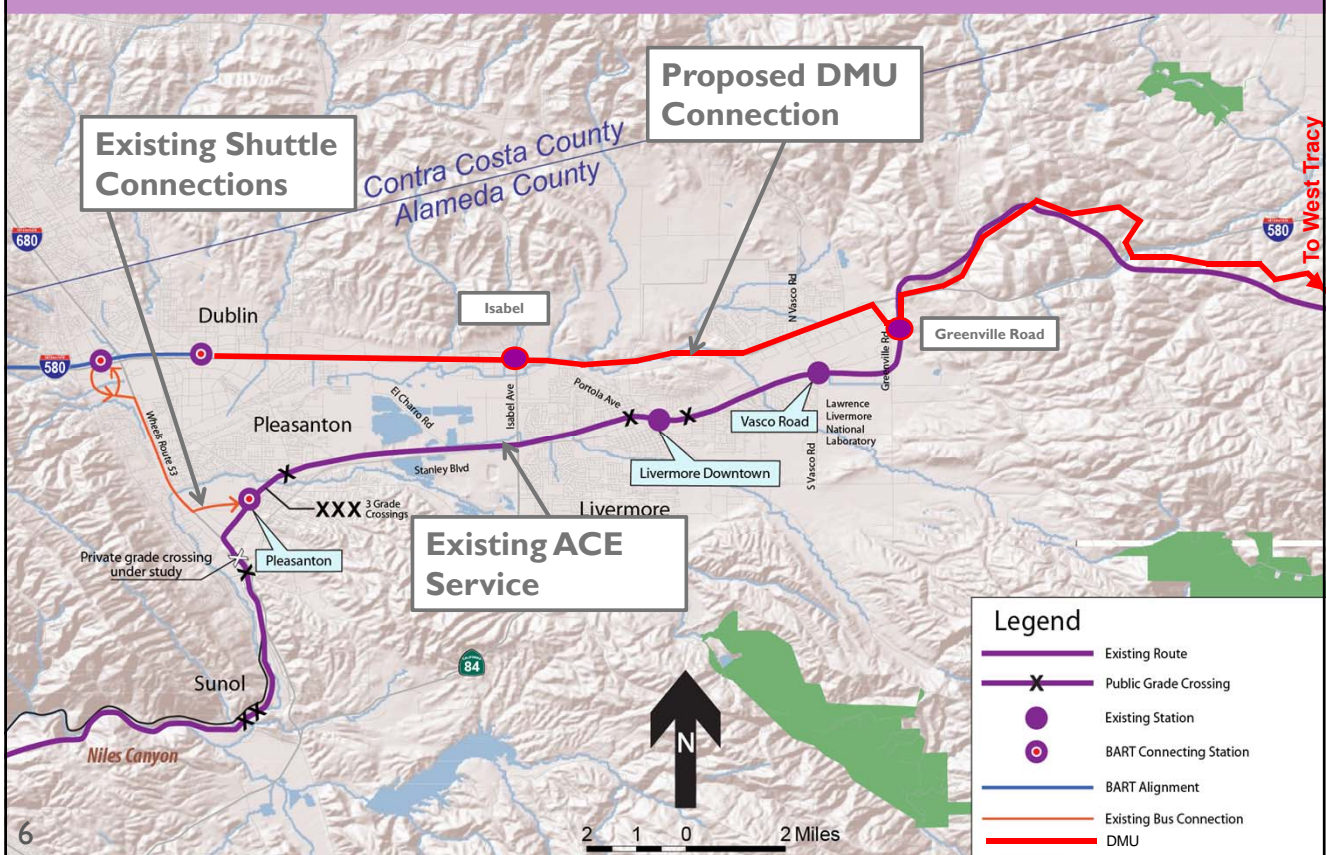
Service tied to BART Schedule

- Weekdays: half-hour service meeting every other BART train
- Weekends: hourly service meeting every 3rd BART train





Existing and Proposed Connections





Current Condition

Current Condition during Peak*

West Tracy to BART: **DMU 42 min**

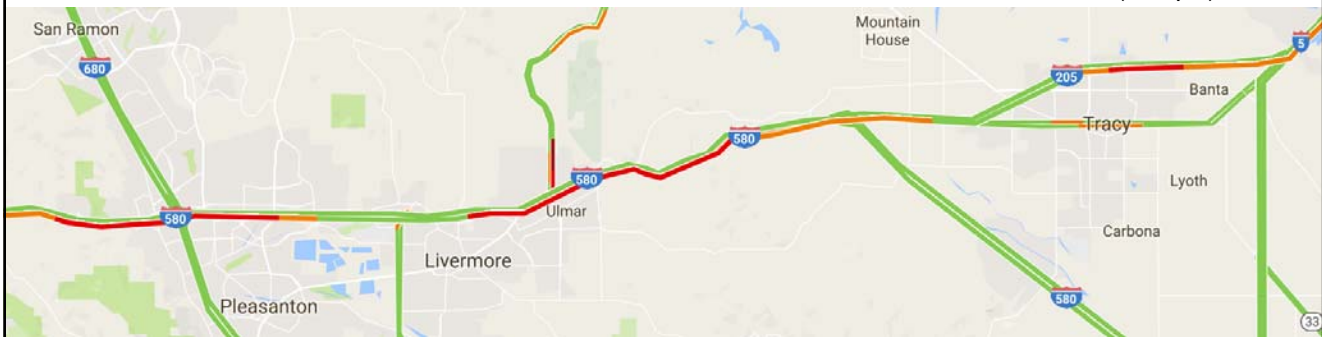
- By Car:
 - AM Peak, traffic 35 – 60 min (7:00 am)
 - PM Peak, traffic 35 – 60 min (5:20 pm)
- By ACE and Shuttle (Tracy to BART):
 - AM Peak, 55 min
 - PM Peak, 74 min

Greenville to BART: **DMU 14.3 min**

- By Car:
 - AM Peak, traffic 16 – 22 min (7:20 am)
 - PM Peak, traffic 20 – 40 min (5:20 pm)
- By ACE (Vasco Road) and Shuttle
 - AM Peak, 26 min
 - PM Peak, 44 min

Isabel to BART: **DMU 5.6 min**

- By Car:
 - AM Peak, traffic 10-14 min (7:20 am)
 - PM Peak, traffic 9 -16 min (5:10 pm)



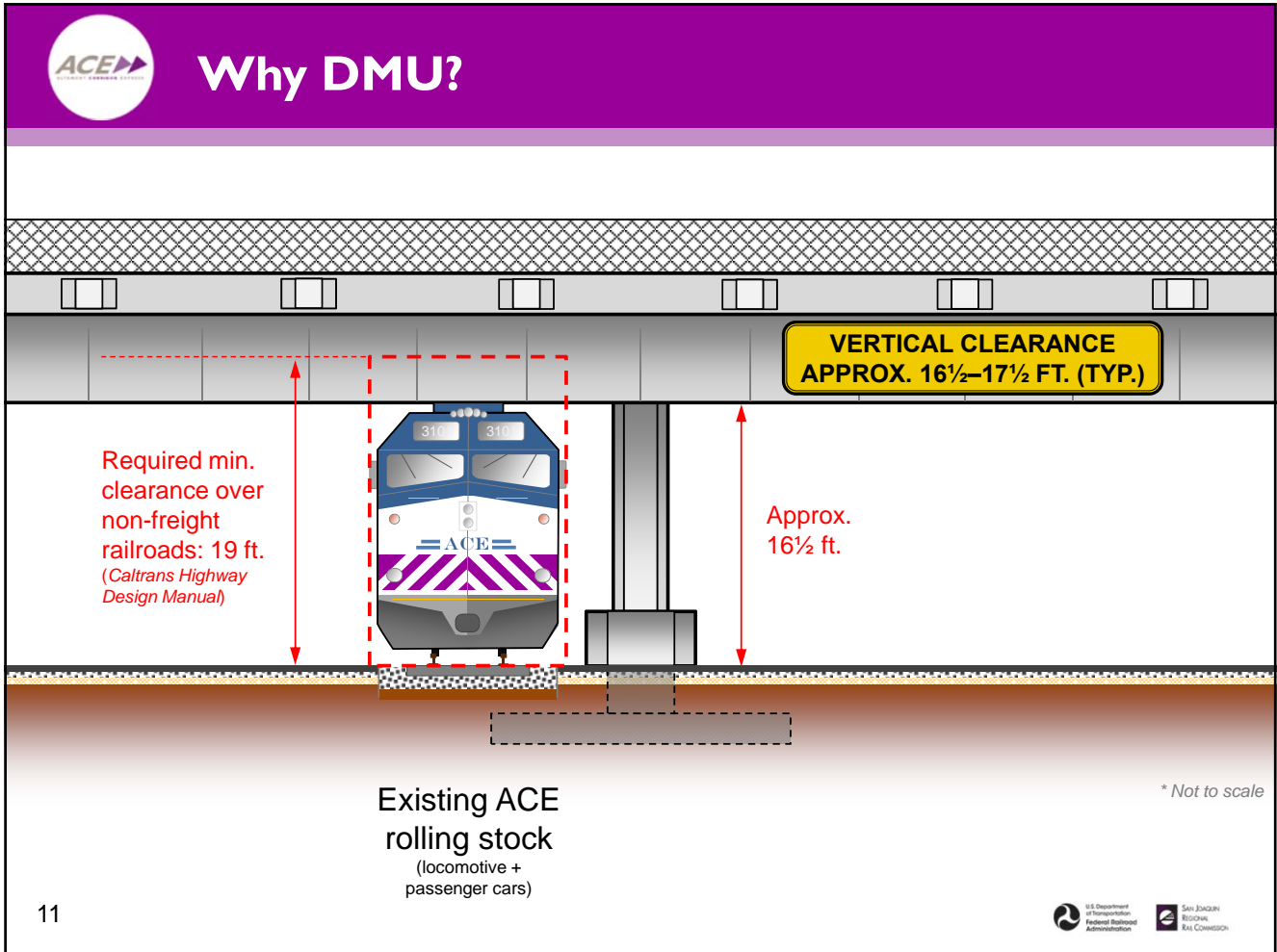
* - Travel times current from Google maps as of 2.28.2017

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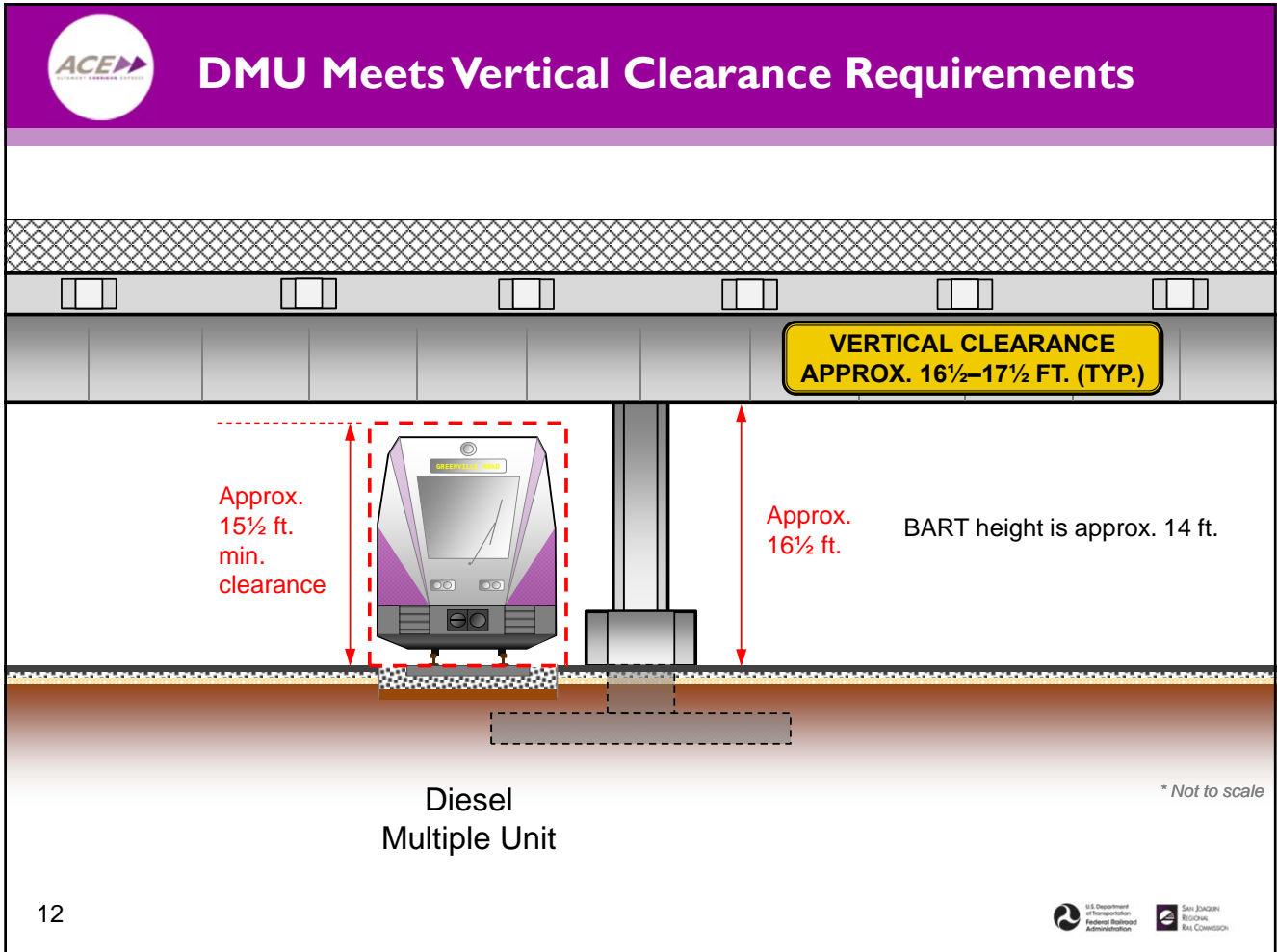


Why DMU?





DMU Meets Vertical Clearance Requirements








DMU Emissions Reduction

Dublin - Pleasanton


Isabel

Greenville

West Tracy

| | Automobile  | DMU (FLIRT)  | Existing ACE Locomotive  |
|----------------------------|--|--|---|
| NOx per Passenger Trip (g) | 4.8 | 1.1 ✓ | 7.9 |
| PM per Passenger Trip (g) | 1.96 | 0.03 ✓ | 0.12 |
| CO2 per Passenger Trip (g) | 8,047 | 1,355 ✓ | 3,874 |

Estimated Annual DMU Emission Reduction vs. ACE:

 **3,435,000 NOx g**
44,000 PM g
1,260,000,000 CO2 g






Fuel Savings

Dublin - Pleasanton

Isabel

Greenville

West Tracy

| | Automobile  | DMU (FLIRT)  | Existing ACE Locomotive  |
|-------------------------------|--|--|---|
| Fuel per Passenger-Trip (gal) | 0.9 | 0.1 ✓ | 0.4 |
| Annual Fuel (gal) | 451,667 | 66,736 ✓ | 190,820 |

Estimated Annual DMU Fuel Savings vs. ACE:



124,084 Gallons
\$215,000 - \$242,000 fuel costs*

* - Fuel costs based on estimated SJRRC / Herzog fuel costs





DMU Preliminary Capital Cost Summary Table



Dublin -
Pleasanton

Isabel

Greenville

West Tracy

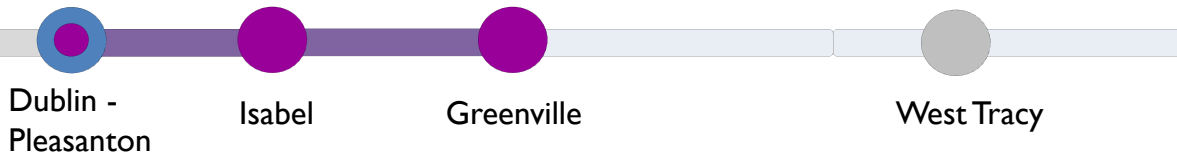
| Section | Segment Length (miles) | Project Cost (millions) | Project Cost Per Mile (millions) |
|--|------------------------|-------------------------|----------------------------------|
| Dublin/Pleasanton DMU Station | - | \$15.6 | - |
| Dublin/Pleasanton to Isabel | 5.5 | \$425.4 | \$78.1 |
| Isabel DMU Station | - | \$48.0 | - |
| Isabel to Greenville | 5.1 | \$498.3 | \$98.1* |
| Greenville DMU Station | - | \$36.1 | - |
| Greenville to West Tracy | 15.3 | \$213.9 | \$14.0 |
| West Tracy DMU Station | - | \$16.8 | - |
| West Tracy Operations and Maintenance Facility | - | \$84.7 | - |
| DMU Vehicles | - | \$52.5 | - |
| Total | 25.81 | \$1,391 | \$53.4 |

Note: UPRR fees not included.

* Depends on BART extension



Estimated Preliminary Capital Costs: Phase 1 (Dublin / Pleasanton Option)



| Corridor Segment | Estimated Cost (millions) |
|--|---------------------------|
| Altamont DMU | |
| BART Dublin/Pleasanton to Greenville (includes BART station improvements and Isabel DMU Station) | \$987.3 |
| Greenville Station | \$36.1 |
| Operations, Maintenance And Storage Facility (temporary) | \$60.0 |
| DMU Consists | \$52.5 |
| Total | \$1,136 |



Estimated Preliminary Capital Costs: Phase 1 (Isabel Option)



| Corridor Segment | Estimated Cost (millions) |
|---|---------------------------|
| Altamont DMU | |
| BART Isabel to Greenville (includes BART station improvements) | \$546.3 |
| Greenville Station | \$36.1 |
| Operations, Maintenance And Storage Facility | \$60.0 |
| DMU Consists | \$52.5 |
| Total | \$695 |

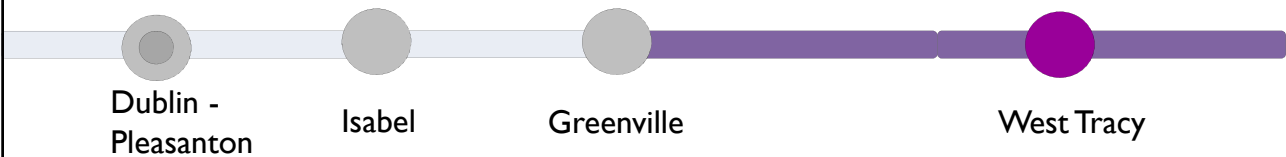


Temporary Maintenance Facility





Estimated Preliminary Capital Costs: Phase 2



| Corridor Segment | Estimated Cost (millions) |
|---|---------------------------|
| Altamont DMU Greenville To West Tracy | \$199.7 |
| West Tracy Station | \$16.8 |
| Tunnel Rehabilitation | \$14.2 |
| Operations, Maintenance And Storage Facility (permanent) | \$84.7 |
| Total | \$315 |

Note: UPRR fees not included.



Preliminary Capital Costs

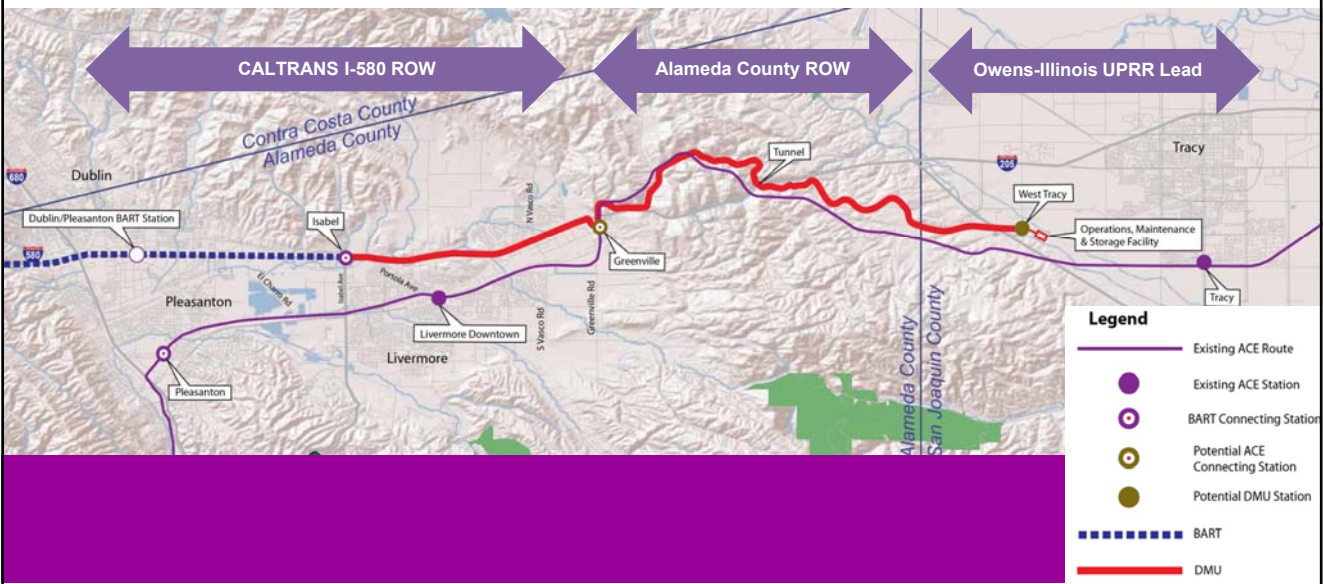
| Total Project | Preliminary Cost |
|----------------------------|------------------|
| Dublin/Pleasanton To Tracy | \$1.4 billion |
| Isabel To Tracy | \$950 million |

Note: UPRR fees not included.

- Can complete in phases with Phase I to Isabel/Greenville (adds \$60 million)
- Cost per Rider: To Be Determined
- Cost Benefit: To Be Determined
- Cost dependent on decisions made
 - Assumes Greenville Station cross platform transfer and share track with UP
 - Capital Cost will be refined as design progresses



Right-of-Way (ROW) Considerations





Segment Detail: Caltrans I-580 Corridor

Dublin - Pleasanton to Greenville



Dublin -
Pleasanton



Isabel



Greenville



West Tracy

Distance: 11.7 miles

Right of way: Median of I-580

Alignment: Single track with trains passing at station crossings

Average Speed: 41 mph

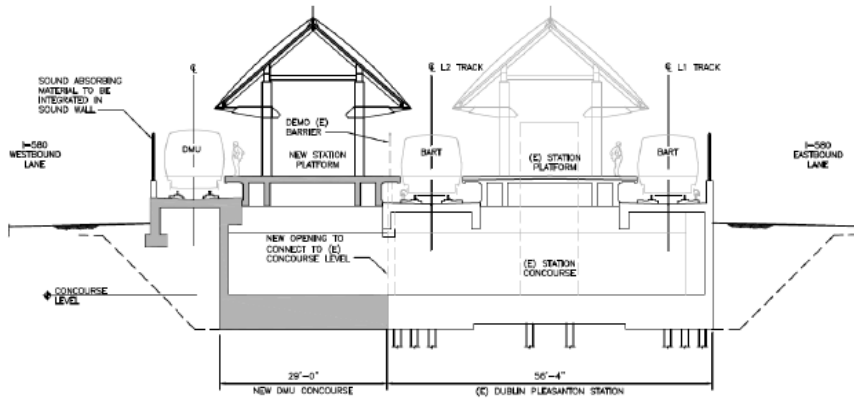
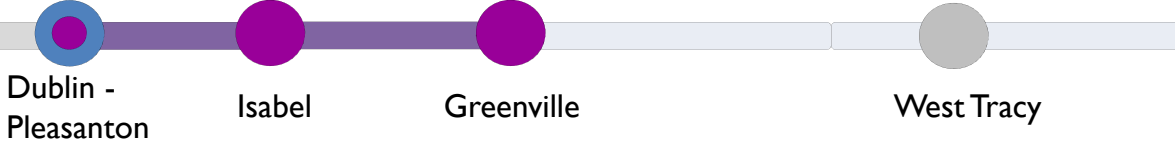
Notes:

- Possible BART extension (Isabel)
- Overpass clearances for rolling stock



BART/DMU Station Configuration

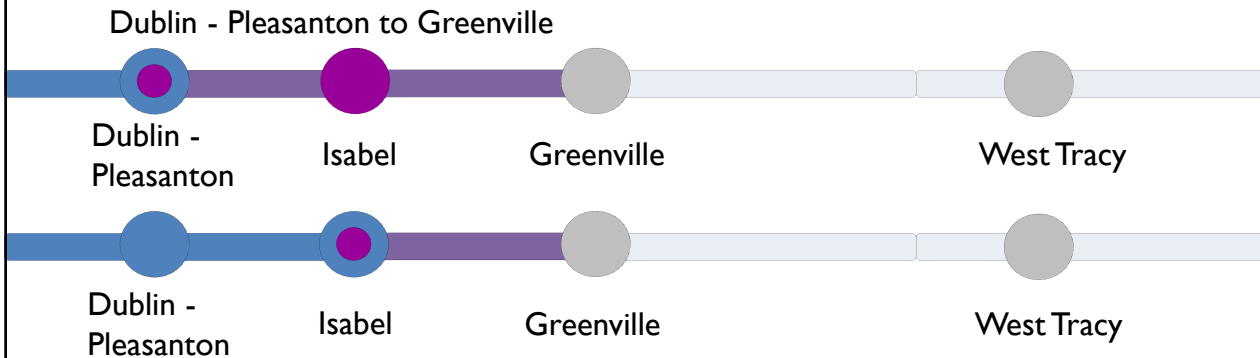
Dublin - Pleasanton to Greenville



TYPICAL SECTION J
DUBLIN-PLEASANTON BART STATION



Decision Area: Caltrans I-580 ROW



Decision:

Meet BART at Dublin – Pleasanton Station or Isabel?

Factors:

DMU can use I-580 right of way to meet BART at either location



Segment Detail: Alameda County Corridor

Greenville to Alameda County Line, Alameda County owned



Distance: <14.0 miles

Right of way: Former UPRR right of way, owned by Alameda County

Alignment: Mainly single track with added long siding, tunnel work at Altamont Pass, and grade separation

Average Speed: 32 mph (Greenville – West Tracy)



Decision Area: Alameda County ROW



Dublin - Pleasanton



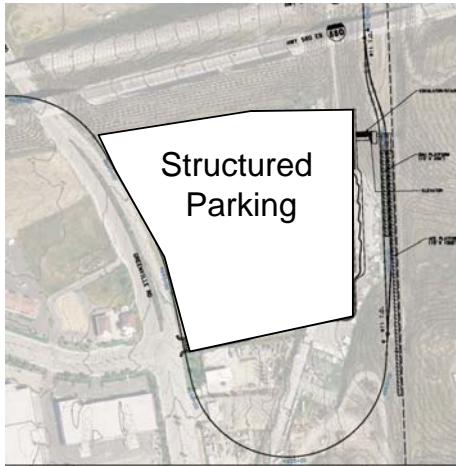
Isabel



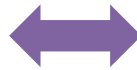
Greenville



West Tracy



Greenville Station



Greenville Alternative



Decision Area: Alameda County ROW



Decisions:

Include Greenville Station
Implement Greenville Alternative

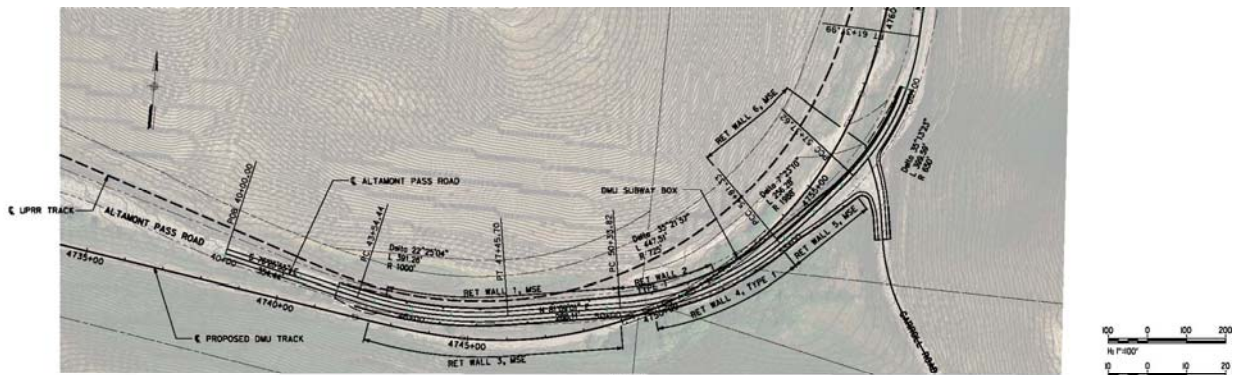
Factors:

Ridership – To Be Determined
Time savings – 2.2 minutes (39.3 run time)
Phased implementation requires Greenville Station
Not including Greenville has implications (ridership)

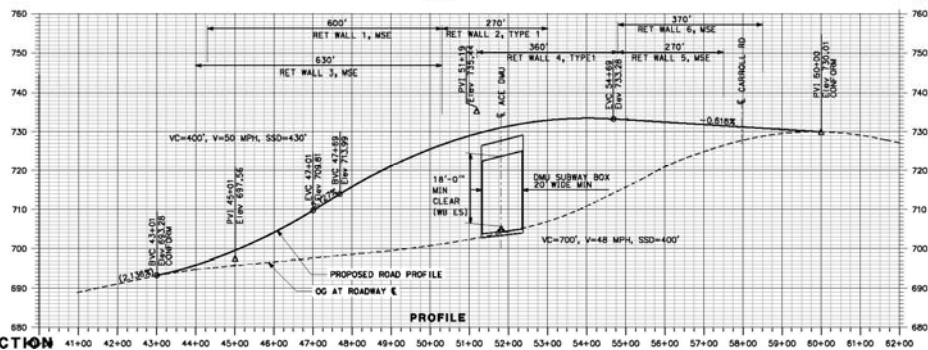
Next Steps: Ridership for options, Committee\stakeholders to determine preferred approach



Altamont Pass Road Grade Separation



PLAN



PROFILE

NOT FOR CONSTRUCTION

28





Existing Tunnel



Dublin - Pleasanton



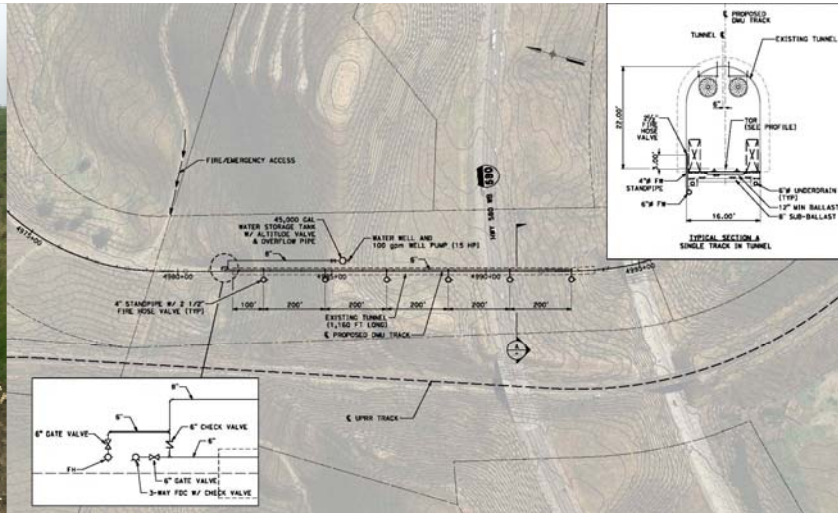
Isabel



Greenville

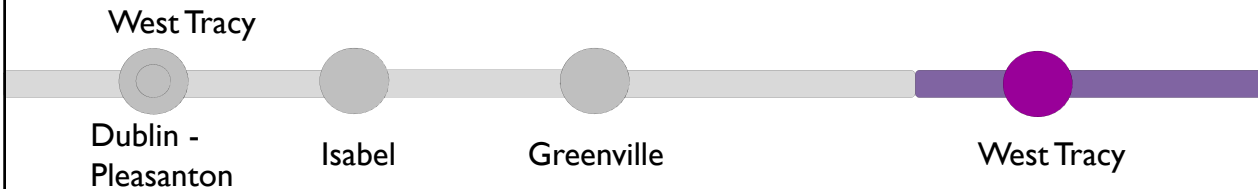


West Tracy





Segment Detail: Owens-Illinois UPRR Lead



Distance: <1 mile

Right of way: Current UPRR freight right of way

Alignment: Shared right of way corridor with UPRR freight

Average Speed: Dependent on alignment and track improvements

Notes: Negotiations with UPRR over sharing tracks or sharing right of way impacts rolling stock selection. Musco Olive Plant appears to have one freight movement a month.



Decision Area: Owens-Illinois UPRR Lead

Sharing UPRR Right of Way

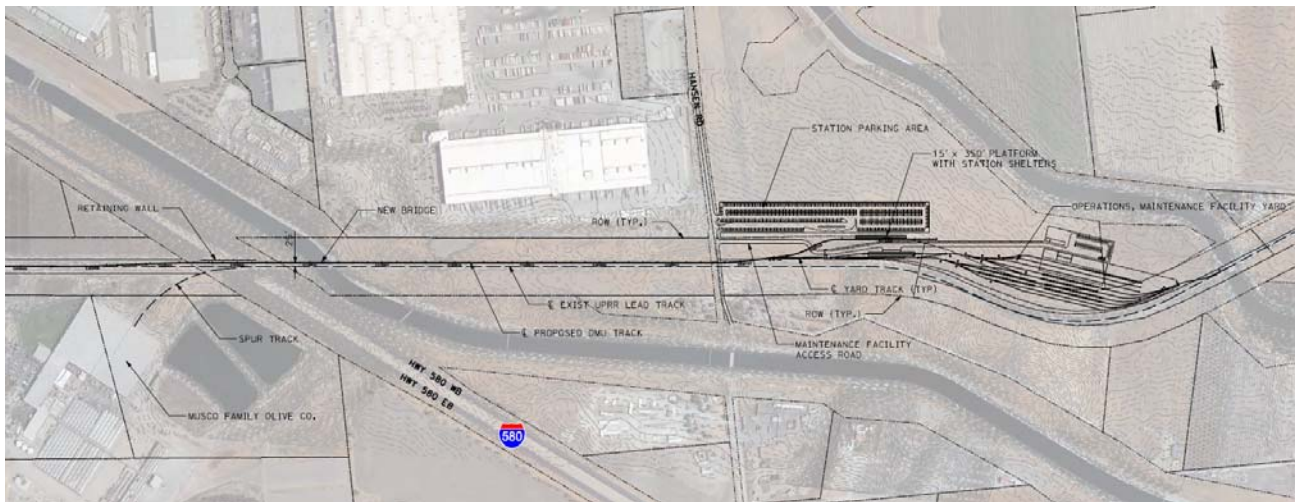


Dublin - Pleasanton

Isabel

Greenville

West Tracy





Decision Area: Owens-Illinois UPRR Lead

Sharing UPRR Track

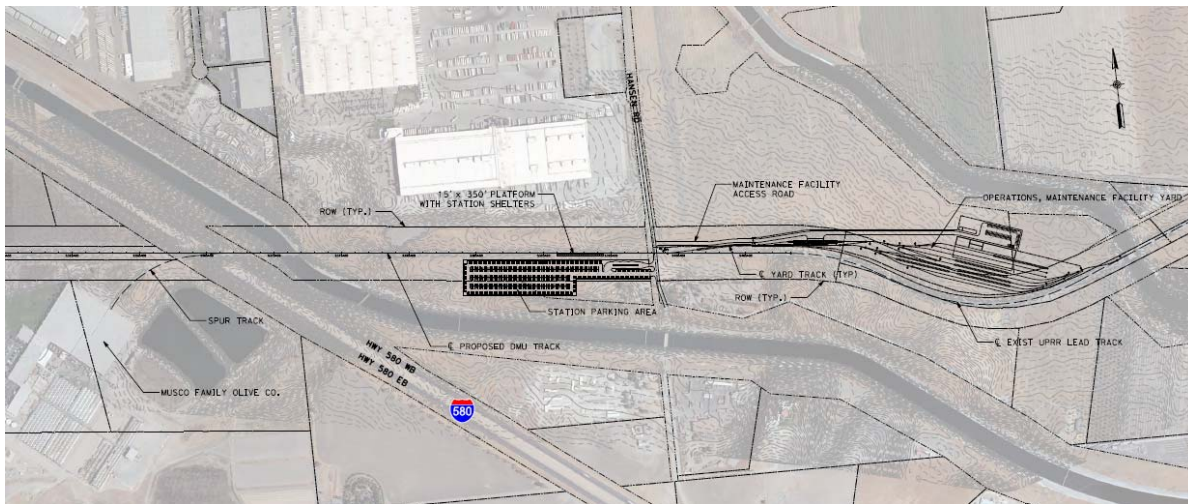


Dublin - Pleasanton

Isabel

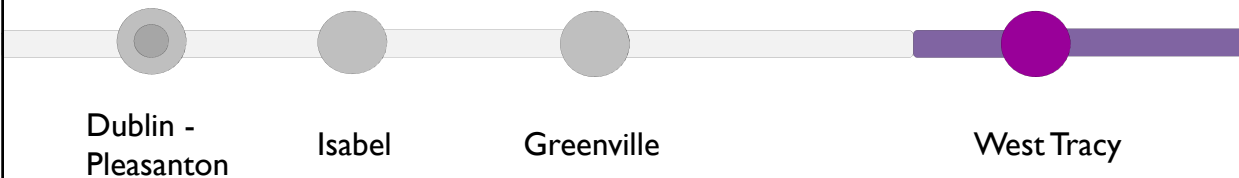
Greenville

West Tracy





Decision Area: Owens-Illinois UPRR Lead



Decision:

Should future service run adjacent or share track with UPRR?

Factors:

Sharing track requires vehicle to be FRA compliant or waiver capable

Rolling stock, capital cost implications

Negotiations with UPRR required for either option

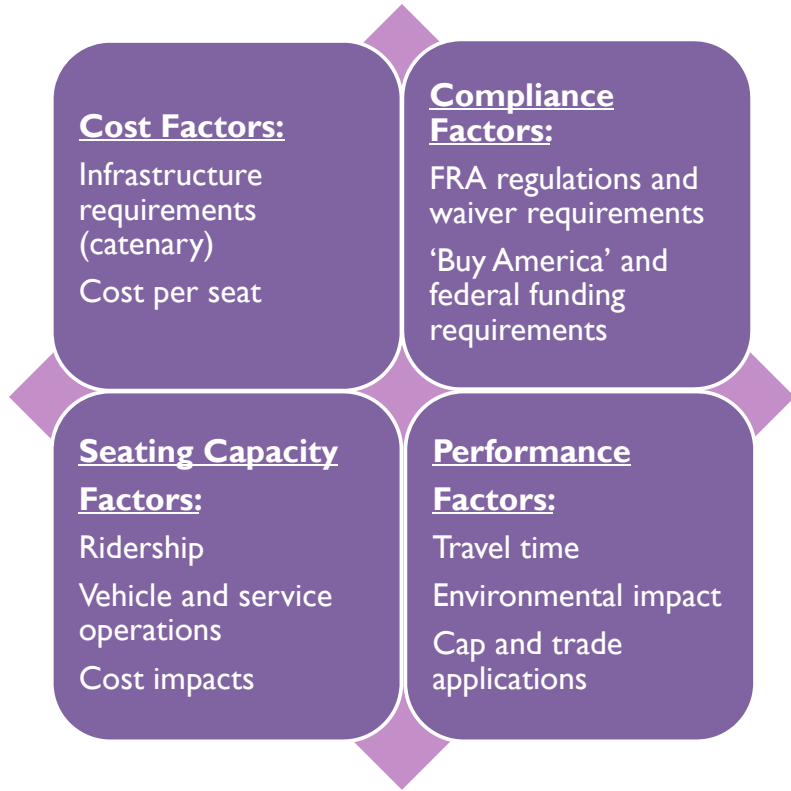
New Bridge over aqueduct for shared corridor

Station moves to maintenance facility site for shared corridor option

Next Steps: Further design on shared corridor option



Rolling Stock Decision Considerations





Rolling Stock Alternatives

Stadler GTW 2/6 (DMU)



Stadler FLIRT (DMU)



Kawasaki M-8 (EMU)







Bombardier Talent Class 93 (DMU)





Rolling Stock Comparison*

| | Stadler GTW 2/6 (DMU) | Stadler FLIRT (DMU) | Kawasaki M-8 (EMU) | Bombardier Talent Class 93 (DMU) |
|------------------------------|---|---|--|---|
| |  |  |  |  |
| FRA Compliant | ● (with waiver) | ● | ● | ● |
| Buy America Compliant | ● | ● | ● | ● |
| Compatible Clearance | ● | ● | ● | ● |
| Top Speed | 75 mph | 79 mph | 100 mph | 87 mph (tilt technology) |
| Cost | \$16 million (\$8 million) | \$13 million | \$8 million +\$6 million per mile | \$8 million |
| Seated Capacity | 208 (104)** | 224 | 212 | 164 |
| Standees (estimated) | 192 (96)** | 254 | 230 | 160 |
| Total Capacity | 400** | 478 | 442 | 324 |
| In Service | Texas eBART | Texas**, Europe, Africa, and Central Asia | Connecticut New York | Norway |

* - Other manufacturers exist, select sample presented above for major distinctions and decision points

** - Planned service late 2018

*** - Assumes double trainset





Next Steps

- Ridership
- Operations and Maintenance Cost



Altamont DMU Simulation

■ [Video](#)

State Legislative Initiative (Former Bill # AB2762)

Purpose

Establish the Tri-Valley-San Joaquin Valley Regional Rail Authority To:

- 1) Develop, finance, deliver, own and operate an inter-regional rail connection between BART, ACE and other San Joaquin County destinations and rail systems.
- 2) Create this independent authority so as to have and exercise powers of maximum flexibility and maximum control with which to pursue its purpose.
- 3) Permit the Authority to consider and select any feasible technology, any combination of technologies and any implementation sequence or phasing strategy that achieves the statutory purpose. All options are open.
- 4) Ensure that all options are available to the Authority as it defines and pursues implementation plan
- 5) Have the power to perform or assign ownership, operations and maintenance, financial obligation functions as the authority deems appropriate.
- 6) The Governing Board of the Authority shall consist of 12 elected officials with 9 having voting rights and 3 ex-officio members, 8 members from the Tri-Valley and 4 members from San Joaquin Valley (Chairman, Vice Chairman, Executive Committee)
- 7) Establish Administrative Support as follows:

Year 1: LAVTA provides all administrative support of the Board

Year 2-4: The Board will select either LAVTA, SJRRC or any other existing public rail transit agency

Year 5 – 9 and subsequent 5 year periods administrative support selected by the Board with options as in Year 2-4.

BART is required to enter into an agreement with the authority to:

- 1) Hold in trust all real and personal property
- 2) Transfer to the Authority other assets accumulated in the
 - Planning
 - Environmental Review
 - Design Documents
 - ROW Acquisition
 - Permitting
 - Construction

All unencumbered monies and assets dedicated for the completion of the project(s) shall be transferred to the Authority for the completion of the inter-regional connection.

The Authority shall pursue any and all sources of funding necessary to successfully execute its purpose with the constraint of a non-compete provision where no member of the Authority shall pursue funding available to other Authority member without consent of those members.

The Authority shall not be responsible for any core system upgrades on the BART system that pre-exist the Authority's creation.

Upon completion of any Tri-Valley Extension of BART, it shall operate, maintain and be responsible for setting fare policies and related financial obligations of the BART extension.

BART shall provide operating and maintenance technical assistance including design, standards and methods as needed by the Authority for any BART extension or integration of any other inter-regional rail system with BART.

The Authority shall retain ownership of the assets of any BART extension.

All procurements must be consistent with State and Federal laws and be based on price, best value, competitive negotiations or all of these as the authority deems appropriate.

The Authority shall be dissolved when it determines that existing rail service agencies are capable of successfully sustaining the system services.