STATE ROUTE 242
Corridor Plan /
Transportation Concept Report

The Corridor Plan (CP) is a Caltrans long range planning document that informs the regional transportation planning process. The CP provides information regarding route segments, including planned projects for the highway through 2035, and existing and forecasted traffic data. Projects identified in the CP will require environmental and engineering studies before final approval and are subject to change.

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Table of Contents

Executive Summary **1**

I. Corridor Planning Process **2**
- Introduction
- Purpose and Need
- State's Interregional Responsibility
- Corridor Plan Consistency

II. Corridor Overview **4**
- Corridor Description
- Alignment and Geometrics
- Demographics
- Land Use
- Environmental Constraints
- Route Designations
- Trip Information
- Transit Services
- Bicycle and Pedestrian Facilities
- Maintenance
- Additional Issues

III. Corridor Performance **13**
- Traffic Information
- Corridor Performance Issues

IV. Corridor Concept **16**
- Concept Rationale
- Goods Movement Strategy
- Transit Strategy
- Land Use Strategy
- Bicycle and Pedestrian Strategies
- Corridor Project List

Appendices **19**
A. Corridor Segment Data / Additional Corridor Data
B. Pertinent Federal, State, and Regional Transportation Plans, Programs, and Directives.
C. Freeway Agreements
D. Highway/Freeway Inventory Map
E. Congestion Map
F. Pavement Condition Map
G. ITS/TOS Elements Map
H. 2009/2035 Origin/Destination Maps

Executive Summary

State Route 242 is a 3.4 mile long connector freeway that links Interstate 680 north of Pleasant Hill to State Route 4 in Concord. The Annual Average Daily Traffic (AADT) ranges from 114,000-120,000. The primary traffic problem on SR 242 is recurrent congestion on southbound SR 242 just north of I-680 in the AM peak period. This is typically caused by high traffic volumes on 242 slowing to merge on to I-680.

In addition to connecting I-680 and SR 4, the 242 corridor serves commercial, light industrial and residential land uses in the City of Concord. There are two Priority Development Areas in its general vicinity (PDAs), the Pleasant Hill Buskirk Development Area and the Concord Community Reuse Area. Two Bay Area Rapid Transit (BART) stations and the Buchanan Field General Aviation airport are also in the vicinity.

HOV improvements are planned for the I-680 and SR 4 corridors, which would affect regional movement in the I-680/SR 242/SR 4 corridors. The future HOV investment emphasis in the vicinity of SR 242 will remain on I-680 and SR-4 respectively. At this time, the Department believes the existing 6 lane freeway provides sufficient mobility, with future demands able to be accommodated through non-capacity increasing operational improvements on SR 242 as well as the presence of alternative routes and modes. I-680 and SR 4 provide efficient routing for HOV's, and BART provides a viable transit alternative for many travelers.

Redevelopment figures for the Concord Naval Weapons Station (CNWS) show an expected impact on the regional transportation system. Travel demands on the SR 242 corridor do not show appreciable change between the CNWS build and no-build scenario; traffic degradation will occur in the future with or without the CNSW Reuse Project. Expected traffic volume in 2030 does not climb above existing capacity except at the point of SR 242 just north of I-680.

Future Concept

The SR-242 future concept is for a 6-lane urban freeway corridor that will continue to function as a connector between I-680 and SR 4, with active ITS deployments for system management.

Planned projects in the corridor include interchange modifications at 242/Clayton Road and roadway rehabilitation in FY 14/15. Additional projects and strategies recommended for further study include corridor-wide ramp metering (a ramp metering study for SR 242 and SR 4 is now in progress), improved Traffic Operations System (TOS) coverage, and pedestrian access improvements at the Olivera Road interchange. In addition, maintaining and enhancing bus service on and across SR 242 connecting to BART stations is important, as well as maintaining and enhancing nearby bicycle and pedestrian networks and expanding trail systems.

Segment	County	Segment Description	Existing Facility	25-yr Concept
A (PM 0.0-3.4)	Contra Costa	I-680 to SR 4, Concord	6F	6F

Table ES1. SR 242 Corridor Concept Summary.

6F = 6-Lane Freeway
PM = Post Mile

I. Corridor Planning Process

Introduction

A Corridor Plan (CP) defines the "concept" or configuration of a State owned/operated facility, projecting to a 25-year planning horizon. The CP describes corridor characteristics such as the existing transportation network and land use, and projects the long-range corridor travel needs. A CP is not meant to be an encyclopedia of corridor information, but rather a statement by the Department on what the future facility should be to better manage projected travel demand and other considerations such as interregional needs, Goods Movement, and local concerns.

Corridor Plans and Transportation Concept Reports (TCR) are being developed for all 56 statutorily identified State Routes in District 4. This CP provides a concept for State Route (SR) 242 within Contra Costa County.

In order to recommend specific corridor improvements, a corridor assessment is performed based on current and forecasted travel demand and growth in the corridor population. This assessment considers current and planned land uses, existing operating conditions, and planned and programmed improvements. Long-range performance expectations and potential deficiencies are also identified. Conclusions are reached in conjunction with internal and external partners.

While considering the transportation network of the corridor as a whole, including alternative modes, Caltrans recognizes that its authority generally lies within the State Highway System. This report's emphasis is on State highway facilities.

Purpose and Need for a Corridor Plan

Government Code 65086 states that "the Department of Transportation as owner-operator of the State Highway System (SHS) shall carry out long-term State highway system planning to identify future highway improvement." These reports are currently identified as Transportation Concept Reports, Corridor Plans or Corridor System Management Plans (CSMPs). Guided by regional, State, and federal policies and guidelines, this CP is focused on anticipating improvements needed to address a 25-year horizon of growth in travel demand.

State's Interregional Responsibility

The SHS serves primarily interregional and regional travel demand. While this is not to preclude SHS access to specific destinations such as public facilities or major tourist attractions, development and modification of the SHS is conducted in the context of the mobility of regional and statewide to-and-through movement of people and goods.

California Senate Bill 45 (SB 45) of 1998 stipulates that the State will nominate transportation improvements that facilitate the movement of people and goods between the State's 43 transportation regions as well as to and through the State. To this end, the State is responsible for developing highway system performance standards pertinent to accommodating interregional travel demand, and specifying corridor facility concepts that improve interregional travel through the State Highway System. The corridor concepts indicated in Corridor Plans reflect the State's determination regarding the system accommodation of interregional, regional, and local travel needs.

Corridor Plan Consistency

Corridor Plan preparation is guided by several levels of government policy and direction. Applicable Federal and State guidelines, such as the *Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA-LU)*, the *California Transportation Plan 2030 (CTP 2030)*, MTC's Regional Transportation Plan (RTP) T2035 and the Interregional Transportation Strategic Plan (ITSP), provide the policy foundation for this Corridor Plan. The current State Highway Operation and Protection Program (SHOPP), a program of maintenance, safety, and rehabilitation improvements, and the State Transportation Improvement Program (STIP) are also critical in the development of this CP.

A full discussion of federal, State, and regional Transportation Planning efforts and policies related to Corridor Plans are included as Appendix B.

II. Corridor Overview

Corridor Description

State Route 242 is a 3.4 mile long connector freeway that links Interstate 680 north of Pleasant Hill to State Route 4 in Concord. The Annual Average Daily Traffic (AADT) ranges from 78,000-115,000.[1] In 2000, SR 242 was widened to six lanes for the entire route by utilizing existing right of way. Ramp meters are present at all onramps, but won't be operational until a local metering agreement with the Department has been developed and approved. The route was signed as part of SR 24 until 1987. SR 242, along with I-580, SR 24, I- 680, and SR 4 serve as the most direct route between the San Francisco Bay Area and the Sacramento River Delta region (via SR 4).

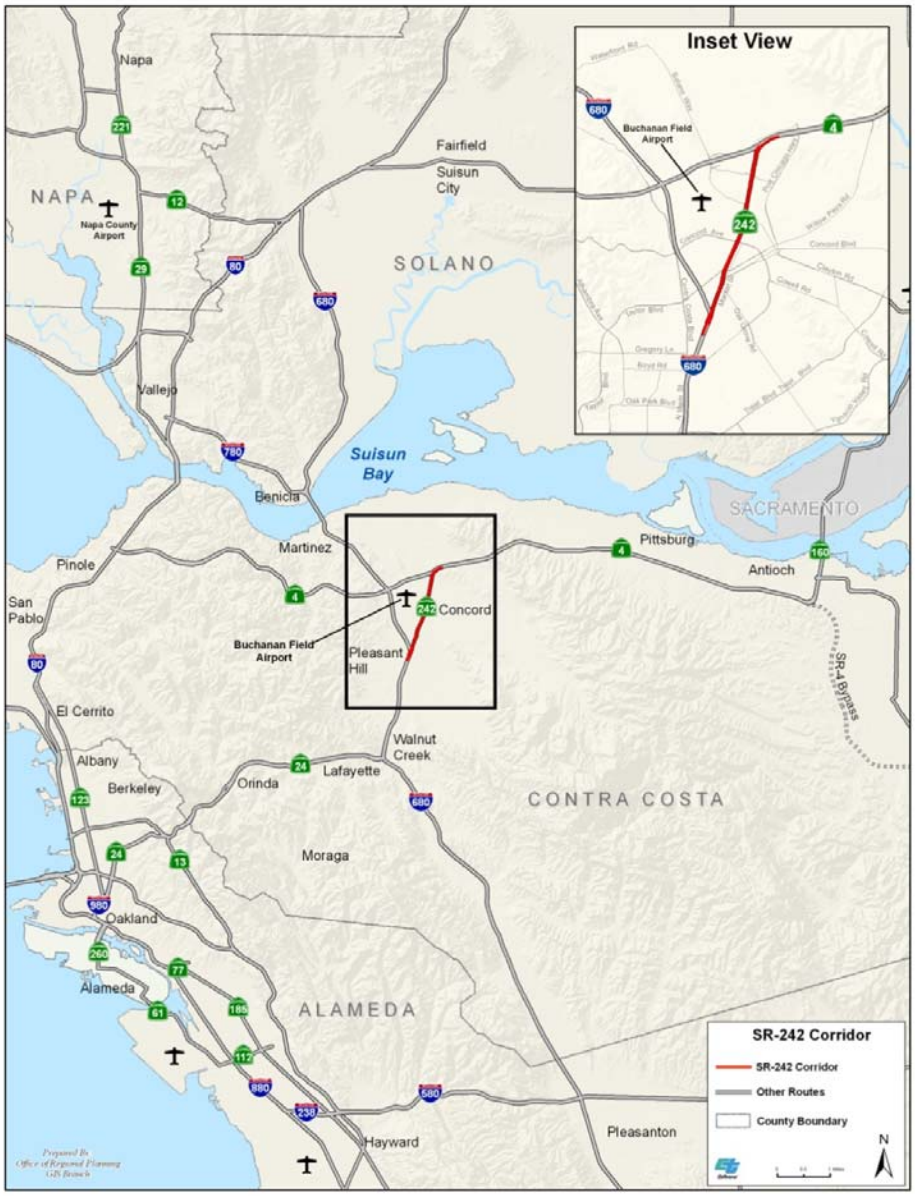


Figure 1. SR 242 Corridor Overview Map.

[1] Caltrans D4 Forecasting Branch 2010

Intelligent Transportation Systems

Traffic Detection Equipment in Corridor

Current ITS infrastructure on the SR 242 Corridor includes Ramp Metering (RM) stations, Traffic Monitoring Stations (TMS), Extinguishable Message Signs (EMS), and Closed-Circuit Television (CCTV) cameras. The coverage and distribution of the sources of detection in the SR 242 corridor varies. Most if not all of the detection in the SR 242 corridor is paired in order to provide data for both the north and south directions. There are detectors at Clayton Rd, and Solano Way (SB only), Market St. onramp (Mainline), Solano Way, Olivera Road, SR 4/ SR 242 interchange. CCTV is located at Clayton Road and Olivera Road. An EMS is located just south of Clayton Road / Willow Pass Road exit. Locations of ITS elements are mapped in Appendix G.

Existing Ramp Metering Equipment

The SR 242 corridor has ramp metering equipment installed (not yet operational) on the following freeway on ramps:

- PM 0.77 SB CLAYTON RD/MARKET ST
- PM 1.47 NB CONCORD AVE
- PM 1.48 SB CONCORD AVE
- PM 2.10 SB SOLANO WAY/GRANT ST
- PM 2.11 NB SOLANO WAY/GRANT ST
- PM 2.70 SB OLIVERA RD

Alignment / Geometrics

Specific alignment and geometric information for the SR 242 corridor is described as follows (mileage is approximate):

County	Post Mile	Facility	Description
CC	PM 0.0-3.4	6 lane freeway	Flat to rolling (urban setting)

Table 1. SR 242 Alignment and Geometrics.

Demographics

Contra Costa County is the third most populous county in the Bay Area. Households and Jobs are expected to increase by more than 30%, respectively, by 2035. The majority of the growth is expected to occur in the eastern portion of the county. The forecasted population growth will increase demand on freeways in the Central Contra Costa area. Concord is located 29 miles east of San Francisco; the city covers 31.13 square miles and is the largest city in Contra Costa County. The population of Concord is estimated at 129,700[2]. Concord will continue to be the major job center in the region. Table 2 details population, housing and job projections for 2005 (base year) and 2035 (future year).

[2] ABAG Projections 2009 (http://www.abag.ca.gov/planning/currentfcst/)

COUNTY	POPULATION		# HOUSEHOLDS		#JOBS	
	2005	2035	2005	2035	2005	2035
Alameda	1,505,300	1,966,300	543,790	707,960	730,270	1,039,680
Contra Costa	1,023,400	1,322,900	368,310	480,480	379,030	555,650
Marin	252,600	274,300	103,180	112,170	135,370	158,280
Napa	133,700	148,800	49,270	54,640	70,690	91,480
San Francisco	795,800	969,000	338,920	415,000	553,090	806,830
San Mateo	721,900	893,000	260,070	322,620	337,350	505,860
Santa Clara	1,763,000	2,431,400	595,700	827,330	872,860	1,412,620
Solano	421,600	506,500	142,040	171,290	150,520	211,880
Sonoma	478,800	561,500	181,800	211,290	220,460	325,110
Total	**7,096,500**	**9,073,700**	**2,583,080**	**3,302,780**	**3,449,740**	**5,107,390**

Table 2. Bay Area Population Housing and Jobs Projections (ABAG 2009).

Land Use

State Route 242 traverses the City of Concord. The topography for this 3.4 mile freeway is relatively flat. The surrounding area consists of land uses including: commercial, light industrial and single family residential. There are two regional shopping centers adjacent to the corridor: Willows Shopping Center, Park & Shop Center. Buchanan Field Airport, a general aviation airport, is located to the Northwest of the corridor.

Regional Blueprint Planning Program

The Regional Blueprint Planning Program supports the smart growth element of the Strategic Growth Plan by promoting focused land use choices at the regional and local levels. In the San Francisco Bay Area, the (FOCUS) program works with local governments and others in the Bay Area to collaboratively address issues such as high housing costs, traffic congestion, and protection of natural resources. The primary goal of FOCUS is to encourage future growth near transit and in the existing communities that surround the San Francisco Bay. The goal is also to enhance existing neighborhoods and provide housing and transportation choices for all residents.

Priority Development Areas

As part of the FOCUS program in 2007, local governments in the Bay Area were invited to apply for regional designation of an area within their community as a Priority Development Area (PDA). PDAs are infill development opportunities within existing communities. They are committed to creating more housing choices in locations easily accessible to transit, jobs, shopping and services. To be eligible to become a PDA, an area had to be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. An *approved area* is part of an existing plan that is more specific than a general plan, such as a specific plan or an area plan. A *potential area* may be envisioned as a potential planning area that is not currently identified in a plan or may be part of an existing plan that needs changes.

While there are no PDAs located in the SR 242 corridor, the closest potential PDAs is the Pleasant Hill Buskirk Development Area, located southeast of the corridor, and Concord Community Reuse Area, located to the east of the corridor.

Sustainable Communities Strategy (SB 375)
Senate Bill 375 requires each region to meet State-established greenhouse gas emission targets for automobiles and light trucks for 2020 and 2035. MPO's must accurately account for the environmental benefits of more compact development and reduced vehicle miles traveled. I f regions develop integrated land use, housing and transportation plans that meet the SB 375 targets, new projects in these regions can be relieved of certain review requirements of the California Environmental Quality Act (CEQA). The targets apply to the regions in the State covered by the 18 metropolitan planning organizations (MPOs).

The next update of the Regional Transportation Plan in 2013[3] by MTC will include a Sustainable Community Strategy (SCS) as required by SB 375. The bill synchronizes the regional housing needs assessment (RHNA) process with the RTP process, requires local governments to rezone their general plans, consistent with the updated housing element within three years of adoption, and provides that RHNA allocations must be consistent with the development pattern in the SCS. The SCS will lay out how greenhouse gas (GHG) emissions reduction targets will be met for cars and light trucks. This will impact land use and travel patterns in the long-range planning horizon**.**

Environmental Factors and Constraints

The environmental factors and constraints map identifies environmentally sensitive areas including hazardous waste sites, species of concern, potential 4(f) land, wetlands and farmland of local importance located in and around the SR 242 corridor. The species of concern include the California Tiger Salamander and the California Goldfields (type of flower). This information needs to be taken into consideration when proposing any improvements or modifications to state facilities within the corridor. The Environmental Factors and Constraints map (Figure 2) is located on the following page.

The SR 242 corridor is located to the southwest of the closed Concord Naval Weapons Station (CNWS). The base is divided into two areas -- the Inland Area and the Tidal Area. The Inland Area of the base is now closed under the Base Realignment and Closure (BRAC) Act. The United States Navy currently owns the Inland Area and will continue to do so until environmental cleanup is completed and the Federal Environmental Impact Statement (EIS) Record of Decision (ROD) is reached. The Tidal Area remains in operation. The closed facility has approximately 60 specific locations where past releases of hazardous substances to soil and groundwater are either suspected or are known to have occurred. These locations are currently in various stages of study, cleanup and monitoring. Additional discussion on CNWS is located in the Additional Corridor Issues section.

Priority Conservation Areas
As part of the FOCUS program, Priority Conservation Areas (PCAs) are areas of regional significance that has broad community support and need to be protected. These areas provide important agricultural, natural resource, historical, scenic, cultural, recreational, and/or ecological values and ecosystem functions. The purpose of designating PCAs through the FOCUS Program is to accelerate protection of key natural lands. Regional agencies are working with state agencies and funding entities to encourage protection of these important natural resources. The SR-242 Environmental Factors and Constraints map on the following page, shows that parts of the former Concord Naval Weapons Station are identified as a PCA.

[3] http://www.onebayarea.org/

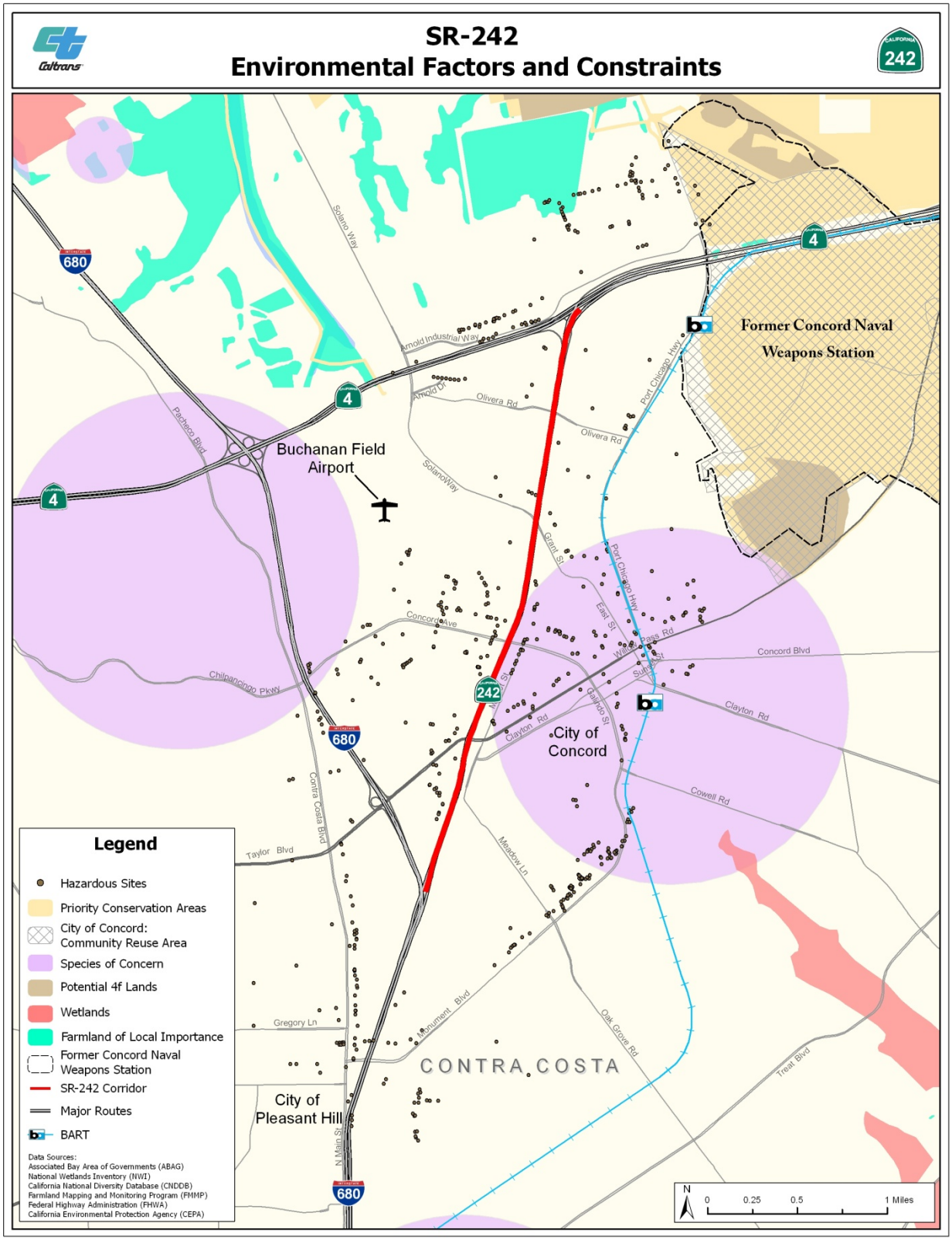


Figure 2. SR 242 Environmental Factors and Constraints.

SR 242 Corridor Route Designations

Freeway & Expressway System (F&E)	In its entirety as defined in the California Streets and Highway Code Section 253.1
Functional Classification	Freeway
Trucking Designations	Terminal Access (STAA)
Trucking Facilities	none
National Highway System (NHS)	no
Scenic Highway	no
Lifeline Corridor	no
Traffic Operations System (TOS) Elements	Ramp metering (not operational), loop detectors, extinguishable message sign, CCTV
Interregional Road System (IRRS)	no
MPO/RTPA/CMA	MPO : Metropolitan Transportation Commission (MTC) CMA : Contra Costa Transportation Authority (CCTA)

Table 3. SR 242 Corridor Route Designations.

Trip Information

Commuting
SR 242 is used as a connector from SR 4 in the north to I-680 in the south. Communities in the Delta Region (Brentwood, Oakley, Antioch, Pittsburg) have grown considerably in recent decades. As a consequence, commuting has increased on SR 4 via SR 242 into Concord and points south via I-680. The SR 242 corridor has a relatively low truck volume (5.1%) and of that percentage, 41% are five axle. SR 242 is used for recreational purposes and is a secondary route from central Contra Costa County and East County to the California Delta region connecting to SR 4.

Origin – Destination Information

Origin and destination information was derived from MTC's Regional Travel Demand model. The 2009 AM peak direction is southbound where nearly 70% of traffic is destined for I-680 southbound. In the PM, the peak direction is northbound where approximately 47% of SR 242 traffic is destined for SR 4 eastbound and westbound. Traffic to other off-ramps is roughly evenly split. The 2035 AM peak direction remains southbound where just over 60% of the traffic will be destined for I-680 southbound. The PM peak direction is northbound where approximately 47% of the traffic will be destined for SR 4. Origin Destination diagrams are located in Appendix H.

Transit Service

Bay Area Rapid Transit (BART) is present in the corridor and includes the Downtown Concord and North Concord/ Martinez stations located on the eastern side of the corridor. Average weekday station usage (reported as exiting passengers) for selected BART Stations in Contra Costa County[4] is:

North Concord-Martinez	1,843
Downtown Concord	4,978
Walnut Creek	5,920

[4] BART Ridership Report Fiscal Year 2010 Weekday Average Exits by Station.

Bus service is provided by County Connection (includes routes 11, 17, 19, 20 and 91X) that primarily provides service between BART stations in Pleasant Hill, Downtown Concord, and North Concord. Route 19 connects the Martinez Amtrak station to downtown Concord BART station. Tri Delta Transit service uses the SR 242 corridor (Route 201) that connects Pittsburg / Bay Point BART station and the downtown Concord BART station.

Pedestrian Facilities

Table 4 details the characteristics of intersections as they meet on and off ramps of SR 242.

SR 242 Interchanges	I/C Classification *	Number of Marked Crossings	Raised Median Y/N	Number of Lanes Crossed	Pedestrian Countdown Timer Y/N	Size of Ramp Corner radii
Clayton Road	L-11	3	Y	4	Y	Small
Concord Ave	L-8	2	Y	6	Y	Large
Solano Way	L-1	3	Y	4	Y	Small
Olivera Road	L-7	3	Y	4	Y	Large

Table 4. SR 242 Ramp Intersection Features and Characteristics.
*http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp0500.pdf (pg. 500-2)

There are four roadways that intersect SR 242. They are listed below and highlight pedestrian access along SR 242 on and off ramps and the overcrossing at Olivera Road.

Olivera Rd Interchange

- Sidewalks exist on both sides of the overcrossing.
- SB onramp is not squared; potential conflict between autos and pedestrians.
- Additional SB onramp is a cloverleaf with a crosswalk; potential conflict between pedestrians and autos.

Grant/Solano Ave Interchange

- Crosswalks exist at all on and off ramps at this interchange.
- Sidewalks are located under the freeway, connecting to a residential area.

Concord Ave Interchange

- Southbound off ramp does not have a crosswalk, but there is a crosswalk across Concord Ave (far side) that provides access to adjacent sidewalks in the area.

Bicycle Facilities

MTC's Regional Bike Plan identifies a Class 1 facility, Port Chicago Highway, located to the east of SR 242. The Iron Horse Regional Trail (Class I facility), is located to the west of SR 242. The Contra Costa Countywide Bicycle and Pedestrian Plan (2009) identifies a proposed Class 1 bicycle facility located to the west of SR 242 from I-680 to Solano Way and from Olivera Rd to SR 4. The segment from Solano Way to Olivera Road already exists. Class 3 bicycle facilities are proposed at Solano Way / Grant St and Olivera Rd overcrossing.

Maintenance

Pavement and roadside maintenance are critical components of protecting and preserving the investment in the SHS. A map of pavement conditions illustrates that the majority of distressed pavement on SR 242 is located from Clayton Road to just North of Concord Avenue. Caltrans' annual State of the Pavement Report describes more detailed pavement condition by postmile. The pavement conditions map for 2007 is located in Appendix F. The primary pavement related project planned for the SR 242 corridor is a resurfacing project estimated for FY 14/15[5].

Additional Corridor Issues

HOV Extension

Adding an HOV lane on SR 242 would likely involve significant right-of-way issues, structure replacement, and/or reduced standard design exceptions. The future HOV investment emphasis in the vicinity of SR 242 will be on I-680 and SR-4 respectively. In the past the Department had discussed developing a Project Study Report (PSR) with CCTA that would explore building an HOV lane through the entire SR 242 corridor. Due to changing priorities at both agencies such a PSR has not yet been developed. SR 242 is also not included in any current County or regional plans for HOV or Express Lane development. At this time, the Department believes the existing 6 lane freeway provides sufficient mobility, with future demands able to be accommodated through non-capacity increasing operational improvements on SR 242 as well as the presence of alternative routes and modes. I-680 and SR 4 provide efficient routing for HOVs, and BART provides a viable transit alternative for many travelers. HOV improvements are planned for the I-680 and SR 4 corridors, which would affect regional movement in the I-680/SR 242/SR 4 corridors.

Right of Way Availability

SR 242 has standard width lanes and full shoulders for most of its length. Right of Way parcel maps indicate there is very limited additional Caltrans right of way available along the SR 242 corridor. The East Bay Municipal Utility District (EBMUD) right of way is located to the immediate west of SR 242. Any improvement requiring new Right of Way within the corridor would likely be cost prohibitive.

Concord Reuse Project Area Plan

The Concord City Council, sitting as the Local Reuse Authority, certified the final EIR and adopted the Reuse Plan for the CNWS at its meeting February 23, 2010. The Clustered Villages alternative was chosen as the adopted plan. Concord City Resolution 10-10 directed staff to conduct further study on ten areas of concern, including incorporation for flex designations in the Area Plan and relocation of low density housing south of Willow Pass Road and East of Mt. Diablo Creek. The Clustered Villages Alternative underwent further refinement. The Concord Reuse Project Draft Area Plan was released in October 2010. A second step in the process will be completion of a supplemental environmental impact report (EIR), building on the certified Final EIR from the Reuse Plan. The final step will be approval of a recommended amendment of the General Plan.

The Concord Reuse Project Area Plan continues to be reviewed, commented on and refined by the Planning Commission, City Council and at public meetings. Recommendations on adoption of the area plan, certification of the supplemental EIR and amendment of the General Plan are not anticipated until 2012.

CNWS build-out figures such as the number of residences, projected employment, and Daily Vehicle Miles Traveled suggest future impacts on the transportation system. Traffic degradation will occur in the

[5] Caltrans District 4 10-Year SHOPP Plan (2011).

future with or without the Reuse Project; travel demands on the SR 242 corridor do not show appreciable change between the CNWS build and no-build scenario (see Table 6a and 6b).

TOS Deficiencies

There is a total of 15 traffic detectors located in the SR 242 corridor. The majority of the detectors are currently not operational and require repair. Until they are repaired, there is limited data being collected in the Freeway Performance Monitoring System (PeMS) database.

III. Corridor Performance

Existing Conditions

SR 242 has an Average Annual Daily Traffic (AADT) ranging from 78,000-115,000 (Northbound and Southbound), truck volume is 5.1 percent. Of this 5 percent, there is a relatively high five-axle truck percentage of 41.4 percent. According to TRANSPAC's Central County Action Plan (2009) there is a higher volume of traffic in the southbound direction (61,000). SR 242 is anticipated to experience a 30 percent increase in traffic volumes during the peak hours by 2030. Average traffic volume to capacity ratios for the route (Tables 4a and 4b) don't reach 1.0 (1.0 generally signifies major recurrent congestion). Additional corridor traffic data is available in Appendix A.

Mainline Segment	Direction	SR 242 Volume to Capacity Ratio (2006)	
		AM (V/C)	PM (V/C)
SR 242 n/o I-680	NB	0.33	0.92
SR 242 n/o Clayton Rd	NB	0.25	0.70
SR 242 n/o Concord Ave	NB	0.31	0.85
SR 242 n/o Grant Ave.	NB	0.29	0.81
SR 242 n/o Olivera Rd	NB	0.22	0.60

Table 4a. Volume to Capacity Ratio (2006) Northbound SR 242.
Source: Concord Community Reuse Plan, Dowling Associates 2009.

Mainline Segment	Direction	SR 242 Volume to Capacity Ratio (2006)	
		AM (V/C)	PM (V/C)
SR 242 n/o I-680	SB	0.83	0.57
SR 242 n/o Clayton Rd	SB	0.64	0.44
SR 242 n/o Concord Ave	SB	0.83	0.57
SR 242 n/o Grant Ave.	SB	0.81	0.56
SR 242 n/o Olivera Rd	SB	0.81	0.56

Table 4b. Volume to Capacity Ratio (2006) Southbound SR 242.
Source: Concord Community Reuse Plan, Dowling Associates 2009.

Corridor Performance Issues

According to MTC and Caltrans' State of the System Report (2008) during the commute hours of 6:45am until 8:30am there is recurring delay totaling 100 Vehicle Hours of Delay (VHD)[6] in the southbound direction between the I-680 Interchange to north of Clayton Road. This is typically caused by merging and weaving issues downstream where SR 242 and I-680 meet. In the northbound direction there are similar congestion issues where SR 242 and EB SR 4 meet. The Contra Costa Congestion Monitoring Program (2009) reported speed data for SR 242 (Table 5).

Peak Period	SR 242 LOS Monitoring Report (2009) Speed Profile	
	Northbound (MPH)	Southbound (MPH)
AM Peak	53.2	41.3
PM Peak	35.8	51.1

Table 5. SR 242 Speed Profile (2009).
Source: CCTA Contra Costa Congestion Monitoring Program.

Future Performance

Performance forecasts from the analysis of the Concord Community Reuse Plan are shown in Table 6a and 6b. A V/C ratio exceeding 1.0 is equivalent to LOS F suggesting higher levels of recurrent congestion. The Concord Community Reuse Plan EIR identifies project specific significant impacts for the preferred alternative that improve or do not change the No Project LOS along the SR 242 corridor in the AM and PM peak direction.

Mainline Segment	Direction	SR 242 Volume to Capacity Ratio (2030)*		SR 242 Volume to Capacity Ratio (2030)**	
		AM (V/C)	PM (V/C)	AM (V/C)	PM (V/C)
SR 242 n/o I-680	NB	0.42	1.12	0.56	1.10
SR 242 n/o Clayton Rd	NB	0.43	0.88	0.55	0.86
SR 242 n/o Concord Ave	NB	0.44	0.90	0.52	0.88
SR 242 n/o Grant Ave.	NB	0.43	0.84	0.55	0.85
SR 242 n/o Olivera Rd	NB	0.37	0.73	0.40	0.74

Table 6a. NB SR 242 Volume to Capacity Ratio Forecast (2030) with CNWS No-Build and Preferred Alt.
*2030 No Project
**2030 Preferred Alternative
Source: Concord Community Reuse Plan, Dowling Associates 2009.

Mainline Segment	Direction	SR 242 Volume to Capacity Ratio (2030)*		SR 242 Volume to Capacity Ratio (2030)**	
		AM (V/C)	PM (V/C)	AM (V/C)	PM (V/C)
SR 242 n/o I-680	SB	0.98	0.73	0.94	0.81
SR 242 n/o Clayton Rd	SB	0.84	0.70	0.81	0.74
SR 242 n/o Concord Ave	SB	0.92	0.63	0.89	0.68
SR 242 n/o Grant Ave.	SB	0.86	0.63	0.86	0.71
SR 242 n/o Olivera Rd	SB	0.97	0.73	0.94	0.76

Table 6b. SB SR 242 Volume to Capacity Ratio Forecast (2030) with CNWS No-Build and Preferred Alt.
*2030 No Project
**2030 Preferred Alternative
Source: Concord Community Reuse Plan, Dowling Associates 2009.

[6] *VHD = Daily Vehicle Hours of Delay. Delay occurs when average travel speed falls below 35 mph for 15 minutes or more.*

The SR 242 corridor is located to the west of the planned Concord Community Reuse Project. Traffic volumes compared to capacity in Table 6a and 6b do not show appreciable change in SR 242 mainline segments between the project preferred alternative and no-build scenarios (analysis summaries are from the 2009 Concord Community Reuse Project Report). Overall, traffic congestion will increase on the transportation system in the future with or without development of the CNWS.

Activating ramp metering equipment (along with other TOS elements and in accordance with a corridor-wide ramp metering agreement) would be expected to help reduce forecasted congestion.

IV. Corridor Concept

The Corridor Concept conveys Caltrans' vision for a route with respect to corridor capacity and operations for a 25-year planning horizon. The concept takes into account factors that create interregional, regional, and local travel demand, including commuting, freight, recreation and land use.

The corridor concept is informed by:

- Current Caltrans statutes, policies and directives
- Local, regional partnership input and corridor analyses
- California Transportation Plan, Regional Transportation Plan, Interregional Transportation Strategic Plan and other approved transportation plans
- Legacy route and corridor concepts developed by Caltrans System Planning
- Information from Caltrans Traffic Operations plans developed for system-wide strategies
- Caltrans Freeway Agreements

State Route 242 is a 6 lane urban freeway corridor that will continue to function as a connector between I-680 and SR 4, with active ITS deployments for system management.

Segment	County	Segment Description	Existing Facility	25-yr Concept:
A (PM 0.0-3.4)	Contra Costa	I-680 to SR 4, Concord	6F	6F

Table 7. SR 242 Corridor Concept Summary.

F = Freeway
PM = Post Mile

Concept Rationale

State Route 242 primarily serves intra-urban commuter traffic. The freeway serves as a connector for commuters traveling from residential communities in Concord, Pittsburg and Antioch to employment sites in central Contra Costa County and points south and west. Operational improvements are the primary strategy to maintain corridor mobility on SR 242. The current HOV investment focus in the vicinity of SR 242 is on completing HOV lanes on I-680 and SR 4 as well as improving HOV connectivity for travelers at the I-680 and SR 4 interchange.

Operational Strategy

Activation of the previously installed (but not yet operational) ramp metering equipment (TOS) will improve the flow of traffic in this corridor. Any agreement on corridor metering and type of metering strategy would be developed in conjunction with local jurisdictions and partner agencies.

Goods Movement Strategy

It is important to keep SR 242 as a corridor supporting local, regional and interregional goods movement. Operational improvements will improve travel time reliability for trucks that use the facility.

Transit Strategy

Maintain and enhance bus service on and across SR 242 connecting to BART stations in Downtown Concord and North Concord/Martinez.

Land Use Strategy

Encourage infill development and continued Transit Oriented Development (TOD) where feasible per region's Sustainable Communities Strategy.

Sustainable Communities Strategy

The passage of SB 375 has changed the dynamic of land use and transportation planning in California. Compact development and the reduction of vehicle miles traveled is expected to reduce GHG emissions; the SCS will be implemented through MTC's 2013 RTP and FOCUS program.

Caltrans supports focused growth solutions at the regional and local level through Regional Blueprint Planning. In the Bay Area the Regional Blueprint Planning program is operated by MTC and Association of Bay Area Governments (ABAG) as the FOCUS program. Its primary goal is to encourage future growth near transit and existing communities. Growth should be monitored both quantitatively and qualitatively in order that the SHS responds to this complex and dynamic growth.

Bicycle and Pedestrian Strategy

Implementation of CCTA's Countywide Bicycle and Pedestrian Plan will improve access and increase safety for all users. Related improvements to study in the SR 242 corridor should include:

- Upgrade curb ramps at the four local street interchanges.
- Refresh crosswalk markings at these interchanges.
- Provide pedestrian countdown signals.
- Study how to reconfigure the SR 242 interchanges with local streets to have square intersections, instead of a clover shape, to improve bike/pedestrian movements and enhance safety.
- Examine how streets at the SR 242 interchanges can accommodate bike routes.

Another important strategy is filling identified bicycle route gaps in MTC's Regional Bicycle Plan, and CCTA's Countywide Bicycle and Pedestrian Plan. This would include completing the proposed Class 1 bicycle facility west of SR 242 (I-680 to Solano Way and Olivera Road to SR 4) and completing Class 3 facilities at Solano/ Grant and Olivera overcrossings.

Complete Streets

Through Deputy Directive 64-Revision #16, Caltrans provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State Highway System. The Department views all transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.

A complete street is defined as a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Complete street concepts apply to rural, suburban, and urban areas. Providing complete streets increases travel options which, in turn, reduces congestion, increases system efficiency, and enables environmentally sustainable alternatives to single driver automotive trips. Implementing complete streets and other multi-modal concepts supports the California Complete Streets Act of 2008 (AB 1358), as well as the California Global Warming Solutions Act of 2006 (AB 32) and SB 375, which outline the State's goals of reducing greenhouse gas emissions. With AB 1358 and DD-64-R1, both Caltrans and local agencies are working to address common goals.

Planned/Programmed Projects

County	Begin PM	End PM	Source	EA/RTP ID
			MTC's RTP 2035	
CC	0.65	0.66	Construct Route 242 on and off ramp at Clayton Rd	22388
CC	off	off	Extend Commerce Ave to connect to Willow Pass Rd via Waterworld Parkway	98194
			Contra Costa County Countywide Comprehensive Transportation Plan	
CC	0.65	0.66	Construct new NB on ramp and associated weaving/accelerating lanes and new SB at SR 242 and Clayton Rd	Same as RTP project
			2010 SHOPP	
CC	R1.6	R1.6	Buchanan Field Viaduct Bridge Rehab	
			10-Yr SHOPP Plan (2011)	
CC	0.0	3.4	Roadway Rehabilitation (FY 14-15)	26980K
			Ramp Meter Development Plan	
CC	3.39	3.39	Southbound SR 242 at SR 4 (Eastbound)	
			Countywide Bicycle and Pedestrian Plan	
CC	off	off	Increase Pedestrian and Bicycle access to housing in Downtown Concord	

Table 8. SR 242 Planned/ Programmed Projects.

Additional Projects Recommended for Further Study

In addition to the planned projects noted in Table 8, the potential projects listed in Table 9 are recommended for further study to support the Corridor Concept.

County	Location	Description
CC	SR 242 Entire Length	Activate Ramp Metering throughout the corridor
CC	SR-242 Entire Length	Improved TOS Coverage
CC	NB SR 242 Grant St Onramp	Reduce conflict with pedestrians (Large radius, non-stop)
CC	SB SR 242 Olivera Rd Onramp	Reduce conflict with pedestrians (Large radius, non-stop)
CC	SB SR 242 Olivera Rd Onramp	Sidewalk Improvements

Table 9. SR 242 Additional Projects Recommended for Further Study.

Appendices

Appendix A
Corridor Segment Data / Additional Corridor Data

The transportation corridor, for purposes of the Corridor Plan, is divided into segments based on a range of criteria that are listed below.

- District boundaries
- County boundaries
- Urban/Rural boundaries
- Major changes in traffic volumes
- Changes in the number of lanes
- Significant changes in grade/terrain
- Changes in route function including recreational, trucking, commuting, etc.
- Freeway Agreements

The SR 242 corridor consists of one segment, as shown in figure A1 (following page). Additional corridor segment data is shown in the attached segment data sheet as well as Table A1.

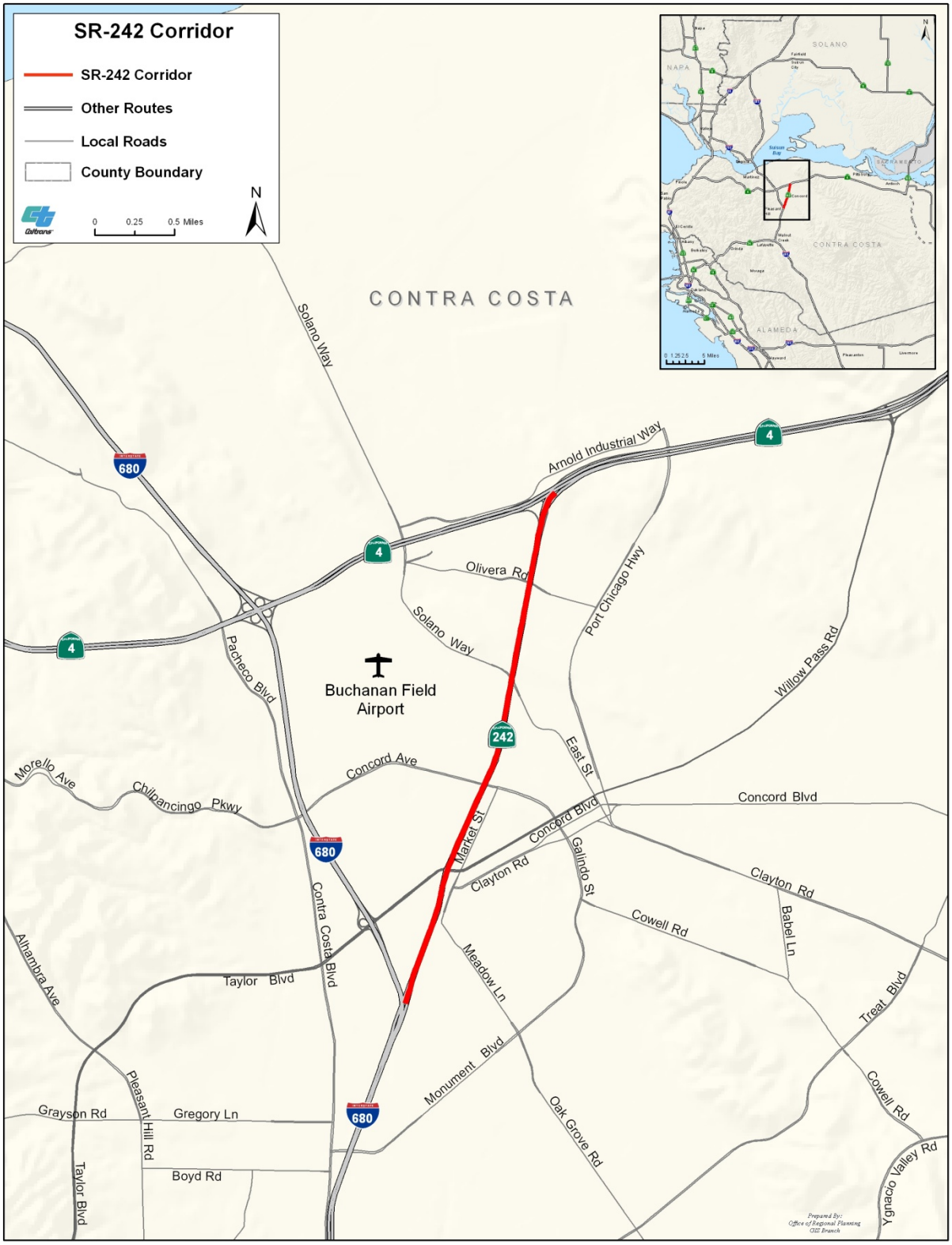
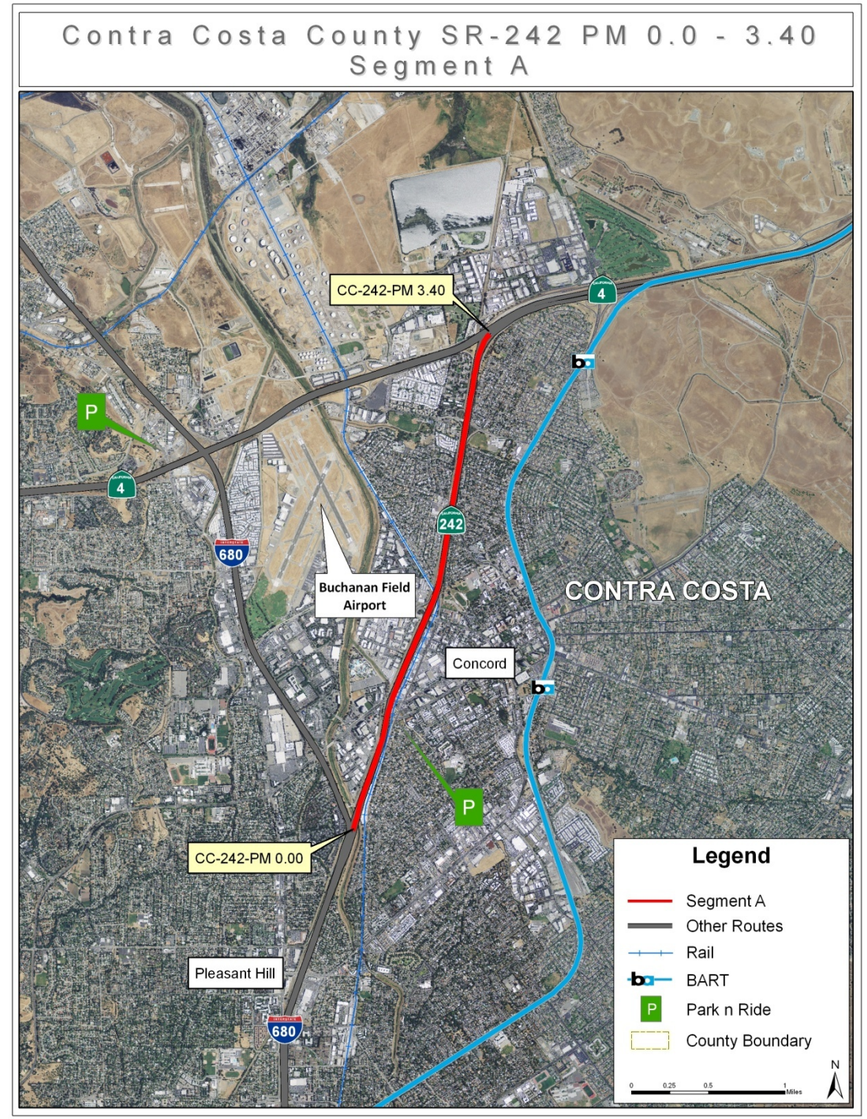


Figure A1. SR 242 Corridor Segment.

SR 242 SEGMENT A DATA	
Features	**Data**
County, City	Contra Costa County, City of Concord
Facility Type	Freeway
Existing Facility	6F
25- Year Concept	6F
Segment Characteristics	
Segment Limits	I-680 to SR 4
Begin/ End Post Mile	0.0-3.40
Length	3.40
Terrain	Flat to rolling
HOV Lanes (PM to PM)	none
Percent Grade (PM to PM)	0-3%
Truck Weigh Station	none
Truck Parking	none
TOS Element	Ramp meters (installed, not operational), loop detectors, CCTV, EMS
Multi Modal	
Bicycle Facilities	Not allowed on freeway. Existing Class I parallel to SR 242 (west side) Olivera to Solano, Concord Ave O/C
Priority Development Areas	Pleasant Hill Buskirk Development Area, Concord Community Reuse Area
Park and Ride	Willow Pass Road and Market St (45 spaces)
Traffic Data	
AADT 2010 (Average Annual Daily Traffic)	78,000-115,000
AADT 2035	178,000
Vehicle Hours of Delay 2008	AM SB 100
Peak Hour Volumes 2009 (AM/PM)	AM: 7,952 PM: 7,714
Peak Hour Volumes 2035 (AM/PM)	AM: 10,755 PM: 10,212
V/C Ratio 2006 *	(NB) AM: 0.28 PM: 0.81 (SB) AM: 0.81 PM: 0.60
V/C Ratio 2030 *	(NB) AM: 0.55 PM: 0.88 (SB) AM: 0.88 PM: 0.75
LOS 2009 (Level of Service)**	AM Peak NB : D SB: E PM Peak NB: E SB: D
Truck Volumes 2008	6,260
Truck Percentage	5.1% (41% is 5+ Axle)
Accident Data* (Jan. 2006-Dec. 2008)**	
Fatality + Injury Rate	0.25
Statewide Fatality + Injury Rate	0.37
Total Accident Rate	0.74
Statewide Total Accident Rate	1.18

* Dowling Associates, 2009.
** 2009 Congestion Monitoring Program (CCTA)
*** Per Million Vehicle Miles



Corridor Segment Data

Segment A (0.0 – 3.4)
SR 242 is a six lane urban freeway. The land adjacent to the facility ranges from single family residential to commercial and light industrial uses. The speed limit for the entire freeway is posted as 65 mph. There is limited right of way available beyond existing lanes and shoulder.

Additional Corridor Data for SR 242	
Route Characteristics	
State Route and Interstate Intersections	I-680 (PM 0.0), SR 4 (PM 3.4)
Cities Traversed	Concord
Parallel Arterials	Market St , Port Chicago Highway
Existing Freeway Congestion	Top AM Peak Period Congestion: SB 100 VHD
	Top PM Peak Period Congestion None
Environmental	
Air Quality Basin	San Francisco Bay Area Air Basin
Air Quality District	Bay Area Air Quality Management District
NAAQS Attainment Area	PM10, NO2, SO2, Sulfates, Lead
NAAQS Maintenance Area	CO
NAAQS Non-Attainment Area	Ozone, PM2.5
Intermodal	
Park 'n Ride lots	Willow Pass Road and Market Street (45 Spaces)
Priority Development Areas	Pleasant Hill BART
Modal Split (American Community Survey 2009):	
Drive Alone	72.2%
Carpool	12.2%
Public Transit	7.6%
Walk	3.1%
Work at Home	2.5%
Other (including bicycle)	2.3%
Summary of Existing Studies in Corridor	**None**

Table A-1. Additional Corridor Data for SR 242.

Appendix B –
Pertinent Federal, State, and Regional Transportation Plans, Programs and Directives

Federal

Safe, Accountable, Flexible, Efficient Transportation Equity Act, A Legacy for Users (SAFETEA-LU)

This federal law authorizes transportation funding through 2009 and established new requirements for statewide and metropolitan transportation planning. The act authorizes all federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. Current bill has been extended by Congress until December 31, 2010.

Federal Transportation Improvement Program (FTIP)

All federally funded projects, and regionally significant projects (regardless of funding), must be listed in the FTIP per federal law. A project is not eligible to be programmed in the FTIP until it is programmed in the *State Transportation Improvement Program* (STIP) or in the *State Highway Operations and Protection Program* (SHOPP). Other types of funding (Federal Demonstration, Congestion Mitigation and Air Quality (CMAQ), Transportation Enhancement Activities (TEA), and Surface Transportation Program (STP) must be officially approved before the projects can be included in the FTIP.

The American Recovery and Reinvestment Act of 2009 (ARRA)

On Feb. 13, 2009, Congress passed the American Recovery and Reinvestment Act of 2009 at the urging of President Obama, who signed it into law four days later. A direct response to the economic crisis, the Recovery Act has three immediate goals:

- Create new jobs and save existing ones
- Spur economic activity and invest in long-term growth
- Foster unprecedented levels of accountability and transparency in government spending

The Recovery Act intends to achieve those goals by:

- Providing $288 billion in tax cuts and benefits for millions of working families and businesses
- Increasing federal funds for education and health care as well as entitlement programs (such as extending unemployment benefits) by $224 billion
- Making $275 billion available for federal contracts, grants and loans
- Requiring recipients of Recovery funds to report quarterly on how they are using the money. All the data is posted on Recovery.gov so the public can track the Recovery funds.

State

California Transportation Plan (CTP), April 2006

The “CTP 2030” is a statewide, long-range transportation policy plan that provides for the movement of people, goods, services, and information. The CTP offers a blueprint to guide future transportation decisions and investments that will ensure California's ability to compete globally, provide safe and effective mobility for all persons, better link transportation and land use decisions, improve air quality, and reduce petroleum energy consumption.

Interregional Transportation Strategic Plan (ITSP)
Caltrans prepared the 1998 ITSP to consolidate and communicate key elements of its ongoing long- and short-range planning. It serves as a counterpart to the Regional Transportation Plans prepared by the 43 Regional Transportation Planning Agencies in California. Caltrans addresses the State Highway system in detail, with special emphasis on the statutorily-identified Interregional Road System (IRRS). The IRRS serves interregional movement of people and goods. There are currently 87 IRRS routes.

State Transportation Improvement Program (STIP)
The STIP is a listing of all capital improvement projects that are expected to receive an allocation of state transportation funds. The California Transportation Commission (CTC) biennially adopts and submits the STIP to the Legislature and Governor. The STIP is a resource management document to assist state and local entities to plan and implement transportation improvements and to utilize available resources in a cost-effective manner.

Regional Transportation Improvement Program (RTIP)
The Regional Transportation Improvement Program is a sub-element of the State Transportation Improvement Program (STIP). The Metropolitan Transportation Commission is responsible for developing regional project priorities for the RTIP for the nine counties of the Bay Area. The biennial RTIP is then submitted to the California Transportation Commission for inclusion in the STIP.

Interregional Transportation Improvement Program (ITIP)
The ITIP is a sub-element of the State Transportation Improvement Program. The statutes of 1997, Chapter 622-Senate Bill (SB) 45- established the Interregional Improvement Program (IIP) which includes projects to improve State highways, intercity passenger rail system, and projects to improve interregional movement of people and goods.

State Highway Operation and Protection Program (SHOPP)
Caltrans prepares the SHOPP for the expenditure of transportation funds for major capital improvements necessary to preserve and protect the State Highway System. The SHOPP is a four-year funding program. SHOPP projects include capital improvements for maintenance, safety, and rehabilitation of State highways and bridges. The 10-Year SHOPP anticipates long-term projected expansion and maintenance needs.

Senate Bill 45 (SB 45)
SB 45 establishes guidelines for the California Transportation Commission to administer the allocation of funds appropriated from the Public Transportation Account for capital transportation projects designed to improve transportation facilities.

California Strategic Growth Plan, January 2007
The Governor and Legislature have initiated the first phase of a comprehensive Strategic Growth Plan to address California's critical infrastructure needs over the next 20 years. California faces over $500 billion in infrastructure needs to meet the demands of a population expected to increase by 23 percent over the next two decades. In November 2006, the voters approved the first installment of that 20-year vision to rebuild California by authorizing a series of general obligation bonds totaling $42.7 billion.

Transportation System Development Plan (TSDP)
The TSDP is a listing of Caltrans recommended capacity- increasing improvements on State Highways. The purpose of the TSDP is to identify a comprehensive, reasonable and effective range of transportation improvements in modal categories to improve interregional and regional mobility and intermodal transfer of people and goods on State Highways and major travel corridors.

District System Management Plan (DSMP)
The DSMP provides a vehicle for the development of multi-modal and multi-jurisdictional transportation strategies. These strategies must be based on an analysis that is developed in partnership with regional and local agencies. The DSMP is the State's counterpart to the Regional Transportation Plan (RTP) for the region.

Goods Movement Action Plan (GMAP), January 2007
The Goods movement Action Plan is a key component of California's Strategic Growth Plan and will guide allocation of $3.1 billion of the $19.9 billion approved by voters in the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B). The GMAP identifies projects for consideration in the California Transportation Commission's allocation of $2 billion for infrastructure investment. The Air Resources Board will allocate the remaining $1 billion for emission reduction projects related to Goods movement.

California State Rail Plan, March 2008
California's Vision for Intercity Passenger Rail Transportation in California is guided by the Governor's *Strategic Growth Plan*, *The Global Warming Solutions Act*, Assembly Bill (AB)32, the California Transportation Plan (2025), and the Department of Transportation's Mission/Vision and Strategic Goals. Caltrans prepares a ten-year Rail Plan that includes both passenger and freight rail elements. The Rail Plan is updated every two years.

Caltrans Deputy Directive 64-R1 - Complete Streets - Integrating the Transportation System
Caltrans fully considers the needs of non-motorized travelers including pedestrians, bicyclists and persons with disabilities in all programming, planning, maintenance, construction, operations, and project development activities and products.

State Assembly Bill 32 (AB 32) - Global Warming Solutions Act, September 2006
This bill requires the State's greenhouse gas emissions to be reduced to 1990 levels by the year 2020. Caltrans' strategy to reduce global warming emissions has two elements. The first is to make transportation systems more efficient through operational improvements. The second is to integrate emission reduction measures into the planning, development, operations and maintenance of transportation elements.

Senate Bill 375 (SB-375) - Addressing Greenhouse Gas Emissions from the Transportation Sector

SB 375 provides a means for achieving AB 32 goals from cars and light trucks. The transportation sector contributes over 40 percent of the GHGs throughout the state. Automobiles and light trucks alone contribute almost 30 percent. SB-375requires the California Air Resources Board (ARB) to develop regional greenhouse gas (GHG) emission reduction targets for cars and light trucks for each of the 18 Metropolitan Planning Organizations (MPOs). Through their planning processes, each of the MPOs are required to develop plans to meet their regional GHG reduction target. This would be accomplished through either the financially constrained "Sustainable Community Strategy" as part of their Regional Transportation Plan (RTP) or an unconstrained alternative planning strategy. SB-375 also provides streamlining of California Environmental Quality Act (CEQA) requirements for specific residential and mixed-use developments.

Caltrans - Climate Action Plan
Greenhouse gas (GHG) emissions and the related subject of global climate change are emerging as critical issues for the transportation community. The California Department of Transportation (Caltrans) recognizes the significance of cleaner, more energy efficient transportation. On June 1, 2005 the State established climate change emissions reduction targets for California which lead to development of the Climate Action Program. This program highlights reducing congestion and improving efficiency of transportation systems through smart land use, operational improvements, and

Intelligent Transportation Systems (objectives of the State's Strategic Growth Plan). The Climate Action Plan approach also includes institutionalizing energy efficiency and GHG emission reduction measures and technology into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

Region

Regional Transportation Plan (RTP)
The Metropolitan Transportation Commission is responsible for adopting the RTP for the nine-county San Francisco Bay Area. The RTP defines a 25 year vision for the region's transportation network. The RTP is updated every four years. The most recently approved RTP is the T2035 Plan approved in 2009. Work is in progress developing the 2013 RTP called Plan Bay Area (which will include the SB-375 required Sustainable Community Strategy).

County

- The Contra Costa Transportation Authority (CCTA) prepared the Countywide Comprehensive Transportation Plan in June 2009.
- Contra Costa County Bicycle and Pedestrian Plan, was first developed and adopted in 2003. It was updated in October 2009 by the Contra Costa Transportation Authority.
- Central County Action Plan was adopted by TRANSPAC on July 9 2009.

Appendix C
State Route 242 Freeway Agreements

A Freeway Agreement documents the understanding between Caltrans and the local agency relating to the planned traffic circulation features of the proposed facility. Agreements are often executed many years before construction is anticipated and they form the basis for future planning, not only by Caltrans but by public and private interests in the community.

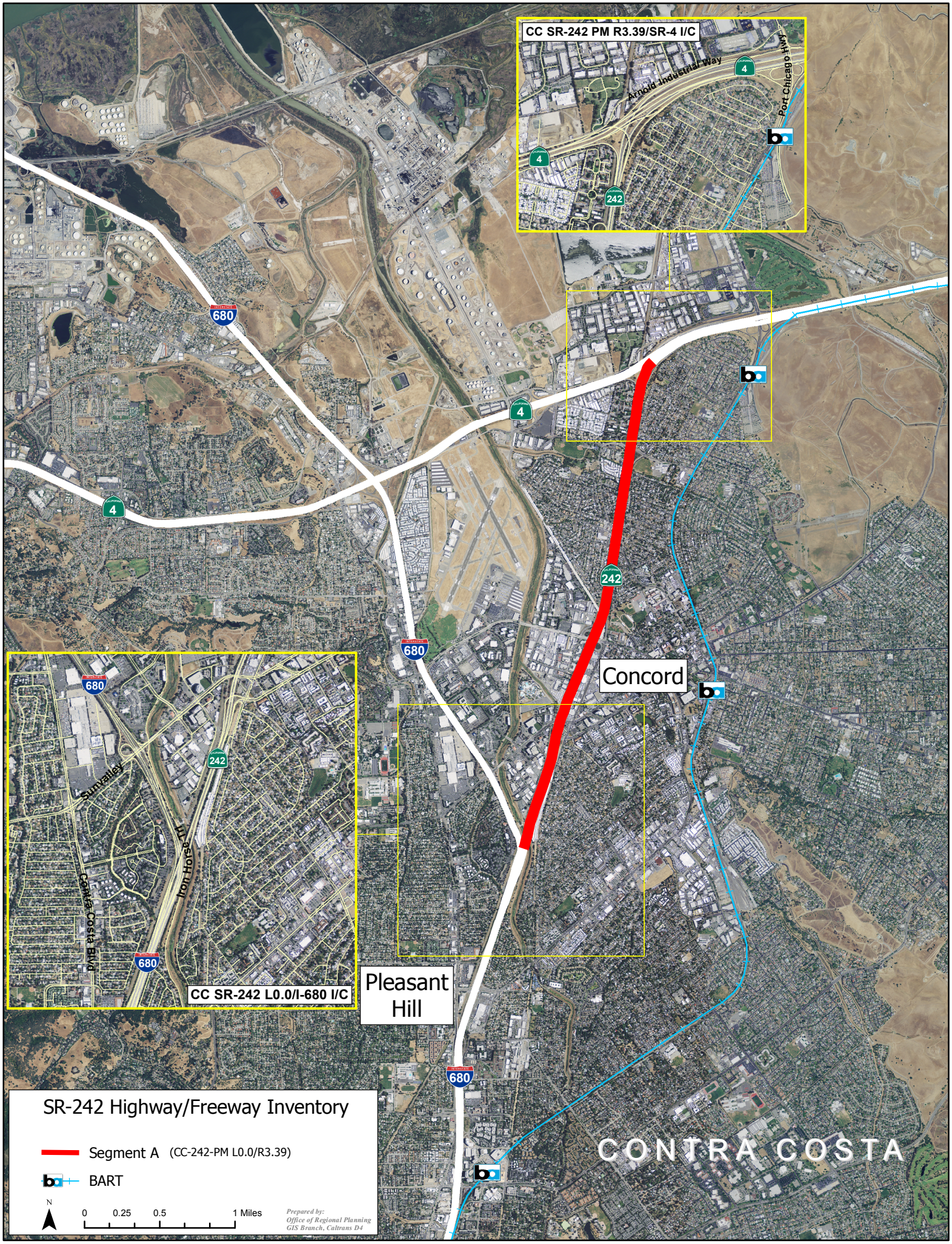
The legislative intent for requiring Freeway Agreements is to obtain local agency support of local road closures, changes to the local circulation system, and to protect property rights and assure adequate service to the community. The agreements may be modified at any time by mutual consent of the parties involved as may become necessary. Table C1 is a listing of current Freeway Agreements on the SR 242 corridor.

Adopted Date	County	Post Miles	Description	Agreement With
9-6-83	CC	0.1/2.4	0.5 south of Meadow Lane to 0.4 south of Olivera Road	City of Concord
10-9-78	CC	13.6/16.7 & 2.4/3.4	Solano Way to 0.2 W. of Willow Pass Rd. & 0.4 S. of Olivera Rd to Route 4.	City of Concord
6-2-60	CC	0.0/0.1	0.1 Mile North of Monument Junction & 0.5 Mile East of Route 106	Contra Costa County

Table C1. SR 242 Corridor Freeway Agreements.

Appendix D

Highway / Freeway Inventory Map


CC SR-242 PM R3.39/SR-4 I/C
Arnold Industrial Way
Port Chicago Hwy
4
242
680
Concord
Pleasant Hill
CONTRA COSTA
CC SR-242 L0.0/I-680 I/C
Sunvalley
Contra Costa Blvd
Ygnacio Valley Rd
SR-242 Highway/Freeway Inventory
Segment A (CC-242-PM L0.0/R3.39)
BART
N
0 0.25 0.5 1 Miles
Prepared by:
Office of Regional Planning
GIS Branch, Caltrans D4

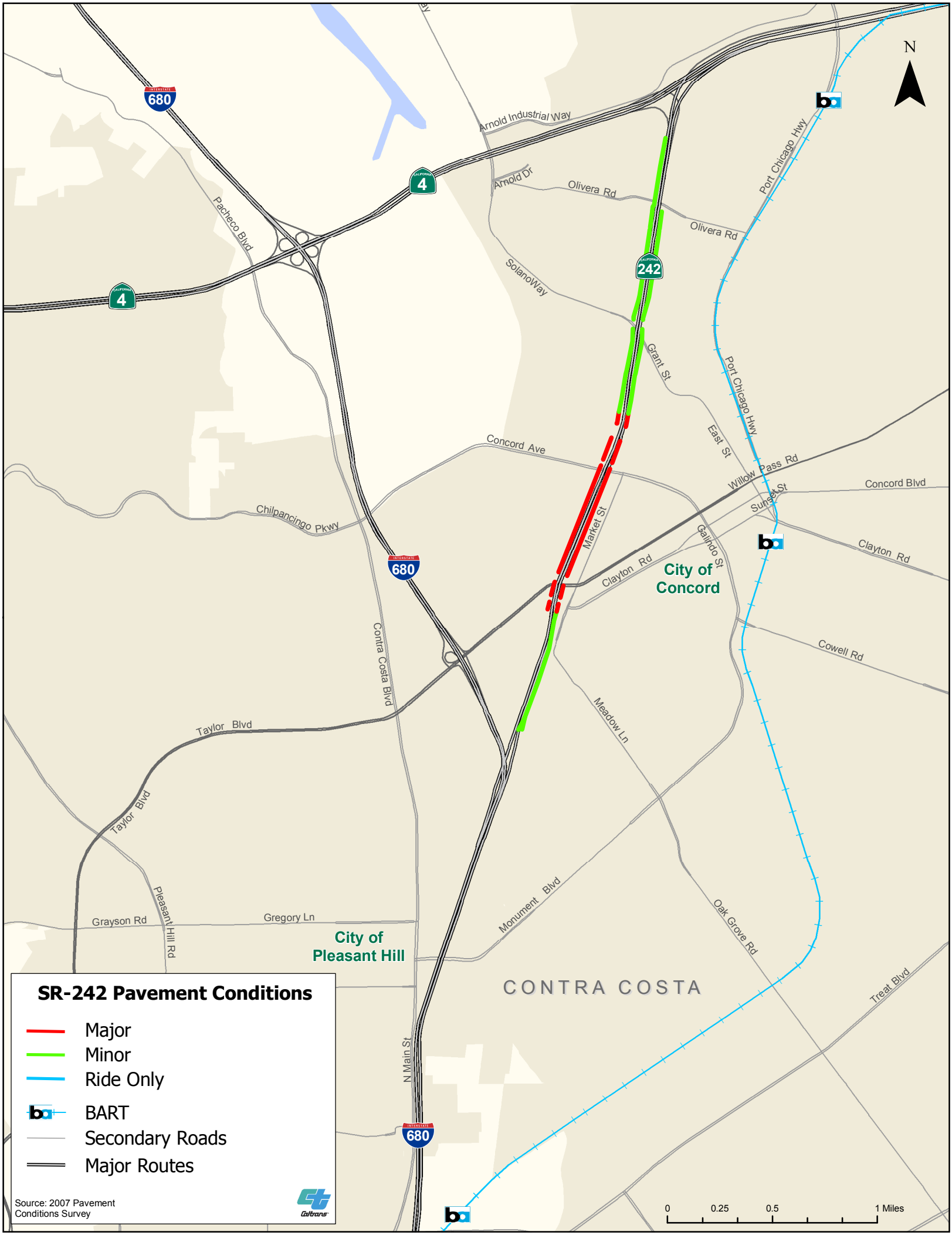
Appendix E

2008 Congestion Map

SR-242 Congestion
BART
AM Congestion
Secondary Roads
Major Routes
Source: 2008 State Highway
Congestion Monitoring Program
Caltrans
0
0.25
0.5
1 Miles
CONTRA COSTA
City of
Concord
City of
Pleasant Hill
Arnold Industrial Way
Arnold Dr
Olivera Rd
Olivera Rd
Port Chicago Hwy
Pacheco Blvd
SolanoWay
Grant St
Port Chicago Hwy
East St
Concord Ave
Willow Pass Rd
Concord Blvd
Sunset St
Chilpancingo Pkwy
Market St
Galindo St
Clayton Rd
Clayton Rd
Cowell Rd
Contra Costa Blvd
Meadow Ln
Taylor Blvd
Taylor Blvd
Pleasant Hill Rd
Grayson Rd
Gregory Ln
Monument Blvd
Oak Grove Rd
Boyd Rd
N Main St

Appendix F

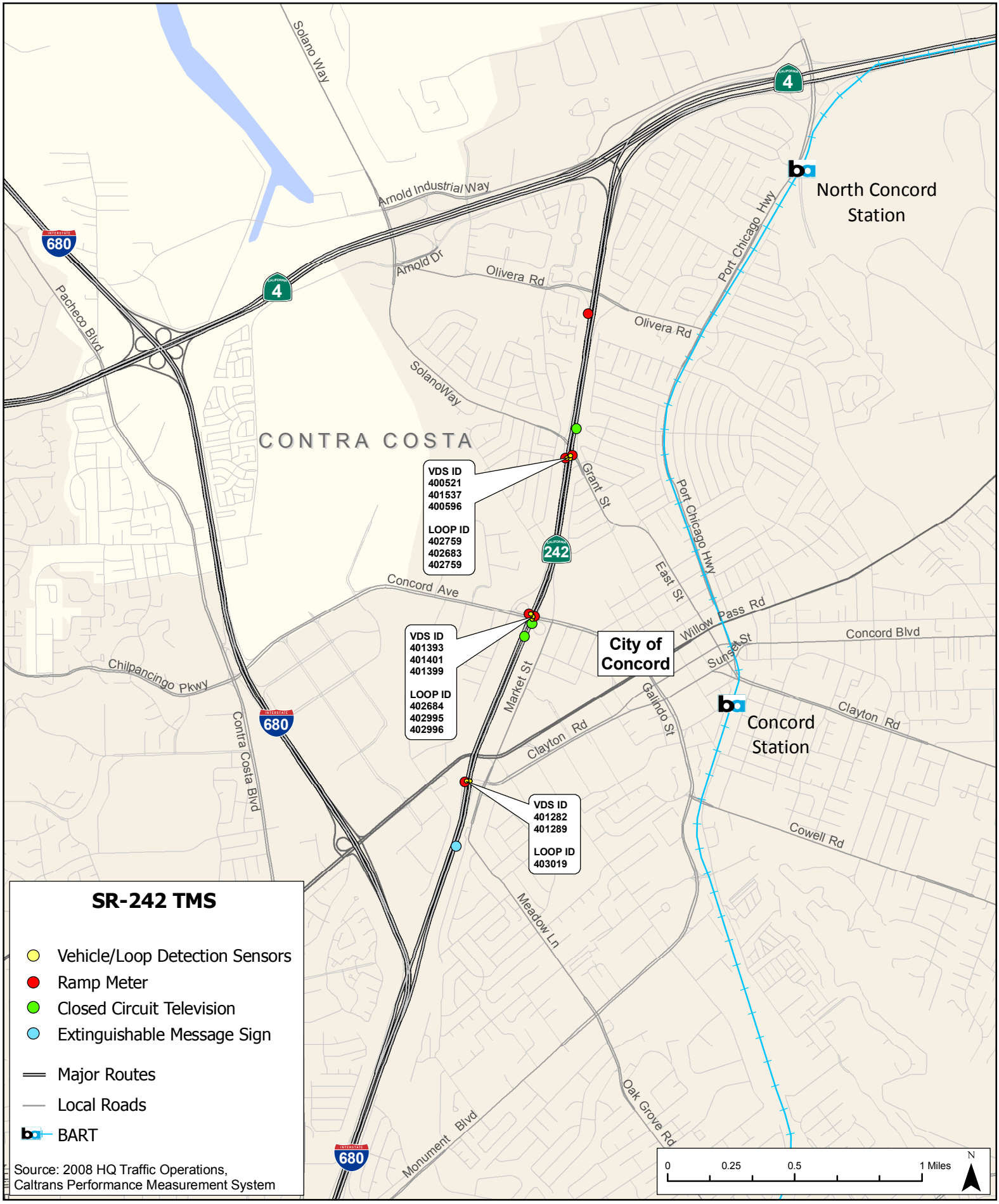
2007 Pavement Condition Map


SR-242 Pavement Conditions
Major
Minor
Ride Only
BART
Secondary Roads
Major Routes
Source: 2007 Pavement Conditions Survey
Caltrans
N
0
0.25
0.5
1 Miles
City of Concord
City of Pleasant Hill
CONTRA COSTA
680
4
242
Arnold Industrial Way
Arnold Dr
Olivera Rd
Olivera Rd
Pacheco Blvd
Solano Way
Grant St
Port Chicago Hwy
Port Chicago Hwy
East St
Concord Ave
Willow Pass Rd
Concord Blvd
Sunset St
Chilpancingo Pkwy
Market St
Galindo St
Clayton Rd
Clayton Rd
Cowell Rd
Contra Costa Blvd
Meadow Ln
Taylor Blvd
Taylor Blvd
Pleasant Hill Rd
Grayson Rd
Gregory Ln
Monument Blvd
Oak Grove Rd
Treat Blvd
N Main St

Appendix G

ITS/TOS Elements Map

Traffic Management Systems



Appendix H

SR 242 Origin Destination Diagrams
Years 2009/2035

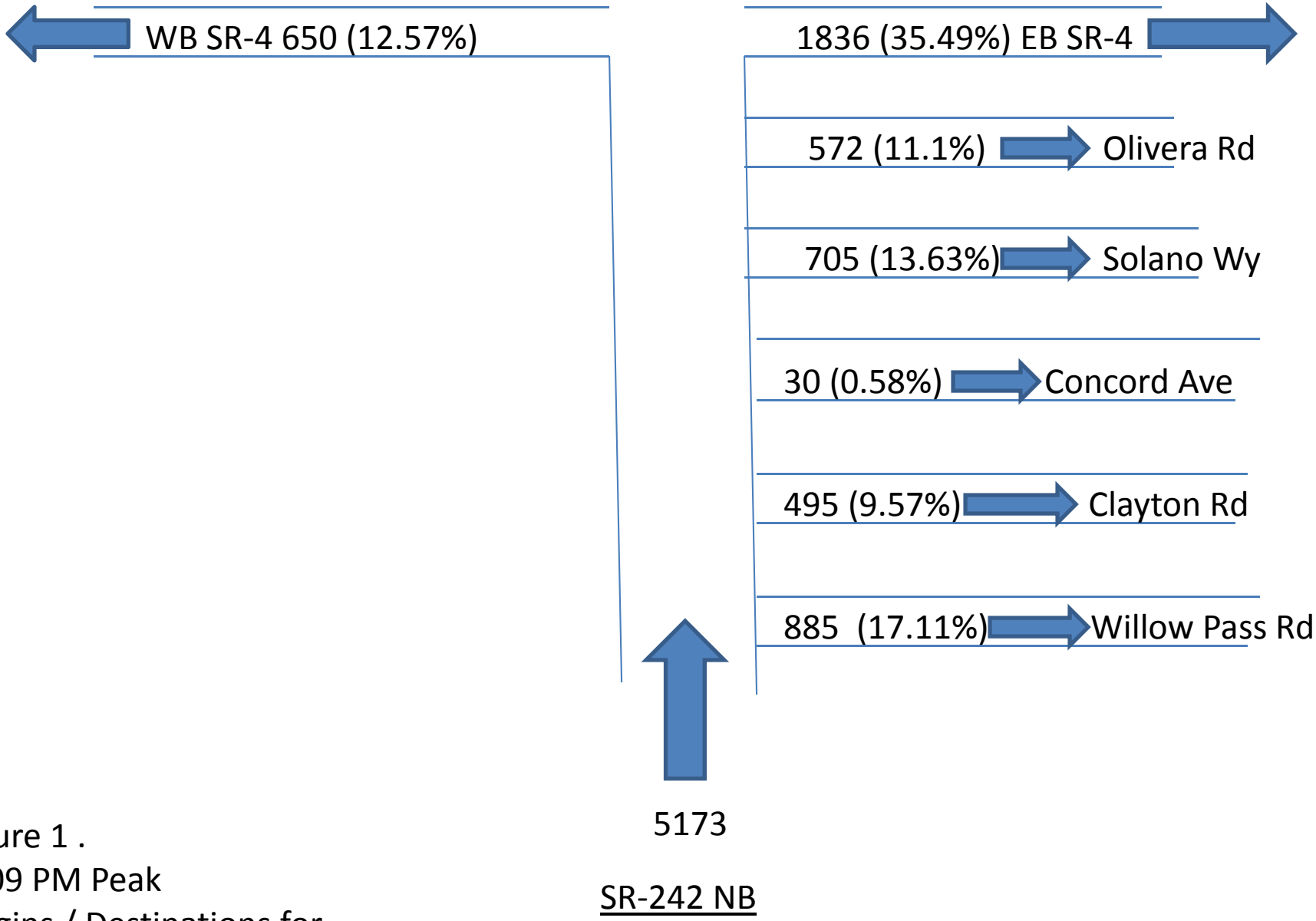


Figure 1 .
2009 PM Peak
Origins / Destinations for
Northbound SR-242

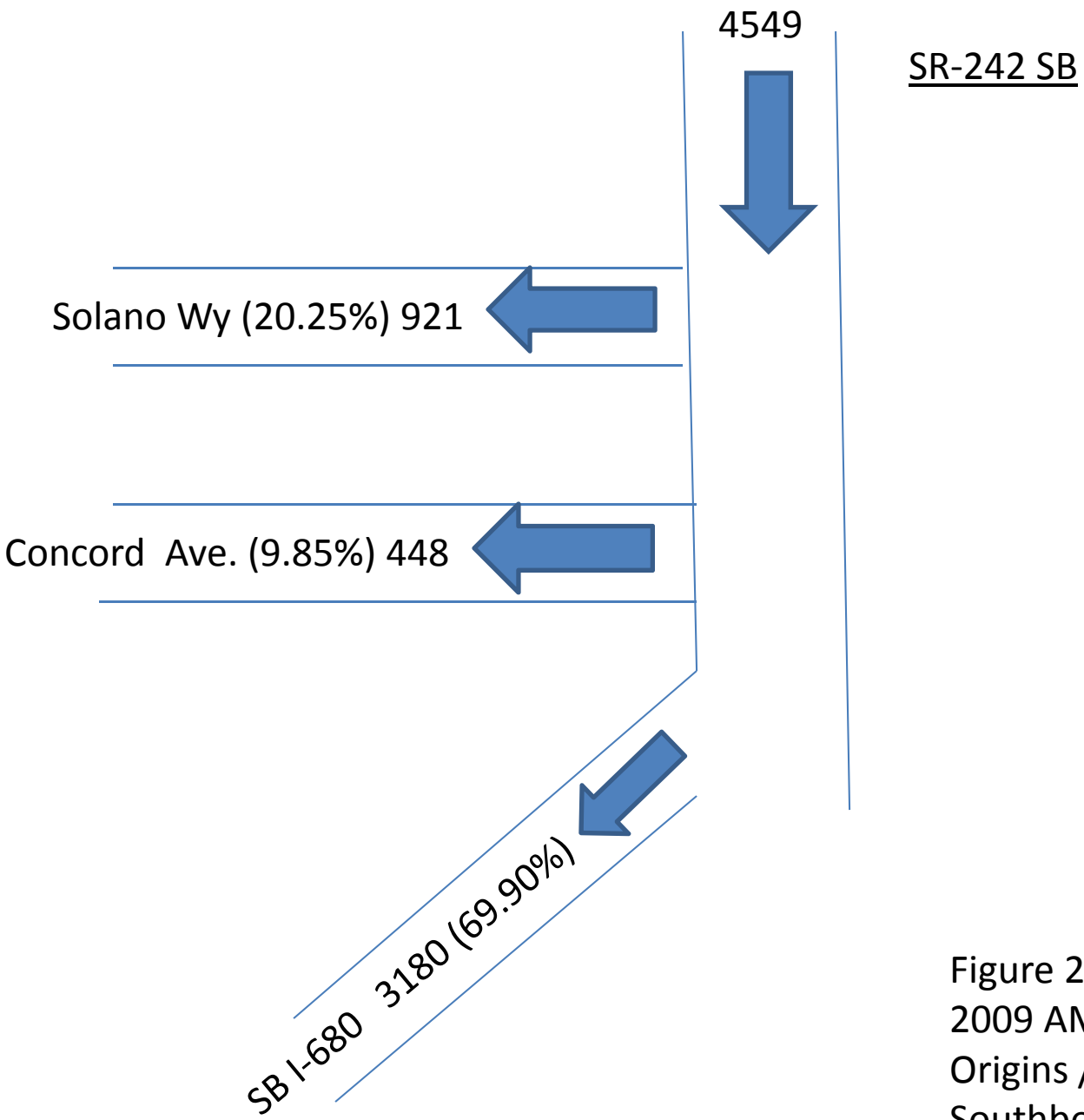


Figure 2.
2009 AM Peak
Origins / Destinations for
Southbound SR-242

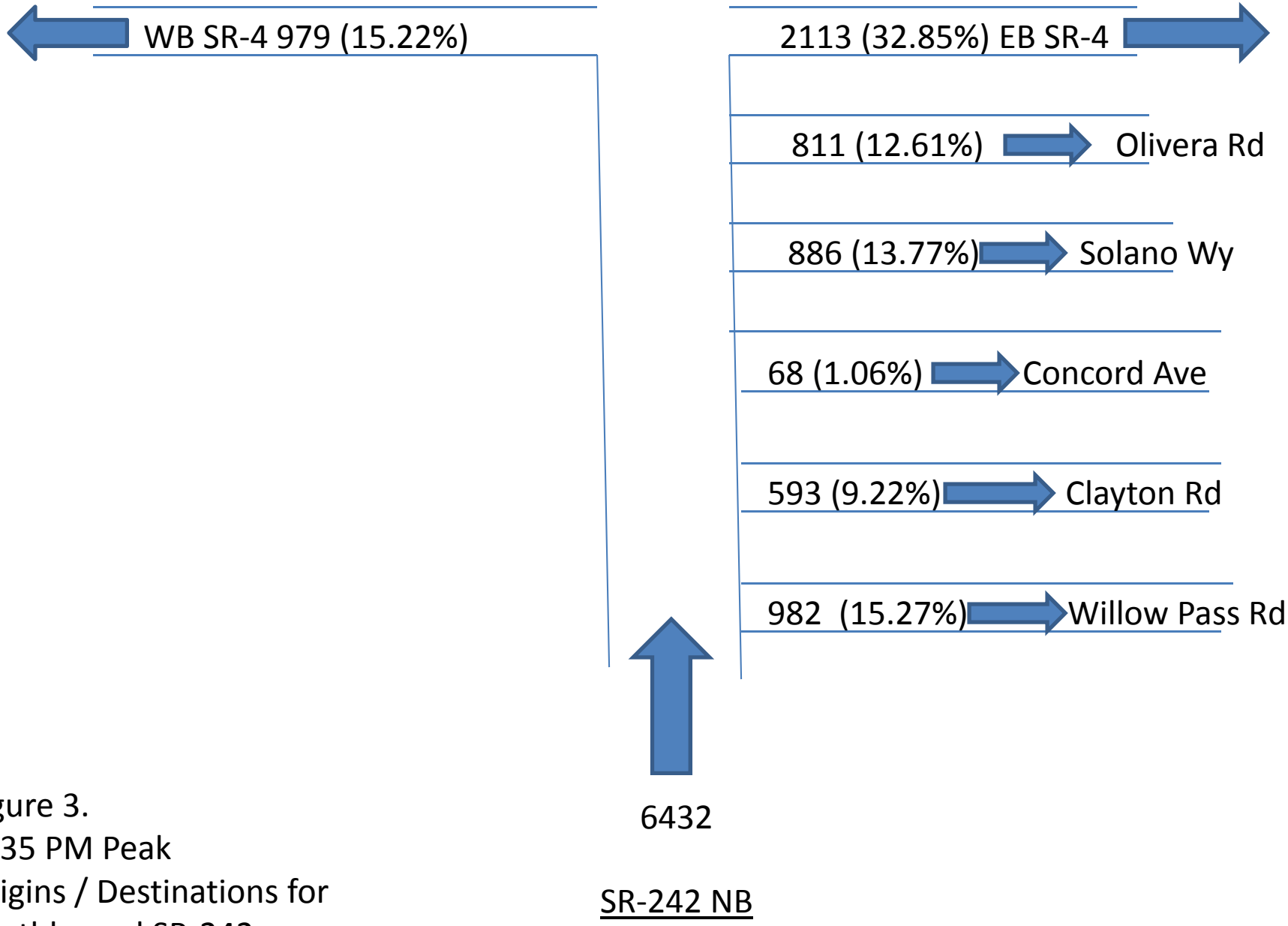


Figure 3.
2035 PM Peak
Origins / Destinations for
Northbound SR-242

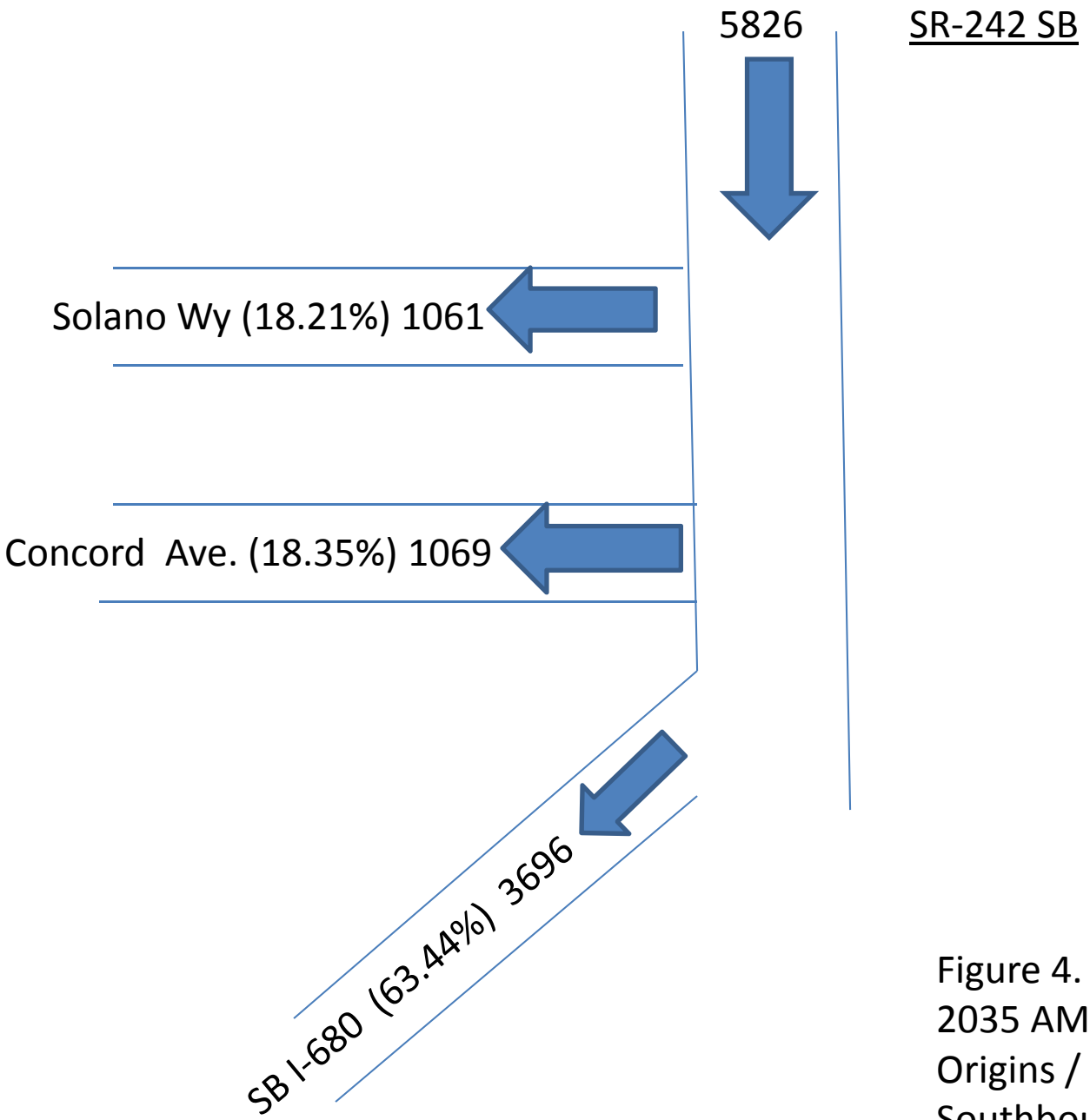


Figure 4.
2035 AM Peak
Origins / Destinations for
Southbound SR-242