

VTA's BART Silicon Valley Phase II Extension

Downtown/Diridon Community Working Group

June 9, 2015



Agenda



- Recap of CWG Process
- Follow up items
- VTA's BART Silicon Valley Program status
 - Phase II recap
 - Environmental update
 - Community Engagement process
- Ridership and Modeling
- Planned Land Use Framework
- Next Steps



CWG Process

Eileen Goodwin, Facilitator

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Role of the CWG

- Be project liaisons
- Receive briefings on technical areas
- Receive project updates
- Build an understanding of the project
- Collaborate with VTA
- Contribute to the successful delivery of the project

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Your Role as a CWG Member



- Attend CWG meetings
 - Bring your own binder (BYOB)
- Be honest
- Provide feedback
- Get informed
- Disseminate accurate information
- Act as conduits for information to community at large

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Role of the CWG Team



CWG Team Member	Role
Eileen Goodwin	Facilitator
Brent Pearse	Primary Outreach Contact
Leyla Hedayat	Phase II Project Manager
Kevin Kurimoto	Technical Lead
Michael Brilliot	City of San Jose – Planning Liaison
Rosalynn Hughey	City of San Jose – Planning Liaison
Ray Salvano	City of San Jose – DOT Liaison
Jessica Zenk	City of San Jose – DOT Liaison

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Work Plan



Items from the work plan discussion during orientation fall in 3 categories:

- Item was added to the work plan
 - Added early because it informs CWG of items to be discussed in the 1st quarter of 2016
 - Added later because decision or information is not readily available
- Item is included as part of topic previously identified in the work plan
- Item will be covered at a later date at another meeting, but we will inform the CWG when info becomes available or topic is not part of the scope of this project

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Work Plan Items



- BART staff to present need for maintenance facility and justification of location of maintenance facility.
- Presentation on the evaluation of the proposed east and west alternatives for the downtown station.
- Update on HSR project—given by HSR staff. Cover compatibility underneath Diridon.
- Presentation on underlying land use assumptions and how they connect to ridership assumptions.
- Presentation on phasing options.
- Presentation on cross over track including purpose and location and constraints on locations.
- Presentation in June about VTA's community engagement process for this effort including how to give public input.

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Work Plan Items (continued)



- Make sure the construction methods presentation in the work plan covers tunneling, construction phasing, cut and cover construction techniques, and temporary and permanent structures.
- Presentation on parking demand analysis especially as it related to the neighborhoods to the east of the downtown.
- Impacts on transit during construction in the vicinity of SJSU.
- City access study scope and findings, especially a connection to SAP.
- Presentation on the design and aesthetics of the BART structures such as vents, exits, etc.
- Presentation regarding trade offs between parking and TOD.
- Presentation regarding access planning (bikes, pedestrians, trails, etc.).
- Presentation regarding parking strategies at Diridon especially interface with SAP.

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Follow-up Items



- Add CWG member names to both sides of the table tents.

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Upcoming Meetings



VTA Board of Directors

- August 6, 2015
- September 3, 2015
- October 1, 2015

SVRT Program Working Committee

- August 3, 2015
- October 5, 2015
- December 7, 2015

City of San Jose Station Area Walk Audits

- July 21, 2015

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Project Status

Leyla Hedayat, Phase II
Project Manager

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Phase II Design Completion



<p><u>Tunnel</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="border-bottom: 1px solid black;">EPB Boring Machine</td><td style="border-bottom: 1px solid black; text-align: right;">95%</td></tr> <tr><td style="border-bottom: 1px solid black;">Tunnel Liners</td><td style="border-bottom: 1px solid black; text-align: right;">95%</td></tr> <tr><td style="border-bottom: 1px solid black;">Horiz. & Vert. Alignment / Geotech.</td><td style="border-bottom: 1px solid black; text-align: right;">95%</td></tr> <tr><td style="border-bottom: 1px solid black;">Trackwork</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Portal Structures</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Mid-Tunnel Ventilation structures</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Cross Passages</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> </table> <p><u>Stations</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="border-bottom: 1px solid black;">Alum Rock</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Downtown</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Diridon/Arena</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Santa Clara</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> </table>	EPB Boring Machine	95%	Tunnel Liners	95%	Horiz. & Vert. Alignment / Geotech.	95%	Trackwork	65%	Portal Structures	65%	Mid-Tunnel Ventilation structures	65%	Cross Passages	65%	Alum Rock	65%	Downtown	65%	Diridon/Arena	65%	Santa Clara	65%	<p><u>Systems</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="border-bottom: 1px solid black;">Traction Power</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Line Electrical</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> <tr><td style="border-bottom: 1px solid black;">Train Control</td><td style="border-bottom: 1px solid black; text-align: right;">65%</td></tr> </table> <p><u>Maintenance and Storage</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="border-bottom: 1px solid black;">Newhall Yard</td><td style="border-bottom: 1px solid black; text-align: right;">30% - 50%</td></tr> </table>	Traction Power	65%	Line Electrical	65%	Train Control	65%	Newhall Yard	30% - 50%
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Environmental Update



- Scoping Report released May 26, 2015
- Over 350 total comments were received in all.
- Documents and consolidates comments received, and considers:
 - Topics/concepts already analyzed
 - Topics/concepts that are not feasible and/or outside of environmental scope
 - New topics/concepts that are feasible and warrant analysis
- Technical analysis continues

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Community Engagement process

Brent Pearse, Community Outreach

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Community Engagement

- Strategy: To actively engage and educate community stakeholders on project status and technical subjects
- Build long term relationships that will last through environmental, final design and construction
- Develop and encourage public participation between VTA and the community

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Three Pronged Approach



1. **Workshops and Walks:** Engage audiences, dive deep on complex subjects: finance/funding, ridership/modeling, access and construction
2. **Community Engagement during Environmental Process**
3. **Ongoing Communication:** 20 plus presentations to organizations/businesses since early 2015



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Important Upcoming Opportunities



Open to All

1. **July 21, 2015** – Access Planning – Audit Walk, CSJ Lead
2. **July 2015** – Land Use Workshop
3. **October 2015** – Finance/Measures A Workshop
4. **January 2016** – Construction Methods/Approach

Why These Topics?

Answer: We receive more public comments and questions on these topics than anything else.

Goal: Address questions and concerns through technical experts and hands on exercises

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General Questions





- When and how is the best time to use my own organization communication tools: blog, website, social media?
 - A: Key project milestones, release of public documents, board meetings
- What types of other groups has or will VTA outreach to?
 - A: Business organizations, community based organizations, low income/minority communities
- How can assigned outreach staff assist me?
 - A: Organize special presentations, meetings, follow up on questions and concerns, keep us moving forward

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Staying Involved



- CWG Portal on www.vta.org/bart/phaseIICWGs
- Email Updates: www.vta.org/bart/subscribe
 - Recommend Topics BART Planning, BART, Environmental, BART News
- Social Media Sharing
 -  @bartsv
 -  facebook.com/bartsv
- Committee and Board Meetings

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CWG Information - www.vta.org/bart/phaseIICWGs



OVERVIEW CONSTRUCTION COMMUNICATIONS FINANCIAL STATIONS ENVIRONMENTAL

Construction Activities

What's New?

- Monday Evening Nighttime Utility Work
- Trade Zone Blvd. Construction to
- Phase II CWGs
- Winter 2015
- Future Berryessa BART Station Campus - Spring 2015

Phase II

Contracting Opportunities

To register, or for more information, please click here.

CWG Information - www.vta.org/bart/phaseIICWGs



OVERVIEW CONSTRUCTION COMMUNICATIONS FINANCIAL STATIONS ENVIRONMENTAL

Home > Environmental Phase II

Phase I Environmental Phase II Environmental

Environmental Documents Phase II CWGs

Project Description

The BART Silicon Valley Phase II Extension Project is planned to begin ground level at the Berryessa Extension terminus south of the Berryessa Station in the City of San Jose, descend into an approximately 5-mile-long subway tunnel, continue through downtown San Jose, and terminate at-grade (street level) near the existing Caltrain Station in the City of Santa Clara.

Phase II Quick Links

- Environmental Documents
- Phase II Extension Map
- Upcoming Meetings
- VTA's BART Silicon Valley Phase II Extension Project: Environmental Process - Fact Sheet 2015 - pdf
 - Spanish
 - Chinese
 - Vietnamese
 - Korean
 - Portuguese
- BART Phase II Environmental Scoping

CWG Information - www.vta.org/bart/phaseIICWGs



The screenshot shows the VTA website's 'Phase II Community Working Groups' page. At the top, there is a navigation menu with 'OVERVIEW', 'CONSTRUCTION', 'COMMUNICATIONS', 'FINANCIAL', 'STATIONS', and 'ENVIRONMENTAL'. Below the menu is a map of the Santa Clara Valley area, highlighting the Santa Clara Station, Alum Rock Station, and Downtown/Diridon Station. The main content area is titled 'Phase II Community Working Groups' and lists three groups: Alum Rock CWG, Downtown/Diridon CWG, and Santa Clara CWG. Each group has a list of links to various documents and meeting summaries. A 'Phase II CWG Links' sidebar on the right contains links for 'Upcoming Meetings', 'Role of Community Working Groups', 'Community Working Groups Map', 'Community/Stakeholder Engagement Milestone Schedule', 'Travel Demand Modeling Fact Sheet', 'Environmental Process Fact Sheet', and 'Phase II Frequently Asked Questions'. The footer includes a hotline number (408) 934-2662, an email address (vtabart@vta.org), and social media icons for YouTube, Facebook, and Twitter.

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Santa Clara Valley Transportation Authority Countywide Model

Presented by George Naylor
Transportation Planning Manager
Travel Demand Forecasting, Research and GIS
Santa Clara Valley Transportation Authority

george.naylor@vta.org

June 9, 2015



Overview of the VTA Travel Demand Model



- Set of Mathematical Models Used to Estimate Existing and Future Travel Patterns > Planning Tools used for Policy Decisions
- Key Inputs – Land Uses, Transportation Networks, Pricing
- Key Outputs – Trips, Mode Shares, Travel Volumes on Roadways and Transit Lines, Travel Speeds and Times

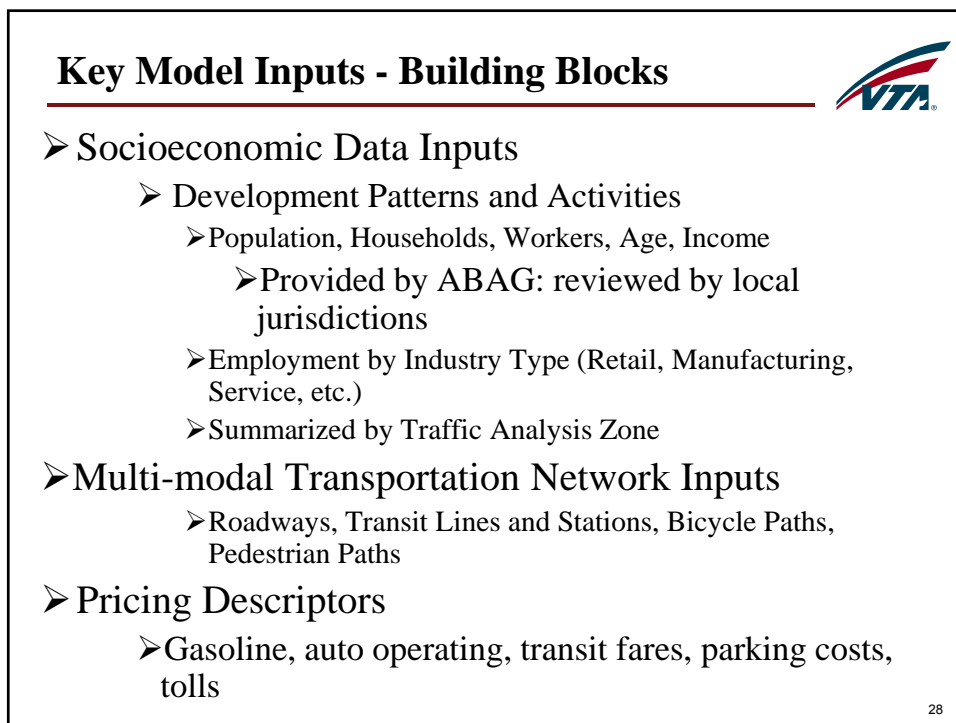
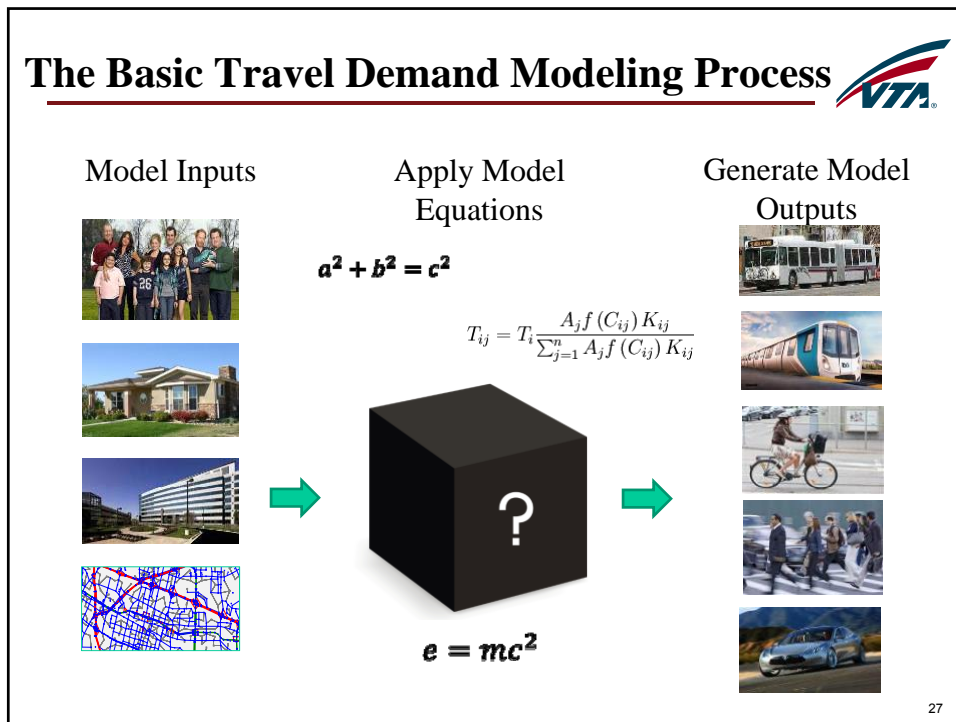
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Overview of the VTA Travel Demand Model



- Developed using Observed Travel Patterns from Household Travel Survey Data and Census (Calibration and Validation)
- Forecast Inputs are Applied to Predict Travel Demand
- Used to Define Transportation Improvement Policies and Test ‘What-if’ Scenarios
- Allows for Different Scales of Analysis > Regional, County, Facility, Route, Transit Stop/Station

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Socio-economic Data Inputs



- VTA is required to use the official regional forecasts prepared by Association of Bay Area Governments (ABAG)
- ABAG prepared latest series used in the Regional Transportation Plan (RTP) known as ABAG Projections 2013
- Projections 2013 have been tailored to meet ABAG and MTC policy goals as well as meet GHG emission targets mandated by Senate Bill 375
- VTA receives census tract data from ABAG
- Data are then allocated to smaller Traffic Analysis Zones (TAZs) for use in the VTA models

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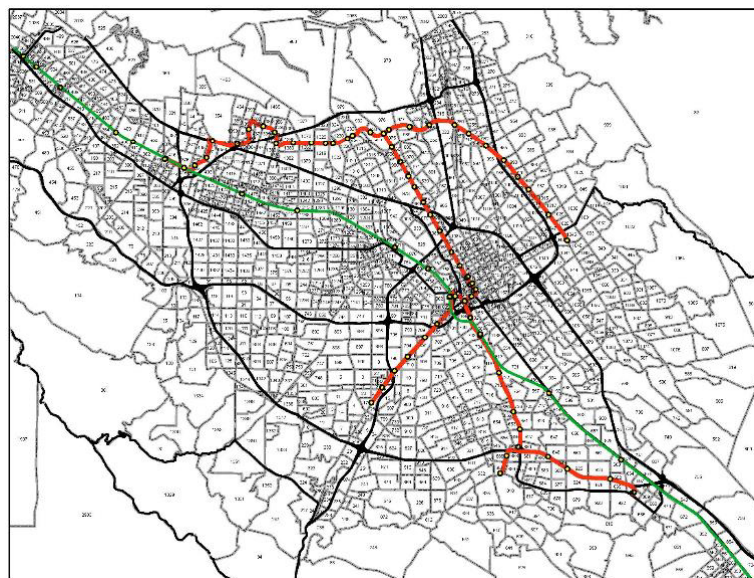
Allocation Procedure to VTA Model Traffic Analysis Zones (TAZ)



- Start with development of base year 2010
- Households and population from 2010 Census
- Jobs from latest parcel data from Dataquick
- Allocated ABAG Census totals to Traffic Analysis Zones (TAZs)
- Added in future growth from approved projects inventory
- Allocated to specific areas based on General Plan data from jurisdictions (if available)
- Conserve to ABAG census tract control totals

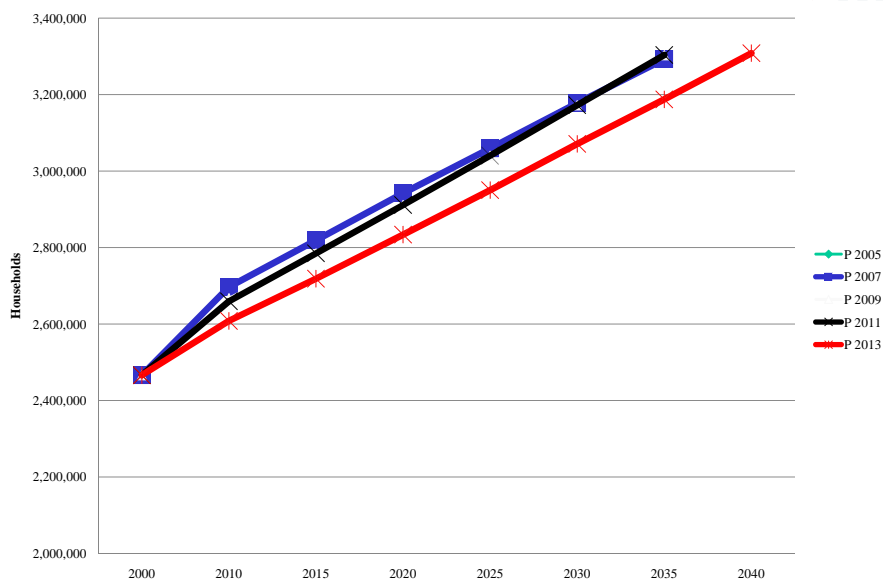
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Countywide Model Traffic Analysis Zones

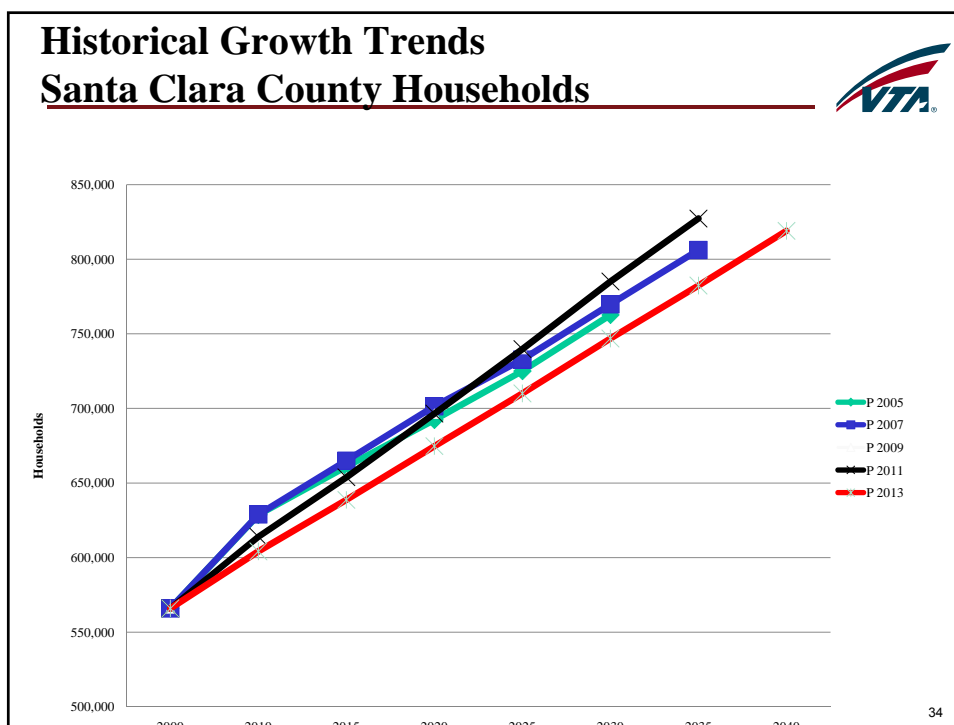
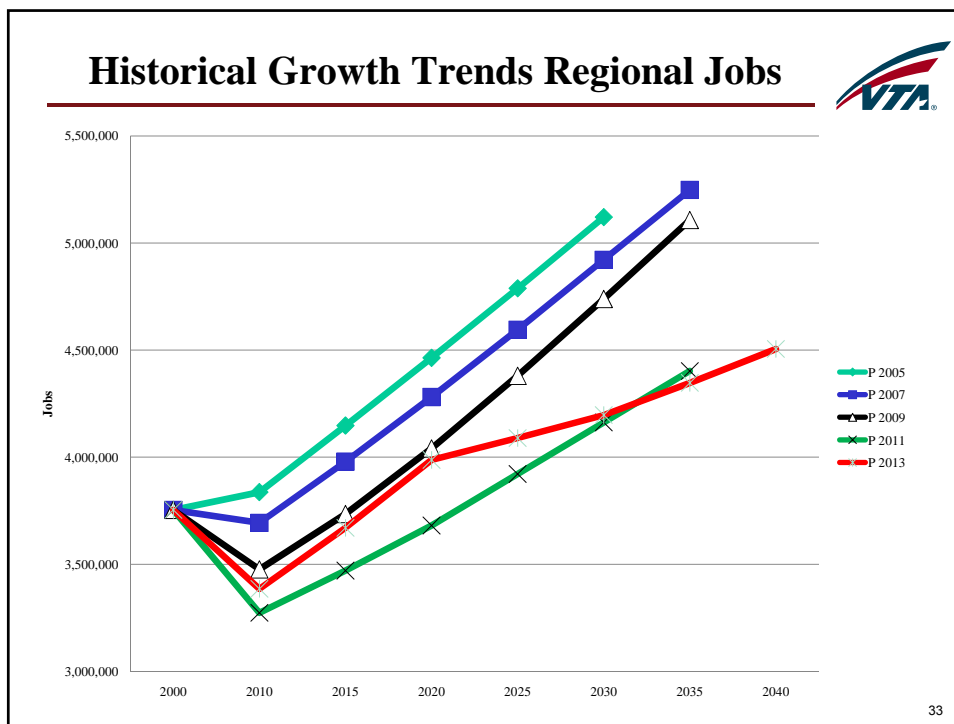


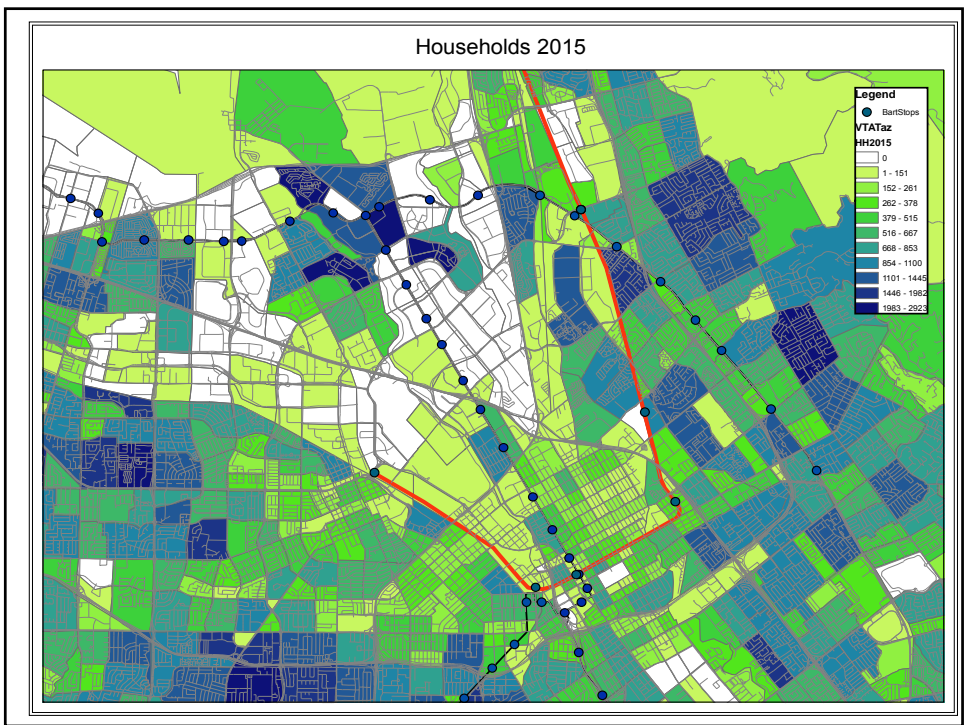
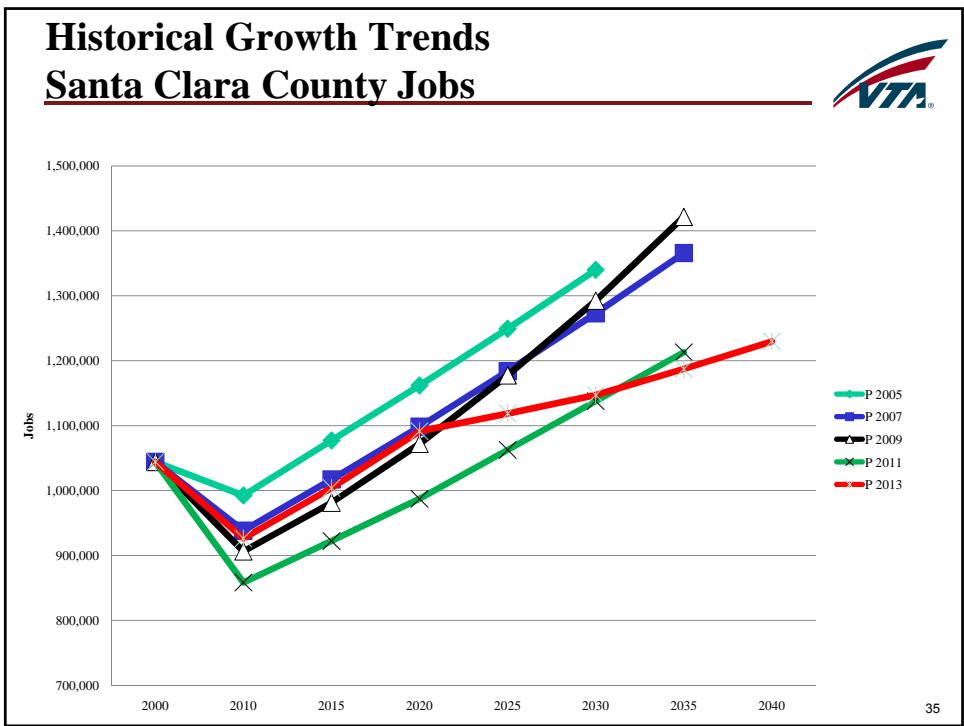
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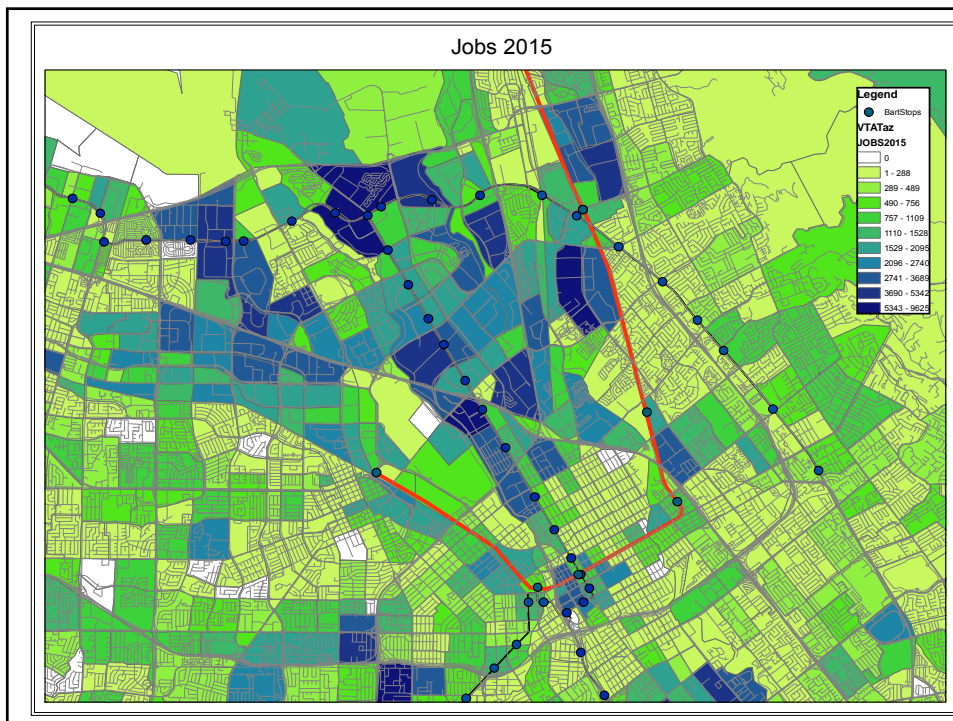
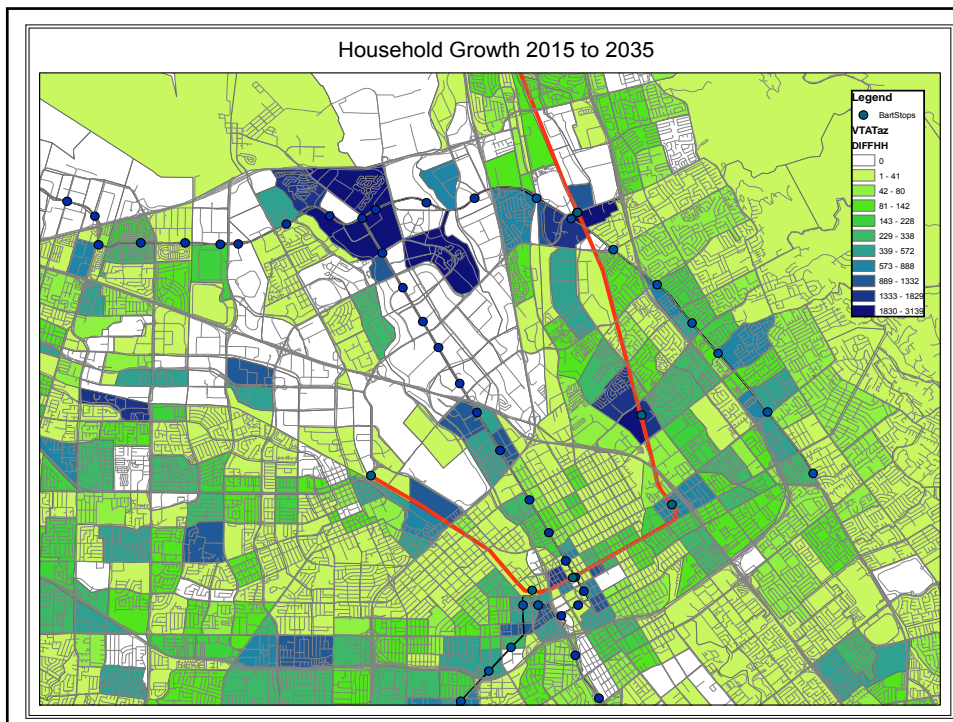
Historical Growth Trends Regional Households

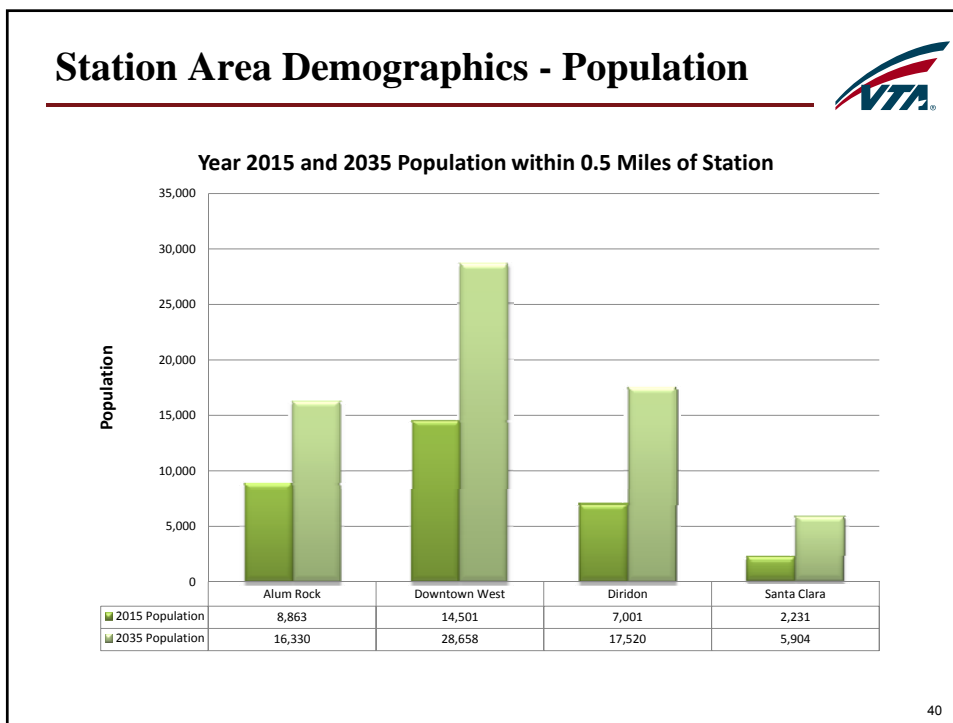
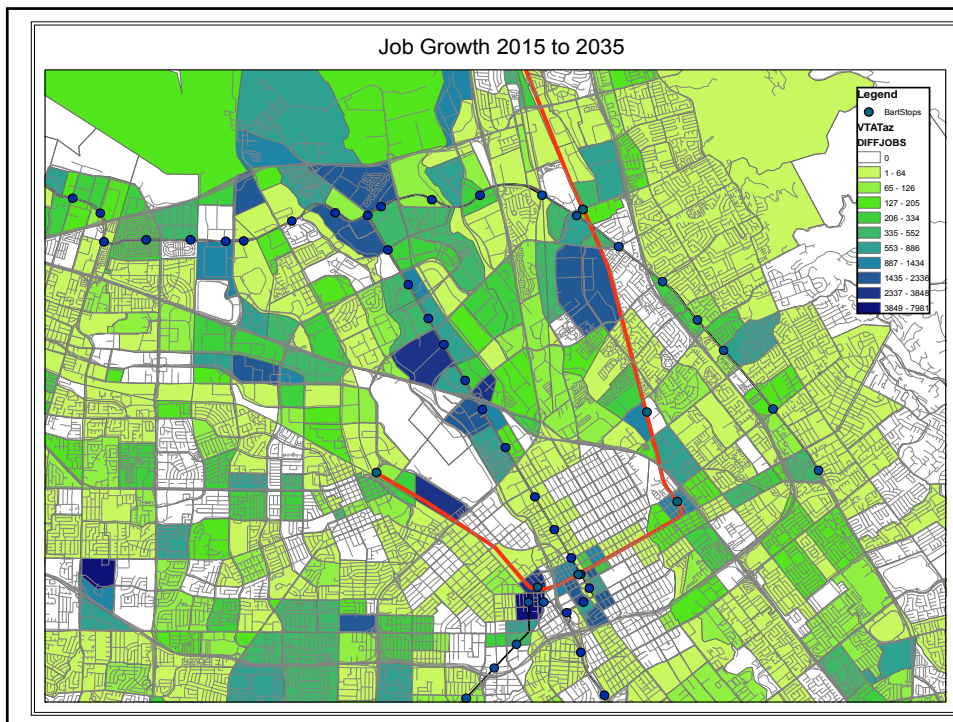


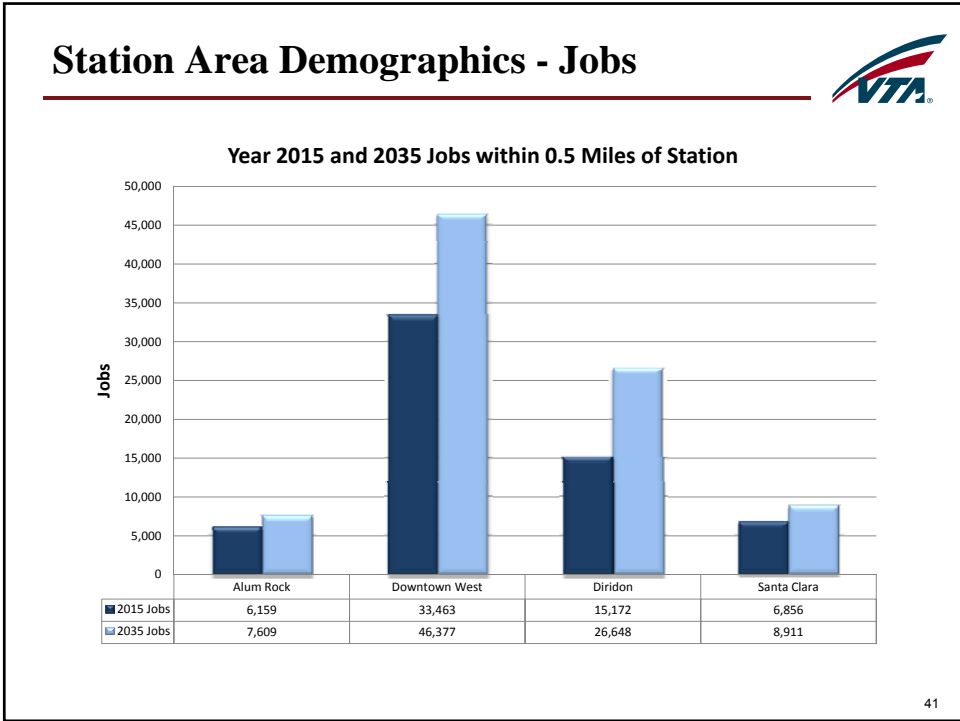
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- ## Highway and Transit Networks
- Highway Networks
 - Roadway attributes on network links
 - Lanes, free-flow speeds, peak hour lane capacities, etc.

 - Transit Networks
 - Bus service utilizes road network speeds
 - Rail and Ferry services use transit links with coded speeds
 - Transit attributes include:
 - Frequencies (peak and off-peak)
 - Fares
 - Stop/Non-stop coding
 - Access connectors (walk, transfer, park-and-ride)

Model Calibration and Validation



- VTA Models are Calibrated to Observed Data
 - 1990 MTC Home-Interview Travel Survey for Non-work Trips
 - 2010 Census Data Travel Patterns for Work Trips

- VTA Models are Validated to Observed Traffic and Transit Patterns
 - AM and PM Peak Traffic Counts
 - Daily Transit Boardings by Operator (BART, Caltrain, VTA)

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Year 2035 Forecast Networks



- Includes Funded Projects in the Adopted Regional Transportation Plan
- Major Transit Projects Include:
 - VTA BART Extension to Silicon Valley
 - 2-Station Phase I in 2035 No Project (existing + committed projects included)
 - 4-Station Phase II in 2035 Project
 - Caltrain Electrification and Transbay Extension
 - VTA Light Rail Improvements
 - Capitol Corridor Extension
 - Vasona Corridor Extension
 - Alum Rock-Mountain View (Long T) Line
 - VTA ECR and Stevens Creek BRT Corridors
- Major Highway Projects Include:
 - VTA Express Lane Corridors – Countywide
 - Various Countywide Roadway Improvements

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BART Silicon Valley Extension



- Model output used in all phases of Project Analysis
 - Transit ridership
 - New transit trips and diverted transit trips
 - Transit vehicle requirements
 - Rail and bus vehicles
 - Station boardings by access/egress modes for station design
 - Park-and-ride spaces and required/kiss-and-ride drop-off
 - Transit transfers – station design for feeder bus and shuttle access/egress

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BART Silicon Valley Extension



- Capital cost estimates
- Operating and maintenance cost estimates
- Traffic volumes
 - Station intersection level-of-service impacts

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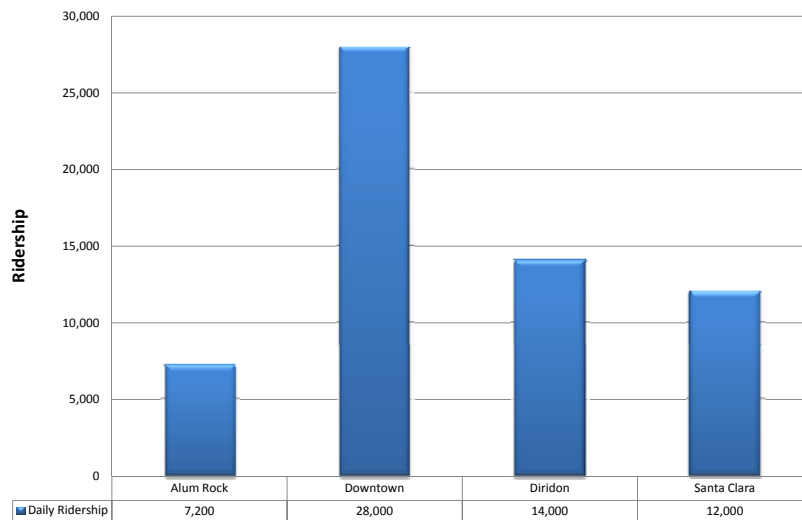
EIR and FTA Ridership Requirements



- Transit Ridership
 - No Project and Project
 - Existing Year (2015) and 20 year horizon (2035)
 - Opening Year 2025
 - New Starts final reported ridership is calculated as 50 % of existing and 50% of horizon ridership
 - FTA requires an estimate of project ridership made by transit dependents – for VTA models these are lowest income riders estimated by the models

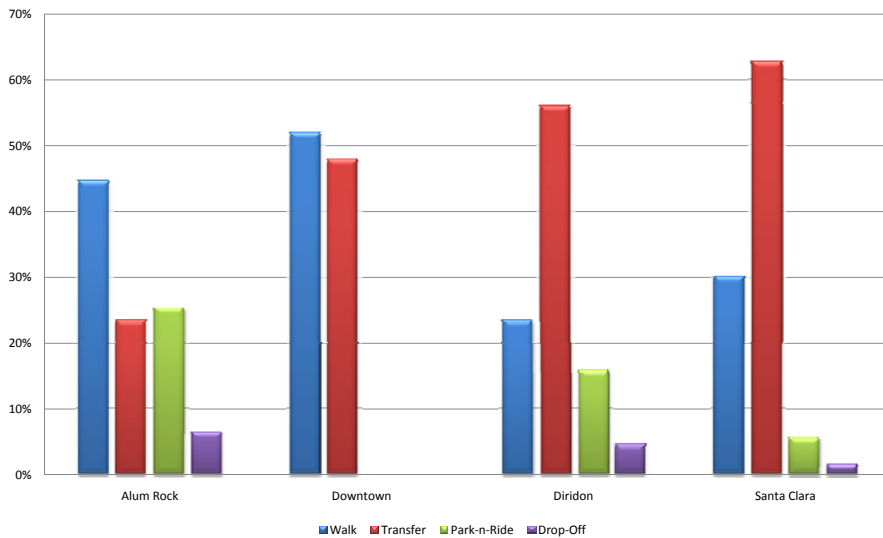
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2035 Ridership – from March 2012 Model Run



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2035 Station Ridership by Mode of Access/Egress – from March 2012 Run



Questions??



What's Next for Ridership?



- Continue Community Outreach efforts
- Support Environmental Documentation Process – 2015 → 2017
- Coordinate with FTA for Review of Ridership Forecasts – 2015 → 2017
- Incorporate updated ABAG Regional Growth forecasts when available (likely late 2016 → early 2017)
- New Starts Submittal (2017)

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BART Phase II

Planned Land Use Framework
Diridon and Downtown



Downtown/Diridon Community Working Group
June 9, 2015

Existing Planning Framework

Downtown Strategy 2000

- Strategy and EIR approved by Council in 2005
- Evaluated:
 - 11.2 Million SF Office
 - 8,500 residential units
 - 1.4 Million SF Retail
 - 3,600 Hotel Rooms
- Development broken into four phases
- Transportation improvements/mitigations identified



Downtown – Envision San Jose 2040

- General Plan Major Strategy # 9
“Destination Downtown”
- Build upon the great transit access to create a vibrant urban center
- 48,500 new jobs planned
- 10,360 new residences planned



Downtown – General Plan & Zoning

- Downtown General Plan Land Use Designation
- Downtown Core Zoning District



Diridon Station Area Plan

- Establishes land use plan and policy framework
- Maximizes development potential
- Plans for Diridon Station Expansion
- Develops model plan for pedestrian, bicycle, and transit connectivity
- Program EIR completed



Diridon Station Area Plan

Planned Development Levels

- 4.96 Million SF Office
- 420,000 SF Retail
- 2,588 Residential Units
- 900 Hotel Rooms



Diridon Station Area Plan – Northern Zone

Innovation District

- Long term development potential
- 3,000,000 SF Office
- 80,000 SF Retail
- 223 Residential Units
- Successful HP Pavilion



Diridon Station Area Plan - Central Zone

Destination Diridon

- Office, entertainment, transit
- 1,150,00 SF Office
- 140,000 Retail
- 250 Hotel
- Ballpark



Diridon Station Area Plan - Southern Zone

Diridon South

- Mixed Used Residential
- 800,000 SF Office
- 200,000 SF Retail
- 2,365 Residential Units
- 650 Hotel

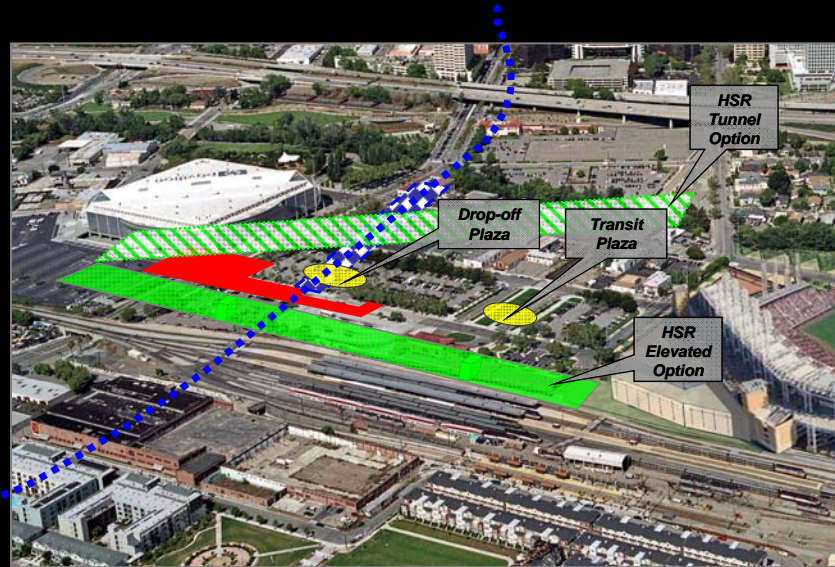


Diridon Station Expansion

Goal: Expand Station to create a well-integrated center of architectural and functional significance



Diridon Station Expansion



Transportation and Parking Strategies

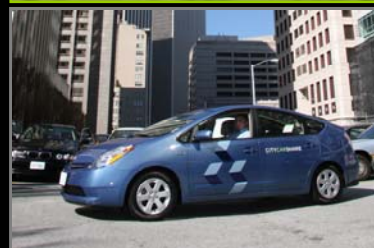
- **Transportation System**

- Enhance facilities for walking, biking, and transit
- Pursue Envision 2040 mode shift goals (20% transit, 15% bike, 15% walk)



- **Parking**

- Encourage best practices (unbundled parking, shared parking, car share)
- Parking goals only, no proposed changes to current code
- If more parking is built, parking would replace development



Evaluate Diridon, Airport & Santa Clara Connections

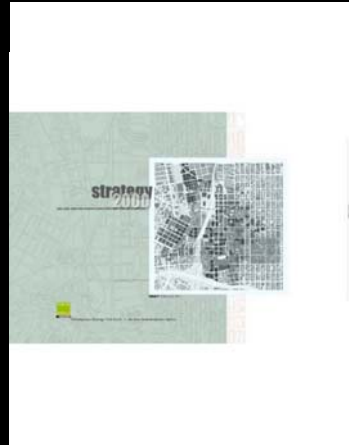
- Viability of Diridon, Airport and Santa Clara connection
 - Route, Ridership, Cost
- Range of Automated Guideway Transit Technologies
 - Automated People Mover (APM)
 - Automated Transit Network (ATN) (2012 SJ study)
 - Hybrid/Phased Approach
- Additional Connections
 - HSR Long Term Parking
 - North SJ
 - Downtown/Convention Center
- Define potential project



Plan Updates and Studies
in Process

Downtown Strategy EIR Update

- Update planned residential capacity
- Remove or modify development phasing
- Update Traffic Analysis
- Consider revised mitigations and funding
- Consider policies to reserve areas adjacent to BART for employment uses



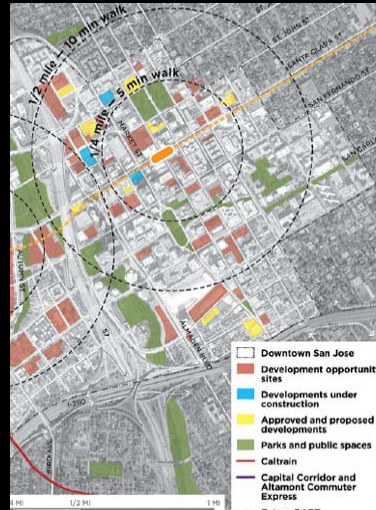
BART Phase II - Development Impact Study

- Identify anticipated impacts of BART upon development
- Evaluate existing land use plans and real estate market
- Identify opportunities/mechanisms to catalyze development
- Suggest changes to existing land use plans

BART Phase II - Access & Connectivity Study

Integrate BART Station into the Surrounding Environment

- Maximize Ridership
- Connect Seamlessly to Feeder Systems
- Enhance the Quality of Street Life
- Encourage Foot Traffic & Business Vitality



BART Phase II - Access & Connectivity Study

Study Process

- Walk Audit & Workshop with Community Stakeholders (You!)
- Three-Day Charette
- Documentation of Stakeholder Input & Charette Outcomes



Save the Date: Tuesday, July 21st

BART Phase II

Planned Land Use Framework
Diridon and Downtown



Downtown/Diridon Community Working Group
June 9, 2015



Discussion

Eileen Goodwin, Facilitator

Next Steps



- Next meeting: Tuesday, August 11, 2015 ~ 4:00-6:00 PM,
San Jose/SV Chamber of Commerce ~ BYOB
 - Financial Analysis of BART Phase II (VTA staff & Ernst and Young)
 - City related projects within the BART corridor (City of San Jose staff)
 - VTA related projects within the BART corridor (VTA staff)
 - Economic Analysis surrounding BART stations (SPUR staff)
 - Envision project update (VTA staff)
- Parking validation
- Action Items