BART Capacity Challenges
BART Existing Yards and Tailtracks
BART Existing Shops
BART Yard and Shop Systemwide Plans

• BART has plans to expand yard and shop capacity
• More shop space*
  • 7 shop spaces at Hayward
  • 10 shop spaces at Santa Clara
• More storage space
  • 250 cars at Hayward
  • 193 cars at Santa Clara

* One shop space = one work space to service one BART car, typically a pit or a lift
Livermore Yard and Shop Design Will Be Refined

• Understand public has concerns
• Now at 10% engineering
• Will have better information during final design
  • Biological, geotechnical, hydrological and utility surveys
• Will refine design with input from Livermore
Locating Yards and Shops

- Yards should be near the beginning of the line
  - Trains positioned to start their morning run
- Shops should also be near the beginning of the line
  - Blue Line only one without a shop near the beginning of the line → poorer service
Blue Line Yard

• Existing
  • 86 cars stored at Dublin Pleasanton, soon to be 90

• Future with BART to Isabel
  • Need to store 172 cars
  • 90 cars displaced from Dublin Pleasanton
  • 36 needed for BART to Livermore
  • 36 needed to improve train frequency and lengthen trains
  • One 10-car ready reserve train
Existing BART Shops (Summer 2017)

668 Cars
34 Shop Spaces
20 Cars per Space

(X) = # of shop spaces
Existing BART Shops

• At 20 cars per shop space, barely able to keep up with maintenance needs
  • Almost always a line of cars waiting at shops
  • Difficulty getting full fleet of cars ready

• BART Facility Standard is 16 cars per shop space

• Blue Line maintenance at Daly City and Hayward less than ideal
BART to Isabel Shop Need

• No place to maintain 36 cars needed for BART to Isabel
  • Need 2-3 shop spaces to maintain 36 cars

• Project design includes shop with 10 shop spaces
  • BART to Livermore project only paying for 2-3 shop spaces
BART to Isabel, Livermore Shop

1212 Cars
61 Shop Spaces
20 Cars per Space

(X+Y) = # of existing shop spaces + # of new shop spaces
Six Possible Yard Locations

1

6

Recommended

2

4

3

5
I-580 Elevation Profile

Yard Profile (flat)

- Hacienda Dr
- Santa Rita Rd / Tassajara Rd
- Fallon Rd / El Charro Rd
- Airway Blvd
- Match Line

Isabel Station

- Isabel Ave
- Portola Ave
- N Livermore Ave
- First St

Elevation (in feet)

- 0 ft
- 2,000 ft
- 4,000 ft
- 6,000 ft
- 8,000 ft
- 10,000 ft
- 12,000 ft
- 14,000 ft
- 16,000 ft
- 18,000 ft
- 20,000 ft
- 22,000 ft

- 330 ft
- 360 ft
- 390 ft
- 420 ft
- 450 ft
- 480 ft
- 510 ft

Match Line
Location 6

- Increases project cost by $50M
- Shop not possible
- Interferes with mainline operations
- Less reliable
Location 4

- Increases project cost by $150M
- Shop not possible
- Less reliable
Location 5

- Increases project cost by $200M
- Shop not possible
- Less reliable
Location 1

- Little effect on project cost
- Interferes with mainline operations
- Hard to operate
- Difficult to add shop
- Inconsistent with Dublin land use plans
- Inconsistent with Alameda County zoning for Doolan Canyon
Location 3

- Increases project cost by $150M
- Cuts into side of hill
- Difficult to add shop
Recommended Yard and Shop Site

- N Livermore Ave
- Hartman Rd
- Las Positas College
- Isabel Station

Proposed BART Maintenance and Storage Yard

Legend:
- Stream
- BART Project

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Recommended Site Consistent with Allowed Land Uses

• Zoned Large Parcel Agricultural by Alameda County

• Allowed uses
  • Agricultural, agricultural processing facilities
  • Utility corridors
  • Solid waste landfills, related waste management facilities
  • Quarries
  • Wind farms
  • Public and quasi-public uses
  • Recreational
Recommended BART Yard and Shop
Connecting Track to Yard and Shop
Recommended Site Constraints

- Livermore Ave
- Hartman Rd
- Las Positas College
- Isabel Station

Legend:
- 20 foot Contours
- Stream
- Flood Zone
- Vernal Pool Habitat
- Potential Sensitive Habitat
- BART Project
Measures to Reduce Impacts

• Possibly reduce size and reshape
• Natural toned colors
• Lighting focused downward, shielded, and recessed
• Fences and berms to visually screen, where feasible
• Perimeter walls or building enclosures to reduce noise
• Put other land under permanent conservation easement
  • Negotiate with resource agencies