San Gabriel Valley Council of Governments*

REVISED AGENDA AND NOTICE OF THE REGULAR MEETING OF THE PLANNING DIRECTORS TECHNICAL ADVISORY COMMITTEE

Thursday, April 23, 2020 – 12:00 PM

Teleconference Meeting: Livestream Available via sgvcog.org

Chair
Craig Hensley
City of Duarte

Vice-Chair
Brad Johnson
City of Claremont

Members
Alhambra
Arcadia
Azusa
Baldwin Park
Claremont
Covina
Diamond Bar
Duarte
El Monte
Glendora
Irwindale
La Verne
Monrovia
Montebello
Monterey Park
Rosemead
San Dimas
San Gabriel
Sierra Madre
South El Monte
South Pasadena
Temple City
West Covina
L.A. County DRP

Thank you for participating in today's meeting. The Planners' Technical Advisory Committee encourages public participation and invites you to share your views on agenda items.

MEETINGS: ***Regular Meetings of the Planners' Technical Advisory Committee are held on the fourth Thursday of each month at 12:00 PM at the Monrovia Community Center (119 West Palm Avenue, Monrovia, CA 91016).*** The Planners' Technical Advisory Committee agenda packet is available at the San Gabriel Valley Council of Government's (SGVCOG) Office, 1000 South Fremont Avenue, Suite 10210, Alhambra, CA, and on the website, www.sgvcog.org. Copies are available via email upon request (sgv@sgvcog.org). Documents distributed to a majority of the Committee after the posting will be available for review in the SGVCOG office and on the SGVCOG website. Your attendance at this public meeting may result in the recording of your voice.

CITIZEN PARTICIPATION: Your participation is welcomed and invited at all Planners' Technical Advisory Committee meetings. Time is reserved at each regular meeting for those who wish to address the Board. SGVCOG requests that persons addressing the Committee refrain from making personal, slanderous, profane, or disruptive remarks.

TO ADDRESS THE PLANNERS' TECHNICAL ADVISORY COMMITTEE: At a regular meeting, the public may comment on any matter within the jurisdiction of the Committee during the public comment period and may also comment on any agenda item at the time it is discussed. At a special meeting, the public may only comment on items that are on the agenda. Members of the public wishing to speak are asked to complete a comment card or simply rise to be recognized when the Chair asks for public comments to speak. We ask that members of the public state their name for the record and keep their remarks brief. If several persons wish to address the Committee on a single item, the Chair may impose a time limit on individual remarks at the beginning of discussion. **The Planners' Technical Advisory Committee may not discuss or vote on items not on the agenda.**

AGENDA ITEMS: The Agenda contains the regular order of business of the Planners' Technical Advisory Committee. Items on the Agenda have generally been reviewed and investigated by the staff in advance of the meeting so that the Committee can be fully informed about a matter before making its decision.

CONSENT CALENDAR: Items listed on the Consent Calendar are considered to be routine and will be acted upon by one motion. There will be no separate discussion on these items unless a Committee member or citizen so requests. In this event, the item will be removed from the Consent Calendar and considered after the Consent Calendar. If you would like an item on the Consent Calendar discussed, simply tell Staff or a member of the Planners' Technical Advisory Committee.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the SGVCOG office at (626) 457-1800. Notification 48 hours prior to the meeting will enable the SGVCOG to make reasonable arrangement to ensure accessibility to this meeting.

***MEETING MODIFICATIONS DUE TO THE STATE AND LOCAL STATE OF EMERGENCY RESULTING FROM THE THREAT OF COVID-19**: On March 17, 2020, Governor Gavin Newsom issued Executive Order N-29-20 authorizing a local legislative body to hold public meetings via teleconferencing and allows for members of the public to observe and address the meeting telephonically or electronically to promote social distancing due to the state and local State of Emergency resulting from the threat of the Novel Coronavirus (COVID-19).

To follow the new Order issued by the Governor and ensure the safety of committee members and staff for the purpose of limiting the risk of COVID-19, in-person public participation at the Planning Directors Technical Advisory Committee meeting scheduled for April 23, 2020 at 12:00pm will be not be allowed. Members of the public may view the meeting live on the SGVCOG's website. To access the meeting video, log onto www.sgvcog.org, click on the Planning Directors Technical Advisory Committee Agenda text on the right-hand side of the homepage, then follow prompts to watch the meeting live during the scheduled meeting time.

Public comments can be submitted electronically by emailing afung@sgvcog.org at least 1 hour prior to the scheduled meeting time. Emailed public comments will be read into the record. If you wish to comment on a specific agenda item, please identify the item in your email. General public comments will be addressed during the general public comment item on the agenda.

Any member of the public requiring a reasonable accommodation to participate in this meeting should contact Alexander Fung at least 48 hours prior to the meeting at (626) 457-1800 or at afung@sgvcog.org.

PRELIMINARY BUSINESS **3 MINUTES**

1. Call to Order
2. Roll Call
3. Public Comment *(If necessary, the Chair may place reasonable time limits on all comments)*
4. Changes to Agenda Order: Identify emergency items arising after agenda posting and requiring action prior to next regular meeting *(It is anticipated that the Committee may take action on the following matters)*

CONSENT CALENDAR **2 MINUTES**

(It is anticipated that the Committee may take action on the following matters)

5. Planners TAC Meeting Minutes – 01/23/2020 **(Page 1)**
Recommended Action: Approve.
6. Planners TAC Meeting Minutes – 02/27/2020 **(Page 4)**
Recommended Action: Approve.

UPDATE ITEMS **15 MINUTES**

7. San Gabriel Valley Regional Housing Trust – Caitlin Sims, Principal Management Analyst, SGVCOG
Recommended Action: For information only.
8. RHNA Methodology – Caitlin Sims, Principal Management Analyst, SGVCOG
Recommended Action: For information only.
9. Project Roomkey – Caitlin Sims, Principal Management Analyst, SGVCOG *Recommended Action: For information only.*
10. Inclusionary Ordinance Poll – Alexander Fung, Management Analyst, SGVCOG **(Page 6)**
Recommended Action: For information only.

DISCUSSION ITEM **10 MINUTES**

11. Legislative Updates: SB 899 (Wiener) & SB 902 (Wiener) – Alexander Fung, Management Analyst, SGVCOG **(Page 35)**
Recommended Action: Discuss and provide direction to staff.

PRESENTATIONS **30 MINUTES**

12. San Gabriel Valley Subregional Arterial Performance Baseline Conditions Analysis – Steve Gota, Highway Programs Project Manager, Los Angeles County Metropolitan Transportation Authority & Eva Moon, Transportation Planning Manager, Los Angeles County Metropolitan Transportation Authority **(Page 53)**
Recommended Action: For information only.
13. Climate Resolve and SCE Pilot Grant Writing Assistance Program for Los Angeles County – Natalie Hernandez, Climate Planning and Resilience Manager, Climate Resolve & Kristopher Eclarino, Technical Project Analyst, Climate Resolve **(Page 253)**
Recommended Action: For information only.

ANNOUNCEMENTS

ADJOURN

SGVCOG Planners TAC Meeting Minutes
Date: January 23, 2020
Time: 12:00 P.M.
Location: Monrovia Community Center
119 West Palm Avenue, Monrovia, CA 91016

PRELIMINARY BUSINESS

1. Call to Order.
C. Hensley called the meeting to order at 12:04pm.

2. Roll Call

Members Present	**Members Absent**
P. Lam; Alhambra	Arcadia
E. Sandoval; Azusa	Covina
R. Garcia; Baldwin Park	Diamond Bar
B. Johnson; Claremont	Montebello
C. Hensley; Duarte	Monterey Park
N. Lee, J. Mikaelian; El Monte	Rosemead
J. Kugel; Glendora	South El Monte
M. Simpson; Irwindale	South Pasadena
E. Scherer; La Verne	Temple City
S. Bermejo; Monrovia	
A. Garcia, F. Melicher; San Dimas	
M. Chang; San Gabriel	
V. Gonzalez; Sierra Madre	
J. Anderson; West Covina	
N. Ornelas Jr., J. Drevno, M. Kim; LACDRP	

SGVCOG Staff	**Guests**
M. Creter, Executive Director	S. Lai, Los Angeles County DPW
C. Sims, Staff	E. Gonzalez, Resident
T. Kirkconnell, Staff	
A. Fung, Staff	

3. Public Comment
No public comments were given at this meeting.

4. Changes to the Agenda Order
No changes were made to the agenda order.

CONSENT CALENDAR

5. Planners TAC Meeting Minutes – 12/05/2019
There was a motion made to approve the 12/05/2019 Planners' TAC Meeting Minutes (M/S: S. Reimers/B. Johnson).

[Motion Passed]

Ayes	Alhambra, Azusa, Baldwin Park, Claremont, Duarte, El Monte, Glendora, Irwindale, La Verne, Monrovia, San Dimas, San Gabriel, Sierra Madre, West Covina, Los Angeles County DRP
Noes	
Abstain	
Absent	Arcadia, Covina, Diamond Bar, Montebello, Monterey Park, Rosemead, South El Monte, South Pasadena, Temple City

UPDATE ITEMS

6. SCAG Regional Early Action Planning (REAP) Program
SGVCOG Principal Management Analyst, Caitlin Sims, provided an update on this item. The Southern California Association of Governments (SCAG) is expected to receive $50 million from the State to support activities that will increase housing planning and facilitate local housing production. SCAG staff is currently developing its Regional Early Action Planning (REAP) Program and soliciting feedback from subregional partners to provide recommendations on the structure of the program to meet local needs in each subregion. SGVCOG staff intends to recommend that SCAG allocates the funding directly to jurisdictions rather than administering a competitive grant program.

7. San Gabriel Valley Regional Housing Trust
SGVCOG Principal Management Analyst, Caitlin Sims, provided an update regarding the San Gabriel Valley Regional Housing Trust. The Trust's joint powers agreement was recently finalized and distributed to all of the San Gabriel Valley cities. 21 cities expressed interest to join the Trust. Additionally, the SGVCOG Governing Board will be appointing 9 members to the Trust's Board of Directors. The appointment process will be discussed by the SGVCOG Homelessness Committee, Executive Committee, and Governing Board in February. Elections and appointments of the Trust's Board of Directors are expected to be conducted in April.

8. SB 743 Implementation & Regional VMT Analysis Model
SGVCOG Management Analyst, Alexander Fung, provided an update regarding the San Gabriel Valley Regional VMT Analysis Model. Based on the recommendations from various SGVCOG committees, SGVCOG staff will be coordinating the efforts to establish a Regional VMT Analysis Model to assist cities with complying the SB 743 mandates. 26 cities expressed interest in joining the efforts. The request for proposal was released in early January and the contract is expected to be awarded in mid-March. Once the project cost is finalized, SGVCOG staff will reach out to the interested cities to execute memorandums of agreement.

PRESENTATIONS

9. Countywide Traffic Reduction Study
Metro Office of Extraordinary Innovation Senior Director, Tham Nguyen, provided a presentation on the Metro Traffic Reduction Study. The study is intended to identify and evaluate one or more potential pilot program concepts, which could include enhanced transportation options and road congestion pricing to reduce traffic and congestion and improve mobility. The study also aims to identify willing partners to pilot the program. While still in planning stages, Metro is preparing to begin a countywide outreach effort to engage stakeholders as a way to solicit input in order to inform the identification of the concepts outlined in the study.

CHAIR'S REPORT

10. Discussion of Status of ADU Ordinances
C. Hensley led a discussion on revised ADU ordinances. All committee members expressed that they are working with their respective jurisdictions to revise ADU ordinances due to the housing bills that were recently signed by Governor Newsom last year.

11. Potential Tour: Hope for Home
C. Hensley led the discussion for this item. Several committee members expressed interest in touring the Pomona Hope for Home Services Center in lieu of hosting a regular committee meeting in February. The committee directed SGVCOG staff to coordinate the tour with the City of Pomona.

12. Solicitation of Presentation Topics
No report was given for this item.

STAFF ANNOUNCEMENTS

13. SGVCOG Regional Housing Trust and Affordable Housing Forum
SGVCOG staff announced that SGVCOG will be hosting the Regional Housing Trust and Affordable Housing Forum on Thursday, February 13, 2020 at 9:00am at the Glendora Public Library.

14. Next Committee Meeting
The committee will be touring the Pomona Hope for Home Services Center in lieu of hosting a regular committee meeting in February. The upcoming regular committee meeting is scheduled for Thursday, March 26, 2020 at 12:00pm at the Monrovia Community Center.

ADJOURN

The meeting adjourned at 12:46pm.

SGVCOG Planners TAC Meeting Minutes
Date: February 27, 2020
Time: 12:00 P.M.
Location: Pomona Hope for Home Services Center
1400 E. Mission Blvd., Pomona, CA 91766

PRELIMINARY BUSINESS

1. Call to Order.
C. Hensley called the meeting to order at 12:08pm.

2. Roll Call

Members Present	**Members Absent**
L. Flores; Arcadia	Alhambra
R. Garcia, B. Martinez; Baldwin Park	Azusa
B. Johnson, A. Turner; Claremont	Covina
C. Hensley, T. Hadloc; Duarte	Diamond Bar
J. Kugel, D. Lopez; Glendora	El Monte
M. Simpson, T. Olivares; Irwindale	Monrovia
M. McCurley; La Verne	Montebello
L. Medina-Whittaker; Rosemead	Monterey Park
A. Garcia, K. Esparza; San Dimas	San Gabriel
A. Hernandez; South El Monte	Sierra Madre
S. Reimers, T. Chan; Temple City	South Pasadena
J. Drevno, M. Kim, N. Ornelas; LACDRP	West Covina

SGVCOG Staff	**Guests**
T. Kirkconnell, Staff	S. Yauchzee, City of Baldwin Park
A. Fung, Staff	T. Sandoval, City of Pomona
	B. DeFrank, City of Pomona
	D. Holley, City of Pomona
	A. Gutierrez, City of Pomona
	A. Khan, City of Pomona
	G. Gonzalez, City of Pomona
	V. Tam, City of Pomona
	M. Clark, City of Rosemead
	D. Baldwin, City of San Dimas
	C. Lam, Congresswoman Napolitano
	T. Valmores, Assemblymember Rubio
	S. Chamberlain, SGV Consortium
	R. Clark, Volunteers of America

3. Public Comment
No public comments were given at this meeting.

4. Changes to the Agenda Order
No changes were made to the agenda order.

PRESENTATIONS

5. Tour of the Pomona Hope for Home Services Center
Pomona Neighborhood Services Director, Benita DeFrank, led the committee to tour the Hope for Home Services Center. Committee members explored the 15,000 square-foot facility that provides in-take services and a clinic for mental and behavioral health services. The facility also includes restrooms, lockers, kennels, laundry rooms, a medical clinic, and open offices.

ADJOURN
The meeting adjourned at 1:30pm.

DATE: April 23, 2020

TO: Planning Directors' Technical Advisory Committee

FROM: Marisa Creter, Executive Director

RE: INCLUSIONARY ORDINANCE POLL RESULTS

RECOMMENDED ACTION

For information only.

BACKGROUND

At the recommendation of several committee members, SGVCOG staff conducted a poll on San Gabriel Valley cities that implemented inclusionary ordinances in their jurisdictions. Inclusionary housing ordinances ensure the production of affordable units in new development by establishing affordable housing set-aside requirements on residential projects that meet certain criteria. Committee members were encouraged to respond to the poll from February 28, 2020 to March 19, 2020. A total of ten committee members submitted responses.

The following cities provided responses to the poll:

City	Does your City have an inclusionary ordinance in place?
Alhambra	No
Arcadia	No
Claremont	Yes
Duarte	Yes
El Monte	No
Glendora	No
La Puente	No
San Dimas	No
South El Monte	No
Temple City	No

Several committee members also shared additional comments and recommendations in their submissions. A committee member recommended cities to hire consultants to assist with the implementation of inclusionary ordinances given that administering the process was time-consuming. Another committee member mentioned that a temporary exemption was imposed on his City's adopted inclusionary ordinance until the next Housing Element update given that the local housing market was stagnant. Additionally, a committee member from the City of Glendora suggested that redevelopment agencies (RDAs) can utilize set-side funds to support development, direct financing, and other forms of investment to encourage the creation of restricted income housing.

The City of Glendora has previously implemented RDA laws that required 20% of tax increment collected to be allocated for projects that improved the quality and quantity of low-income housing. While the City's RDA laws are now defunct, the 20% set-aside funds were previously used to achieve an inclusionary requirement for all housing to be built within a specific redevelopment project area. RDAs can use set-aside funds in various ways, including land assembly and public infrastructure, to support the creation of restricted income housing.

A draft of Los Angeles County Department of Regional Planning's (DRP) Inclusionary Housing Ordinance can also be found in Attachment A as a reference. DRP will be hosting a public hearing on the draft Inclusionary Housing Ordinance on Wednesday, April 29, 2020.

SGVCOG Management Analyst, Alexander Fung, will provide a brief presentation on this item at this meeting.

Prepared by: _____
Alexander P. Fung
Management Analyst

Approved by: Marisa Creter
Marisa Creter
Executive Director

ATTACHMENTS
Attachment A – Los Angeles County DRP Inclusionary Housing Ordinance Draft

ORDINANCE NO. _____

An ordinance amending Title 22 – Planning and Zoning of the Los Angeles County Code to establish an Inclusionary Housing Program in the unincorporated areas of Los Angeles County.

The Board of Supervisors of the County of Los Angeles ordains as follows:

SECTION 1. Section 22.14.010 is hereby amended to read as follows:

22.14.010 A.

…

Affordable Housing and Senior Citizen Housing. The following terms are defined for the purposes of Chapter 22.120 (Density Bonus), Chapter 22.121 (Inclusionary Housing) and Chapter 22.166 (Housing Permits):

Affordable housing cost. ~~As defined in Section 50052.5 of the California Health and Safety Code.~~

1. Unless otherwise specified, as defined in Section 50052.5 of the California Health and Safety Code.

2. For middle income households, affordable housing cost shall not be less than 28 percent of the gross income of the household, nor exceed the product of 35 percent times 130 percent of area median income adjusted for family size appropriate for the unit.

Affordable housing set-aside. Dwelling units reserved for extremely low, very low, lower, ~~or~~ moderate, or middle income households.

Affordable rent. As defined in Section 50053 of the California Health and Safety Code.

Affordable sale price. The maximum sale price of an affordable unit based on the affordable housing cost, as determined by the County.

…

Housing development. A residential development project ~~for five or more dwelling units,~~ including mixed use developments. It may also be a subdivision or a common interest development, as defined in Section 4100 of the California Civil Code, approved by the County and consisting of dwelling units or unimproved residential lots. ~~It may also be either a project to substantially rehabilitate and convert an existing commercial building to residential use, or the substantial rehabilitation of an existing multi-family dwelling, as defined in Section 65863.4(d) of the California Government Code, where the result of rehabilitation would be a net increase in available dwelling units.~~

…

Income. See "Income" for the following:

Area median income.

Extremely low income.

Lower income.

Middle income.

…

Specific adverse impact. As defined in Section 65589.5 (d) (2) of the California Government Code.

Submarket area. A geographic area with similar land use and real estate markets, as depicted in Figures 22.14.010-A through 22.14.010-F, below.

FIGURE 22.14.010-A: ANTELOPE VALLEY SUBMARKET AREA

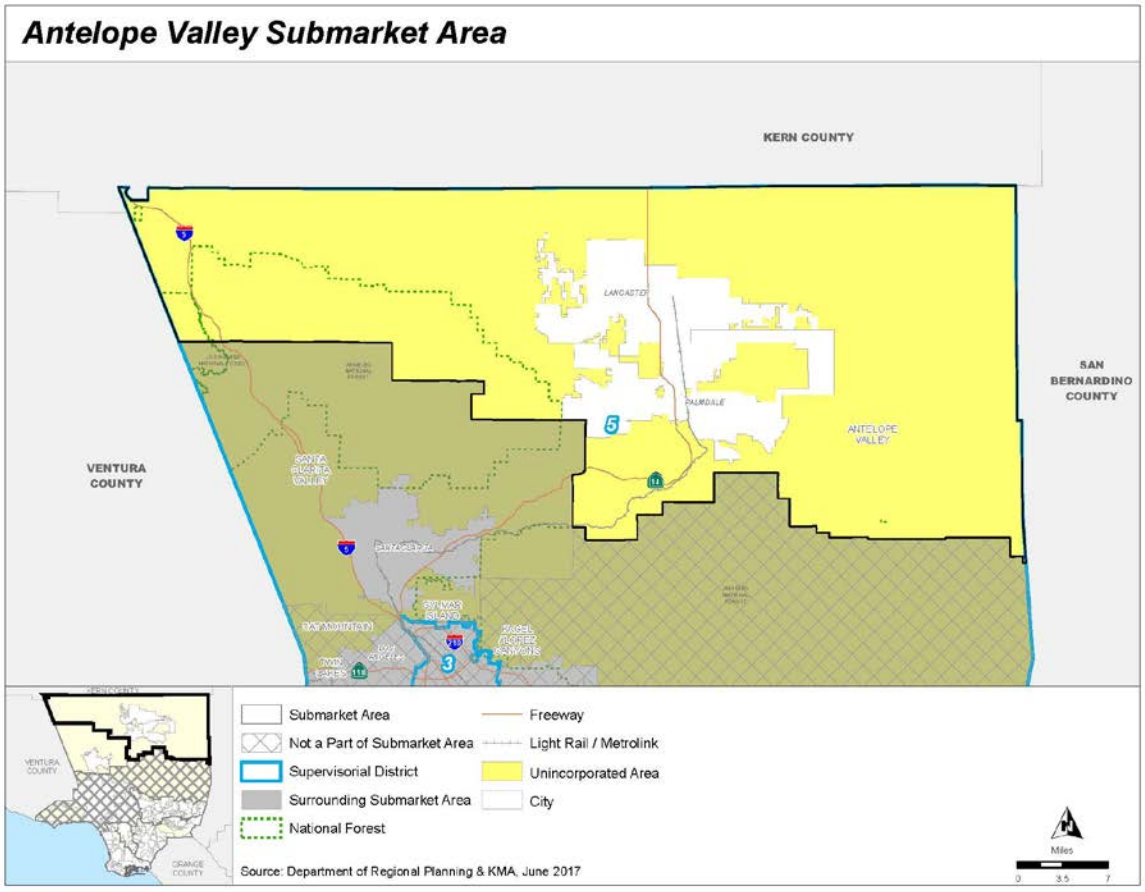


FIGURE 22.14.010-B: COASTAL SOUTH LOS ANGELES SUBMARKET AREA

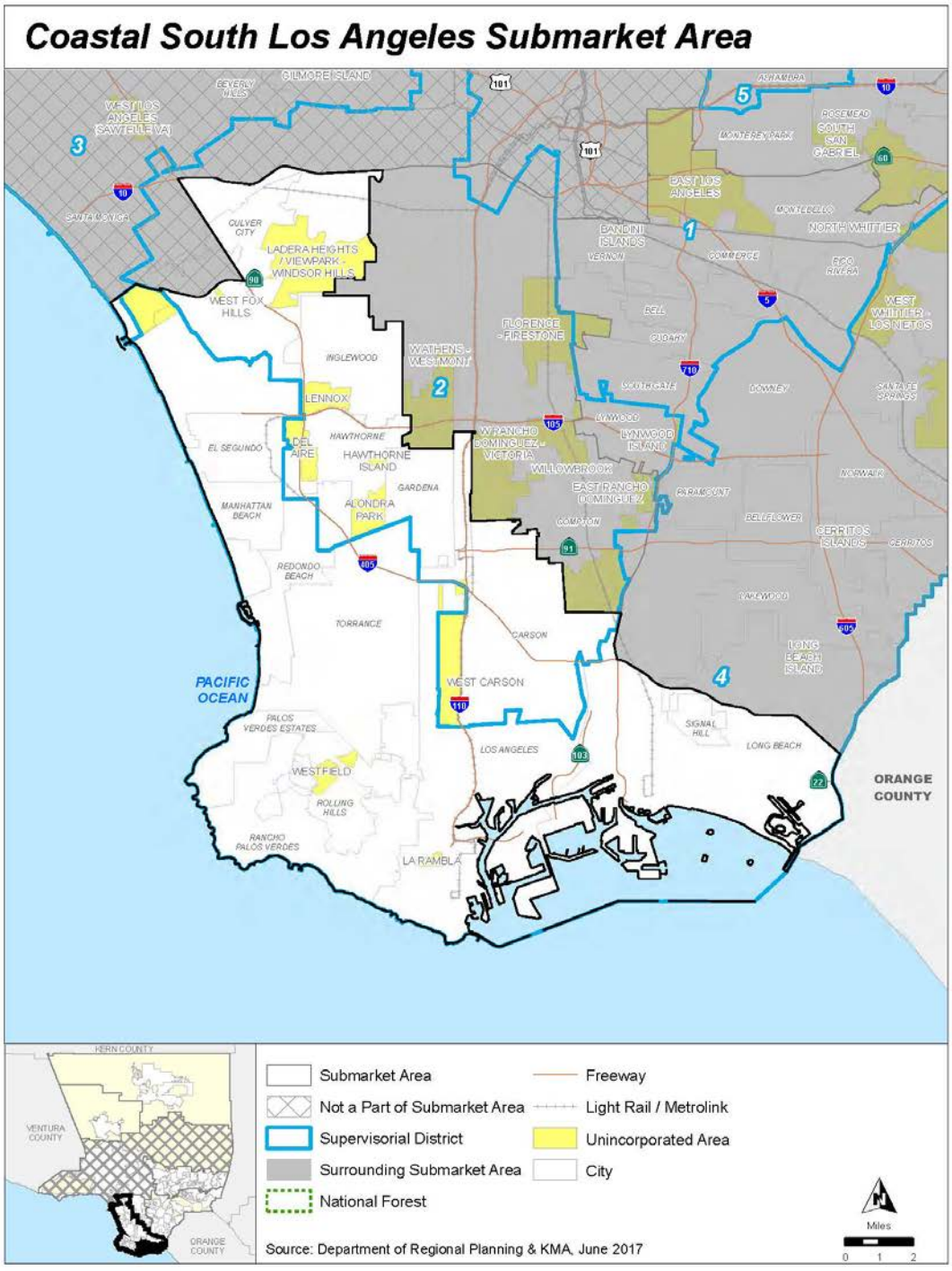


FIGURE 22.14.010-C: EAST LOS ANGELES/GATEWAY SUBMARKET AREA

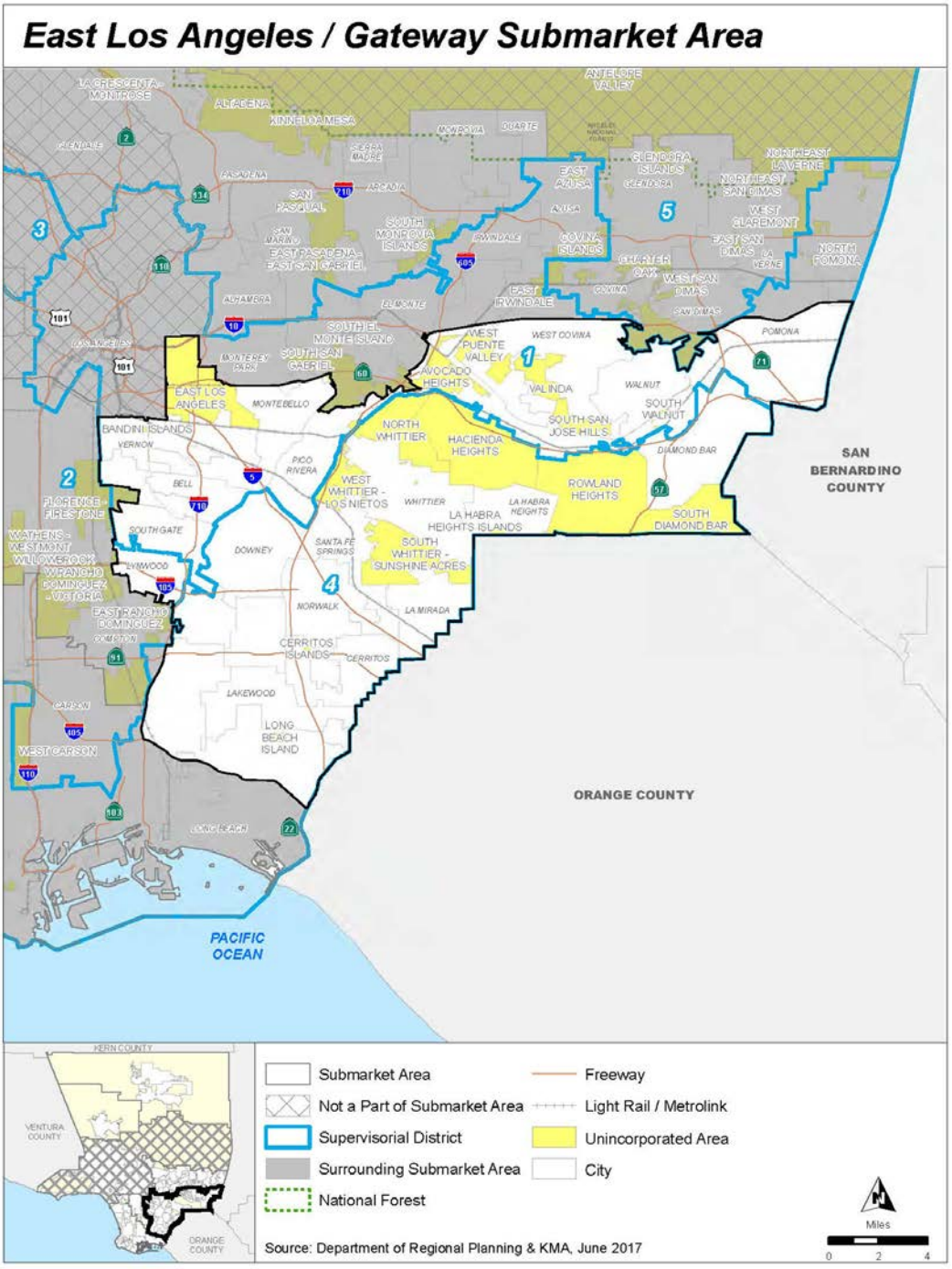


FIGURE 22.14.010-D: SAN GABRIEL VALLEY SUBMARKET AREA

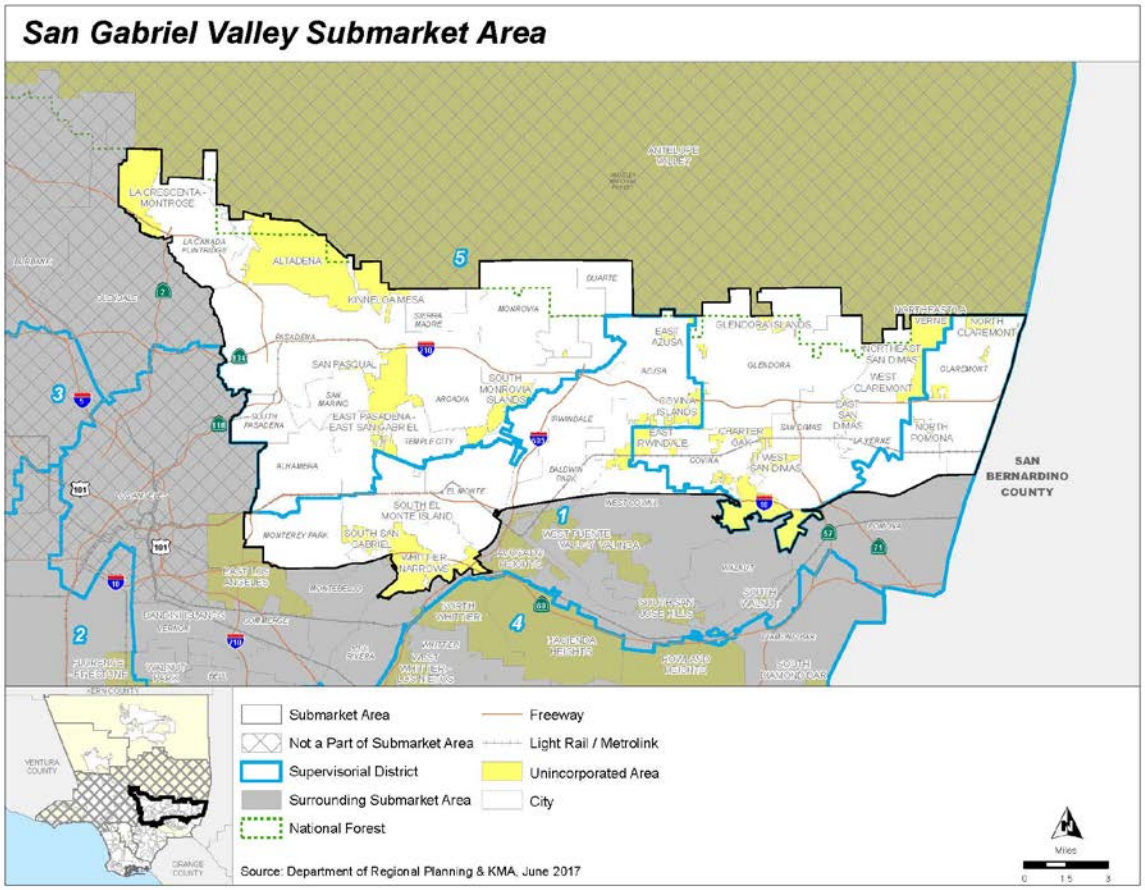


FIGURE 22.14.010-E: SANTA CLARITA VALLEY SUBMARKET AREA

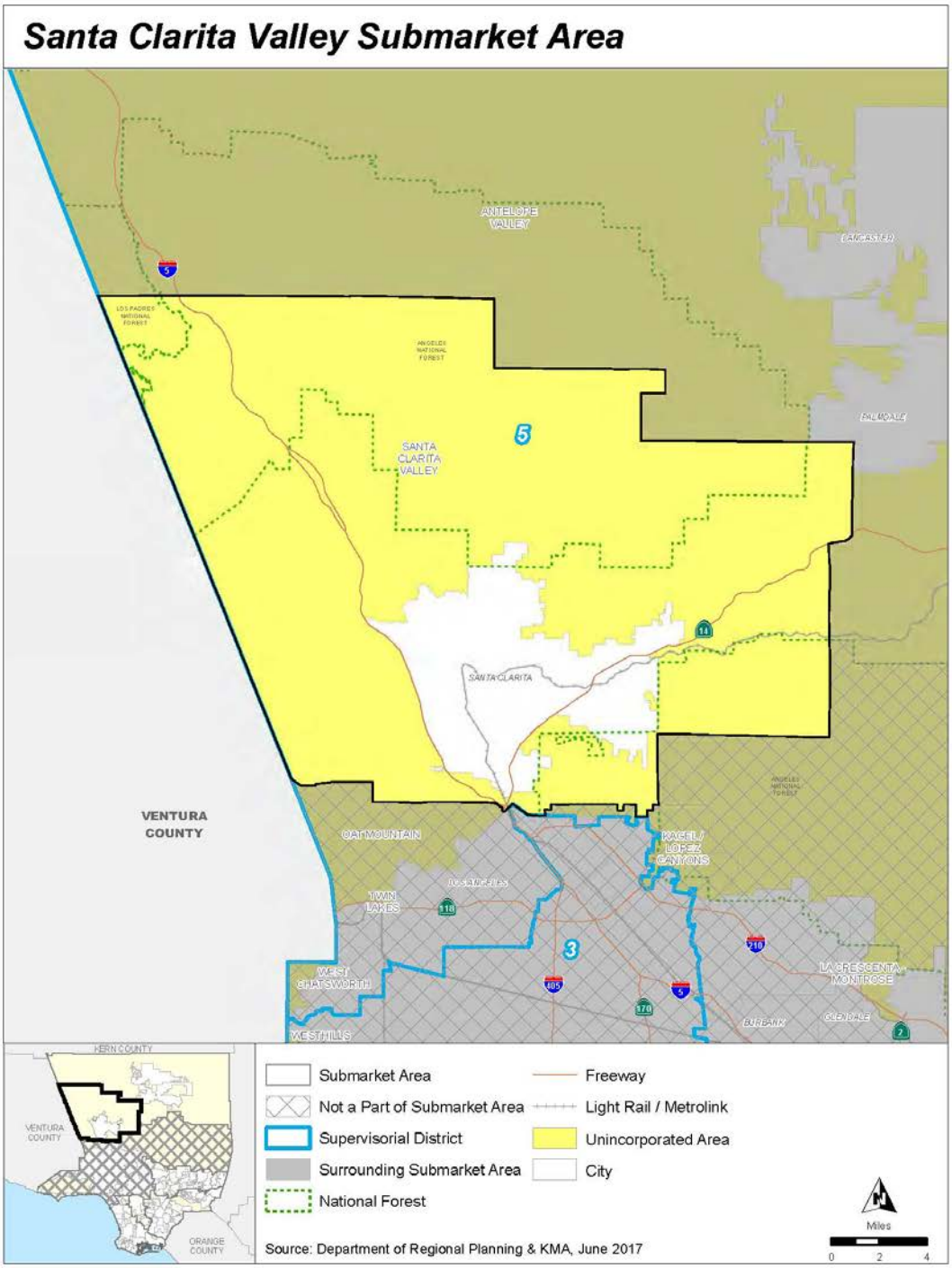
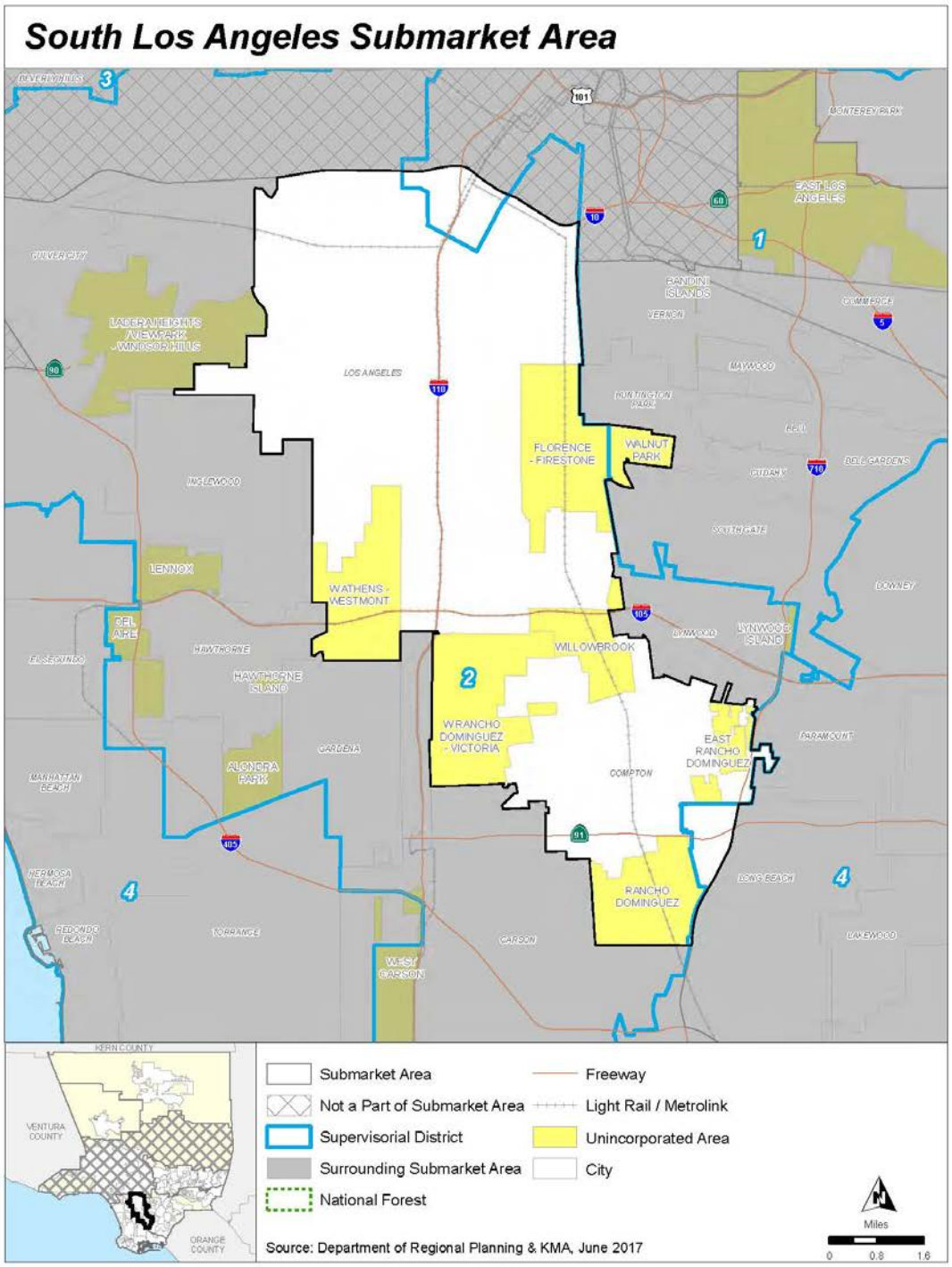


FIGURE 22.14.010-F: SOUTH LOS ANGELES SUBMARKET AREA



…

SECTION 2. Section 22.14.090 is hereby amended to read as follows:

22.14.090 I.

…

Income.

Area median income. The current median annual household income for Los Angeles County as estimated yearly by the United States Department of Housing and Urban Development or as published by the California Department of Housing and Community Development.

Extremely low income. An annual income for a household ~~which~~ that does not exceed 30 percent of the area median income, as specified by Section 50106 of the California Health and Safety Code.

~~Low income. An annual income for a person or a family which does not exceed 80 percent of the area median income.~~

Lower income. An annual income for a household ~~which~~ that does not exceed 80 percent of the area median income, as specified by Section.50079.5 of the California Health and Safety Code. "Low Income" shall mean the same as "Lower Income."

Middle income. An annual income for a household that does not exceed 150 percent of the area median income.

…

SECTION 3. Section 22.16.030 is hereby amended to read as follows:

22.16.030 Land Use Regulations for Zones A-1, A-2, O-S, R-R, and W.

…

C. Use Regulations.

1. Principal Uses. Table 22.16.030-B, below, identifies the permit or review required to establish each principal use.

TABLE 22.16.030-B:PRINCIPAL USE REGULATIONS FOR AGRICULTURAL, OPEN SPACE, RESORT AND RECREATION, AND WATERSHED ZONES						
	A-1	***A-2***	***O-S***	***R-R***	***W***	***Additional Regulations***
…						
Residential Uses						
…						
Notes: … 16. Use may also be subject to Chapter 22.120 (Density Bonus), Chapter 22.121 (Inclusionary Housing), or ~~and~~ Chapter 22.166 (Housing Permits) ~~if it includes affordable housing or senior citizen housing~~.						

…

SECTION 4. Section 22.18.030 is hereby amended to read as follows:

22.18.030 Land Use Regulations for Zones R-A, R-1, R-2, R-3, R-4, and R-5.

…

C. Use Regulations.

1. Principal Uses. Table 22.18.030-B, below, identifies the permit or review required to establish each principal use.

TABLE 22.18.030-B:PRINCIPAL USE REGULATIONS FOR RESIDENTIAL ZONES							
	R-A	*R-1*	*R-2*	*R-3*	*R-4*	*R-5*	*Additional Regulations*
…							
Residential Uses							
…							
Single-family residences[8]	SPR	SPR	SPR	SPR	SPR	-	Section 22.140.580
Single-family residences on compact lots[8]	-	-	CUP	CUP	CUP	-	Section 22.140.585
…							
Notes: … 8. Use may also be subject to Chapter 22.120 (Density Bonus), Chapter 22.121 (Inclusionary Housing), or ~~and~~ Chapter 22.166 (Housing Permits) ~~if it includes affordable housing or senior citizen housing~~.							

…

SECTION 5. Section 22.20.030 is hereby amended to read as follows:

22.20.030 Land Use Regulations for Zones C-H, C-1, C-2, C-3, C-M, C-MJ, and C-R.

…

C. Use Regulations.

1. Principal Uses. Table 22.20.030-B, below, identifies the permit or review required to establish each principal use.

TABLE 22.20.030-B:PRINCIPAL USE REGULATIONS FOR COMMERCIAL ZONES								
	C-H	*C-1*	*C-2*	*C-3*	*C-M*	*C-MJ*	*C-R*	*Additional Regulations*
…								
Residential Uses								
…								
Notes: … 25. Use may also be subject to Chapter 22.120 (Density Bonus), Chapter 22.121 (Inclusionary Housing), or ~~and~~ Chapter 22.166 (Housing Permits) ~~if it includes affordable housing or senior citizen housing~~. …								

…

SECTION 6. Section 22.24.030 is hereby amended to read as follows:

22.24.030 Land Use Regulations for Rural Zones.

…

C. Use Regulations.

1. Principal Uses. Table 22.24.030-B, below, identifies the permit or review required to establish each principal use.

TABLE 22.24.030-B:PRINCIPAL USE REGULATIONS FOR RURAL ZONES			
	C-RU	***MXD-RU***	***Additional Regulations***
…			
Residential Uses			
…			
Notes: … 13. Use may also be subject to Chapter 22.120 (Density Bonus), Chapter 22.121 (Inclusionary Housing), or ~~and~~ Chapter 22.166 (Housing Permits) ~~if it includes affordable housing or senior citizen housing~~.			

…

SECTION 7. Section 22.26.030 is hereby amended to read as follows:

22.26.030 Mixed Use Development Zone.

…

B. Land Use Regulations.

…

3. Use Regulations.

a. Principal Uses.

i. Table 22.26.030-B, below, identifies the permit or review required to establish each principal use.

TABLE 22.26.030-B:PRINCIPAL USE REGULATIONS FOR ZONE MXD		
		Additional Regulations
…		
Residential Uses		
…		
Notes: … 7. Use may also be subject to Chapter 22.120 (Density Bonus), Chapter 22.121 (Inclusionary Housing), or ~~and~~ Chapter 22.166 (Housing Permits) ~~if it includes affordable housing or senior citizen housing~~.		

…

E. Modifications of Development Standards. With the exception of a height bonus granted through lot consolidation in Subsection G, below, the development standards specified in Subsection D, above, may be modified as follows:

…

2. Notwithstanding Subsection E.1, above, any development standard specified in Subsection D, above, may be waived or modified in accordance with Chapter 22.120 (Density Bonus) or Chapter 22.121 (Inclusionary Housing), subject to an Administrative Housing Permit (Section 22.166.040) application, and shall require the approval of a Ministerial Site Plan Review (Chapter 22.186) application.

…

SECTION 8. Section 22.46.030 is hereby amended to read as follows:

22.46.030 Administration.

A. Specific Plans and associated regulations shall be administered in accordance with Article 8, Chapter 3, Division 1, Title 7 and other applicable provisions of the California Government Code. Such plans and regulations may reference existing

provisions and procedures of this Title 22 or they may develop different administrative procedures to use in the implementation of the Specific Plan. Except as otherwise expressively provided in a Specific Plan, property may be used for any purpose and subject to all of the standards and requirements of the basic zone. Where the regulations of a Specific Plan differ from the provisions of the basic zone, ~~with the exception of projects subject to Chapter 22.120 (Density Bonus) and Chapter 22.166 (Housing Permits),~~ such regulations shall supersede the provisions of the basic zone as specified in the Specific Plan.

B. Exceptions.

1. Density Bonus or Inclusionary Housing. Notwithstanding any contrary provisions in this Chapter, any Specific Plan regulations specified in Subsection A, above, may be waived or modified through a Housing Permit (Chapter 22.166) pursuant to Chapter 22.120 (Density Bonus) or Chapter 22.121 (Inclusionary Housing).

…

SECTION 9. The Chapter headings for Division 6 are hereby amended to read as follows:

DIVISION 6: DEVELOPMENT STANDARDS.

Chapters:

...

Chapter 22.120 Density Bonus.

Chapter 22.121 Inclusionary Housing.

…

SECTION 10. Section 22.120.030 is hereby amended to read as follows:

22.120.030 Applicability.

Notwithstanding any contrary provisions in this Title 22, the provisions of this Chapter, in conjunction with Chapter 22.166 (Housing Permits), shall apply in all zones that allow residential use as a principal use, and apply to all eligible housing developments, including projects to substantially rehabilitate and convert an existing commercial building to residential uses, or the substantial rehabilitation of an existing multifamily dwelling, as defined in Section 65863.4 (d) of the California Government Code, where the result of the rehabilitation would be a net increase in available dwelling units.

…

SECTION 11. Section 22.120.050 is hereby amended to read as follows:

22.120.050 Affordable Housing.

…

B. **Affordable Housing Set-Aside.**

1. Duration of Affordability. –

a. Rental. The affordability term for affordable housing set-aside units shall be at least 55 years from the issuance of the final certificate of occupancy by Public Works.

~~a~~b. For-sale. The initial sale of the affordable housing set-aside units shall be restricted to eligible buyers and shall require an equity-sharing agreement with the County, as described in Chapter 22.166 (Housing Permits).

2. ~~Compatibility~~Comparability. Affordable housing set-aside units shall have the same number of bedrooms as the non-set-aside dwelling units. In a housing development with a variety of bedroom counts per dwelling unit, the percentage of affordable set-aside dwelling units with a particular number of bedrooms shall be equal to the percentage of non-set-aside dwelling units with the same number of bedrooms.

3. Location of Units. ~~The affordable housing set-aside units and the density bonus dwelling units may be located in different geographic areas within the housing development.~~ The affordable housing set-aside units shall be provided on-site, or off-site if one of the following are met:

a. Located in an unincorporated area of Los Angeles County and within one-quarter mile of the principal project;

b. Located within a Highest, High, or Moderate Resource Area, as determined by the State Tax Credit Allocation Committee and State Department of Housing and Community Development;

c. Located in an area with known displacement risk based on evidence to the satisfaction of the Department; or

d. Developed as part of a new community land trust.

~~4. Covenant and Agreement Required. A covenant and agreement~~

~~ensuring the continuing availability of affordable housing set-aside units shall be recorded, pursuant to Section 22.166.070 (Covenant and Agreement).~~

4. Timing. All entitlements and permits for on-site or off-site affordable set aside units shall be obtained prior to or concurrently with the entitlements and permits for the non set-aside units.

…

SECTION 12. Section 22.120.100 is hereby amended to read as follows:

22.120.100 Rules and Calculations.

…

D. Density Bonus.

1. Except as specified otherwise, the density bonus shall be calculated using the baseline dwelling units~~,~~ exclusive of a manager's unit or units~~, on contiguous parcels~~.

…

~~F. Contiguous Parcels. For the purposes of this Chapter, a Housing Permit application may only be filed for contiguous parcels.~~

SECTION 13. Chapter 22.121 is hereby added to read as follows:

Chapter 22.121 Inclusionary Housing.

Sections:

22.121.040 Application Requirement.

22.121.050 Affordable Housing Set-Aside.

22.121.060 Incentive and Waiver or Reduction of Development Standard.

22.121.070 County Feasibility Assessment.

22.121.010 Purpose.

The purpose of this Chapter is to ensure the inclusion of affordable housing units in housing developments that meet certain criteria and encourage mixed-income communities.

22.121.020 Definitions.

Specific terms used in this Chapter are defined in Division 2 (Definitions), under "Affordable Housing and Senior Citizen Housing."

22.121.030 Applicability.

Notwithstanding any contrary provisions in this Title 22, the provisions of this Chapter, in conjunction with Chapter 22.166 (Housing Permits), apply to all housing developments, including projects to substantially rehabilitate and convert an existing commercial building to residential uses, or the substantial rehabilitation of an existing multifamily dwelling, as defined in Section 65863.4 (d) of the California Government Code, where the result of the rehabilitation would be a net increase in available dwelling units, that meet all of the following:

A. Has at least five or more baseline dwelling units;

B. Is located in a submarket area, with the following exceptions:

1. Rental projects or condominium projects located in the South Los Angeles or Antelope Valley submarket areas; or

2. Rental projects located in the East Los Angeles/Gateway submarket area; and

C. Is not located within an area subject to a development agreement or specific plan with an affordable housing requirement.

22.121.040 Application Requirement.

Except as specified otherwise, an Administrative Housing Permit (Section 22.166.040) is required for any housing development subject to this Chapter.

22.121.050 Affordable Housing Set-Aside.

A. Rental. If the project consists of rental units, the affordable housing set-aside units shall be provided at an affordable rent, as described in Table 22.121.050-A, below.

TABLE 22.121.050-A: INCLUSIONARY HOUSING REQUIREMENTS FOR RENTAL PROJECTS

Option	*Affordability*[1]	*Set-aside*	*Set-aside (Small projects)*[2]
1	Average affordability[3] of 40% AMI or less	10%	5%
2	Average affordability[3] of 65% AMI or less	15%	7%
3	80% AMI or less	20%	10%

Notes:
1. Units shall be set aside for extremely low, very low, or lower income households.
2. Projects with less than 20 baseline dwelling units.
3. Calculations for the average affordability shall comply with Subsection C (Calculation), below.

B. For-sale. If the project consists of for-sale units, the affordable housing set-aside units shall be provided at an affordable sale price, as described in Table 22.121.050-B, below.

TABLE 22.121.050-B: INCLUSIONARY HOUSING REQUIREMENTS FOR FOR-SALE PROJECTS			
Submarket Area	***Affordability[1]***	***Set-aside***	***Set-aside (Small projects)[2]***
Coastal South Los Angeles, South Los Angeles (excluding condominiums), East Los Angeles/Gateway	Average affordability[3] of 135% AMI or less	20%	10%
San Gabriel Valley		15%	7%
Santa Clarita Valley, Antelope Valley (excluding condominiums)		5%	-
Notes: 1. Units shall be set aside for moderate or middle income households. 2. Projects with less than 20 baseline dwelling units. 3. Calculations for the average affordability shall comply with Subsection C (Calculation), below.			

C. Calculation.

1. Inclusionary Housing Requirement.

a. The inclusionary housing requirement shall be calculated using the baseline dwelling units exclusive of a manager's unit or units.

b. All calculations resulting in fractional numbers shall be rounded up to the next whole number.

2. Density Bonus. The inclusionary housing requirement is inclusive of the affordable housing set-aside provided in Section 22.120 (Density Bonus).

3. Average Affordability. Average affordability is the sum of each unit set aside for extremely low income, very low income, lower income, moderate income, or middle income households multiplied by the income level, and divided by the total number of affordable housing set-aside units.

D. Comparability.

1. Bedroom Mix. Affordable housing set-aside units shall have the same number of bedrooms as the non-set aside dwelling units. In a project with a variety of bedroom counts per dwelling unit, the percentage of affordable set-aside dwelling units with a particular number of bedrooms shall be equal to the percentage of non-set-aside dwelling units with the same number of bedrooms.

2. The affordable housing set-aside units shall be indistinguishable from the non-set-aside units in terms of exterior and interior appearance and overall quality of construction. Where reasonable, interior finishes may consist of less expensive materials and equipment, provided they are new, durable, and of good quality.

3. Affordable housing set-aside units shall have comparable access to building amenities as other non-set-aside units.

4. Affordable housing set-aside units shall not be overly concentrated in one area of the project, and shall be reasonably distributed throughout the project. This does not apply to a senior citizen housing development.

5. Affordable housing set-aside units in a common interest development or a single-family residential subdivision shall be for-sale only.

E. Duration of Affordability.

1. Rental. The affordability term for rental affordable housing set-aside units shall be at least 55 years from the issuance of the final certificate of occupancy by Public Works.

2. For-sale. The initial sale of the affordable housing set-aside units shall be restricted to eligible buyers and shall require an equity-sharing agreement with the County, as described in Chapter 22.166 (Housing Permits).

F. Location. The required affordable housing set-aside units shall be provided on-site, or off-site if one of the following are met:

1. Located in an unincorporated area of Los Angeles County and within one-quarter mile of the principal project;

2. Located within a Highest, High, or Moderate Resource Area, as determined by the State Tax Credit Allocation Committee and State Department of Housing and Community Development;

3. Located in an area with known displacement risk based on evidence to the satisfaction of the Department; or

4. Developed as part of a community land trust.

G. Timing. All permits and entitlements for on-site or off-site affordable set aside units shall be obtained prior to or concurrently with the permits and entitlements for the non set-aside units.

22.121.060 Incentive and Waiver or Reduction of Development Standard.

A project with any middle income affordable set-aside shall be eligible for one incentive and one waiver or reduction of a development standard, subject to the following:

A. The project is not eligible to receive any incentive or waiver or reduction of development standard provided in Chapter 22.120 (Density Bonus);

B. Incentive. The granting of an incentive pursuant to this Section is subject to the following:

1. A Discretionary Housing Permit (Section 22.166.050), unless the findings specified in Section 22.166.040.C.1.a are satisfied, in which case an Administrative Housing Permit (Section 22.166.040) application is required; and

2. Said incentive shall not be used to request any density bonus or direct financial incentive, such as an exemption from, or a reduction in, the payment of any planning and zoning fees; and

C. Waiver or Reduction of Development Standard. The granting of a waiver or reduction of development standard is subject to a Discretionary Housing Permit (Section 22.166.050), unless the findings specified in Section 22.166.040.C.1.b are satisfied, in which case an Administrative Housing Permit (Section 22.166.040) application is required.

22.121.070 County Feasibility Assessment.

To ensure consistency with long term economic trends, the County shall evaluate the appropriateness of the affordable housing set asides in Table 22.121.050-A and Table 22.121.050-B and evaluate the boundaries of the submarket areas every five years from the effective date of this Chapter.

SECTION 14. Section 22.166.030 is hereby amended to read as follows:

22.166.030 Applicability.

This Chapter applies to projects that provide affordable housing or senior citizen housing and are eligible to receive various benefits, including but not limited to: density bonuses, incentives, waivers or reductions of development standards, and permit streamlining pursuant to the State Density Bonus Law, as set forth in Section 65915 of the California Government Code, as amended, or any other state laws or local ordinances or policies that aim to increase the production of affordable housing and senior citizen housing.

…

SECTION 15. Section 22.166.070 is hereby amended to read as follows:

22.166.070 Covenant and Agreement

A. Affordable Housing. A covenant and agreement, acceptable to the LACDA, shall be recorded by the applicant with the Registrar-Recorder/County Clerk to ensure the continuing availability of affordable housing set-aside units, and as applicable, age restricted units and child care facilities, in compliance with this Chapter ~~and~~, Chapter 22.120 (Density Bonus), or Chapter 22.121 (Inclusionary Housing). All Housing Permits without a covenant and agreement that is recorded within 180 days of the Housing Permit effective date shall be null and void. ~~The covenant and agreement shall be recorded within 30 days of the Housing Permit effective date.~~

…

2. Rental Affordable Housing Set-Aside Units. When affordable housing set-asides are rental dwelling units, the covenant and agreement shall also

include owner requirements related to the following, and subject to the LACDA's review and approval:

a. Duration of affordability, ~~pursuant to Subsection B.1.a (Rental) of Section 22.120.050~~ as specified;

…

3. For-Sale Affordable Housing Set-Aside Units. When affordable housing set-asides are for-sale dwelling units ~~solely pursuant to Section 65915 of the California Government Code~~, the covenant and agreement shall also include owner requirements related to the following and subject to the LACDA's review and approval:

…

d. Provisions restricting the initial sale to eligible buyers, and requiring equity sharing with the County that states the following terms:

…

v. The County's initial subsidy shall be equal to the fair market value of the home at the time of initial sale minus the initial sale price, plus the amount of any down payment assistance or mortgage assistance. If upon resale the fair market value is lower than the initial fair market value, then the value at the time of the resale shall be used as the initial fair market value; ~~and~~

vi. The County, a County-designated agency, or a qualified nonprofit shall maintain right of first refusal on the unit for the purpose of sale or rental to eligible households; and

~~vi~~ix. All County equity-sharing proceeds shall be deposited into the County Affordable Housing Trust Fund, or equivalent, and shall be used within five years for any of the purposes described in Section 33334.2(e) of the California Health and Safety Code that promote home ownership.

…

SECTION 16. Section 22.166.080 is hereby amended to read as follows:

22.166.080 Monitoring of Affordable Housing

The monitoring of affordable housing set-aside units shall be administered by the LACDA. The LACDA shall be responsible for verifying income eligibility, monitoring sales of affordable housing set-aside units to qualified buyers, conducting periodic site inspections, and administering the annual certification of affordable housing set-aside units approved pursuant to this Chapter for the duration of the required term as specified in Chapter 22.120 (Density Bonus) or Chapter 22.121 (Inclusionary Housing).

SECTION 17. Section 22.300.020 is hereby amended to read as follows:

22.300.020 Application of Community Standards Districts to Property.

…

B. Additional Regulations.

1. Density Bonus Exception. Notwithstanding any contrary provisions in this Volume II, any CSD regulations specified in Subsection A, above, may be waived or modified through a Housing Permit (Chapter 22.166), pursuant to Chapter 22.120 (Density Bonus) or Chapter 22.121 (Inclusionary Housing).

...

REPORT

DATE: April 23, 2020

TO: Planning Directors' Technical Advisory Committee

FROM: Marisa Creter, Executive Director

RE: LEGISLATIVE UPDATES: SB 899 (WIENER) & SB 902 (WIENER)

RECOMMENDED ACTION

Discuss and provide direction to staff.

BACKGROUND

On January 30, 2020, Senator Scott Wiener (D-San Francisco) introduced SB 899 and SB 902 to address California's housing storage. Both bills were subsequently amended in early March to reflect proposed amendments in Sections 65913.3 and 65913.5 to the Government Code. If passed, SB 899 would allow churches, synagogues, mosques, and nonprofit hospitals to build multi-story apartment buildings on their properties as long as the housing units are restricted to low-income renters and SB 902 would allow construction of duplex, triplex, and fourplex residential units without additional local government approval in single-family neighborhoods using by-right provisions.

Specifically, SB 899 would categorize 100% affordable housing projects by a nonprofit hospital, nonprofit treatment of diagnostic center, nonprofit rehabilitation facility, nonprofit nursing home, or religious institution would be considered as by-right development. The bill would require nonprofits and religious institutions to partner with qualified developers and price the resulting housing units toward low-income individuals and families. Zoning restrictions would also be lifted to allow for buildings up to 36 feet and 40 units in residential neighborhoods and up to 55 feet and 150 units in mixed-use land and commercial zones if both the project and its sponsor match the aforementioned requirements. Cities and counties would not be able to require the development projects to comply with an objective design standard that prevents the projects from building up to the maximum allotted height and units within their respective zones. Furthermore, the resulting affordable units must be restricted to lower income households for 45 years for owner-occupied units and 55 years for rented units.

Additionally, SB 902 would allow duplexes in cities with fewer than 10,000 residents, triplexes in cities with a population of 10,000 to 50,000 residents, and fourplexes in cities with more than 50,000 residents using by-right provisions. Existing building heights, along with other local building rules such as design standards, that are imposed by cities would remain the same under this bill. This bill would also illegalize the demolishment of existing single-family homes for the purpose of conversion into duplexes, triplexes, or fourplexes if the homes have been occupied by renters any time in the past seven years or if the owner had evicted its tenants within the past 15 years to live there. Population numbers provided by the California Department of Finance suggest that more than 75% of California cities would have to allow triplex or fourplex developments on existing residential land under this bill.

SB 902 would also authorize a local government to pass an ordinance to zone any parcel for up to 10 units of residential density per parcel, at a height specified by the local government in the ordinance, if the parcel is located in either a transit-rich area, jobs-rich area, or urban infill site. This bill would also not mandate increased housing density in areas designated as "very high fire hazard severity zones" by the state.

SB 899 has been referred to the Senate's Housing Committee, Environmental Quality Committee, and Government and Finance Committee while SB 902 has been referred to the Senate Housing Committee. Given that the California Legislature recently extended its recess until May 4th due to the COVID-19 pandemic, either committees are not expected to take any actions until the recess concludes.

SGVCOG Management Analyst, Alexander Fung, will provide a brief presentation on SB 899 and SB 902 at this meeting.

Prepared by: _____
Alexander P. Fung
Management Analyst

Approved by: Marisa Creter
Marisa Creter
Executive Director

ATTACHMENTS
Attachment A – SB 899 Bill Language
Attachment B – SB 902 Bill Language

AMENDED IN SENATE MARCH 5, 2020

SENATE BILL No. 899

Introduced by Senator Wiener

January 30, 2020

An act to ~~amend Section 65915 of~~ *add Section 65913.5 to* the Government Code, relating to ~~local government.~~ *housing.*

LEGISLATIVE COUNSEL'S DIGEST

SB 899, as amended, Wiener. ~~Density bonuses.~~ *Planning and zoning: housing development: nonprofit hospitals or religious institutions.*

The Planning and Zoning Law requires each county and city to adopt a comprehensive, long-term general plan for its physical development, and the development of certain lands outside its boundaries, that includes, among other mandatory elements, a housing element. That law allows a development proponent to submit an application for a development that is subject to a specified streamlined, ministerial approval process not subject to a conditional use permit if the development satisfies certain objective planning standards.

This bill would require that a housing development project be a use by right upon the request of a nonprofit hospital, nonprofit diagnostic or treatment center, nonprofit rehabilitation facility, nonprofit nursing home, or religious institution that partners with a qualified developer on any land owned in fee simple by the applicant if the development satisfies specified criteria. The bill would define various terms for these purposes. Among other things, the bill would require that 100% of the units in a housing development project eligible for approval as a use by right under these provisions be restricted to lower income households, with an affordable housing cost or affordable rent for those households, for specified periods, but would authorize the development

to include ancillary commercial uses on the ground floor of the development. The bill would specify that a housing development project that is eligible for approval as a use by right under the bill is also eligible for a density bonus or other incentives or concessions.

The bill would include findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

The California Environmental Quality Act (CEQA) requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of, an environmental impact report on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA does not apply to the ministerial approval of projects.

This bill, by requiring approval of certain development projects as a use by right, would expand the exemption for ministerial approval of projects under CEQA.

By adding to the duties of local planning officials with respect to approving certain development projects, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

~~Existing law, known as the Density Bonus Law, requires a city or county to provide a developer that proposes a housing development within the jurisdictional boundaries of that city or county with a density bonus and other incentives or concessions for the production of lower income housing units, or for the donation of land within the development, if the developer agrees to construct a specified percentage of units for very low income, low-income, or moderate-income households or qualifying residents and meets other requirements.~~

~~This bill would make a nonsubstantive change to that law.~~

Vote: majority. Appropriation: no. Fiscal committee: ~~no~~ *yes*. State-mandated local program: ~~no~~ *yes*.

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The people of the State of California do enact as follows:

SECTION 1. Section 65913.5 is added to the Government Code, to read:

65913.5. (a) For purposes of this section:

(1) "Applicant" means a nonprofit hospital, nonprofit diagnostic or treatment center, nonprofit rehabilitation facility, nonprofit nursing home, or religious institution that partners with a qualified developer to construct a housing development project and requests approval of that project as a use by right pursuant to this section.

(2) "Nonprofit hospital," "nonprofit diagnostic or treatment center," "nonprofit rehabilitation facility," and "nonprofit nursing home" mean any hospital, diagnostic or treatment center, rehabilitation facility, and nursing home, as the case may be, that is owned and operated by one or more nonprofit corporations or associations no part of the net earnings of that inures, or may lawfully inure, to the benefit of any private shareholder or individual, or a hospital publicly owned or operated by a public entity or agency of this state.

(3) "Qualified developer" means a local public entity, as defined in Section 50079 of the Health and Safety Code, a nonprofit corporation, a limited partnership in which the managing general partner is a nonprofit corporation, or a limited liability company in which the managing member is a nonprofit corporation.

(4) "Religious institution" means an institution owned, controlled, and operated and maintained by a bona fide church, religious denomination, or religious organization composed of multidenominational members of the same well-recognized religion, lawfully operating as a nonprofit religious corporation pursuant to Part 4 (commencing with Section 9110) of Division 2 of Title 1 of the Corporations Code.

(5) (A) "Use by right" means that the local government's review of the development project under this section may not require a conditional use permit, planned unit development permit, or other discretionary local government review or approval that would constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code. Any subdivision of the sites shall be subject to all laws, including, but not limited to, the local government ordinance implementing

the Subdivision Map Act (Division 2 (commencing with Section 66410)).

(B) A local ordinance may provide that "use by right" does not exempt the development project from design review. However, that design review shall not constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code.

(b) Notwithstanding any inconsistent provision of a city's or county's general plan, specific plan, zoning ordinance, or regulation, upon the request of an applicant, a housing development project shall be a use by right on any land owned in fee simple by the applicant if the development satisfies the following criteria:

(1) If the development project is located in an area where allowable uses are limited to single-family residential development:

(A) The development project consists of no more than 40 residential units and has a height of no more than 36 feet.

(B) The development project is located on a site that is one-quarter acre in size or greater and is either adjacent to an arterial road or located within a central business district.

(C) One hundred percent of the residential units in the housing development project are restricted to lower income households, as that term is defined in Section 50079.5 of the Health and Safety Code, with an affordable housing cost or affordable rent, as defined in Sections 50052.5 and 50053, respectively, of the Health and Safety Code, for those households, for at least the following periods of time:

(i) Fifty-five years for units that are rented.

(ii) Forty-five years for units that are owner occupied.

(D) The development project complies with all objective design standards of the city or county. However, the city or county shall not require the development project to comply with an objective design standard that would preclude the development from including up to 40 units or impose a maximum height limitation of less than 36 feet.

(2) If the development project is located in any area where residential or commercial uses are an allowable use:

(A) The development project consists of no more than 150 residential units and has a height of no more than 55 feet.

(B) The development project is located on a site that is one-half acre in size or greater and is either adjacent to an arterial road or located within a central business district.

(C) One hundred percent of the residential units in the housing development project are restricted to lower income households, as that term is defined in Section 50079.5 of the Health and Safety Code, with an affordable housing cost or affordable rent, as defined in Sections 50052.5 and 50053, respectively, of the Health and Safety Code, for those households, for at least the following periods of time:

(i) Fifty-five years for units that are rented.

(ii) Forty-five years for units that are owner occupied.

(D) The development project complies with all objective design standards of the city or county. However, the city or county shall not require the development project to comply with an objective design standard that would preclude the development from including up to 150 units or impose a maximum height limitation of less than 55 feet.

(c) A housing development project that is eligible for approval as a use by right pursuant to this section shall be eligible for a density bonus or other incentives or concessions.

(d) Notwithstanding any other provision of this section, a development project that is eligible for approval as a use by right pursuant to this section may include ancillary commercial uses, provided that those uses are limited to the ground floor of the development.

(e) The Legislature finds and declares that ensuring residential development at greater density on land owned by religious institutions and nonprofit hospitals is a matter of statewide concern and is not a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Therefore, this section applies to all cities, including charter cities.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

All matter omitted in this version of the bill appears in the bill as introduced in the Senate, January 30, 2020. (JR11)

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AMENDED IN SENATE MARCH 9, 2020

SENATE BILL No. 902

Introduced by Senator Wiener

January 30, 2020

An act to ~~amend Section 65400 of~~ *add Section 65913.3 to* the Government Code, relating to land use.

LEGISLATIVE COUNSEL'S DIGEST

SB 902, as amended, Wiener. ~~General plan.~~ *Planning and zoning: neighborhood multifamily project: use by right: density.*

~~Existing law, the Planning and Zoning Law, requires a city or county to adopt a general plan for land use development within its boundaries that includes, among other things, a housing element. That law requires the planning agency of a city or county to provide by April 1 of each year an annual report to, among other entities, the Department of Housing and Community Development. The law requires that the annual report include, among other specified information, the number of housing development applications received and the number of units approved and disapproved in the prior year.~~

~~This bill would additionally require the planning agency include in the annual report whether the city or county is a party to a court action related to a violation of state housing law, and the disposition of that action. By requiring a planning agency to include additional information in its annual report, the bill would impose a state-mandated local program.~~

The Planning and Zoning Law requires a city or county to adopt a general plan for land use development within its boundaries that includes, among other things, a housing element. Existing law requires an attached housing development to be a permitted use, not subject to

a conditional use permit, on any parcel zoned for multifamily housing if at least certain percentages of the units are available at affordable housing costs to very low income, lower income, and moderate-income households for at least 30 years and if the project meets specified conditions relating to location and being subject to a discretionary decision other than a conditional use permit. Existing law provides for various incentives intended to facilitate and expedite the construction of affordable housing.

Existing law, until January 1, 2026, authorizes a development proponent to submit an application for a multifamily housing development that satisfies specified planning objective standards to be subject to a streamlined, ministerial approval process, as provided, and not subject to a conditional use permit.

This bill would provide that a neighborhood multifamily project is a use by right in zones where residential uses are permitted if the project is not located in a very high fire severity zone, does not demolish sound rental housing or housing that has been placed on a national or state historic register, follows specified local objective criteria, and meets specified density requirements. The bill would define use by right to mean that the local government's review of the housing development may not require a conditional use permit, planned unit development permit, or other discretionary local government review or approval that would constitute a project for purposes of the California Environmental Quality Act (CEQA).

This bill would additionally authorize a local government to pass an ordinance to zone any parcel for up to 10 units of residential density per parcel, at a height specified by the local government in the ordinance, if the parcel is located in a transit-rich area, a jobs-rich area, or an urban infill site. The bill would specify that an ordinance adopted under these provisions is not a project for purposes of CEQA.

CEQA requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of, an environmental impact report on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on

the environment. CEQA does not apply to the approval of ministerial projects.

By requiring local planning officials to approve housing developments as a use by right under certain circumstances, this bill would expand the above-described exemption from CEQA for the ministerial approval of projects.

By adding to the duties of local planning officials, this bill would impose a state-mandated local program.

This bill would include findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 65913.3 is added to the Government Code, to read:

65913.3. (a) A neighborhood multifamily project shall be a use by right in zones where residential uses are permitted, if the proposed housing development satisfies all of the following requirements:

(1) The project is not located in a very high fire hazard severity zone.

(2) The project does not demolish sound rental housing or housing that has been placed on a national or state historic register.

(3) The project follows all local objective criteria related to local impact fees, local height and setback limits, and local demolition standards.

(4) The project meets, and does not exceed, one of the following densities:

(A) Two residential units per parcel in unincorporated areas or in cities with a population of 10,000 or fewer people.

(B) Three residential units per parcel in cities with a population between 10,000 and 50,000 people.

(C) Four residential units per parcel in cities with a population of 50,000 or more people.

(b) (1) A local government may pass an ordinance, notwithstanding any local restrictions on adopting zoning ordinances enacted by the jurisdiction, including restrictions enacted by a local voter initiative, that limit the legislative body's ability to adopt zoning ordinances, to zone any parcel for up to 10 units of residential density per parcel, at a height specified by the local government in the ordinance, if the parcel is located in one of the following:

(A) A transit-rich area.

(B) A jobs-rich area.

(C) An urban infill site.

(2) An ordinance adopted in accordance with this subdivision shall not constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code.

(c) For purposes of this section:

(1) "High-quality bus corridor" means a corridor with fixed route bus service that meets all of the following criteria:

(A) It has average service intervals of no more than 15 minutes during the three peak hours between 6 a.m. to 10 a.m., inclusive, and the three peak hours between 3 p.m. and 7 p.m., inclusive, on Monday through Friday.

(B) It has average service intervals of no more than 20 minutes during the hours of 6 a.m. to 10 a.m., inclusive, on Monday through Friday.

(C) It has average intervals of no more than 30 minutes during the hours of 8 a.m. to 10 p.m., inclusive, on Saturday and Sunday.

(2) (A) "Jobs-rich area" means an area identified by the Department of Housing and Community Development in consultation with the Office of Planning and Research that is high opportunity and either is jobs rich or would enable shorter commute distances based on whether, in a regional analysis, the tract meets both of the following:

(i) The tract is high opportunity, meaning its characteristics are associated with positive educational and economic outcomes for households of all income levels residing in the tract.

(ii) The tract meets either of the following criteria:

(iii) New housing sited in the tract would enable residents to live near more jobs than is typical for tracts in the region.

(iv) New housing sited in the tract would enable shorter commute distances for residents, relative to existing commute patterns and jobs-housing fit.

(B) The Department of Housing and Community Development shall, commencing on January 1, 2022, publish and update, every five years thereafter, a map of the state showing the areas identified by the department as "jobs-rich areas."

(3) (A) "Sound rental housing" means any of the following:

(i) Housing that is subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of moderate, low, or very low income.

(ii) Housing that is subject to any form of rent or price control through a public entity's valid exercise of its police power.

(iii) (I) Housing occupied by tenants within the seven years preceding the date of the application, including housing that has been demolished or that tenants have vacated before the application for a development permit.

(II) For purposes of this clause, "tenant" means a person who does not own the property where they reside, including residential situations that are any of the following:

(ia) Residential real property rented by the person under a long-term lease.

(ib) A single-room occupancy unit.

(ic) An accessory dwelling unit that is not subject to, or does not have a valid permit in accordance with, an ordinance adopted by a local agency pursuant to Section 65852.2.

(id) A residential motel.

(ie) A mobilehome park, as governed under the Mobilehome Residency Law (Chapter 2.5 (commencing with Section 798) of Title 2 of Part 2 of Division 2 of the Civil Code), the Recreational Vehicle Park Occupancy Law (Chapter 2.6 (commencing with Section 799.20) of Title 2 of Part 2 of Division 2 of the Civil Code), the Mobilehome Parks Act (Part 2.1 (commencing with Section 18200) of Division 13 of the Health and Safety Code), or the Special Occupancy Parks Act (Part 2.3 (commencing with Section 18860) of Division 13 of the Health and Safety Code).

(if) Any other type of residential property that is not owned by the person or a member of the person's household, for which the

person or a member of the person's household provides payments on a regular schedule in exchange for the right to occupy the residential property.

(iv) A parcel or parcels on which an owner of residential real property has exercised their rights under Chapter 12.75 (commencing with Section 7060) of Division 7 of Title 1 to withdraw accommodations from rent or lease within 15 years before the date that the development proponent submits an application pursuant to a streamlined, ministerial approval process.

(B) "Sound rental housing" shall not mean housing that the local agency has deemed uninhabitable due to fire, flood, earthquake, or other natural disaster.

(4) "Transit-rich area" means a parcel within one-half mile of a major transit stop, as defined in Section 21064.3 of the Public Resources Code, or a parcel on a high-quality bus corridor.

(5) "Urban infill site" means a site that satisfies all of the following:

(A) A site that is a legal parcel or parcels located in a city if, and only if, the city boundaries include some portion of either an urbanized area or urban cluster, as designated by the United States Census Bureau, or, for unincorporated areas, a legal parcel or parcels wholly within the boundaries of an urbanized area or urban cluster, as designated by the United States Census Bureau.

(B) A site in which at least 75 percent of the perimeter of the site adjoins parcels that are developed with urban uses. For the purposes of this section, parcels that are only separated by a street or highway shall be considered to be adjoined.

(C) A site that is zoned for residential use or residential mixed-use development, or has a general plan designation that allows residential use or a mix of residential and nonresidential uses, with at least two-thirds of the square footage of the development designated for residential use.

(6) (A) "Use by right" means that the local government's review of the housing development may not require a conditional use permit, planned unit development permit, or other discretionary local government review or approval that would constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code. Any subdivision of the sites shall be subject to all laws, including, but not limited to, the local

government ordinance implementing the Subdivision Map Act (Division 2 (commencing with Section 66410)).

(B) A local ordinance may provide that "use by right" does not exempt the housing development from design review. However, that design review shall not constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code.

(7) "Very high fire hazard severity zone" means a very high fire hazard severity zone as determined by the Department of Forestry and Fire Protection pursuant to Section 51178, or within a high or very high fire hazard severity zone as indicated on maps adopted by the Department of Forestry and Fire Protection pursuant to Section 4202 of the Public Resources Code.

(d) The Legislature finds and declares that ensuring the adequate production of affordable housing is a matter of statewide concern and is not a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Therefore, this section applies to all cities, including charter cities.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

~~SECTION 1. Section 65400 of the Government Code, as amended by Section 1 of Chapter 844 of the Statutes of 2019, is amended to read:~~

~~65400. (a) After the legislative body has adopted all or part of a general plan, the planning agency shall do both of the following:~~

~~(1) Investigate and make recommendations to the legislative body regarding reasonable and practical means for implementing the general plan or element of the general plan, so that it will serve as an effective guide for orderly growth and development, preservation and conservation of open-space land and natural resources, and the efficient expenditure of public funds relating to the subjects addressed in the general plan.~~

~~(2) Provide by April 1 of each year an annual report to the legislative body, the Office of Planning and Research, and the~~

~~Department of Housing and Community Development that includes all of the following:~~

~~(A) The status of the plan and progress in its implementation.~~

~~(B) The progress in meeting its share of regional housing needs determined pursuant to Section 65584 and local efforts to remove governmental constraints to the maintenance, improvement, and development of housing pursuant to paragraph (3) of subdivision (c) of Section 65583.~~

~~The housing element portion of the annual report, as required by this paragraph, shall be prepared through the use of standards, forms, and definitions adopted by the Department of Housing and Community Development. The department may review, adopt, amend, and repeal the standards, forms, or definitions, to implement this article. Any standards, forms, or definitions adopted to implement this article shall not be subject to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2. Before and after adoption of the forms, the housing element portion of the annual report shall include a section that describes the actions taken by the local government towards completion of the programs and status of the local government's compliance with the deadlines in its housing element. That report shall be considered at an annual public meeting before the legislative body where members of the public shall be allowed to provide oral testimony and written comments.~~

~~The report may include the number of units that have been substantially rehabilitated, converted from nonaffordable to affordable by acquisition, and preserved consistent with the standards set forth in paragraph (2) of subdivision (c) of Section 65583.1. The report shall document how the units meet the standards set forth in that subdivision.~~

~~(C) The number of housing development applications received in the prior year.~~

~~(D) The number of units included in all development applications in the prior year.~~

~~(E) The number of units approved and disapproved in the prior year.~~

~~(F) The degree to which its approved general plan complies with the guidelines developed and adopted pursuant to Section 65040.2 and the date of the last revision to the general plan.~~

~~(G) A listing of sites rezoned to accommodate that portion of the city's or county's share of the regional housing need for each income level that could not be accommodated on sites identified in the inventory required by paragraph (1) of subdivision (c) of Section 65583 and Section 65584.09. The listing of sites shall also include any additional sites that may have been required to be identified by Section 65863.~~

~~(H) The number of net new units of housing, including both rental housing and for-sale housing and any units that the County of Napa or the City of Napa may report pursuant to an agreement entered into pursuant to Section 65584.08, that have been issued a completed entitlement, a building permit, or a certificate of occupancy, thus far in the housing element cycle, and the income category, by area median income category, that each unit of housing satisfies. That production report shall, for each income category described in this subparagraph, distinguish between the number of rental housing units and the number of for-sale units that satisfy each income category. The production report shall include, for each entitlement, building permit, or certificate of occupancy, a unique site identifier that must include the assessor's parcel number, but may include street address, or other identifiers.~~

~~(I) The number of applications submitted pursuant to subdivision (a) of Section 65913.4, the location and the total number of developments approved pursuant to subdivision (b) of Section 65913.4, the total number of building permits issued pursuant to subdivision (b) of Section 65913.4, the total number of units including both rental housing and for-sale housing by area median income category constructed using the process provided for in subdivision (b) of Section 65913.4.~~

~~(J) If the city or county has received funding pursuant to the Local Government Planning Support Grants Program (Chapter 3.1 (commencing with Section 50515) of Part 2 of Division 31 of the Health and Safety Code), the information required pursuant to subdivision (a) of Section 50515.04 of the Health and Safety Code.~~

~~(K) Whether the city or county is a party to a court action related to a violation of state housing law, and the disposition of that action, including, but not limited to, any of the following:~~

~~(i) The Housing Accountability Act (Section 65589.5).~~

~~(ii) Housing element law (Article 10.6 (commencing with Section 65580) of Chapter 3).~~

~~(iii) Density bonus law (Chapter 4.3 (commencing with Section 65915)).~~

~~(iv) Section 65913.4.~~

~~(v) Section 65583.~~

~~(vi) The Housing Crisis Act of 2019 (Chapter 12 (commencing with Section 66300)).~~

~~(L) The Department of Housing and Community Development shall post a report submitted pursuant to this paragraph on its internet website within a reasonable time of receiving the report.~~

~~(b) If a court finds, upon a motion to that effect, that a city, county, or city and county failed to submit, within 60 days of the deadline established in this section, the housing element portion of the report required pursuant to subparagraph (B) of paragraph (2) of subdivision (a) that substantially complies with the requirements of this section, the court shall issue an order or judgment compelling compliance with this section within 60 days. If the city, county, or city and county fails to comply with the court's order within 60 days, the plaintiff or petitioner may move for sanctions, and the court may, upon that motion, grant appropriate sanctions. The court shall retain jurisdiction to ensure that its order or judgment is carried out. If the court determines that its order or judgment is not carried out within 60 days, the court may issue further orders as provided by law to ensure that the purposes and policies of this section are fulfilled. This subdivision applies to proceedings initiated on or after the first day of October following the adoption of forms and definitions by the Department of Housing and Community Development pursuant to paragraph (2) of subdivision (a), but no sooner than six months following that adoption.~~

~~SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.~~

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REPORT

DATE: April 23, 2020

TO: Planning Directors' Technical Advisory Committee

FROM: Marisa Creter, Executive Director

RE: SAN GABRIEL VALLEY SUBREGIONAL ARTERIAL PERFORMANCE BASELINE CONDITIONS ANALYSIS

RECOMMENDED ACTION

For information only.

BACKGROUND

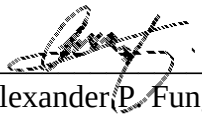
The Los Angeles County Metropolitan Transportation Authority (Metro) has been working with its local partner agencies and external stakeholders to implement a wide range of arterial improvements to enhance mobility and reliability in Los Angeles County. These improvements include signal synchronization, ITS investments, and enhancements to bus speeds. These ongoing efforts are known as the Measure UP! Program. Understanding the performance of the County's transportation system can greatly address regional mobility and reliability needs by targeting and implementing the proper transportation projects.

Metro initiated the Arterial Performance Measurement Framework as part of the Measure Up! Program in 2014 to assess the feasibility of developing a program to evaluate the constraints, resources, and needs for local and regional jurisdictions in Los Angeles County. The Framework defined five primary components:

- Performance Measures
- Data Collection/Sources
- Data Management
- Performance Measurement Tool
- Provision of Input to Planning Processes

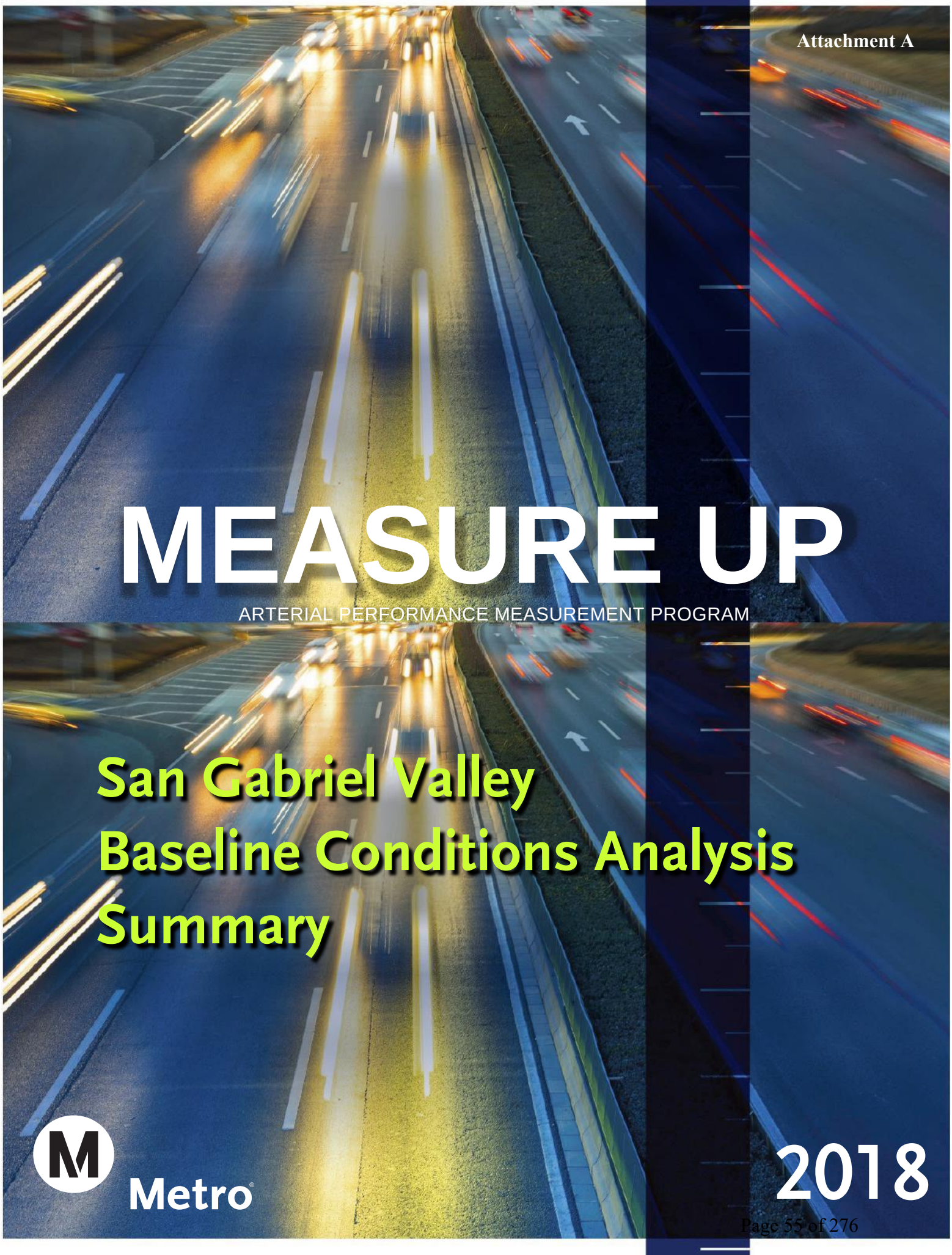
In 2016, Metro initiated the Arterial Performance Measurement Pilot Project to test the effectiveness of a performance analytics package for Los Angeles County's complex arterial and highway network. To complement the pilot project, Metro also initiated the Countywide Arterial Performance Baseline Conditions Analysis. This analysis evaluates the performance of arterials throughout Los Angeles County to provide agencies and stakeholders with a detailed and reliable assessment of services on each section of the network and establish a baseline for evaluation of various arterial investments and improvements. To facilitate consistent and ongoing performance reporting, a custom data processing and analysis tool was developed for each subregion, including the San Gabriel Valley. This Excel-based tool provides stakeholders with on-demand access to several performance metrics at various levels of aggregation. The Countywide Arterial Performance Baseline Conditions Analysis was completed in April 2018.

Metro representatives will provide a brief presentation on this item at this meeting. Additional information regarding the Measure UP! Program can be found on https://www.riits.net/.

Prepared by: 
Alexander P. Fung
Management Analyst

Approved by: Marisa Creter
Marisa Creter
Executive Director

ATTACHMENTS
Attachment A – San Gabriel Valley Baseline Conditions Analysis Summary
Attachment B – Measure UP! Program Final Report for the San Gabriel Valley Subregion



MEASURE UP

ARTERIAL PERFORMANCE MEASUREMENT PROGRAM

San Gabriel Valley Baseline Conditions Analysis Summary

Metro

2018

MEASURE UP

ARTERIAL PERFORMANCE BASELINE CONDITIONS

2018 Analysis Results Summary

Introduction

As part of Metro's Measure UP! Arterial Performance Measurement program, The Countywide (Arterial Performance) Baseline Conditions Analysis evaluates the performance of arterials throughout Los Angeles County to provide agencies and stakeholders with a detailed, reliable assessment of service on each part of the network, and to establish a baseline for evaluation of various arterial improvements and investments. To facilitate consistent and ongoing performance reporting, a custom data processing and analysis tool was developed for each subregion. This tool provides stakeholders with on-demand access to several key performance metrics at various levels of aggregation. This San Gabriel Valley Arterial Baseline Conditions Analysis Summary provides a brief overview of the performance of select major arterials in the subregion.

The following performance measures were used to generate this Summary.

Performance Measure	Definition	Data Source	Performance Outcome
Vehicle Miles Traveled (VMT)	Number of vehicles multiplied by the distance traveled over a corridor.	• 24-hour traffic count data	Travel Demand
Average Daily Traffic (ADT)	Number of vehicles per day over a corridor.	• 24-hour traffic count data	Travel Demand
Speed (MPH)	Corridor distance divided by travel time in hours.	• INRIX speed data	Mobility

The Countywide Baseline Conditions Analysis was developed using analysis results from Metro's San Gabriel Valley Measure Up! Workbook. The San Gabriel Valley Measure Up! Workbook is a Microsoft Excel-based analysis tool that uses arterial speed and volume input data and calculates performance measures for defined arterial corridors. To access the San Gabriel Valley Measure Up! Workbook, please go to https://catalog.riits.net/dataset/san-gabriel-valley-measure-up-workbook

There were two primary data sources used to input into the San Gabriel Valley Measure Up! Workbook:

- INRIX®, Inc. 2018 speed data for all major Los Angeles County roadways; and
- 24-hour manual counts conducted over multiple non-holiday, midweek days from February to May 2017. The remaining data was purchased from private vendors who had recently conducted counts for other projects or provided by local agencies. A sample of corridors were recounted in 2018 to update the data.

The San Gabriel Valley Measure Up! Workbook identifies the count data source for each count location. The methodology behind the data analysis and the User's Guide on how to use the tool is provided in the Los Angeles Metro Arterial Performance Measurement Baseline Conditions Analysis Methodology and Tool User's Guide (2017).

San Gabriel Valley

Highest Daily VMT Directional Corridors by Jurisdiction

Arterial Vehicle Miles Traveled (VMT) is used as a measure of overall corridor vehicular demand. Below is a table listing the top twenty corridors by average daily VMT for individual jurisdictions from the "Arterial Analysis" worksheet of the San Gabriel Valley Measure Up! Workbook sorted in descending order.

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)
				AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)	Average Daily	
W	Valley Bl	Industry	12.9	46,963	66,822	52,278	40,961	207,025	16,024
E	Valley Bl	Industry	12.9	30,647	61,171	70,734	37,939	200,490	15,518
W	Valley Bl	Walnut	5.8	28,992	41,367	30,617	25,458	126,435	21,875
N	Azusa Av	Industry	4.9	13,318	34,506	37,348	29,043	114,215	23,215
S	Azusa Av	Industry	4.9	24,622	36,765	24,718	27,776	113,881	23,147
E	Valley Bl	Walnut	5.8	14,077	33,200	45,457	16,568	109,303	18,911
S	Diamond Bar Bl	Diamond Bar	6.4	26,726	33,958	21,955	18,640	101,278	15,726
S	Rosemead Bl	LA County (Avocado Heights)	5.2	16,445	31,292	31,316	19,399	98,452	18,788
E	Colima Rd/Golden Springs	LA County (Hacienda-Rowland Heights)	7.1	9,406	29,501	35,733	19,523	94,163	13,244
N	Rosemead Bl	LA County (Avocado Heights)	5.2	21,109	30,480	22,538	19,486	93,613	17,865
N	Diamond Bar Bl	Diamond Bar	6.4	11,483	25,548	33,001	18,795	88,827	13,793
E	Huntington Dr	San Marino	4.7	12,274	29,276	32,012	14,418	87,981	18,880
W	Colima Rd/Golden Springs	LA County (Hacienda-Rowland Heights)	7.1	19,640	31,387	19,881	15,640	86,548	12,173
S	Myrtle Av/Peck Rd	El Monte	5.5	12,003	24,628	21,467	17,477	75,575	13,642
N	Myrtle Av/Peck Rd	El Monte	5.5	11,007	24,712	22,762	16,841	75,322	13,596
W	Arrow Hwy	Irwindale	4.0	24,197	22,012	14,695	14,288	75,192	18,940
W	Huntington Dr	San Marino	4.7	17,268	24,337	19,640	13,463	74,707	16,032
S	Azusa Av	West Covina	4.3	15,267	24,188	16,816	16,645	72,915	16,879
E	Colima Rd/Golden Springs	Diamond Bar	5.4	5,691	21,875	29,741	14,295	71,601	13,334
E	Arrow Hwy	Irwindale	4.0	9,637	22,722	25,319	12,575	70,253	17,696

Highest ADT Directional Corridors by Jurisdiction

Corridors with high VMT may not be the highest daily demand corridors in terms of Average Daily Traffic (ADT). The table below shows the top twenty directional corridors sorted in descending order by ADT.

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)
				AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)	Average Daily	
S	Rosemead Bl	Rosemead	1.9	8,720	17,276	11,242	10,845	48,083	25,307
N	Rosemead Bl	Rosemead	1.9	8,335	16,606	12,121	10,663	47,725	25,119
N	Azusa Av	Industry	4.9	13,318	34,506	37,348	29,043	114,215	23,215
S	Azusa Av	Industry	4.9	24,622	36,765	24,718	27,776	113,881	23,147
W	Valley Bl	Walnut	5.8	28,992	41,367	30,617	25,458	126,435	21,875
S	Grand Av	Walnut	2.6	8,701	18,220	14,260	11,149	52,329	20,521
N	Grand Av	Walnut	2.6	10,024	17,266	15,677	8,882	51,849	20,333
W	Arrow Hwy	Irwindale	4.0	24,197	22,012	14,695	14,288	75,192	18,940
E	Valley Bl	Walnut	5.8	14,077	33,200	45,457	16,568	109,303	18,911
E	Huntington Dr	San Marino	4.7	12,274	29,276	32,012	14,418	87,981	18,880
S	Rosemead Bl	LA County (Avocado Heights)	5.2	16,445	31,292	31,316	19,399	98,452	18,788
S	Fullerton Rd	LA County (Hacienda-Rowland Heights)	1.9	7,173	10,338	9,325	8,277	35,113	18,677
S	Fullerton Rd	Industry	0.1	382	550	496	440	1,868	18,677
S	Azusa Av	LA County (Hacienda-Rowland Heights)	0.5	1,766	3,026	2,088	2,102	8,982	17,965
S	Azusa Av	Azusa	2.9	10,281	17,609	12,151	12,236	52,277	17,965
S	Azusa Av	LA County (Valinda-South San Jose Hills	0.7	2,614	4,478	3,090	3,111	13,294	17,965
S	Azusa Av	La Puente	1.2	4,133	7,080	4,885	4,919	21,018	17,965
N	Rosemead Bl	LA County (Avocado Heights)	5.2	21,109	30,480	22,538	19,486	93,613	17,865
W	Huntington Dr	Los Angeles	0.3	1,351	1,573	1,119	955	4,999	17,855
S	Rosemead Bl	LA County (East Pasadena-San Gabriel)	2.4	6,697	14,243	12,179	8,748	41,867	17,816

Slowest Directional Corridors in Subregion – Speed and Travel Time

Speeds and the resulting travel times along a corridor can be a measure of congestion along a corridor. Lower speeds below unimpeded prevailing (free-flow) speeds are indicative of congestion. The table below lists the twenty slowest jurisdictional arterial segments in the subregion as measured by average speed and the corresponding travel times for the 8:00 AM, noon, and 5:00 PM hours. Overall, all arterial corridors in the subregion experience lower than threshold speeds during the daylight hours (typically between 5AM and 7PM), which results in the corridors having some Vehicle Hours of Delay (VHD). Generally speaking, most corridors experience their slowest speeds during the PM peak period.

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Average Speed by Hour				Average Travel Time by Hour		
				8AM	Noon	5PM	Average Speed of Peak Hours	8AM	Noon	5PM
N	Fullerton Rd	Industry	0.1	10.3	8.5	9.1	9.3	0.6	0.7	0.7
N	Mountain Av	Duarte	0.5	13.1	11.5	12.3	12.3	2.4	2.7	2.5
S	Mountain Av	Duarte	0.5	14.9	12.8	11.9	13.2	2.1	2.4	2.6
N	Fremont Av	South Pasadena	1.8	13.3	18.7	13.5	15.2	7.9	5.6	7.8
S	Azusa Av	LA County (Hacienda-Rowland Heights)	0.5	16.9	15.6	13.9	15.4	1.8	1.9	2.2
S	Fullerton Rd	Industry	0.1	16.5	16.7	13.9	15.7	0.4	0.4	0.4
S	Mountain Av	Monrovia	1.3	18.3	16.3	13.8	16.1	4.4	4.9	5.8
W	Foothill Bl/Walnut St	LA County (East Pasadena-San Gabriel)	0.2	18.0	15.8	15.1	16.3	0.5	0.6	0.6
N	Azusa Av	LA County (Hacienda-Rowland Heights)	0.5	17.2	16.5	15.3	16.3	1.7	1.8	2.0
N	Citrus Av	West Covina	0.2	17.9	15.8	15.9	16.5	0.8	0.9	0.9
E	Foothill Bl/Walnut St	LA County (East Pasadena-San Gabriel)	0.2	16.0	16.7	17.1	16.6	0.6	0.5	0.5
N	Fair Oaks Av	South Pasadena	1.4	15.0	20.2	17.5	17.6	5.5	4.1	4.7
N	Mountain Av	Monrovia	1.3	17.9	17.2	17.8	17.6	4.5	4.7	4.5
S	San Gabriel Bl	Pasadena	1.2	18.2	17.8	17.3	17.7	4.1	4.2	4.3
E	W Colorado St/E Colorado St/Colorado Bl	LA County (East Pasadena-San Gabriel)	0.6	20.6	18.6	14.4	17.9	1.8	2.0	2.6
N	Nogales St	Industry	0.5	18.5	17.6	17.6	17.9	1.5	1.5	1.5
S	Lake Av	Pasadena	2.8	19.6	16.9	17.4	18.0	8.7	10.1	9.8
E	Valley Bl	Alhambra	3.0	19.0	19.3	15.7	18.0	9.6	9.5	11.6
E	Garvey Av	Rosemead	2.4	19.0	18.5	17.1	18.2	7.5	7.7	8.3
E	Valley Bl	San Gabriel	1.3	21.0	17.5	16.4	18.3	3.6	4.3	4.6

Measure Up! Overview:

The Measure Up! Arterial Performance Measurement Program evaluates the performance of arterials throughout Los Angeles County to provide agencies and stakeholders with a detailed, reliable assessment of service on major arterials of the network, and to establish a baseline for evaluation of various arterial improvements and investments. As part of the Program, Metro has developed the Baseline Conditions Analysis Tool and secured a license with Iteris ClearGuide.

Baseline Conditions Analysis Tools

To explore real-time traffic data for arterials and jurisdictions, please visit Metro ClearGuide at https://metro.iteris-clearguide.com/

This platform has speed and travel time historical data starting January 1, 2018 and real-time data. Access to ClearGuide will be available until January 2021 to anyone in the public sector in LA County, including their consultants.

- If you had an existing iPeMs account, we have already migrated your account information, routes, and data over to the new platform. To activate your account please create a new password by visiting this link: https://auth.iteris-clearguide.com/password_reset_request/?return_to=https://metro.iteris-clearguide.com/
- If you wish to create an account and start using ClearGuide, please visit this link: https://metro.iteris-clearguide.com/
    - Go to "create account"
    - Your account will automatically be approved with a public agency email. If it is not automatically approved or a consultant needs access, please notify Eva Moon at PanMoonE@metro.net.

To access all LA County subregional Measure Up! workbooks and summaries, please go to the RIITS Data Catalogue at https://catalog.riits.net/dataset

- An account must be created to access the RIITS database. To do so, click "Register" on the bottom of the login box. This will take you to the account creation page where you must enter your first name, last name, and username. Public agencies in the County of LA will be automatically approved.

Contact Information

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Final Report

San Gabriel Valley Subregional Arterial Performance Baseline Conditions Analysis

April 2018

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Acronyms and Abbreviation

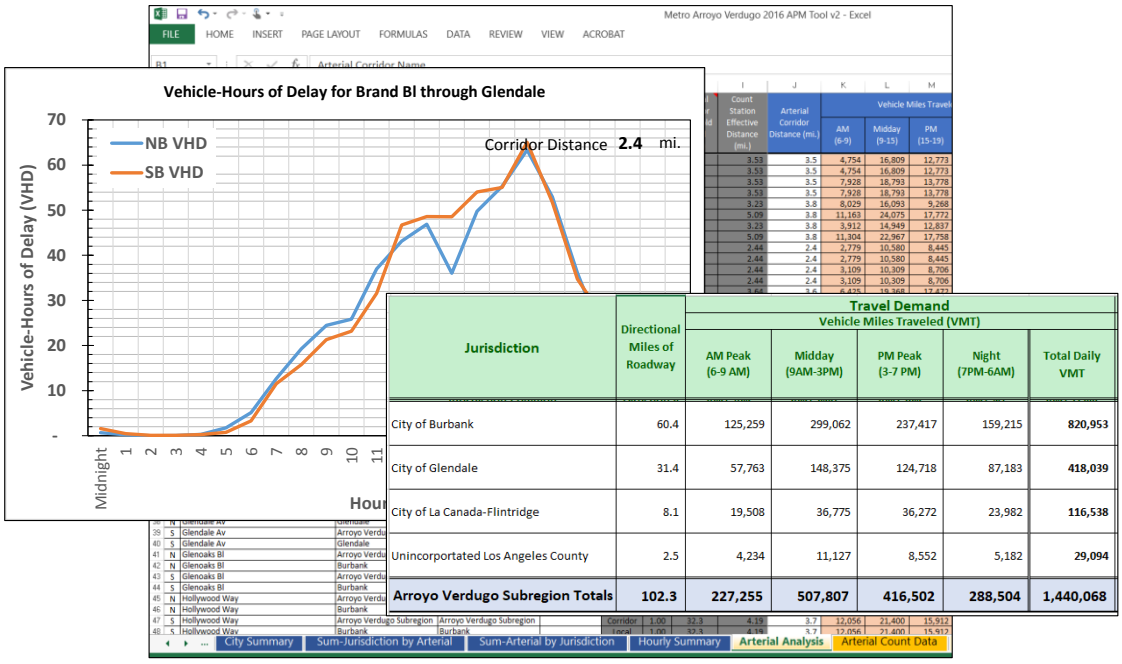
Acronym	Definition	Acronym	Definition
ADT	Average Daily Traffic	N	North
AM	Ante Meridian	NB	Northbound
APMT	Arterial Performance Measurement Tool	PTI	Planning Time Index
Av	Avenue	PM	Post Meridian
Bl	Boulevard	Rd	Road
CSAN	Countywide Significant Arterial Network	S	South
CSTAN	Countywide Significant Truck Arterial Network	SB	Southbound
CWB	Countywide Baseline	St	Street
Dr	Drive	TTI	Travel Time Index
E	East	VHD	Vehicle-Hours of Delay
EB	Eastbound	VMT	Vehicle-Miles Trafeled
ICM	Integrated Corridor Management	VPH	Vehicles Per Hour
ITS	Intelligent Transportation System	W	West
LA	Los Angeles	WB	Westbound
MPH	Miles Per Hour		

1.0 Introduction

The Countywide (Arterial Performance) Baseline Conditions Analysis evaluates the performance of arterials throughout Los Angeles County to provide agencies and stakeholders with a detailed, reliable assessment of service on each part of the network, and to establish a baseline for evaluation of various arterial improvements and investments. To facilitate consistent and ongoing performance reporting, a custom data processing and analysis tool was developed for each subregion. This tool provides stakeholders with on-demand access to several key performance metrics at various levels of aggregation. This San Gabriel Valley Arterial Baseline Conditions Analysis Report provides a brief summary of the performance of select major arterials in the subregion.

The Baseline Conditions Analysis Report was developed using analysis results from Metro's San Gabriel Valley Arterial Performance Measurement Tool (APMT). The APMT, illustrated in Exhibit 1.1, is a Microsoft Excel-based analysis tool that uses arterial speed and volume input data and calculates performance measures for defined arterial corridors. The APMT presents these results in tables and graphics. The data in the APM tool combines 2016 speed data from INRIX, Inc. and traffic volume data collected from various sources including manual traffic counts conducted from February to May 2017, 2016 counts from the Los Angeles County DPW, recent counts from the City of Glendale, and purchased recently collected data (conducted for other projects) from private data collection vendors. The methodology behind the data analysis and the User's Guide on how to use the tool is provided in the *Los Angeles Metro Arterial Performance Measurement Baseline Conditions Analysis Methodology and Tool User's Guide (2017)*, referred to in this report as the Methodology and User's Guide.

Exhibit 1.1: Metro Arterial Performance Measurement Tool (APMT)



1.1 Arterial Corridors

The table in Exhibit 1.2 lists these arterials and describes the limits of the arterials including which jurisdictions the arterial traverses. Exhibit 1.3 is a map showing these arterial corridors in the subregion and the locations where traffic volume data was collected.

To identify these corridors, a preliminary list of arterial corridors was derived from the list of Metro Recommended Framework Network arterials that include Countywide Significant Arterial Network (CSAN) and Countywide Significant Truck Arterial Network (CSTAN) streets and roads. This initial list was selected based on the following quantitative and qualitative criteria:

- Corridor identified as a Priority Route by Metro's San Gabriel Valley partner agencies;
- Corridor carries high traffic volumes (typically exceeding 40,000 average daily traffic);
- Corridor is multi-jurisdictional that provides intercity/subregional connectivity;
- Corridor has unique regional operational characteristic such as being an Integrated Corridor Management (ICM) project facility or directly parallel to a proposed future ICM corridor; and
- Corridor has programmed or planned ITS projects along the corridor.

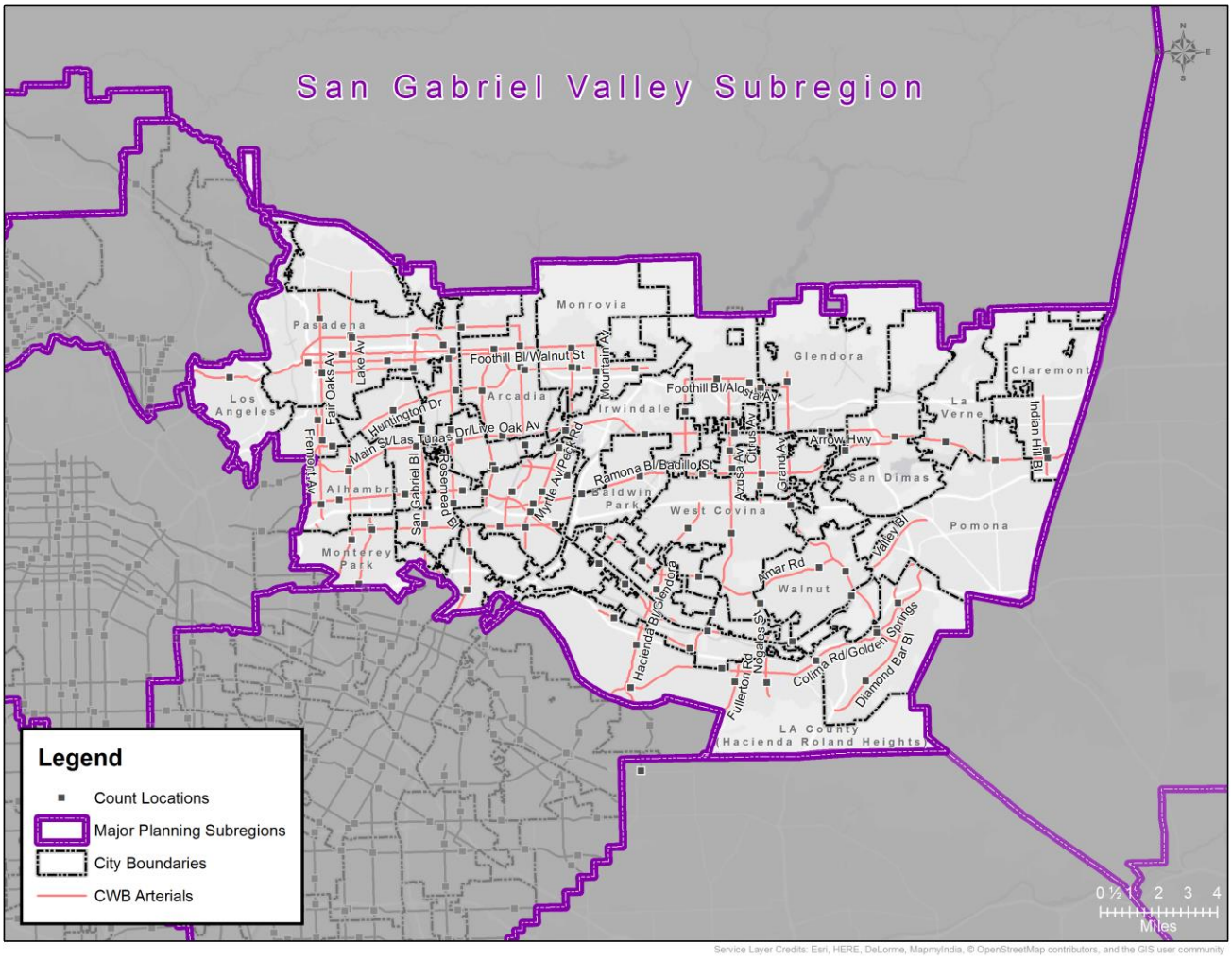
This draft list was provided to San Gabriel Valley subregional partners for review in January 2017 and an outreach meeting was conducted on January 31, 2017. Metro received input from regional partners concerning the draft arterial corridors at that meeting and provided partners with a comment form for additional comments.

Exhibit 1.2: San Gabriel Valley Subregion Study Arterial Corridors List

Arterial Corridor	Centerline Miles	From		To	
		Street	Jurisdiction	Street	Jurisdiction
Amar Rd	9.2	Baldwin Park Bl	City of Industry	Temple Av	Walnut
Arrow Hwy	16.8	Live Oak Av	Irwindale	S Mills Av	Claremont
Atlantic Av	5.5	SR-60 (EB Off)	Monterey Park	Huntington Dr	South Pasadena
Azusa Av	10.2	Colima Road	Hacienda Heights	E Foothill Road	Azusa
Baldwin Av	5.5	I-10 On/Off	El Monte	Foothill Bl	Arcadia
Citrus Av	4.4	Foothill Bl	Azusa	I-10	West Covina
Colima/Golden Springs Rd	17.6	Leffingwell Rd	Whittier	Ave Rancheros	Diamond Bar
Del Mar Bl	3.4	S Pasadena Av	Pasadena	San Gabriel	Pasadena
Diamond Bar Bl	6.4	Brea Canyon Rd	Diamond Bar	Temple Av	Diamond Bar
Fair Oaks Av	5.4	Huntington Dr	Pasadena	Woodbury Rd	Pasadena
Foothill Bl/Alosta Av	3.1	Irwindale Av	Irwindale	Barranca Av	Azusa
Foothill Bl/Walnut St	10.0	Orange Grove	Pasadena	Mountain Av	Monrovia
Fremont Av	3.9	I-10	Monterey Park	Columbia St	Pasadena
Arterial Corridor	Centerline Miles	From		To	
		Street	Jurisdiction	Street	Jurisdiction
Fullerton Rd	2.0	Pathfinder Road	Rowland Heights	SR-60	Rowland Heights
Gale Av	3.6	7th Av	Hacienda Heights	Azusa Av	City of Industry
Garfield Av	2.6	Hellman Av	Monterey Park	Pomona Bl	Monterey Park
Garvey Av	8.5	Ramona Bl	Alhambra	Durfee Av	El Monte
Grand Av	11.0	Diamond Bar Bl	Diamond Bar	W Foothill Bl	Glendora
Hacienda Bl/Glendora Av	7.8	City Limits	La Habra Heights	I-10	West Covina
Huntington Dr	15.4	Mission Rd/N Soto	Los Angeles	I-605	Duarte
Indian Hill Bl	1.7	Foothill Bl	Claremont	I-10	Claremont
Irwindale Av	3.0	San Bernardino Rd	Irwindale	Foothill Bl	Irwindale
Lake Av	3.7	E California St	Pasadena	E Altadena Dr	Altadena
Lower Azusa Rd	3.1	Ellis Ln	Temple City	Durfee Av	El Monte
Main/Las Tunas/Live Oak	11.7	Huntington Dr	Alhambra	Arrow Highway	Baldwin Park
Mountain Av	1.3	Foothill Bl	Monrovia	Duarte Rd	Monrovia
Myrtle Av/Peck Rd	6.1	Foothill Bl	Monrovia	I-10	El Monte

Arterial Corridor	Centerline	From		To	
Orange Grove Bl	5.1	Colorado Bl	Pasadena	Sierra Madre Villa	Pasadena
Ramona Bl/Badillo St	13.8	Ramona Bl	El Monte	Arrow Highway	La Verne
Rosemead Bl	10.9	Beverly Bl	Pico Rivera	Orange Grove Bl	Pasadena
San Gabriel Bl	9.3	Rosemead Bl	South El Monte	Sierra Madre Bl	Pasadena
San Gabriel/Sierra Madre Bl	4.1	I-210	Pasadena	Santa Anita Av	Arcadia
Santa Anita Av	7.3	Garvey Av	El Monte	Sierra Madre Bl	Arcadia
Valley Bl	24.8	I-710 Terminus	Alhambra	Humane Wy/ SR-71	Pomona
W/E Colorado St/ Colorado Bl	11.7	Glendale Limits	Los Angeles	Huntington Dr	Arcadia

Exhibit 1.3: San Gabriel Valley Subregion Study Arterial Corridors Map



2.0 Arterial Performance Measures

The performance measures presented in this Baseline Conditions Analysis provide an assessment of the productivity, mobility, and reliability metrics of each arterial corridor listed in Exhibit 1.2, and are summarized in Exhibit 2.1 below. These measures were selected for this study based on the *Metro Arterial Performance Measurement Framework Concept of Operations*, completed in 2015. More detailed descriptions of these measures and how they are calculated can be found in the Methodology and User's Guide.

Exhibit 2.1: Arterial Performance Measures

Performance Outcome	Performance Measure	Definition	Data Source
Travel Demand	Vehicle Miles Traveled (VMT)	Number of vehicles multiplied by the distance traveled over a corridor.	• 24-hour traffic count data
Productivity	Flow in Vehicles per Hour (VPH)	Number of vehicles traveling along a corridor per hour.	• 24-hour traffic count data
Mobility	Speed (MPH)	Corridor distance divided by travel time in hours.	• INRIX speed data
	Travel Time (minutes)	Time to traverse a corridor segment in minutes.	• INRIX speed data
	Delay in Vehicle-Hours of Delay (VHD)	Difference in actual travel time compared to a threshold travel time (typically at the free-flow speed) along a segment. VHD is calculated as the delayed travel time multiplied by the number of vehicles experiencing that delay.	• 24-hour traffic count data • INRIX speed data
	Delay per Mile (VHD/Mile)	Ratio of VHD divided by corridor distance. A measure of congestion intensity.	• 24-hour traffic count data • INRIX speed data
	Peak Period Spreading	Average duration of peak period VHD in hours.	• VHD
Reliability	Travel Time Index	Ratio of the average travel time divided by the threshold travel time (i.e., free-flow).	• INRIX speed data
	Planning Time Index	Ratio of the 95th percentile travel time divided by the average travel time. The 95th percentile travel time is the 95th slowest day out of 100 days (approx. 1 day per month).	• INRIX speed data

2.1 Data Sources

There were two primary data sources used for this analysis:

- INRIX®, Inc. 2016 speed data for all major Los Angeles County roadways; and
- 24-hour manual counts conducted over multiple non-holiday, midweek days. Of the 242 count locations for this subregion, 154 were counted between February 28th, 2017 and May 2nd, 2017 by private vendors (existing counts for other remaining locations were either purchased from private vendors who had recent counts from other projects or were obtained from local agencies).

These data items were input into the San Gabriel Valley subregional APMT which was used to calculate the performance measures presented in this report.

2.2 Travel Demand

Vehicle-Miles Traveled (VMT) is the measure used to identify the demand for travel along an arterial corridor. VMT is calculated by multiplying the traffic volume from a specific count location by the effective distance covered by that segment. For more details on the effective distance and how VMT is calculated in the APMT, please see the Methodology and User's Guide for the APMT.

2.3 Productivity

Throughput or flow is the measure used to evaluate productivity and is defined as the average number of vehicles that move along a corridor per unit of time. Productivity is reported as vehicles per hour (VPH). Arterial productivity for a jurisdiction or subregion is calculated by summing hourly VMT and the effective distances for all the count stations associated with that jurisdiction along that arterial, then dividing by the total VMT by the total effective distances.

2.4 Mobility

Mobility is evaluated using five measures of traffic performance: average speed, travel time, vehicle-hours of delay (VHD), VHD per mile, and peak period spreading.

The average annual non-holiday, weekday ***speed*** (in miles-per-hour or mph) over a corridor is calculated using the INRIX data by estimating the average travel time along the corridor and dividing that time by the distance for each arterial corridor. Lower speeds below unimpeded prevailing (free-flow) speeds are indicative of congestion.

Average travel times are reported in the APMT in minutes and average travel times in minutes over a year (current year is 2016) computed using INRIX speed data described above. Since travel times vary by the distance of a corridor, they are best used to compare a corridor's performance over time rather than to compare performance across corridors.

Delay is reported as vehicle-hours of delay (VHD) and measures the overall congestion levels on a corridor. The measure is computed by identifying a reference or threshold travel time against which to determine if vehicles were delayed. This time is defined as the free-flow time

that is determined by reviewing the fastest constrained and is determined by reviewing the fastest average INRIX speeds during an off-peak period, typically during the middle of the night. Delay is the corridor VMT multiplied by the difference in travel time along the corridor from the actual travel time compared against the threshold travel time. When the actual travel time is equal to or less than the threshold travel time, then the delay is equal to zero.

Delay per Mile or VHD/Mile is a measure of congestion intensity and is measured by taking VHD and dividing that number by the directional miles of corridor. Since VHD can vary by both the demand and the length of the corridor, VHT/Mile allows for a comparison across corridors that reflects an individual driver's experience of congestion along a corridor.

Peak Period Spreading measures the change in the congested time period for a corridor over time and is measure in hours. That is, it attempts to answer whether the duration of the congestion expanding (or contracting) from one year to the next.

2.5 Reliability

Travel time reliability attempts to capture the extent of unexpected delays that can occur from day to day. While average travel times can give an indication of how bad congestion can be, reliability is the consistency or dependability in travel times. The ***Travel Time Index*** is used to evaluate the intensity of congestion. The travel time index is calculated by taking the ratio of the average travel over the free-flow travel time.

The ***Planning Time Index*** is a measure of reliability that is becoming more widespread in use and is defined as the 95th percentile travel time. The 95th percentile travel time is the time that a person's travel will be faster on 95 days out of 100. For example, a person leaving for work on a weekday at 8:00 AM will experience a travel time to work 95 days out of 100 that is less than the planning time for that departure time. For five days, that person will experience a travel time that takes longer than the planning time. Thus, if a commuter needs to be at work on time 95 days out of 100 (or 19 days out of 20 for a typical work month), that person should allow for the 95th percentile travel time to get to work. These reliability concepts are described in more detail in the Methodology and User's Guide.

3.0 Analysis Results Summary

This section presents a few findings for each of the performance measures described above. These performance measures were developed in the APMT, which houses all the data used for this analysis.

3.1 Travel Demand

Arterial VMT is used as a measure of overall corridor vehicular demand. Exhibit 3.1, below, is a table from the "Arterial Analysis" worksheet of the APMT sorted in descending order by average daily VMT for individual jurisdictions that shows listing the top ten corridors by VMT.

Valley Boulevard carries the most VMT in the subregion, carrying an average daily of over 360,000 VMT in both directions. Following these corridors, Azusa Avenue, Rosemead Boulevard, Valley Boulevard, and Diamond Bar Boulevard, all carry over 100,000 average daily VMT in one direction.

The top ten directional corridors by VMT represent six arterials as follows:

- East and westbound Valley Boulevard;
- East and westbound Azusa Avenue;
- Northbound Rosemead Boulevard;
- Eastbound Valley Avenue;
- Southbound Diamond Bar Boulevard;
- Eastbound Colima/Golden Springs Roads; and
- Northbound and southbound Rosemead Boulevard.

Exhibit 3.1: Highest Daily VMT Directional Corridors by Jurisdiction

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)
				AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)	Average Daily	
E	Valley Bl	Industry	12.9	30,646	61,168	70,723	37,923	200,461	15,516
W	Valley Bl	Industry	12.9	35,109	54,716	41,051	30,428	161,304	12,485
S	Azusa Av	Industry	4.9	19,038	37,835	24,762	27,641	109,276	22,211
N	Rosemead Bl	Rosemead	3.7	17,864	36,459	28,421	26,211	108,955	29,368
E	Valley Bl	Walnut	5.8	10,770	29,896	46,148	16,221	103,034	17,826
S	Diamond Bar Bl	Diamond Bar	6.4	26,726	33,960	21,952	18,645	101,283	15,727
E	Colima Rd/Golden Springs	LA County (Hacienda-Rowland Heights)	7.1	9,445	29,632	35,857	19,601	94,535	13,296
N	Rosemead Bl	LA County (Avocado Heights)	5.2	19,450	30,524	20,938	22,116	93,027	17,753
S	Rosemead Bl	Rosemead	3.7	15,272	32,117	21,721	21,981	91,090	24,553
N	Azusa Av	Industry	4.9	7,887	28,784	21,987	31,845	90,503	18,395

Corridors with high VMT may not be the highest daily demand corridors in terms of Average Daily Traffic (ADT). Exhibit 6 shows the top ten directional corridors sorted in descending order by ADT. This list shows many of the same high VMT corridors, including Rosemead

Boulevard, and Azusa Avenue, but note that the highest average daily VMT corridor, Valley Boulevard, is not included in this list.

The top ten directional corridors by ADT represent six arterials as follows:

- North and southbound Rosemead Boulevard;
- Southbound Hacienda Boulevard/Glendora Avenue;
- Southbound Azusa Avenue;
- East and westbound Arrow Highway;
- North and southbound Grand Avenue;
- Northbound Azusa Avenue;and
- Eastbound Ramona Boulevard/Badillo Street

Exhibit 3.2: Highest ADT Directional Corridors by Jurisdiction

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)
				AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)	Average Daily	
N	Rosemead Bl	Rosemead	3.7	17,864	36,459	28,421	26,211	108,955	29,368
S	Rosemead Bl	Rosemead	3.7	15,272	32,117	21,721	21,981	91,090	24,553
S	Hacienda Bl/Glendora	La Puente	2.1	6,164	14,418	14,625	12,953	48,159	22,933
S	Azusa Av	Industry	4.9	19,038	37,835	24,762	27,641	109,276	22,211
E	Arrow Hwy	Irwindale	4.0	10,813	27,356	28,900	16,097	83,166	20,949
W	Arrow Hwy	Irwindale	4.0	26,108	27,292	14,988	14,759	83,148	20,944
S	Grand Av	Walnut	2.6	8,698	18,216	14,257	11,144	52,315	20,516
N	Grand Av	Walnut	2.6	10,022	17,265	15,674	8,873	51,833	20,327
N	Azusa Av	West Covina	4.3	14,204	28,788	23,299	21,102	87,394	20,230
E	Ramona Bl/Badillo St	Irwindale	1.1	1,935	5,710	7,811	4,821	20,276	19,311

Exhibits 3.3 and 3.4 are maps showing VMT and ADT by corridor, respectively.

Exhibit 3.3: Daily Corridor Demand by Segment – Vehicle Miles Traveled (VMT)

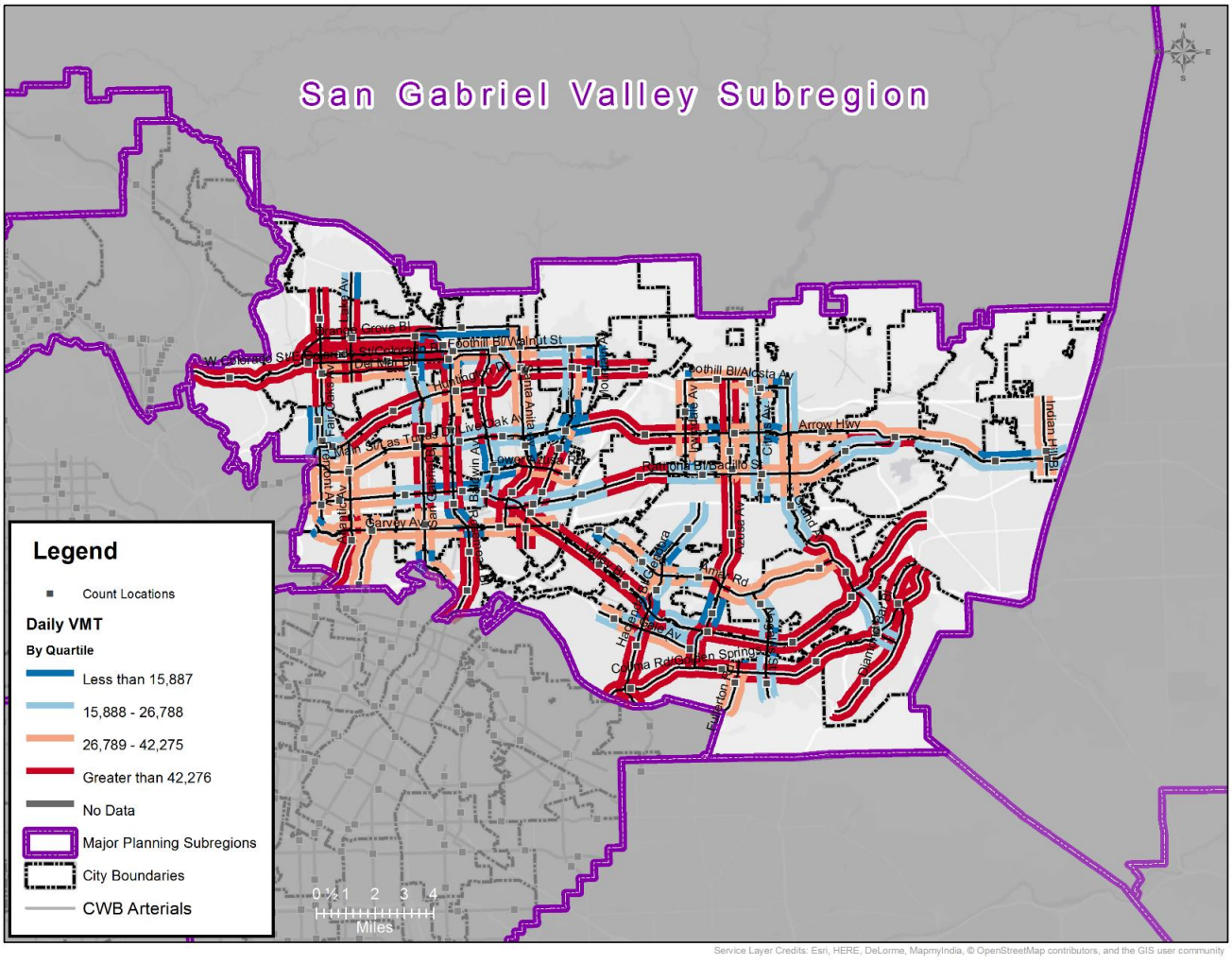
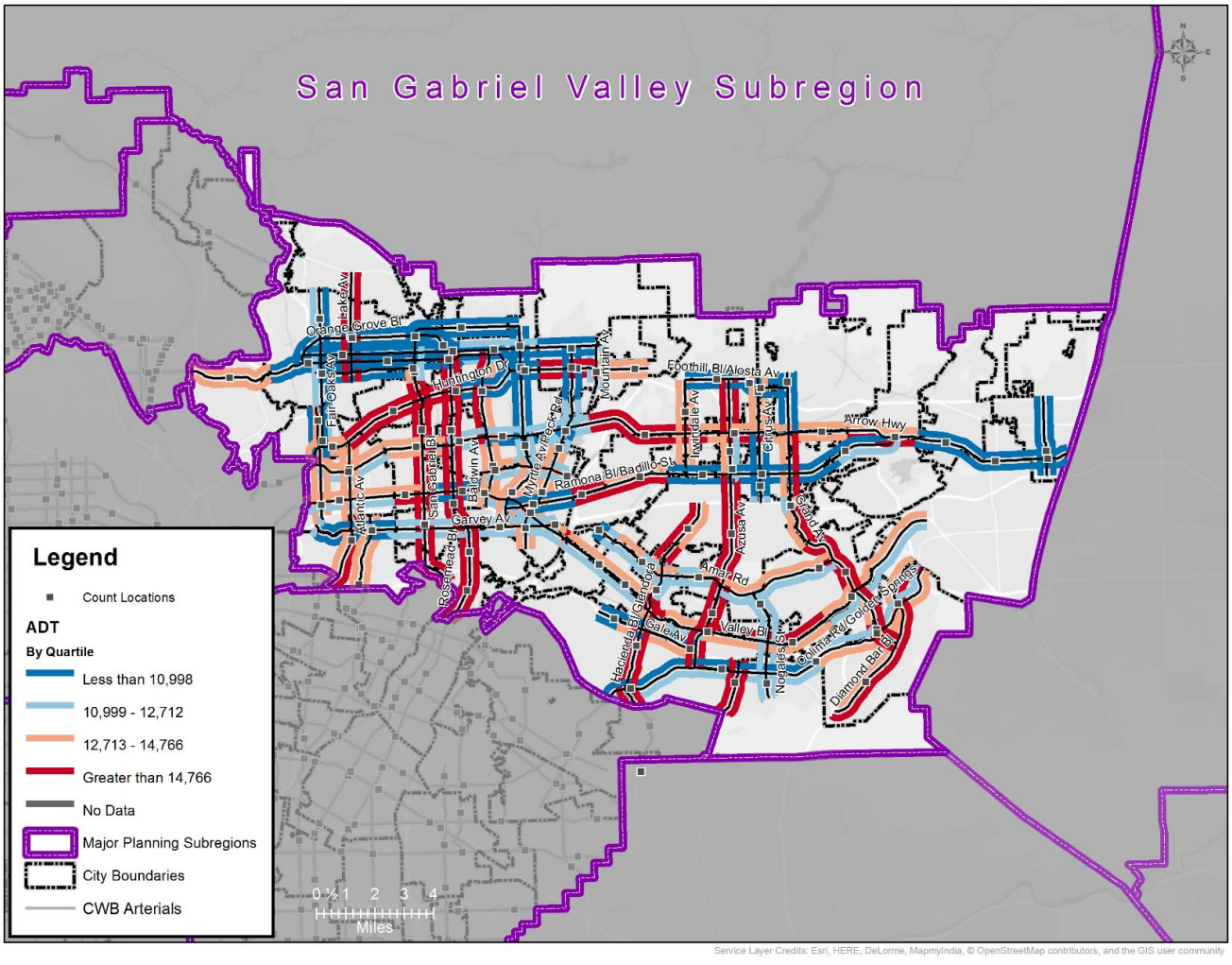


Exhibit 3.4: Daily Corridor Demand by Segment – Average Daily Traffic (ADT)



3.2 Productivity

The productivity measure is the average volume of traffic per unit of time along a roadway measured in vehicles per hour (VPH). Exhibit 3.5, from the "Arterial Analysis" worksheet in the APMT, lists the top ten directional corridors sorted in descending order by maximum VPH for any time period. On the following page, Exhibits 3.6 and 3.7 are maps that show the VPH for the 8:00 AM and 5:00 PM hours, respectively.

The most productive corridors in the subregion include:

- North and southbound Rosemead Boulevard;
- East and westbound Arrow Highway;

- Southbound Hacienda Boulevard/Glendora Avenue;
- North and southbound Azusa Avenue;
- North and southbound Grand Ave; and
- Eastbound Huntington Drive.

The highest peak hour flow rate during the AM peak period is reported along northbound Arrow Highway with a flow of 2,192 VPH. The highest flow rate during the PM peak period is on eastbound Valley Boulevard with a flow of 1,992 VPH.

Exhibit 3.5: Most Productive Directional Corridors by Jurisdiction - VPH

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Average Daily Traffic (ADT)	Average Hourly Flow Rate During Period (VPH)			
					AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)
N	Rosemead Bl	Rosemead	3.7	29,368	1,605	1,638	1,915	642
S	Rosemead Bl	Rosemead	3.7	24,553	1,372	1,443	1,464	539
W	Arrow Hwy	Irwindale	4.0	20,944	2,192	1,146	944	338
S	Hacienda Bl/Glendora	La Puente	2.1	22,933	978	1,144	1,741	561
S	Azusa Av	Industry	4.9	22,211	1,290	1,282	1,258	511
N	Grand Av	Walnut	2.6	20,327	1,310	1,128	1,537	316
E	Arrow Hwy	Irwindale	4.0	20,949	908	1,148	1,820	369
S	Grand Av	Walnut	2.6	20,516	1,137	1,191	1,398	397
N	Azusa Av	West Covina	4.3	20,230	1,096	1,111	1,348	444
E	Huntington Dr	San Marino	4.7	19,267	864	1,065	1,743	301

Exhibit 3.6: AM Peak Period Productivity by Segment - Vehicles per Hour (VPH)

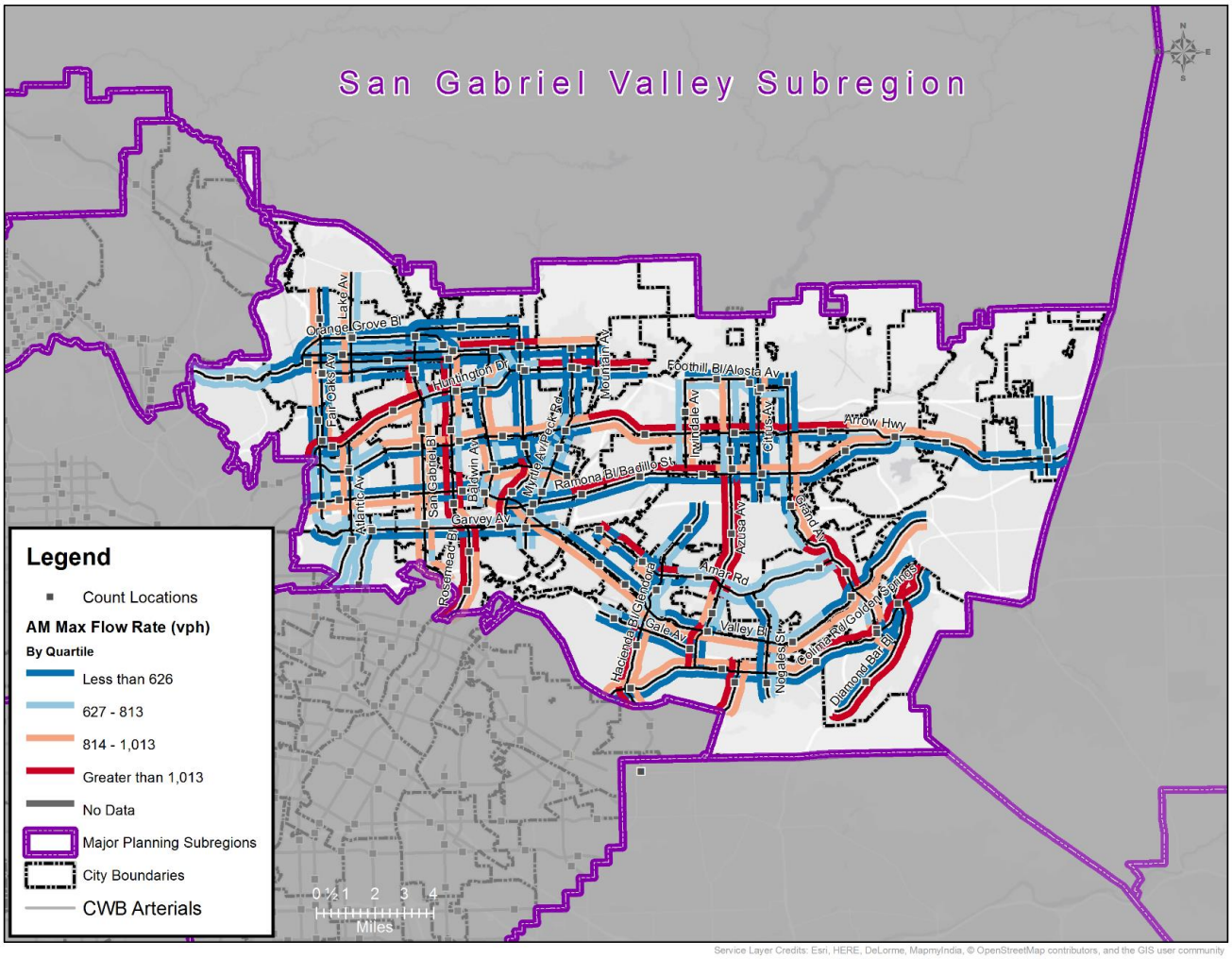
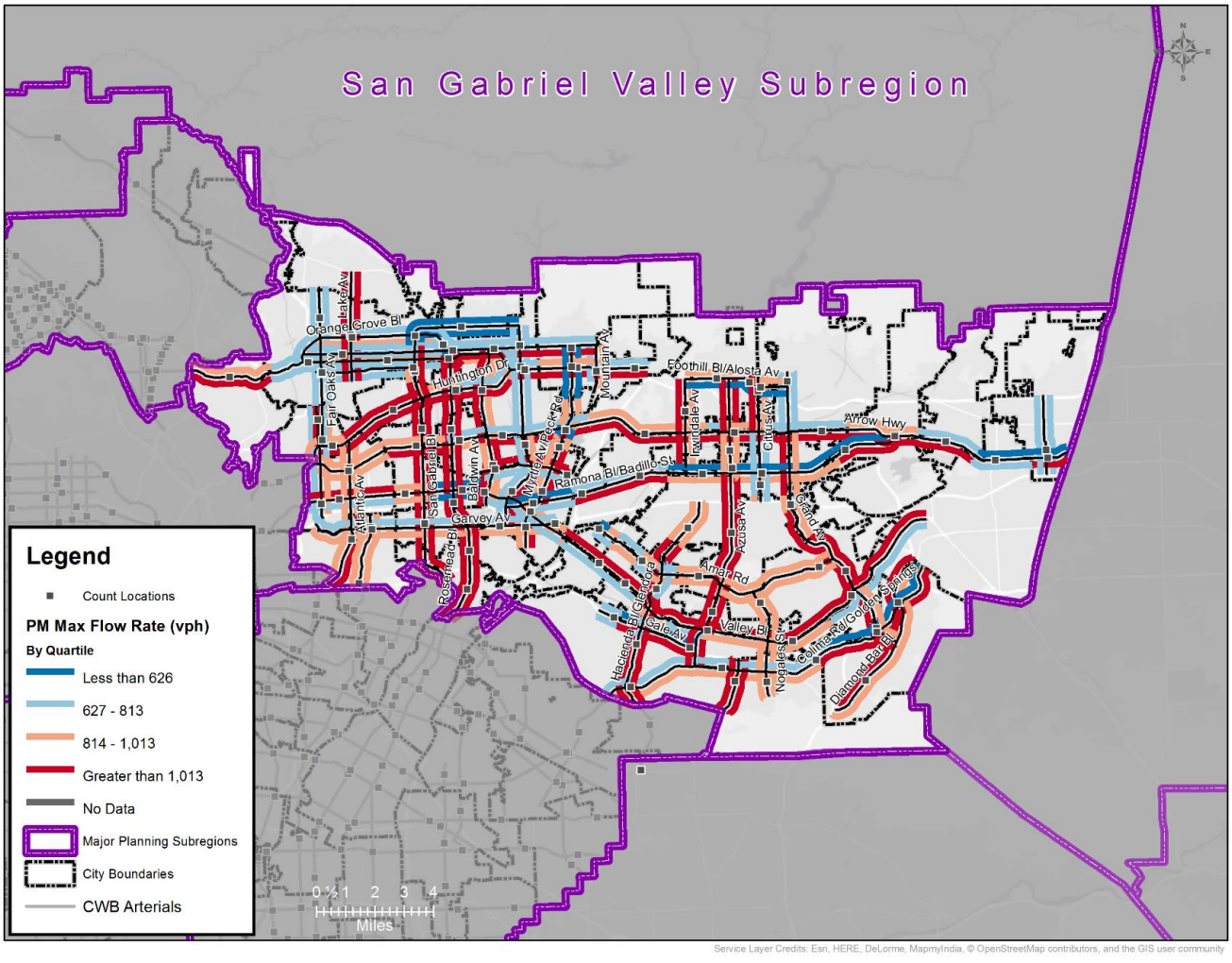


Exhibit 3.7: PM Peak Period Productivity by Segment - Vehicles per Hour (VPH)



3.3 Mobility

The mobility performance outcome has five evaluation measures: speed, travel time, vehicle-hours of delay (VHD), VHD per mile, and peak period spreading. The following subsections discuss the findings for each of these measures.

Speeds and Travel Times

Speeds and the resulting travel times along a corridor can be a measure of congestion along a corridor. Lower speeds below unimpeded prevailing (free-flow) speeds are indicative of congestion.

Exhibit 3.8, from the AMPT "Arterial Analysis" worksheet lists the ten slowest jurisdictional arterial segments in the subregion as measured by average speed for the 8:00 AM, noon, and 5:00 PM hours. The corresponding travel times for those times are also shown. Exhibit 3.9 on the following page is a map showing the 8:00 AM peak hour average speeds. Exhibit 3.10 is a similar map, but shows the 5:00 PM peak hour speeds.

These slowest arterials include:

- Northbound Mountain Avenue;
- North and southbound Azusa Avenue;
- Northbound Fremont Avenue;
- Northbound Nogales Street;
- Northbound Fullerton Road;
- Eastbound Valley Boulevard;
- Southbound Lake Avenue;
- Northbound Fair Oaks Avenue; and
- Northbound Mountain Avenue.

Exhibit 3.8: Slowest Directional Corridors in Subregion – Speed and Travel Time

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Average Speed by Hour			Average Travel Time by Hour		
				8AM	Noon	5PM	8AM	Noon	5PM
N	Mountain Av	Duarte	0.5	15.5	14.6	14.5	2.0	2.1	2.2
S	Azusa Av	LA County (Hacienda-Rowland Heights)	1.0	16.6	15.7	13.6	3.6	3.8	4.4
N	Fremont Av	South Pasadena	1.8	14.7	19.1	14.2	7.1	5.5	7.4
N	Azusa Av	LA County (Hacienda-Rowland Heights)	1.0	15.5	17.6	15.4	3.9	3.4	3.9
N	Nogales St	Industry	0.5	16.7	16.0	16.2	1.6	1.7	1.7
N	Fullerton Rd	Industry	0.1	15.2	15.6	18.2	0.4	0.4	0.3
E	Valley Bl	Alhambra	3.0	17.0	17.1	15.1	10.7	10.6	12.1
S	Lake Av	Pasadena	2.8	17.5	15.6	16.3	9.7	10.9	10.4
N	Fair Oaks Av	South Pasadena	1.4	14.8	18.3	16.4	5.6	4.5	5.0
N	Mountain Av	Monrovia	1.3	17.3	16.5	16.4	4.7	4.9	4.9

Overall, all arterial corridors in the subregion experience lower than free flow threshold speeds during the daylight hours (typically between 5 AM and 7PM), which results in the corridors reporting some VHD (See next section).

Exhibit 3.9: 8AM Hour Speeds on San Gabriel Valley Subregion

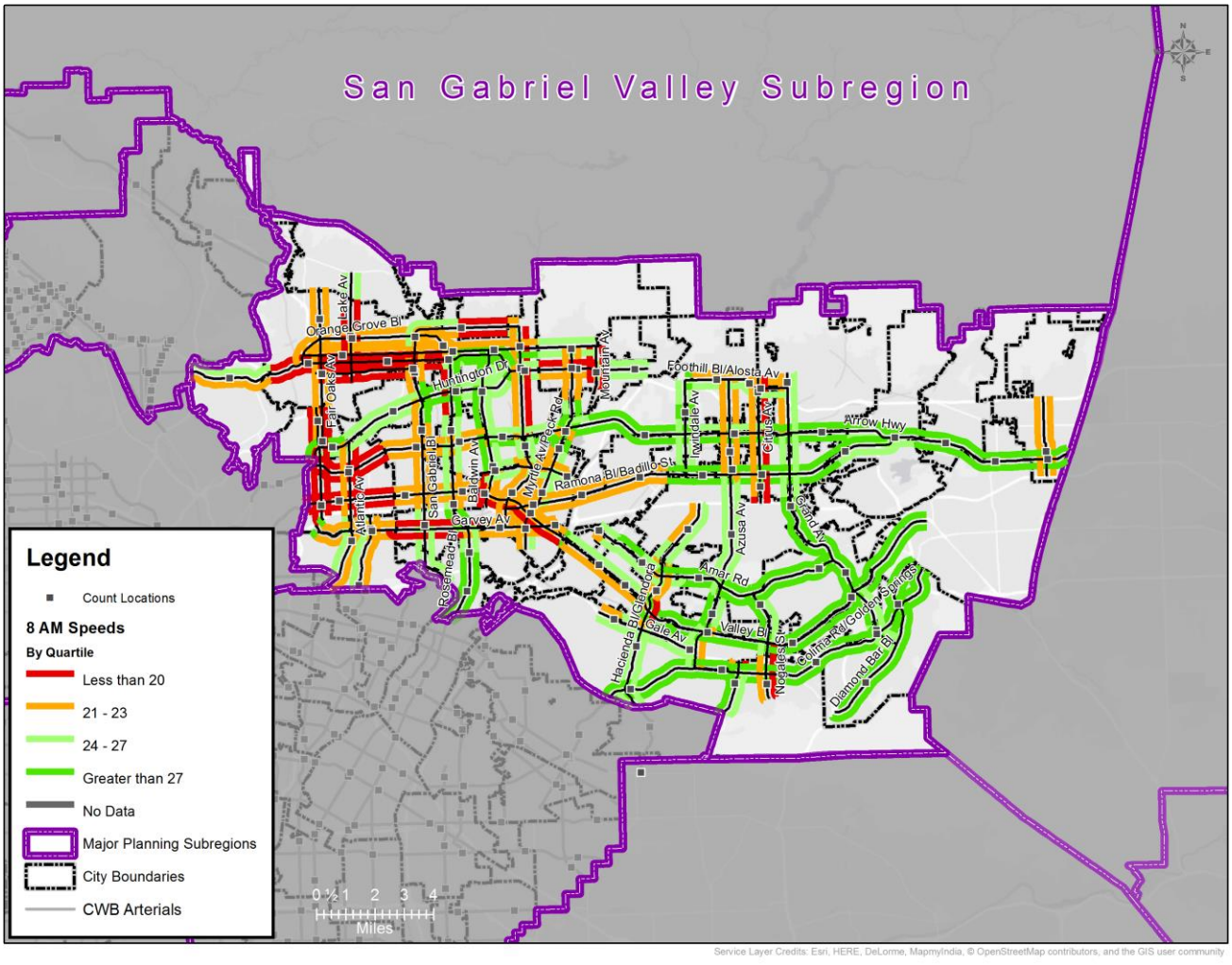
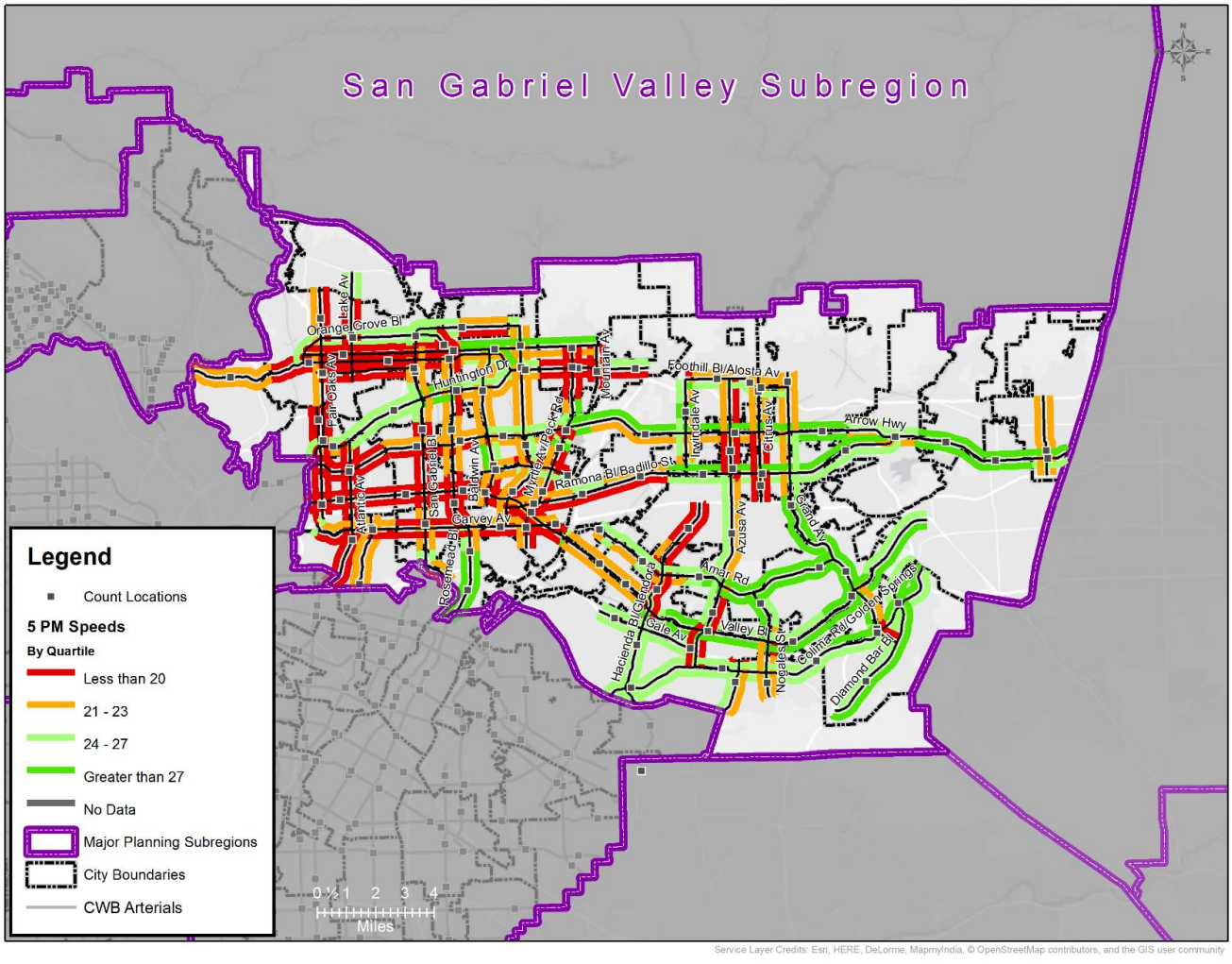


Exhibit 3.10: 5 PM Hour Speeds on San Gabriel Valley Subregion



Vehicle Hours of Delay (VHD)

Congestion measured by VHD captures two dimensions of overall mobility: travel times and the number of vehicles experiencing those travel times. Exhibit 3.11, from the "Arterial Analysis" worksheet, shows the ten most congested segments in the subregion measured by descending daily VHD. Exhibit 3.12 is a map on the following page that shows daily VHD by jurisdictional segment.

The most congested corridors in the subregion include:

- Southbound Azusa Avenue;
- Northbound Azusa Avenue;
- North and southbound Rosemead Boulevard;
- Eastbound Valley Boulevard;

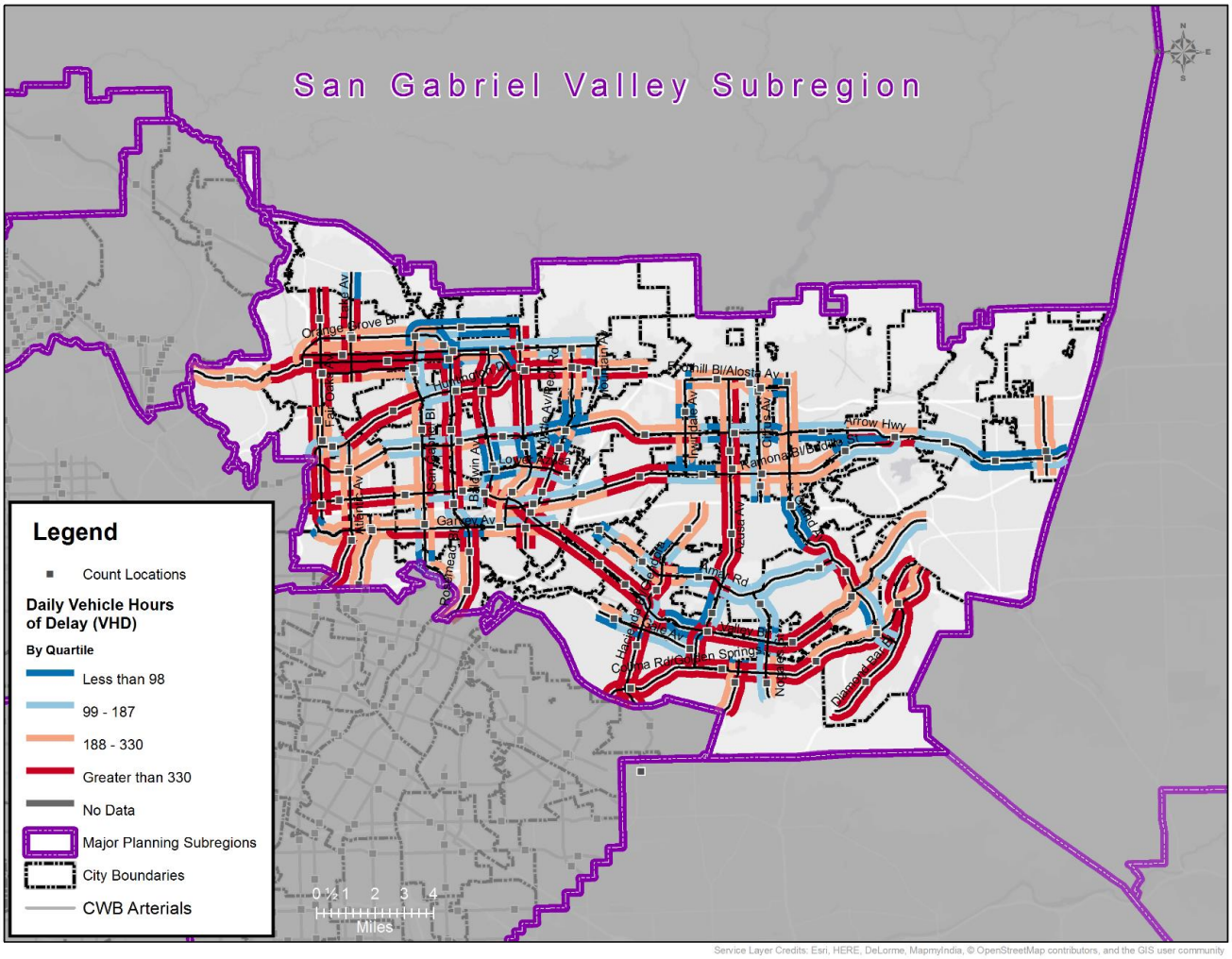
- Eastbound Huntington Drive;
- Northbound Diamond Bar Boulevard;
- Eastbound Colima/Golden Springs Roads; and
- Eastbound Ramona Boulevard/Badillo Street

The highest reported VHD occurs on Azusa Avenue, with an average daily VHD of 1,318 and 1,103 in the south and northbound directions, respectively. This is followed by 1,166 daily VHD on Rosemead Boulevard. No other arterial corridor exceeds 1,000 VHD in average during the day.

Exhibit 3.11: Most Congested Directional Corridors in Subregion – VHD

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Total Vehicle-Hours of Delay (VHD)				
				AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)	Average Daily (VHD)
S	Azusa Av	Industry	4.9	176	503	479	159	1,318
N	Rosemead Bl	Rosemead	3.7	96	347	557	167	1,166
N	Azusa Av	Industry	4.9	94	343	494	172	1,103
E	Valley Bl	Industry	12.9	111	261	515	67	954
N	Azusa Av	West Covina	4.3	139	316	356	135	946
S	Rosemead Bl	Rosemead	3.7	126	288	408	84	906
E	Huntington Dr	Monrovia	4.1	84	264	452	88	888
N	Diamond Bar Bl	Diamond Bar	6.4	88	184	437	88	798
E	Colima Rd/Golden Springs	LA County (Hacienda-Rowland Heights)	7.1	50	237	412	92	791
E	Ramona Bl/Badillo St	Baldwin Park	3.4	61	168	450	76	754

Exhibit 3.12: Daily Corridor Congestion in Subregion – VHD



Vehicle Hours of Delay per Mile (VHD/Mile)

While VHD captures overall delay along a corridor, VHD per mile measures the intensity of that delay. Exhibit 3.13 from the "Arterial Analysis" worksheet lists the top ten most intensely congested segments by VHD/Mile, with the map in Exhibit 3.14 on the following page showing daily VHD per mile.

The most congested corridors as measured by VHD/Mile include:

- North and southbound Azusa Avenue;
- Southbound Hacienda Boulevard/Glendora Avenue;
- North and Southbound Rosemead Boulevard;
- Northbound Fullerton Road;
- Eastbound Ramona Boulevard/Badillo Street; and

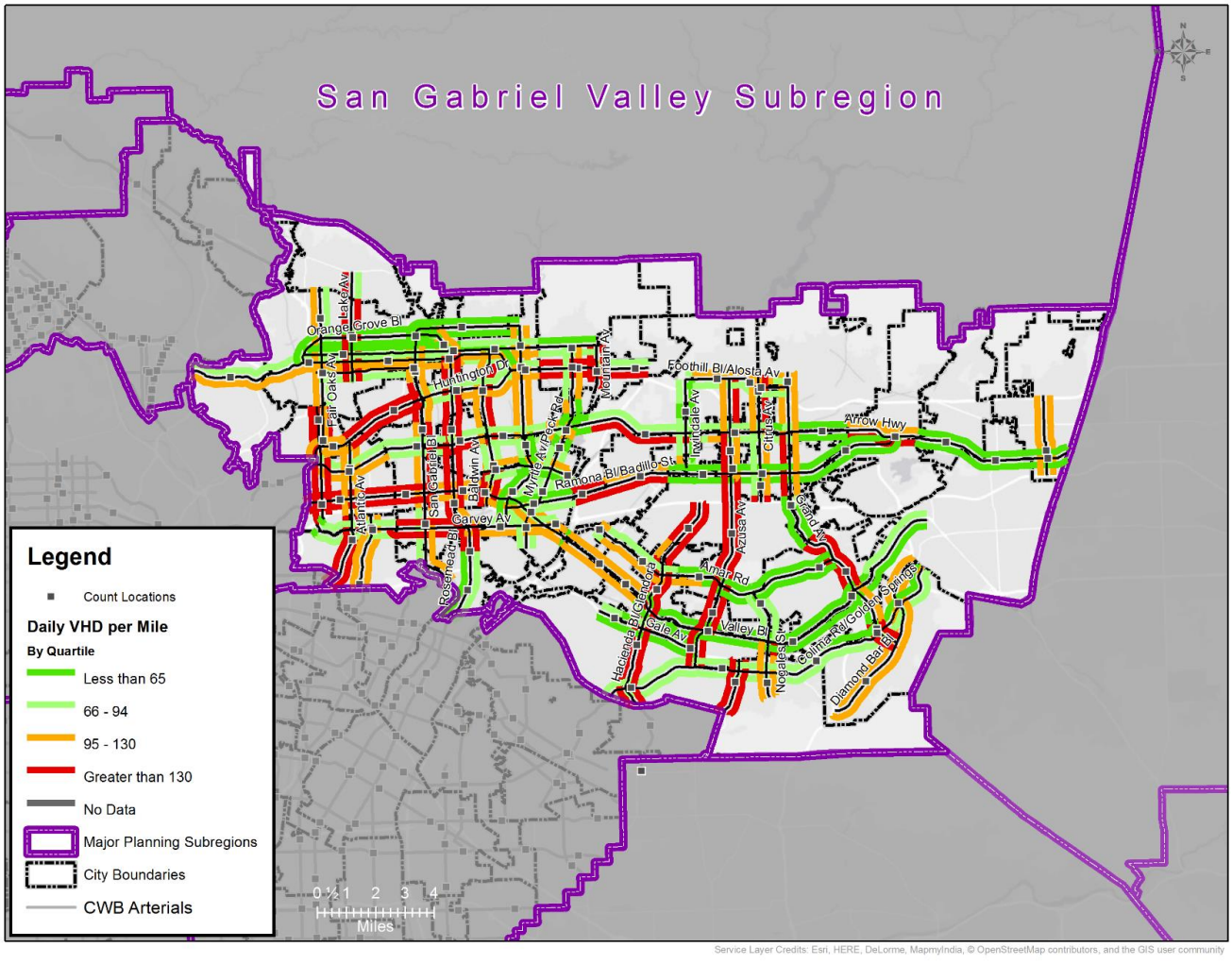
- Southbound Lake Avenue.

Southbound Azusa Avenue presents approximately 350 VHD/Mile, while the northbound direction presents approximately 300 VHD/Mile.

Exhibit 3.13: Most Intensely Congested Directional Corridors in Subregion – VHD/Mile

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Delay per Mile				
				AM (6-9)	Midday (9-15)	PM (15-19)	Night (0-6/19-24)	Average Daily (VHD/MI)
S	Azusa Av	LA County (Hacienda-Rowland Heights)	1.0	45	127	134	43	349
S	Hacienda Bl/Glendora	La Puente	2.1	32	110	136	49	327
N	Rosemead Bl	Rosemead	3.7	26	93	150	45	314
N	Fullerton Rd	Industry	0.1	53	145	83	30	311
N	Azusa Av	LA County (Hacienda-Rowland Heights)	1.0	34	100	118	47	298
E	Ramona Bl/Badillo St	Irwindale	1.1	14	41	203	20	278
S	Azusa Av	Industry	4.9	36	102	97	32	268
S	Lake Av	Pasadena	2.8	35	119	76	29	259
S	Hacienda Bl/Glendora	LA County (Valinda-South San Jose Hills)	0.8	20	89	113	36	258
S	Rosemead Bl	Rosemead	3.7	34	78	110	23	244

Exhibit 3.14: Congestion Intensity in Subregion – Daily VHD/Mile



Peak Period Spreading

The duration of the peak period is also an important measure to evaluate the congestion impacts of transportation investments. From one year to the next congestion during the peak hour may remain constant or even decline. However, the duration that congestion lasts may spread into earlier or later hours of the day when there was previously less or no congestion. This measure is best tracked over time for individual arterial corridors. However, the two arterial corridors with the highest AM or PM peak period delays – Diamond Bar Boulevard and Rosemead Boulevard– are presented in the charts from the "Hourly Summary" APMT worksheet in Exhibits 19 and 20,respectively.

The exhibits show the estimated peak periods and durations of major congestion. For many major Los Angeles County arterials, the peak congestion period surpass the typical arterial peak periods of 7:00 to 9:00 AM and 4:00 to 6:00 PM. The AM peak period in Diamond Bar

Boulevard, as in Rosemead Boulevard, lasts approximately 3 hours, from 6:00 to 9:00 AM. The PM peak period in Rosemead Boulevard, as in Diamond Bar Boulevard, lasts approximately 5 hours, from 2:00 to 7:00 PM.

Exhibit 3.15: Peak Periods for Diamond Bar Bl in Subregion – VHD by Hour

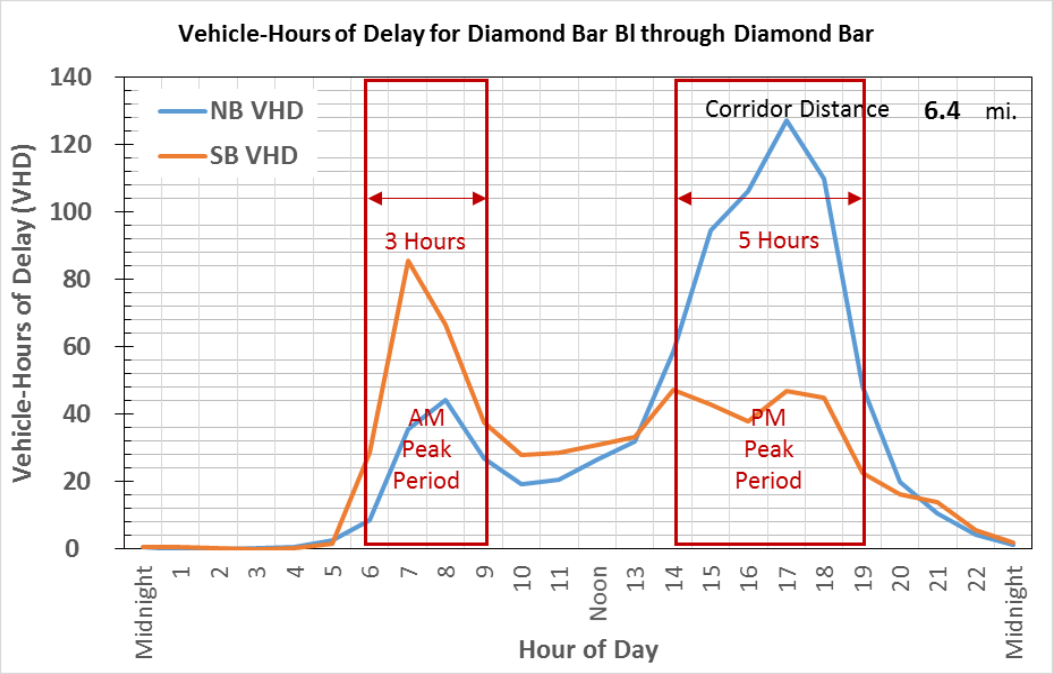
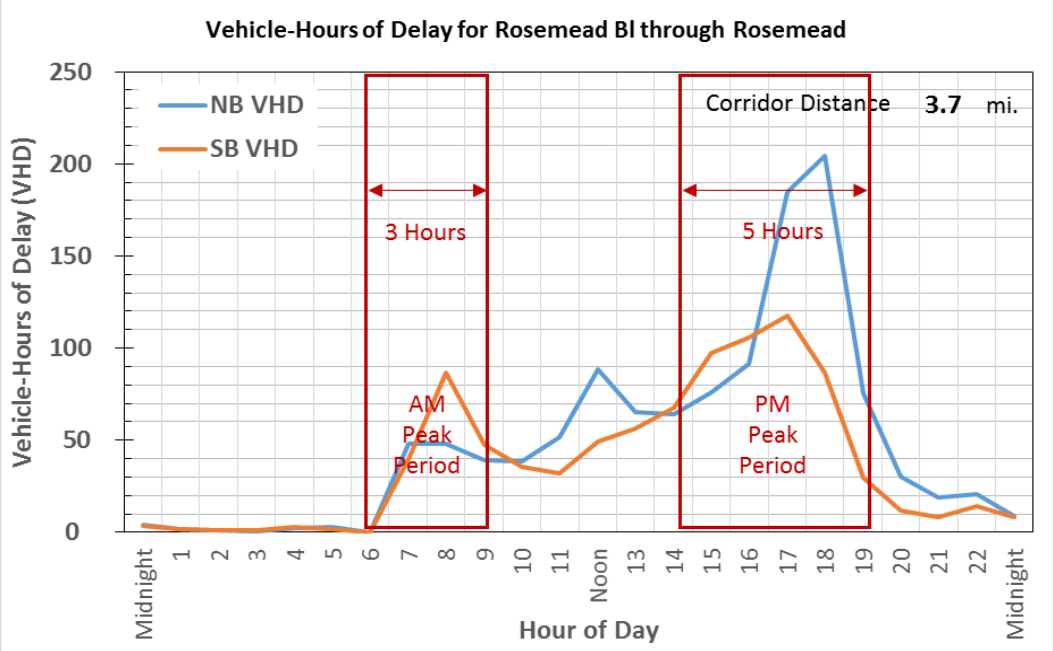


Exhibit 3.16: Peak Periods for Rosemead Bl in Subregion – VHD by Hour



3.4 Reliability

Travel time reliability attempts to capture the extent of unexpected delays that can occur from day to day. The reliability measure is evaluated using the planning time index (PTI), a ratio of the 95th percentile travel time as compared to the free-flow travel time. The 95th percentile travel time is the time at which 95 percent of the travel times are faster. Travel time variance, measured by travel time index (TTI), evaluates the intensity of congestion by measuring the ratio of the average travel over the free-flow travel time.

Exhibit 3.17, below, is from the APMT "Arterial Analysis" worksheet hourly results and shows the jurisdictional segments with the worst reliability (highest PTI in any peak hour). On the following page, Exhibits 3.18 and 3.19 are maps that show the PTI for the 8:00 AM and 5:00 PM hours respectively.

The following segments have the worst reliability in the subregion:

- Northbound Fullerton Road;
- Northbound Fremont Avenue;
- North and southbound Azusa Avenue;
- Northbound Fair Oaks Avenue;
- Northbound Nogales Street;
- Southbound Fullerton Road;
- North and southbound Rosemead Boulevard; and
- Northbound Azusa Avenue.

Exhibit 3.17: Worst Reliability Segments in Subregion – TTI and PTI

Dir	Arterial Corridor Name	Jurisdiction	Arterial Corridor Distance (mi.)	Travel Time Index by Hour			Planning Time Index by Hour		
				8AM	Noon	5PM	8AM	Noon	5PM
N	Fullerton Rd	Industry	0.1	1.87	1.83	1.56	2.84	2.63	2.06
N	Fremont Av	South Pasadena	1.8	1.95	1.50	2.03	2.87	1.72	2.41
N	Azusa Av	LA County (Hacienda-Rowland Heights)	1.0	1.70	1.50	1.71	2.85	1.84	1.97
N	Fair Oaks Av	South Pasadena	1.4	1.89	1.52	1.71	2.51	1.79	2.04
N	Nogales St	Industry	0.5	1.56	1.63	1.61	1.88	2.06	2.09
S	Azusa Av	LA County (Hacienda-Rowland Heights)	1.0	1.52	1.60	1.85	1.82	2.01	2.18
N	Fullerton Rd	LA County (Hacienda-Rowland Heights)	1.9	1.31	1.54	1.73	1.70	2.00	2.27
S	Rosemead Bl	El Monte	0.8	1.33	1.20	1.94	1.74	1.37	2.70
N	Rosemead Bl	El Monte	0.8	1.18	1.33	1.91	1.37	1.69	2.70
N	Azusa Av	Industry	4.9	1.46	1.39	1.86	1.87	1.56	2.32

Exhibit 3.18: 8 AM Hour PTI in Subregion

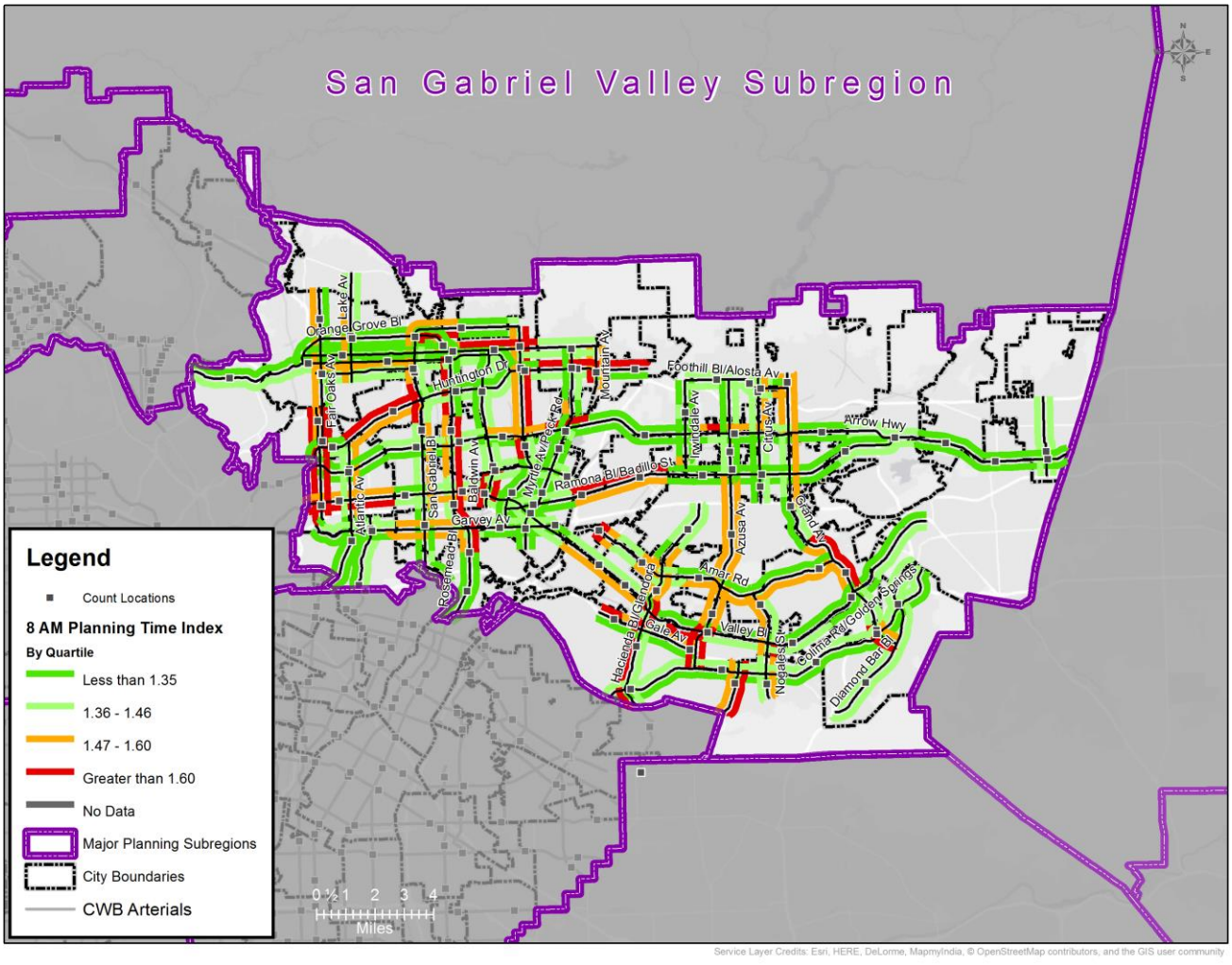
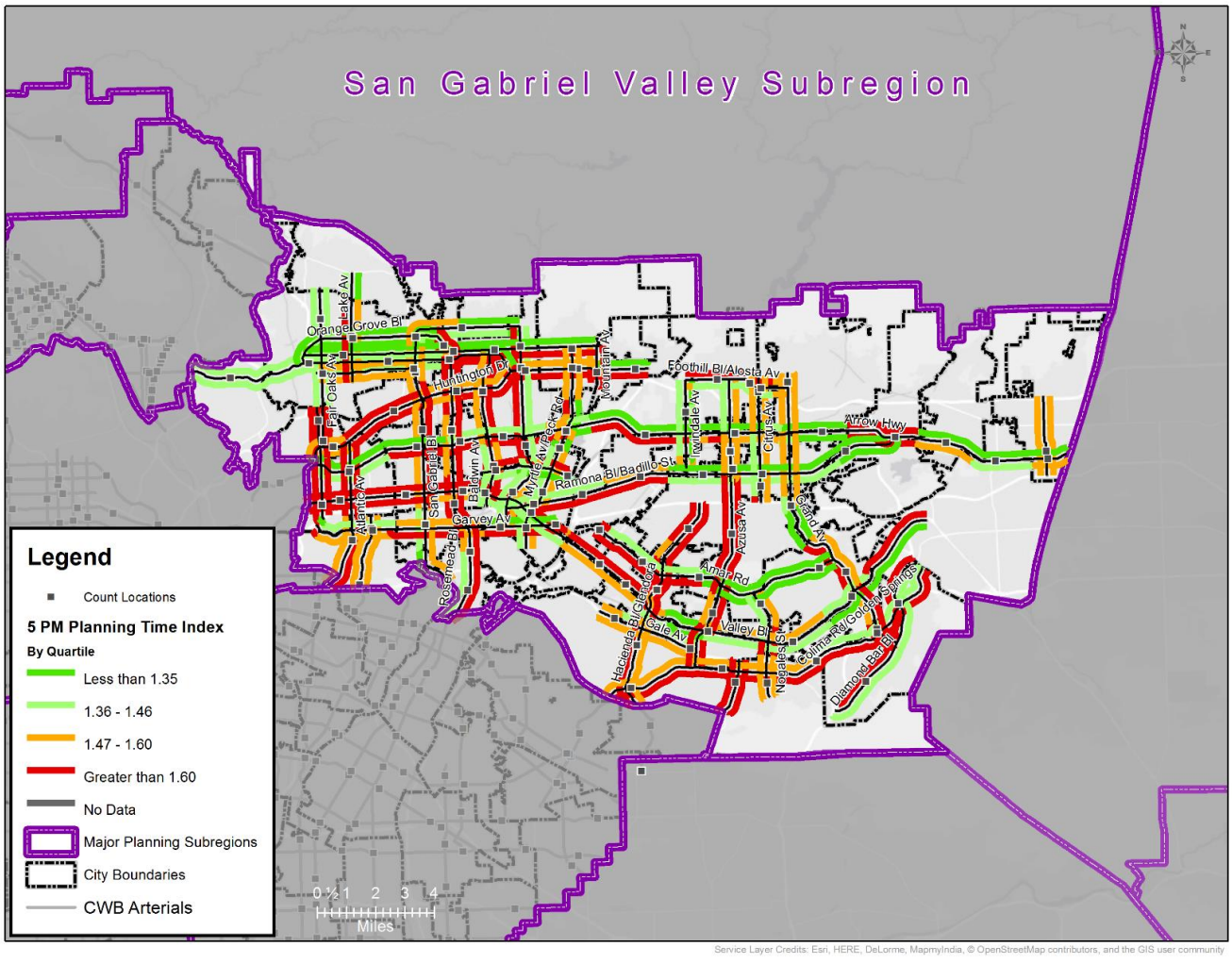


Exhibit 3.19: 5 PM Hour PTI in Subregion



3.5 Summary

The corridors that have the highest volumes/throughput and experience the worst congestion or reliability in at least one jurisdiction include (in alphabetical order by street name):

- Azusa Avenue,
- Colima/Golden Springs Roads,
- Huntington Drive,
- Rosemead Boulevard, and
- Valley Boulevard.

There are other corridors that experience congestion or lower travel time reliability, but that also carry lower volumes or throughput. These include (in alphabetical order by street name):

- Foothill Boulevard/Walnut Avenue,
- Fullerton Road, and
- San Gabriel/Sierra Madre Boulevards.

Other corridors are relatively productive, but currently do not experience the levels of congestion of other corridors. These corridors include (in alphabetical order):

- Arrow Highway,
- Diamond Bar Boulevard,
- Hacienda Boulevard/Glendora Avenue,
- Lake Avenue, and
- Ramona Boulevard/Badillo Street.

4.0 Analysis Results by Corridor

This section presents the performance results for each corridor. The same performance metrics are evaluated and presented. The results in this section are taken from the "Sum-Jurisdiction by Arterial" and the "Hourly Summary" worksheets. The first exhibit in each corridor presents key travel demand and productivity performance measures for the corridor. The second exhibit for each corridor reports mobility and reliability outcomes. The last three exhibits for each corridor show some key performance measures by hour through the subregion.

4.1 Amar Road

Amar Road is a 9.2-mile corridor in the San Gabriel Valley, traversing the Cities of Industry, La Puente, Walnut, and West Covina, as well as through portions of unincorporated Los Angeles County. The corridor carries a daily average VMT above the subregion's median of 78,900 per direction, representing the 25th and 26th highest average daily VMT in the west and eastbound directions, respectively. The corridor experiences the 32nd and 43rd highest average daily VHD in the subregion.

Exhibit 4.1: Amar Road Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	9.2	18,166	33,835	31,690	21,754	105,446	660	615	864
	W	9.2	20,916	34,933	30,357	25,528	111,734	760	635	828
City of Industry	E	0.4	336	1,041	1,164	787	3,329	303	469	787
	W	0.4	1,158	1,268	769	874	4,069	1,044	571	519
Los Angeles County	E	3.1	6,900	11,469	9,748	7,743	35,860	740	615	784
	W	3.1	5,751	11,553	10,809	8,588	36,701	616	619	869
City of La Puente	E	2.7	3,197	10,163	10,220	7,309	30,888	402	639	964
	W	2.7	8,581	10,583	7,670	8,151	34,985	1,079	666	724
City of Walnut	E	3.1	7,192	11,916	12,275	5,868	37,251	786	651	1,006
	W	3.1	7,020	12,308	11,169	8,491	38,988	767	673	916
City of West Covina	E	2.0	3,922	7,306	6,843	4,697	22,768	660	615	864
	W	2.0	4,516	7,543	6,555	5,512	24,126	760	635	828

Exhibit 4.2: Amar Road Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	9.2	131	295	735	14.2	32.2	80.2	28.1	26.5	1.28	1.36	1.39	1.50
	W	9.2	88	183	524	9.6	19.9	57.2	29.9	29.7	1.21	1.22	1.33	1.30
City of Industry	E	0.4	4	13	31	11.0	35.9	84.2	22.8	22.8	1.40	1.40	1.68	1.62
	W	0.4	11	9	37	29.5	25.0	100.2	24.7	23.9	1.37	1.42	1.61	1.64
Los Angeles County	E	3.1	60	125	332	19.2	40.2	106.7	26.4	23.7	1.33	1.49	1.49	1.69
	W	3.1	26	88	225	8.4	28.2	72.3	27.2	26.2	1.22	1.27	1.37	1.40
City of La Puente	E	2.7	24	136	270	9.1	51.4	101.9	26.2	22.4	1.28	1.49	1.41	1.76
	W	2.7	49	62	212	18.4	23.2	80.1	27.2	26.8	1.25	1.27	1.43	1.40
City of Walnut	E	3.1	46	60	173	15.0	19.6	56.7	31.9	34.4	1.30	1.20	1.53	1.32
	W	3.1	20	34	107	6.6	11.1	35.2	36.5	37.9	1.18	1.13	1.32	1.22
City of West Covina	E	2.0	30	79	199	15.2	40.1	100.5	27.2	24.6	1.29	1.43	1.48	1.60
	W	2.0	28	63	177	14.4	32.1	89.6	28.0	26.8	1.30	1.36	1.47	1.53

Exhibit 4.3: Amar Road Hourly Flow Rates (VPH)

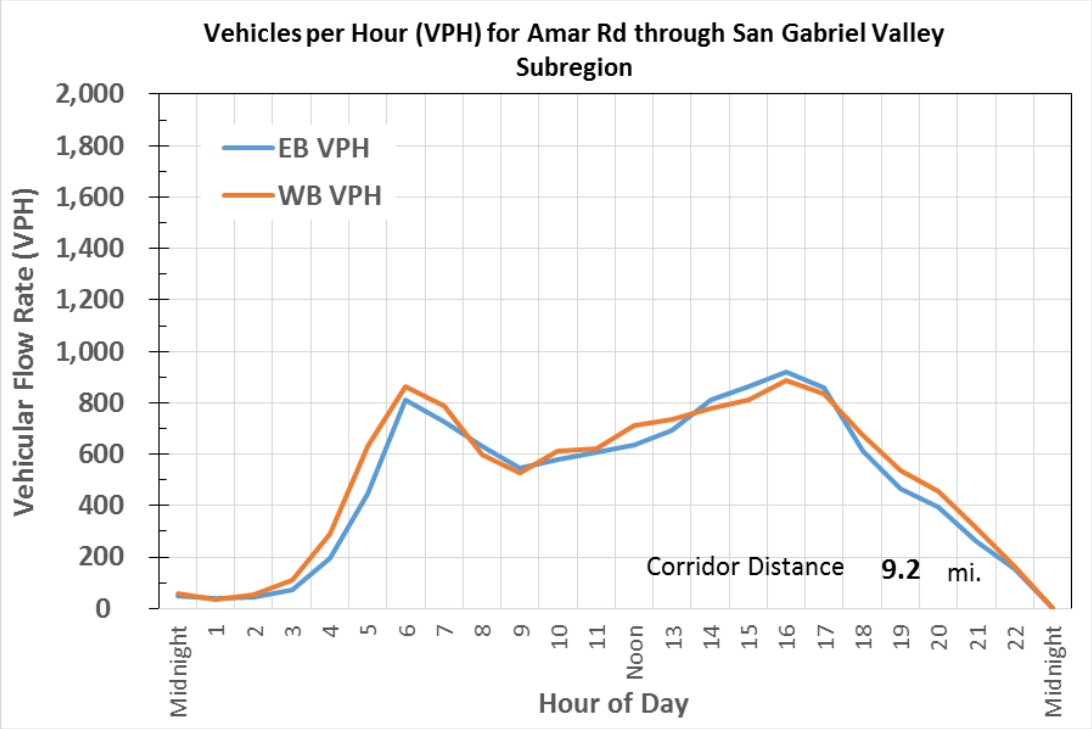


Exhibit 4.4: Amar Road Hourly Congestion (VHD)

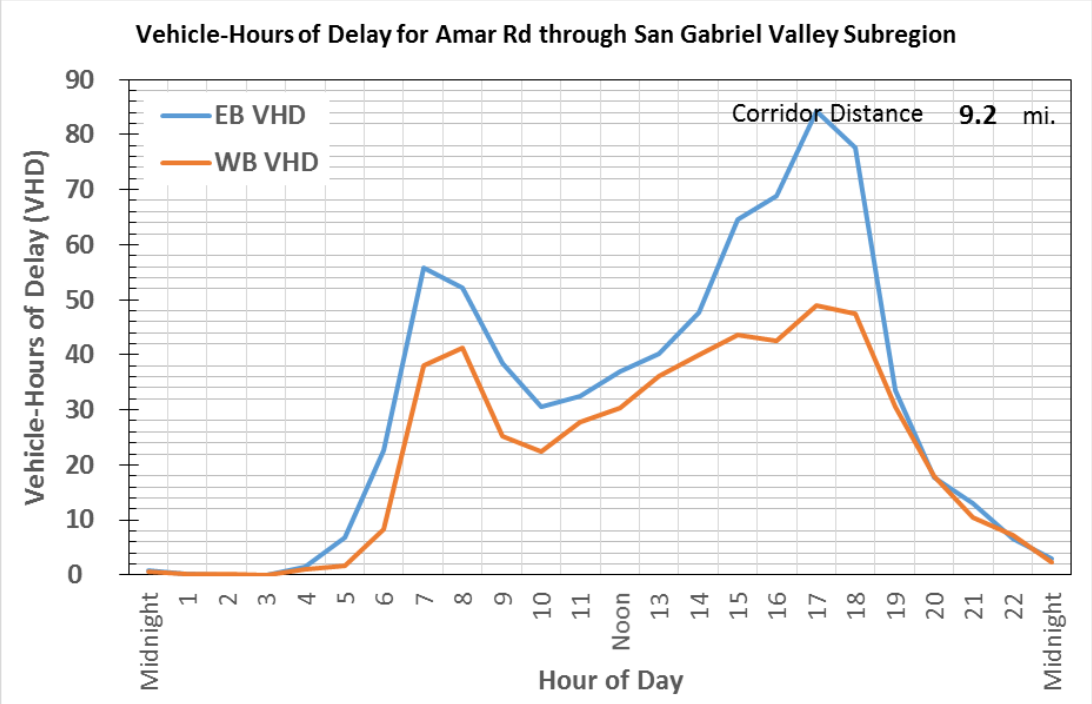
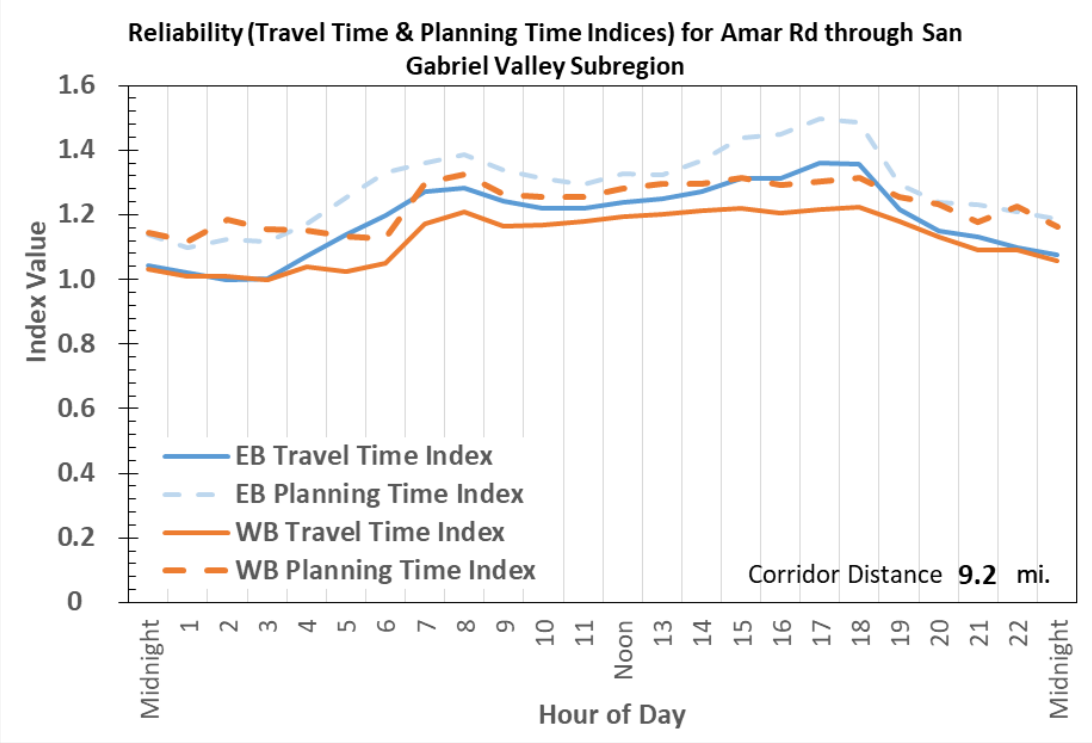


Exhibit 4.5: Amar Road Hourly Reliability (TTI and PTI)



4.2 Arrow Highway

Arrow Highway is a 16.8-mile arterial, crossing the Cities of Azusa, Claremont, Covina, Glendora, Irwindale, La Verne, Pomona, San Dimas, and parts of unincorporated Los Angeles County. The corridor experiences daily average VMT above the subregion's median of 78,900 per direction, representing the 4th and 7th highest average daily VMT in the east and westbound directions, respectively. The corridor has the 15th and 18th highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.6: Arrow Highway Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	16.8	28,594	77,434	89,231	45,039	240,298	567	768	1,328
	W	16.8	62,179	75,878	51,171	44,324	233,551	1,234	753	761
City of Azusa	E	2.2	4,036	11,523	11,814	7,713	35,086	601	857	1,319
	W	2.2	7,512	10,532	7,318	6,783	32,145	1,118	784	817
City of Claremont	E	2.3	2,547	8,238	9,579	3,707	24,072	366	592	1,032
	W	2.3	4,633	6,843	5,269	3,969	20,714	666	492	568
City of Covina	E	2.7	4,595	12,445	14,341	7,238	38,619	567	768	1,328
	W	2.7	9,993	12,195	8,224	7,123	37,535	1,234	753	761
City of Glendora	E	2.7	3,895	11,963	12,028	6,102	33,988	483	741	1,118
	W	2.7	10,424	12,361	8,659	8,285	39,728	1,292	766	805
City of Irwindale	E	4.0	10,813	27,356	28,900	16,097	83,166	908	1,148	1,820
	W	4.0	26,108	27,292	14,988	14,759	83,148	2,192	1,146	944
Los Angeles County	E	3.8	6,383	17,284	19,918	10,053	53,638	567	768	1,328
	W	3.8	13,879	16,937	11,422	9,894	52,132	1,234	753	761
City of La Verne	E	2.5	3,119	6,661	10,754	4,175	24,708	409	437	1,058
	W	2.5	6,839	8,639	7,126	4,749	27,353	898	567	701
City of Pomona	E	2.3	1,562	4,654	7,397	2,683	16,296	223	333	794
	W	2.3	3,903	4,941	3,752	2,915	15,511	558	353	403
City of San Dimas	E	2.6	4,956	12,811	17,589	7,339	42,695	633	818	1,685
	W	2.6	7,766	11,306	8,564	5,795	33,431	992	722	820

Exhibit 4.7: Arrow Highway Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	16.8	99	769	1,292	5.9	45.8	76.9	28.7	24.2	1.13	1.34	1.19	1.50
	W	16.8	274	300	1,068	16.3	17.8	63.6	29.4	29.2	1.20	1.21	1.26	1.29
City of Azusa	E	2.2	10	118	184	4.5	52.8	82.0	27.8	22.2	1.08	1.36	1.20	1.59
	W	2.2	65	42	172	28.9	18.7	76.9	25.6	27.8	1.29	1.19	1.51	1.31
City of Claremont	E	2.3	9	75	129	3.9	32.5	55.6	29.9	24.8	1.12	1.35	1.23	1.57
	W	2.3	18	30	98	7.6	13.1	42.2	29.8	29.3	1.18	1.20	1.29	1.31
City of Covina	E	2.7	7	123	196	2.7	45.4	72.8	28.4	23.7	1.07	1.28	1.18	1.45
	W	2.7	61	48	187	22.4	17.8	69.4	27.3	28.5	1.25	1.20	1.41	1.32
City of Glendora	E	2.7	11	67	149	4.0	24.8	55.5	31.0	29.0	1.12	1.20	1.22	1.30
	W	2.7	30	47	164	11.2	17.3	60.9	31.0	30.9	1.19	1.20	1.31	1.29
City of Irwindale	E	4.0	51	397	611	12.7	100.1	154.0	28.8	21.4	1.18	1.58	1.27	2.01
	W	4.0	127	56	293	31.9	14.2	73.8	30.9	32.0	1.18	1.14	1.31	1.25
Los Angeles County	E	3.8	19	141	263	5.1	37.5	70.0	29.4	25.8	1.13	1.31	1.26	1.55
	W	3.8	71	65	252	19.0	17.3	67.2	28.1	29.1	1.25	1.20	1.46	1.34
City of La Verne	E	2.5	14	66	117	5.7	26.0	46.2	29.9	28.0	1.18	1.26	1.28	1.48
	W	2.5	22	39	110	8.8	15.2	43.1	30.2	29.6	1.17	1.19	1.29	1.31
City of Pomona	E	2.3	5	30	52	2.2	13.0	22.4	29.0	27.6	1.11	1.16	1.20	1.35
	W	2.3	12	19	65	5.3	8.3	28.0	30.4	30.0	1.15	1.17	1.28	1.28
City of San Dimas	E	2.6	36	232	430	13.7	88.7	164.7	25.7	21.8	1.26	1.48	1.37	1.79
	W	2.6	45	103	293	17.2	39.6	112.3	27.9	24.6	1.29	1.46	1.43	1.61

Exhibit 4.8: Arrow Highway Hourly Flow Rates (VPH)

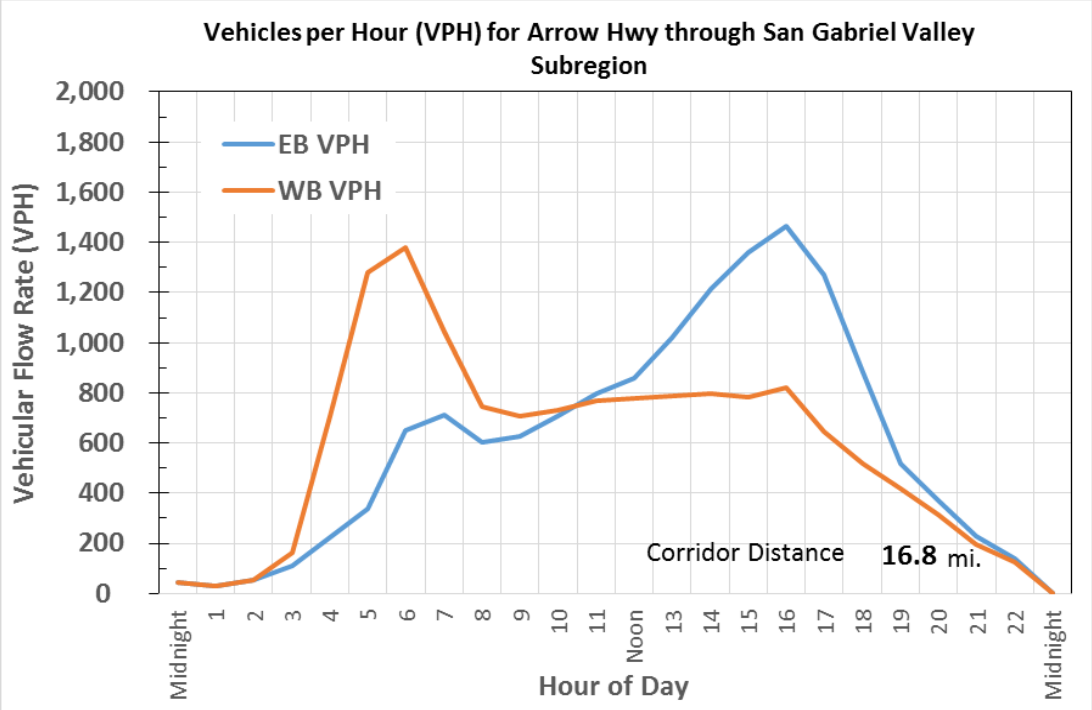


Exhibit 4.9: Arrow Highway Hourly Congestion (VHD)

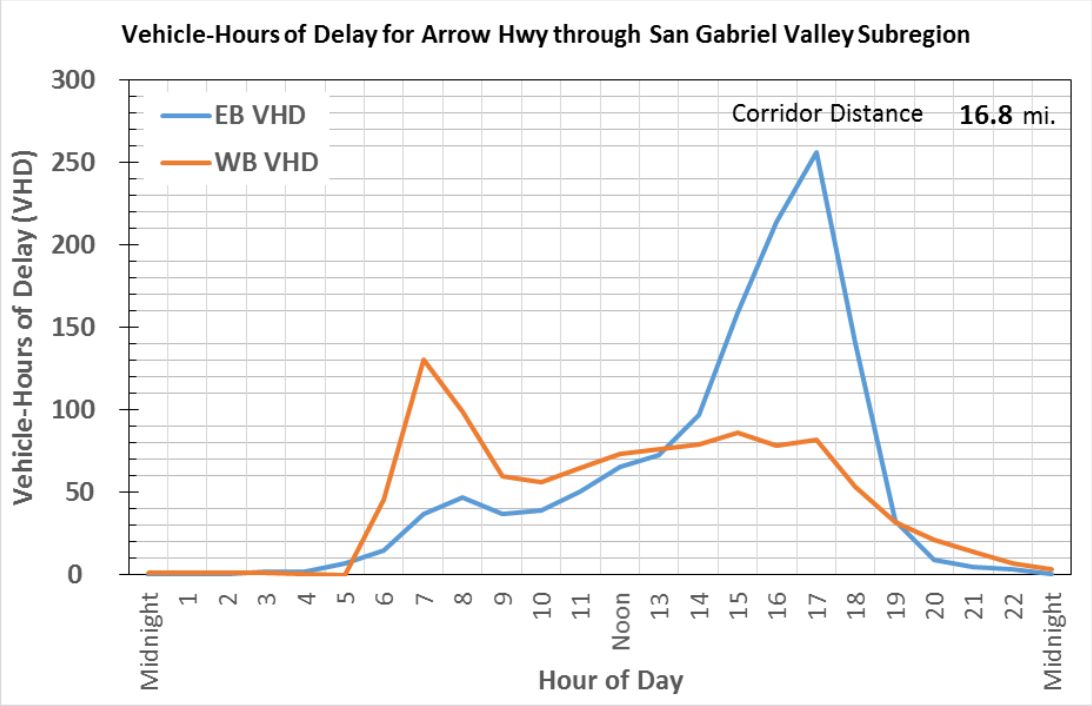
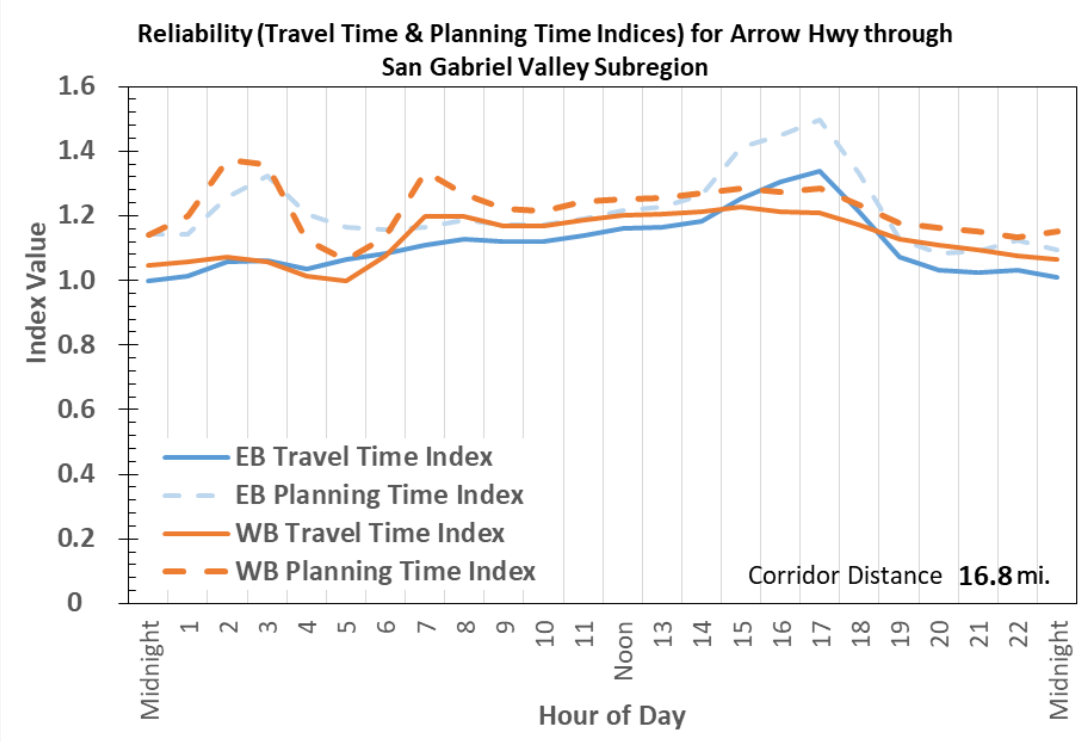


Exhibit 4.10: Arrow Highway Hourly Reliability (TTI and PTI)



4.3 Atlantic Avenue

Atlantic Avenue is a 5.5-mile corridor in the San Gabriel Valley, crossing the Cities of Alhambra and Monterey Park. The corridor has a daily average VMT close to the subregion's median of 78,900 per direction, representing the 36th and 37th highest average daily VMT in the south and northbound directions, respectively. The corridor experiences the 24th and 31st highest average daily VHD also in the north and southbound directions, respectively.

Exhibit 4.11: Atlantic Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	5.5	10,727	26,536	22,357	18,955	78,575	651	806	1,018
	S	5.5	12,007	28,067	21,090	18,100	79,263	729	852	960
City of Alhambra	N	2.6	5,401	11,180	9,556	7,142	33,279	703	728	933
	S	2.6	7,199	12,361	9,508	7,378	36,446	937	805	929
City of Monterey Park	N	2.9	6,363	16,238	13,701	10,219	46,522	721	920	1,165
	S	2.9	5,902	15,663	11,510	9,200	42,275	669	888	979

Exhibit 4.12: Atlantic Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	5.5	61	354	829	11.2	64.4	150.9	21.0	17.7	1.24	1.47	1.38	1.69
	S	5.5	62	301	738	11.2	54.8	134.4	22.2	18.8	1.20	1.42	1.31	1.58
City of Alhambra	N	2.6	40	152	325	15.5	59.3	126.9	19.2	17.2	1.29	1.44	1.58	1.72
	S	2.6	45	137	320	17.6	53.3	125.0	21.3	18.1	1.24	1.45	1.43	1.65
City of Monterey Park	N	2.9	30	216	538	10.2	73.6	183.0	22.9	18.2	1.18	1.49	1.32	1.71
	S	2.9	27	166	432	9.2	56.6	146.9	23.1	19.3	1.17	1.40	1.27	1.60

Exhibit 4.13: Atlantic Avenue Hourly Flow Rates (VPH)

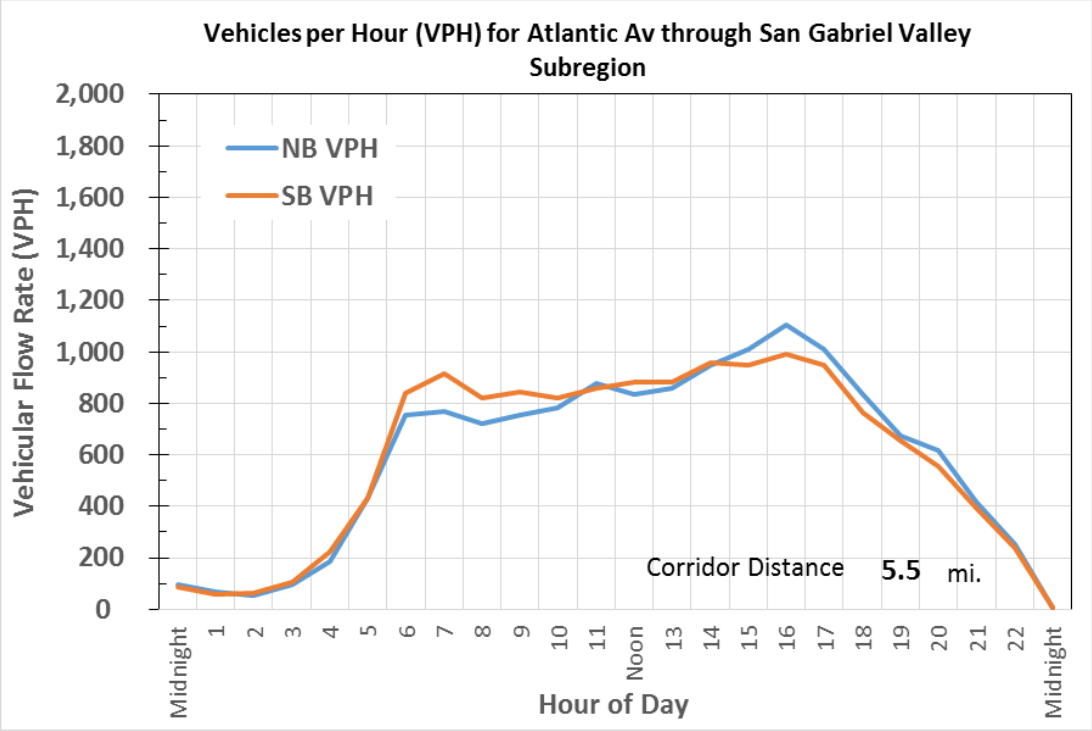


Exhibit 4.14: Atlantic Avenue Hourly Congestion (VHD)

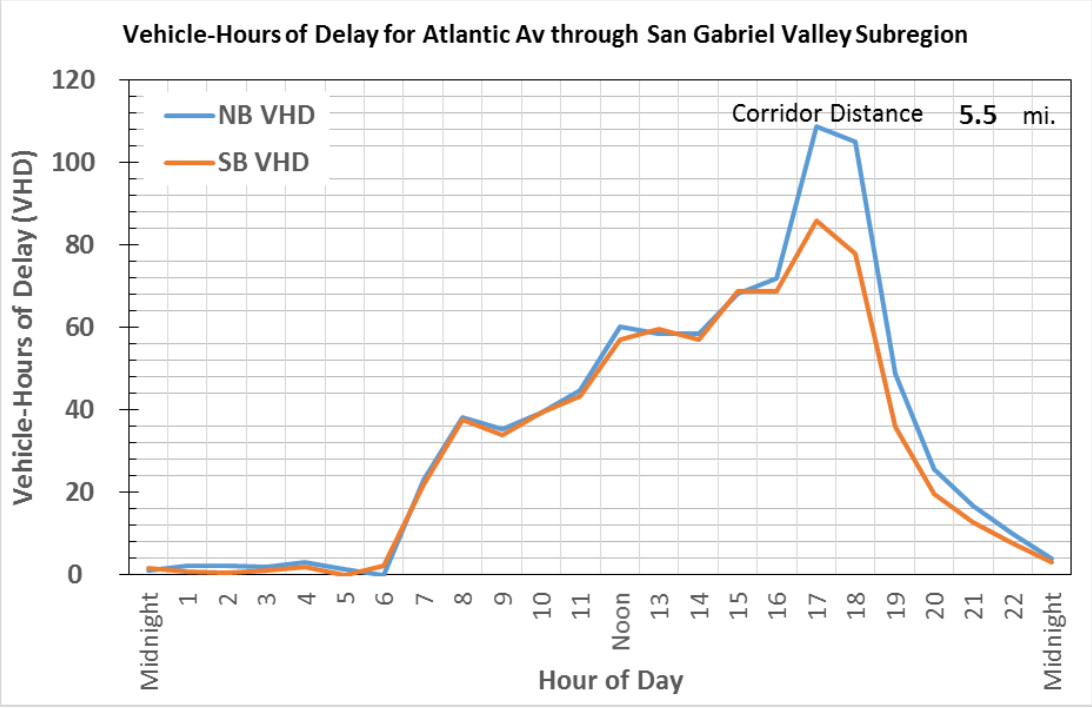
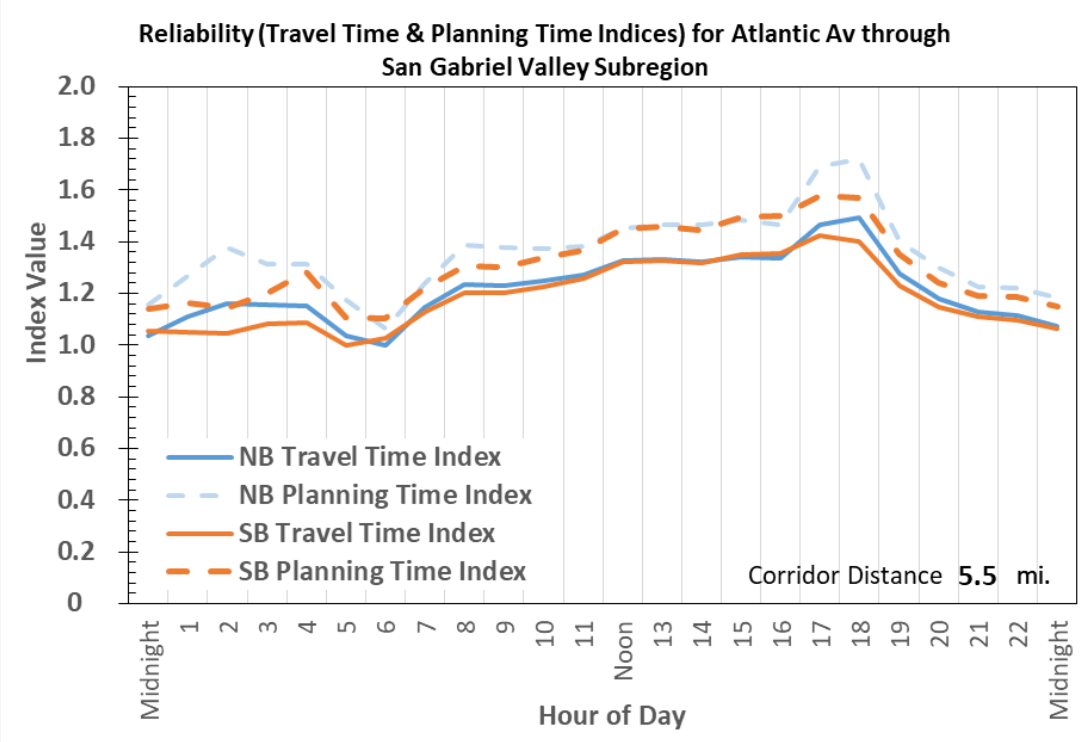


Exhibit 4.15: Atlantic Avenue Hourly Reliability (TTI and PTI)



4.4 Azusa Avenue

Azusa Avenue is a 10.2-mile corridor that traverses the Cities of Azusa, Covina, Industry, La Puente, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 11th and 12th highest average daily VMT in the south and northbound directions, respectively. The corridor experiences the 4th and 6th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.16: Azusa Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	10.2	20,369	56,602	44,813	47,599	169,383	666	925	1,098
	S	10.2	30,303	62,577	44,796	46,000	183,676	990	1,023	1,098
City of Azusa	N	2.9	5,811	16,148	12,785	13,580	48,324	666	925	1,098
	S	2.9	8,645	17,853	12,780	13,123	52,402	990	1,023	1,098
City of Covina	N	2.8	3,904	12,404	9,989	8,025	34,322	468	744	898
	S	2.8	5,478	13,350	10,221	8,745	37,793	657	800	919
City of Industry	N	4.9	7,887	28,784	21,987	31,845	90,503	534	975	1,117
	S	4.9	19,038	37,835	24,762	27,641	109,276	1,290	1,282	1,258
Los Angeles County	N	1.7	3,475	9,656	7,645	8,120	28,895	666	925	1,098
	S	1.7	5,169	10,675	7,642	7,847	31,333	990	1,023	1,098
City of La Puente	N	1.2	2,336	6,493	5,140	5,460	19,429	666	925	1,098
	S	1.2	3,476	7,178	5,138	5,276	21,069	990	1,023	1,098
City of West Covina	N	4.3	14,204	28,788	23,299	21,102	87,394	1,096	1,111	1,348
	S	4.3	13,981	26,139	19,797	21,663	81,580	1,079	1,008	1,146

Exhibit 4.17: Azusa Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	10.2	203	791	1,940	19.9	77.6	190.2	22.0	18.8	1.35	1.58	1.50	1.75
	S	10.2	229	625	1,689	22.5	61.3	165.5	23.2	20.5	1.29	1.45	1.39	1.57
City of Azusa	N	2.9	53	201	512	18.2	69.1	176.1	20.5	17.9	1.22	1.40	1.35	1.55
	S	2.9	52	105	307	17.7	36.1	105.3	21.9	21.0	1.17	1.22	1.30	1.39
City of Covina	N	2.8	26	130	334	9.2	46.9	120.2	21.5	19.4	1.20	1.33	1.35	1.52
	S	2.8	45	145	384	16.1	52.2	138.0	20.6	18.4	1.24	1.39	1.40	1.58
City of Industry	N	4.9	94	494	1,103	19.1	100.5	224.2	21.3	16.8	1.46	1.86	1.87	2.32
	S	4.9	176	479	1,318	35.8	97.4	267.8	23.2	19.1	1.42	1.72	1.63	1.92
Los Angeles County	N	1.7	47	186	445	27.0	107.0	255.8	19.6	16.5	1.51	1.74	2.21	2.05
	S	1.7	58	170	447	33.6	97.7	256.7	22.1	19.6	1.41	1.62	1.67	1.88
City of La Puente	N	1.2	7	113	156	6.4	96.7	132.9	30.1	16.5	1.13	2.07	1.38	2.57
	S	1.2	16	75	167	13.7	64.1	143.1	28.6	23.1	1.24	1.53	1.45	1.70
City of West Covina	N	4.3	139	356	946	32.2	82.3	218.9	24.2	21.9	1.39	1.53	1.57	1.68
	S	4.3	107	255	726	24.8	58.9	168.1	26.1	23.7	1.33	1.47	1.47	1.63

Exhibit 4.18: Azusa Avenue Hourly Flow Rates (VPH)

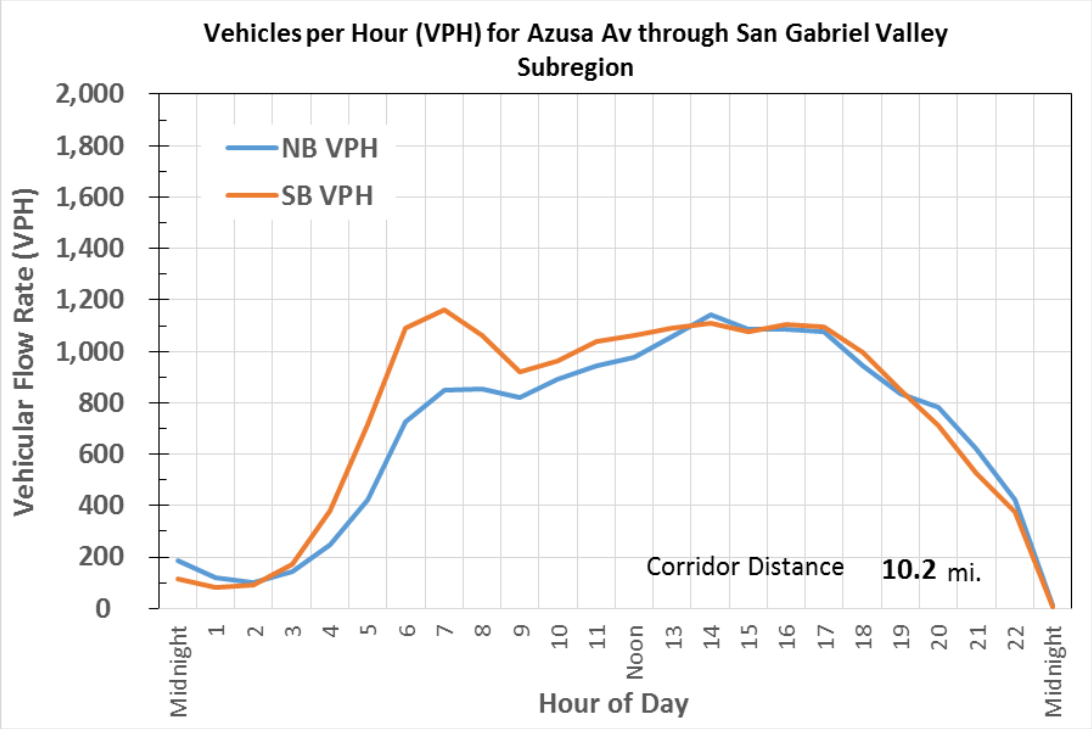


Exhibit 4.19: Azusa Avenue Hourly Congestion (VHD)

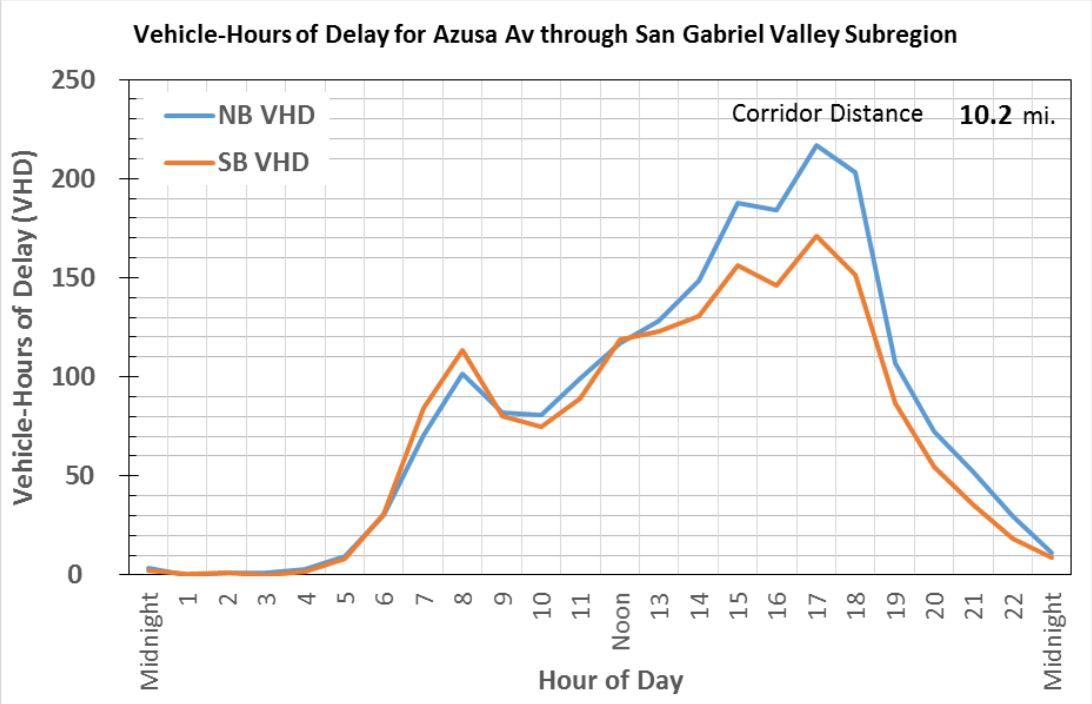
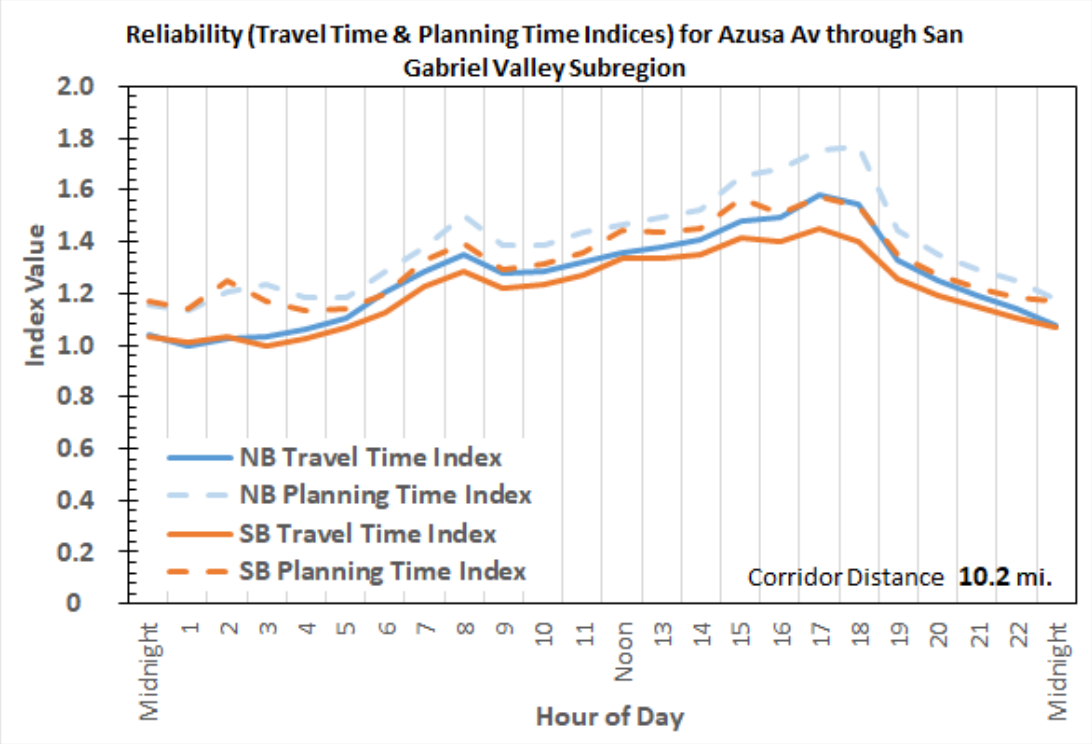


Exhibit 4.20: Azusa Avenue Hourly Reliability (TTI and PTI)



4.5 Baldwin Avenue

Baldwin Avenue is a 5.5-mile corridor, crossing the Cities of Arcadia, El Monte, and Temple City. The corridor carries a daily average VMT at the subregion's median of 78,900 per direction, presenting the 35th and 38th highest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 33th and 36th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.21: Baldwin Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	5.5	13,385	27,974	21,781	16,126	79,266	813	849	992
	S	5.5	11,032	27,273	22,675	16,542	77,521	670	828	1,033
City of Arcadia	N	3.3	9,333	17,700	11,945	9,012	47,990	957	908	919
	S	3.3	5,127	17,189	15,562	10,493	48,372	526	881	1,197
City of El Monte	N	1.3	3,121	6,522	5,078	3,760	18,481	813	849	992
	S	1.3	2,572	6,359	5,287	3,857	18,074	670	828	1,033
City of Temple City	N	1.1	2,261	5,358	4,816	3,506	15,942	667	790	1,065
	S	1.1	2,762	5,248	3,917	3,159	15,087	815	774	867

Exhibit 4.22: Baldwin Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	5.5	85	274	702	15.5	49.9	127.9	23.6	20.9	1.25	1.41	1.40	1.56
	S	5.5	81	241	641	14.8	44.0	116.7	24.5	23.1	1.31	1.39	1.43	1.51
City of Arcadia	N	3.3	55	161	469	17.0	49.5	144.2	24.2	21.2	1.27	1.44	1.42	1.61
	S	3.3	22	177	387	6.6	54.3	119.0	27.3	22.5	1.18	1.43	1.29	1.59
City of El Monte	N	1.3	41	95	248	32.3	73.9	193.7	21.1	18.4	1.43	1.63	1.78	1.91
	S	1.3	39	53	178	30.2	41.2	139.4	17.8	21.5	1.57	1.30	1.85	1.46
City of Temple City	N	1.1	12	38	90	10.4	33.3	79.5	25.6	23.8	1.19	1.28	1.40	1.47
	S	1.1	16	27	86	14.1	23.5	76.1	28.6	28.3	1.25	1.26	1.43	1.42

Exhibit 4.23: Baldwin Avenue Hourly Flow Rates (VPH)

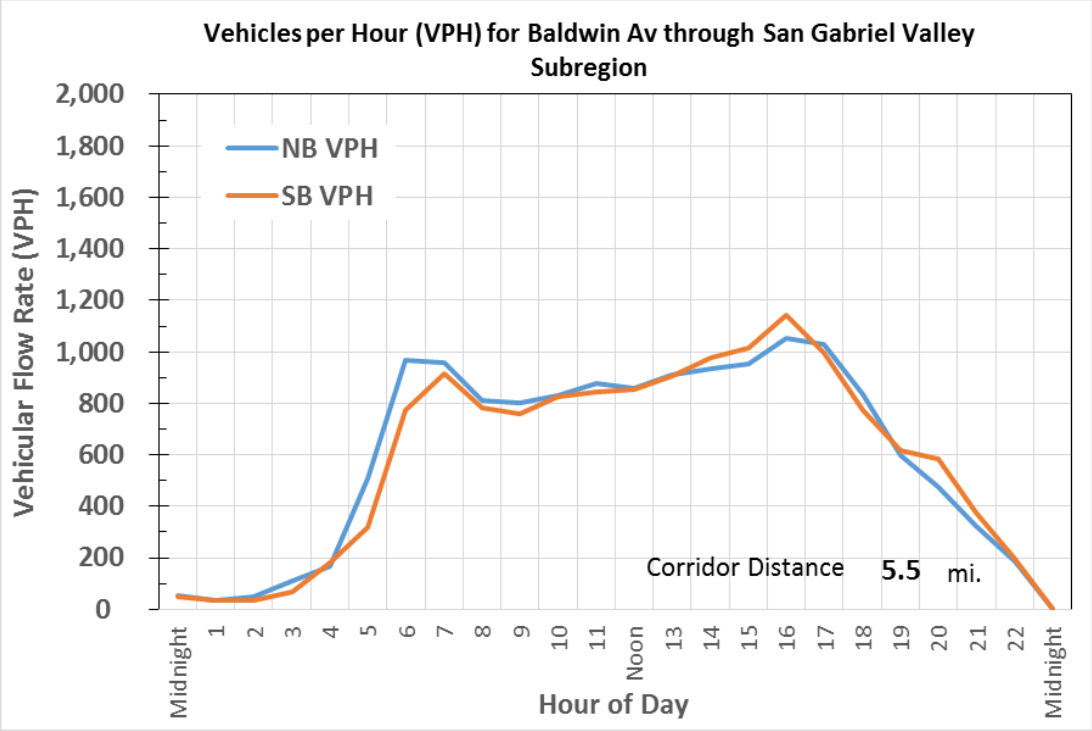


Exhibit 4.24: Baldwin Avenue Hourly Congestion (VHD)

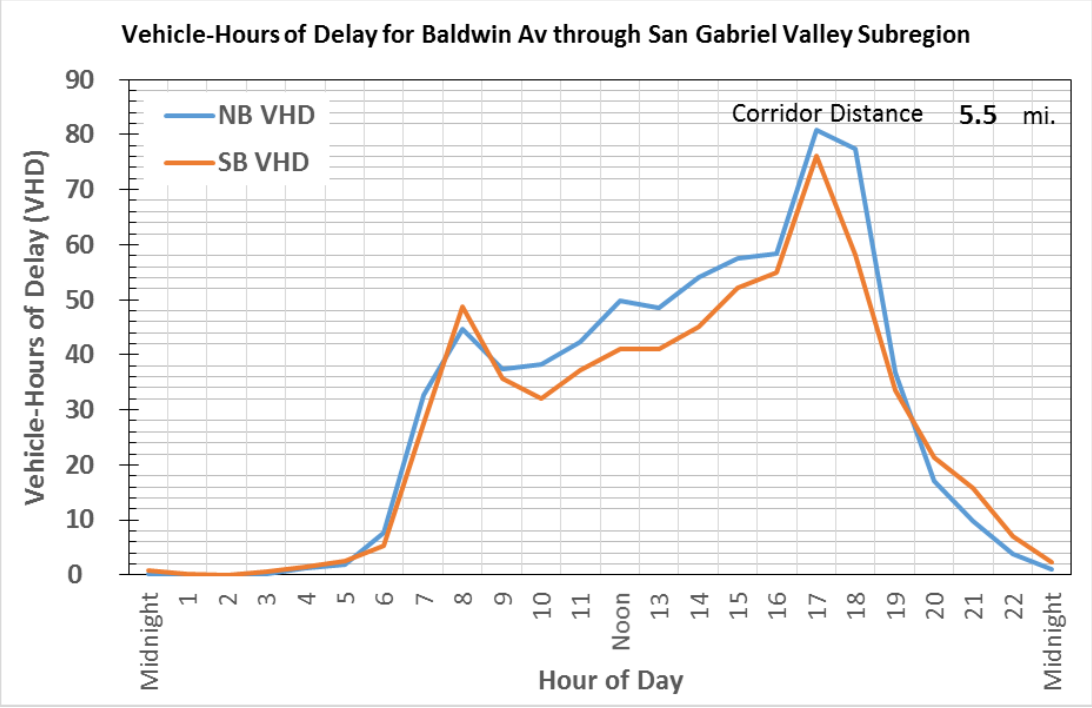
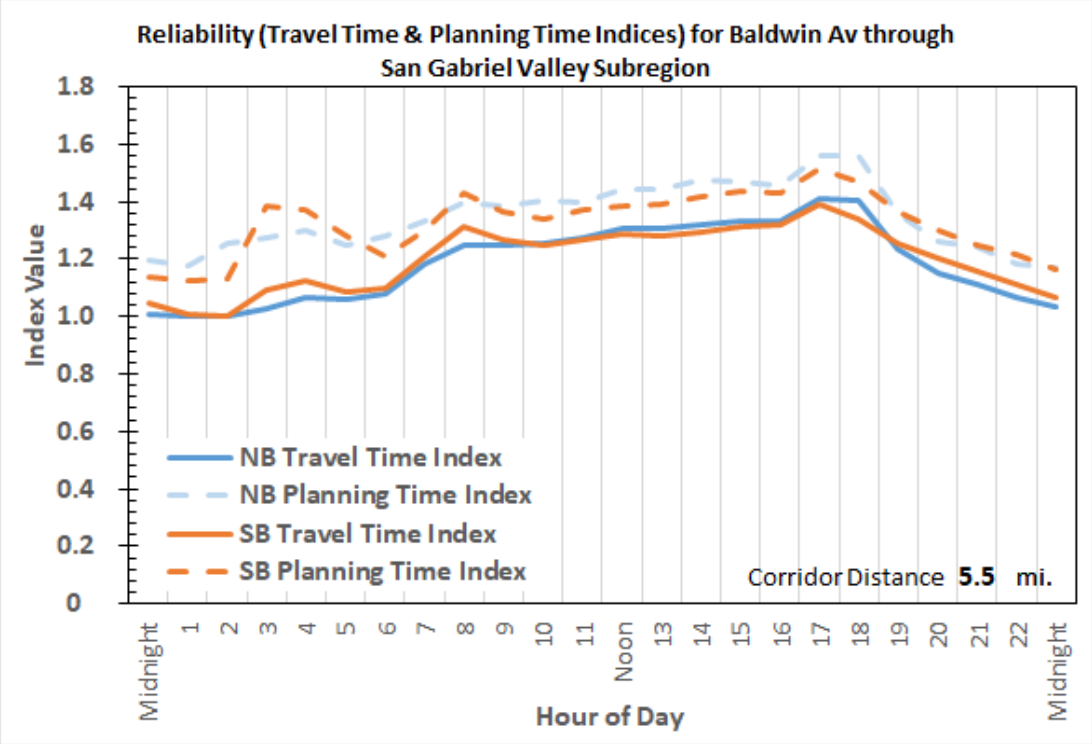


Exhibit 4.25: Baldwin Avenue Hourly Reliability (TTI and PTI)



4.6 Citrus Avenue

Citrus Avenue is a 4.4-mile corridor in the San Gabriel Valley, crossing the Cities of Azusa, Covina, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 27th and 28th lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 38th and 47th highest average daily VHD in the subregion in the north and southbound directions, respectively.

Exhibit 4.26: Citrus Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	4.4	8,616	20,431	13,991	11,678	54,716	651	772	793
	S	4.4	5,043	20,253	16,106	13,979	55,382	381	765	913
City of Azusa	N	1.4	3,375	7,312	4,843	3,948	19,477	821	889	884
	S	1.4	1,913	6,841	5,721	5,303	19,778	465	832	1,044
City of Covina	N	2.2	3,152	8,590	6,147	5,283	23,172	480	654	702
	S	2.2	1,947	9,171	6,842	5,393	23,352	296	698	781
Los Angeles County	N	1.2	2,305	5,467	3,744	3,125	14,641	651	772	793
	S	1.2	1,350	5,419	4,310	3,740	14,819	381	765	913
City of West Covina	N	0.2	469	1,112	761	636	2,978	651	772	793
	S	0.2	274	1,102	877	761	3,014	381	765	913

Exhibit 4.27: Citrus Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	4.4	99	184	616	22.4	41.7	139.6	20.0	19.5	1.33	1.37	1.46	1.52
	S	4.4	29	191	451	6.6	43.2	102.2	21.9	19.4	1.16	1.31	1.26	1.43
City of Azusa	N	1.4	42	56	211	30.8	40.9	153.8	19.9	20.5	1.38	1.33	1.57	1.51
	S	1.4	15	67	174	10.6	49.3	126.9	22.2	20.5	1.23	1.33	1.39	1.55
City of Covina	N	2.2	30	79	238	13.5	35.9	108.6	19.8	18.5	1.25	1.34	1.38	1.48
	S	2.2	7	76	167	3.2	34.9	76.5	21.7	18.6	1.09	1.28	1.23	1.44
Los Angeles County	N	1.2	29	44	157	24.4	36.9	133.1	22.1	22.7	1.42	1.38	1.60	1.53
	S	1.2	12	47	124	10.6	39.4	105.2	23.4	22.4	1.28	1.34	1.42	1.49
City of West Covina	N	0.2	4	12	35	15.1	49.5	145.7	18.3	16.3	1.21	1.35	1.42	1.59
	S	0.2	2	17	41	7.7	72.0	171.6	19.2	15.5	1.19	1.47	1.34	1.69

Exhibit 4.28: Citrus Avenue Hourly Flow Rates (VPH)

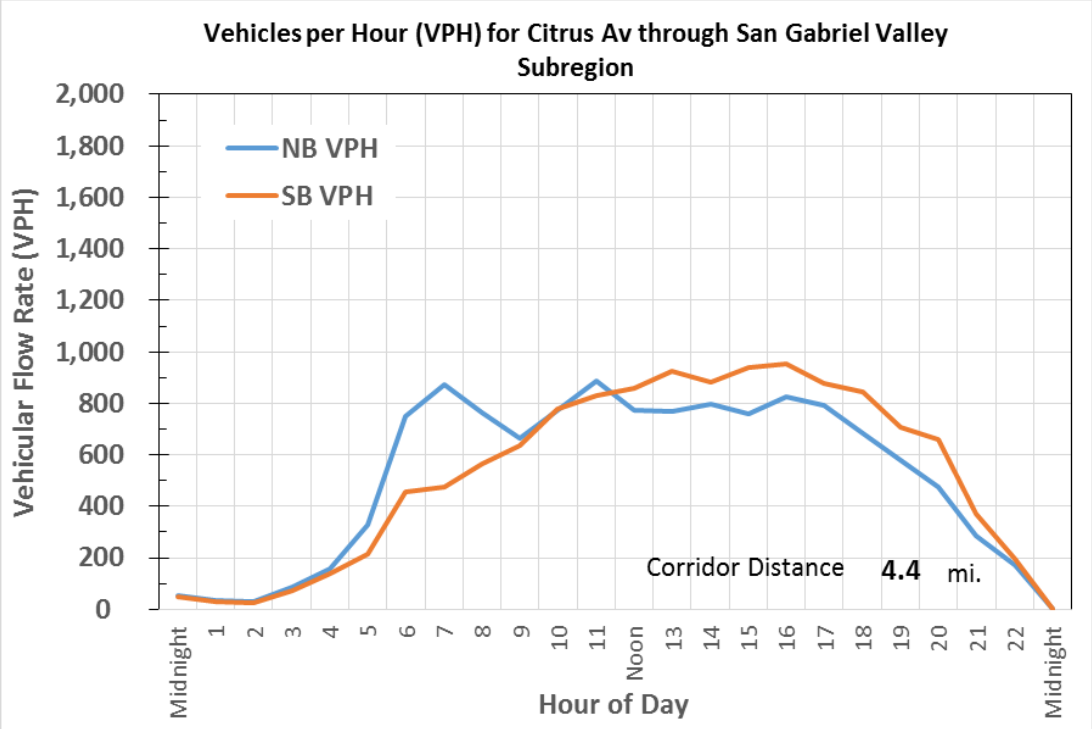


Exhibit 4.29: Citrus Avenue Hourly Congestion (VHD)

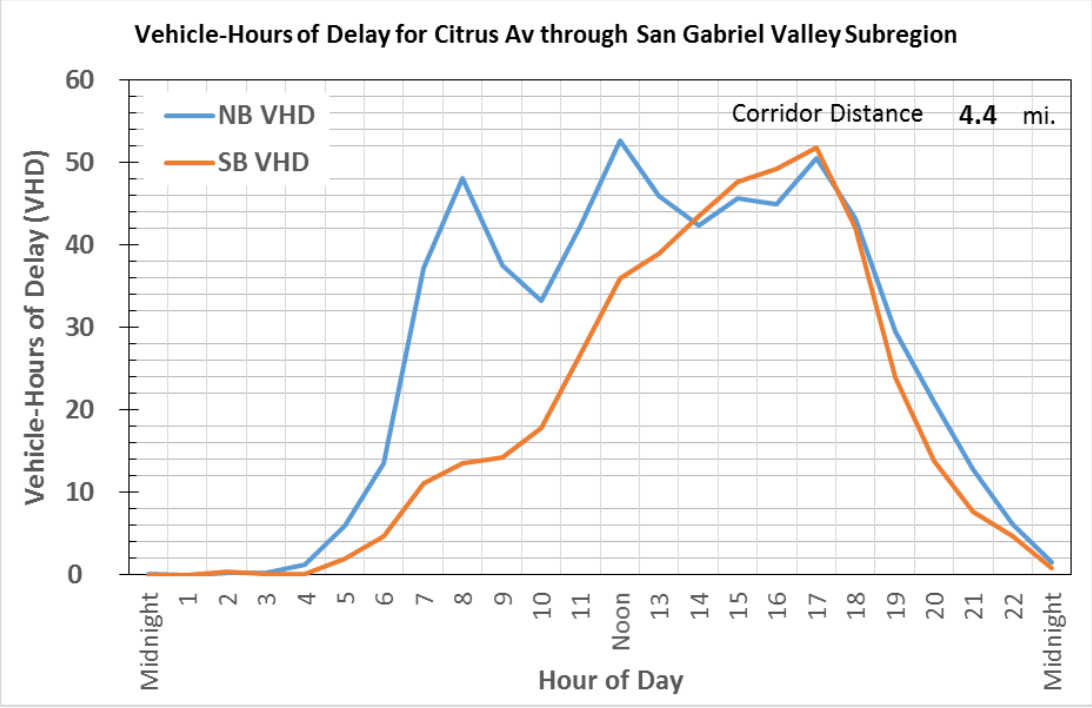
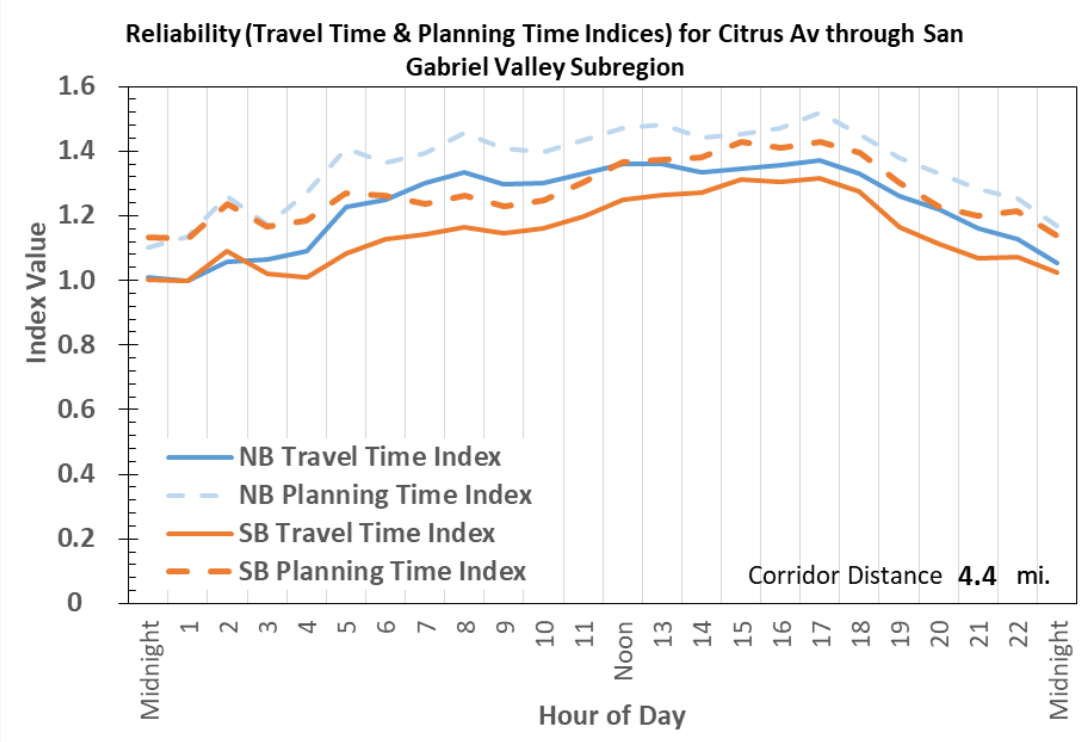


Exhibit 4.30: Citrus Avenue Hourly Reliability (TTI and PTI)



4.7 Colima/Golden Springs Roads

Colima and Golden Springs Roads represent a 17.6-mile corridor in the San Gabriel Valley, crossing the Cities of Diamond Bar, Industry, and portions of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, representing the 6th and 8th highest average daily VMT in the east and westbound directions, respectively. The corridor experiences the 5th and 9th highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.31: Colima/Golden Springs Rd Travel Demand and Productivity

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	17.6	23,380	73,351	88,760	48,519	234,011	443	695	1,261
	W	17.6	48,738	78,065	49,462	38,868	215,133	923	739	703
City of Diamond Bar	E	5.4	5,691	21,874	29,739	14,294	71,599	353	679	1,384
	W	5.4	16,978	22,503	12,267	9,621	61,369	1,054	698	571
City of Industry	E	1.2	1,770	6,095	5,754	3,906	17,525	509	876	1,240
	W	1.2	2,402	6,886	4,706	3,485	17,479	690	989	1,014
Los Angeles County	E	7.1	9,445	29,632	35,857	19,601	94,535	443	695	1,261
	W	7.1	19,689	31,537	19,982	15,702	86,909	923	739	703

Exhibit 4.32: Colima/Golden Springs Rd Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	17.6	114	950	1,743	6.5	54.0	99.0	28.9	24.2	1.21	1.45	1.28	1.64
	W	17.6	241	446	1,454	13.7	25.3	82.6	29.1	26.9	1.24	1.35	1.34	1.48
City of Diamond Bar	E	5.4	24	262	416	4.6	48.9	77.4	29.0	24.1	1.17	1.40	1.26	1.63
	W	5.4	75	73	305	14.0	13.7	56.8	30.0	29.4	1.22	1.24	1.38	1.39
City of Industry	E	1.2	3	85	182	2.6	73.1	156.6	29.2	21.0	1.10	1.54	1.21	2.16
	W	1.2	8	86	234	6.7	74.6	201.5	27.4	19.8	1.17	1.62	1.33	1.99
Los Angeles County	E	7.1	50	412	791	7.0	58.0	111.3	28.8	24.5	1.23	1.45	1.33	1.66
	W	7.1	110	214	676	15.5	30.0	95.1	28.6	25.8	1.27	1.41	1.39	1.56

Exhibit 4.33: Colima/Golden Springs Rd Hourly Flow Rates (VPH)

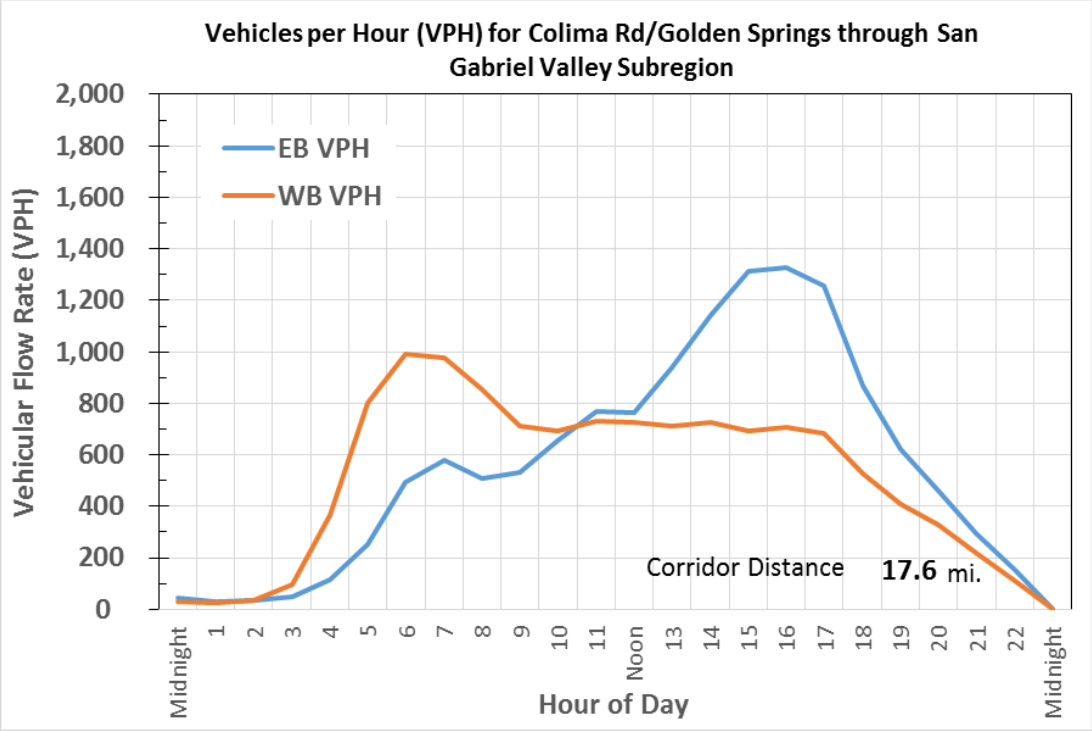


Exhibit 4.34: Colima/Golden Springs Rd Hourly Congestion (VHD)

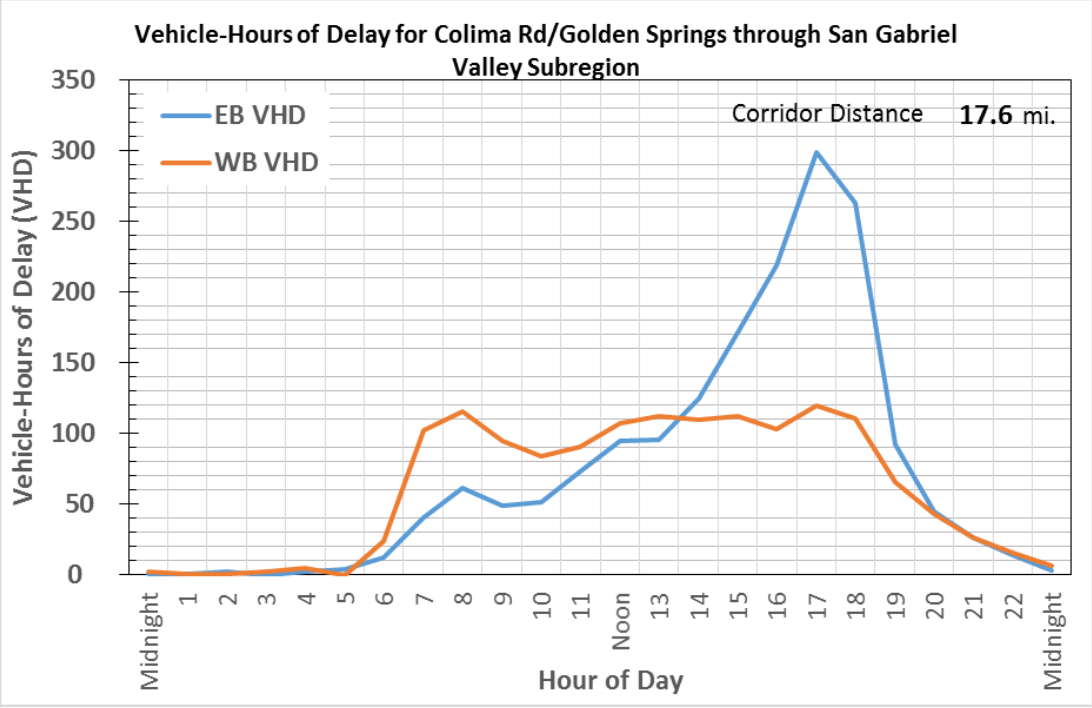
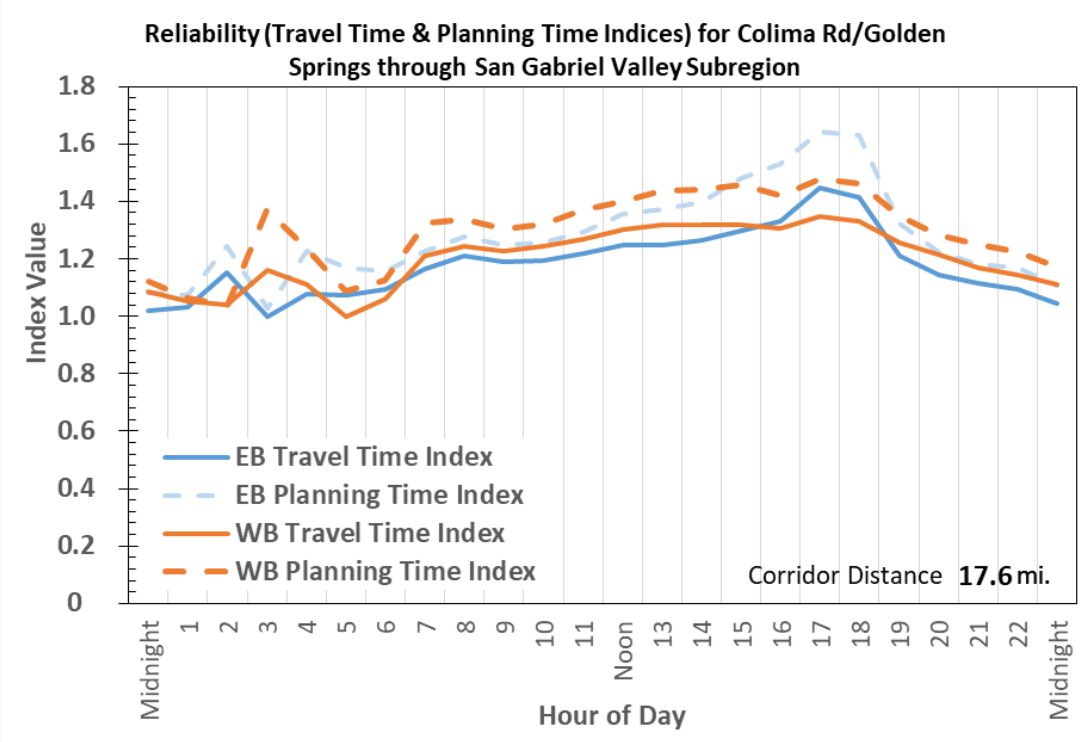


Exhibit 4.35: Colima/Golden Springs Rd Hourly Reliability (TTI and PTI)



4.8 Del Mar Boulevard

Del Mar Boulevard is a 3.4-mile corridor in the San Gabriel Valley, crossing the City of Pasadena. The corridor carries a daily average VMT below the subregion's median of 78,900 per direction, presenting the 7th and 9th lowest average daily VMT in the east and westbound directions, respectively. The corridor experiences the 52nd and 58th highest average daily VHD in the west and eastbound directions, respectively.

Exhibit 4.36: Del Mar Boulevard Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	3.4	3,705	9,813	10,252	5,121	28,891	360	477	747
	W	3.4	7,040	11,432	8,640	5,114	32,226	684	555	630
City of Pasadena	E	3.4	3,705	9,813	10,252	5,121	28,891	360	477	747
	W	3.4	7,040	11,432	8,640	5,114	32,226	684	555	630

Exhibit 4.37: Del Mar Boulevard Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	3.4	34	105	242	10.0	30.6	70.7	19.5	19.0	1.27	1.30	1.41	1.51
	W	3.4	69	114	350	20.1	33.2	102.0	18.9	18.6	1.36	1.39	1.55	1.57
City of Pasadena	E	3.4	34	105	242	10.0	30.6	70.7	19.5	19.0	1.27	1.30	1.41	1.51
	W	3.4	69	114	350	20.1	33.2	102.0	18.9	18.6	1.36	1.39	1.55	1.57

Exhibit 4.38: Del Mar Boulevard Hourly Flow Rates (VPH)

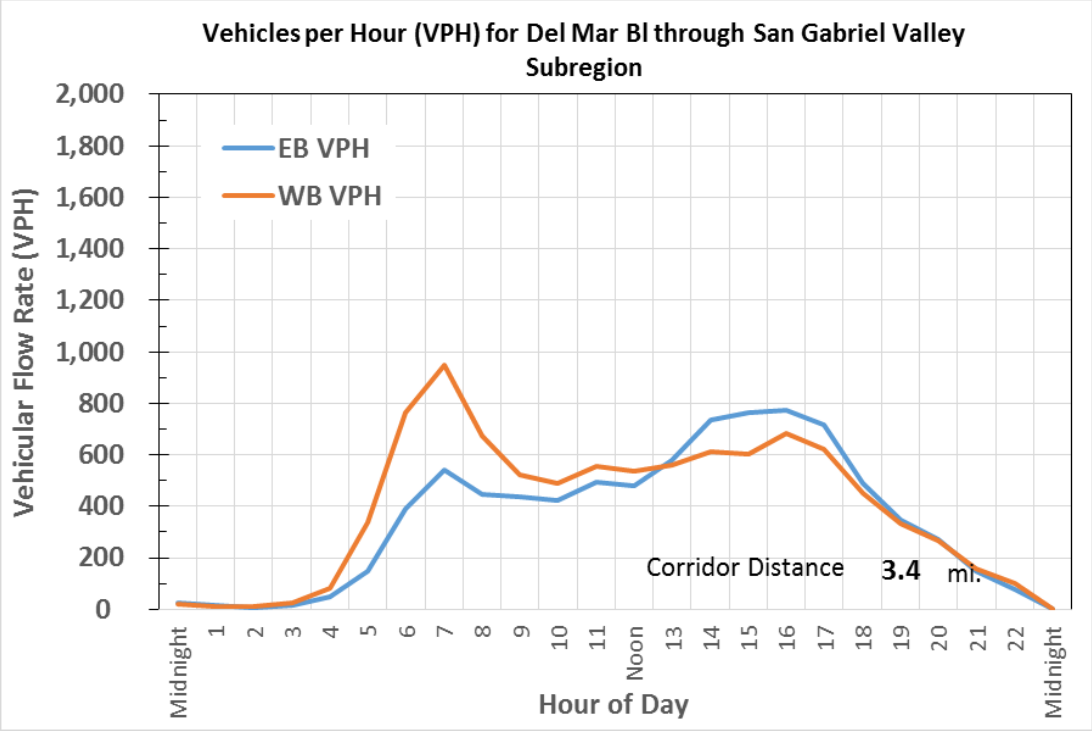


Exhibit 4.39: Del Mar Boulevard Hourly Congestion (VHD)

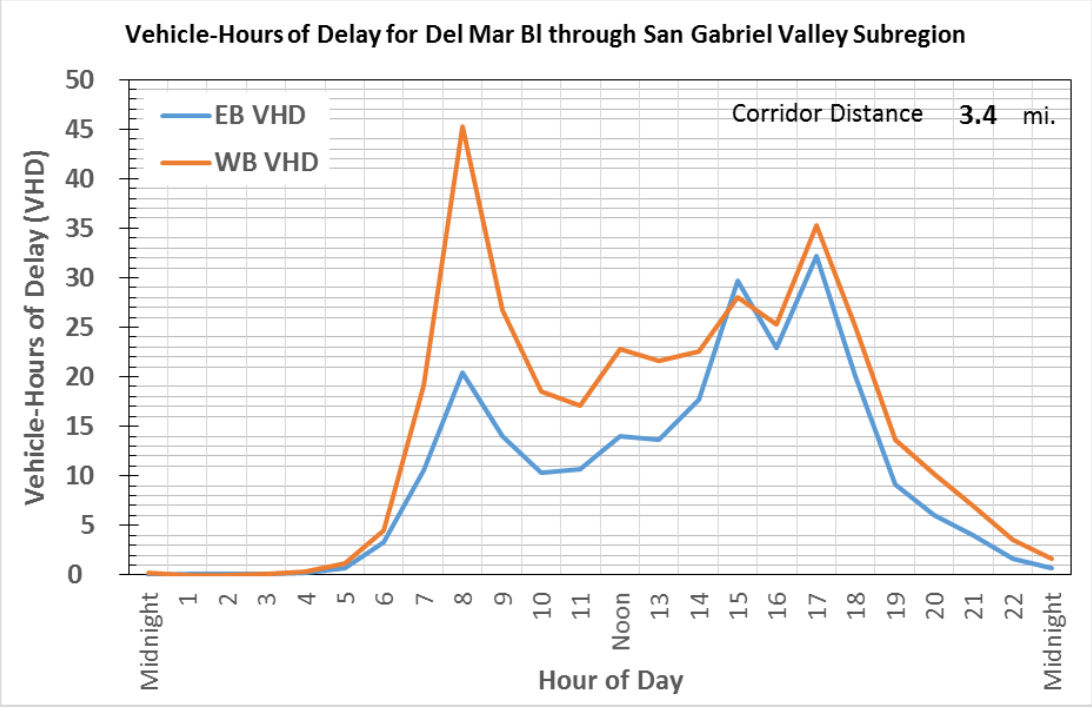
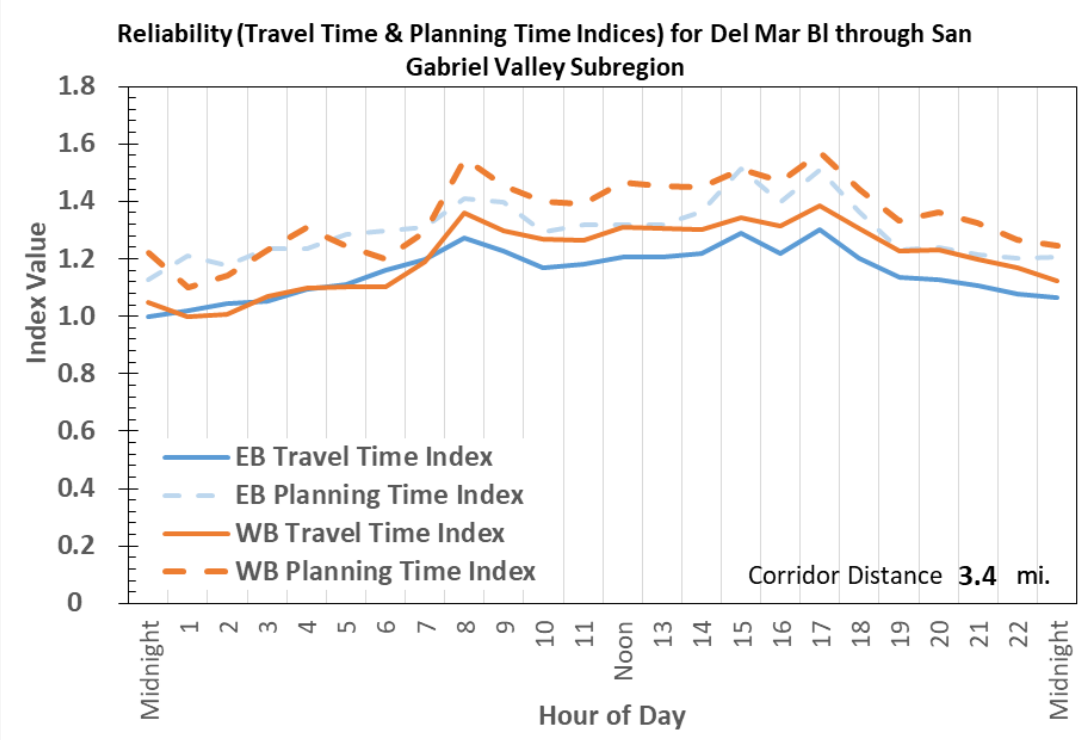


Exhibit 4.40: Del Mar Boulevard Hourly Reliability (TTI and PTI)



4.9 Diamond Bar Boulevard

Diamond Bar Boulevard is a 6.4-mile corridor in the San Gabriel Valley, crossing the City of Diamond Bar. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 28th and 32nd highest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 27th and 37th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.41: Diamond Bar Bl Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	6.4	11,483	25,546	33,002	18,796	88,826	594	661	1,281
	S	6.4	26,726	33,960	21,952	18,645	101,283	1,383	879	852
City of Diamond Bar	N	6.4	11,483	25,546	33,002	18,796	88,826	594	661	1,281
	S	6.4	26,726	33,960	21,952	18,645	101,283	1,383	879	852

Exhibit 4.42: Diamond Bar Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	6.4	88	437	798	13.7	67.9	123.9	27.8	23.5	1.31	1.55	1.45	1.77
	S	6.4	180	173	622	28.0	26.8	96.5	29.7	29.6	1.31	1.31	1.44	1.42
City of Diamond Bar	N	6.4	88	437	798	13.7	67.9	123.9	27.8	23.5	1.31	1.55	1.45	1.77
	S	6.4	180	173	622	28.0	26.8	96.5	29.7	29.6	1.31	1.31	1.44	1.42

Exhibit 4.43: Diamond Bar Bl Hourly Flow Rates (VPH)

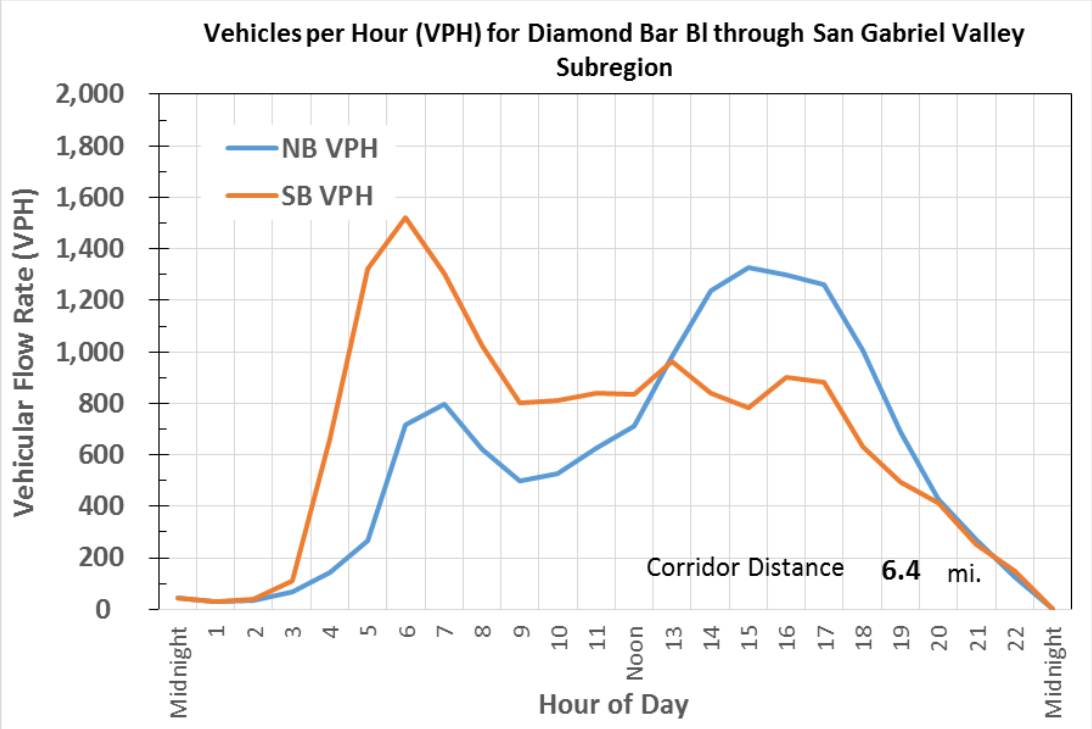


Exhibit 4.44: Diamond Bar Bl Hourly Congestion (VHD)

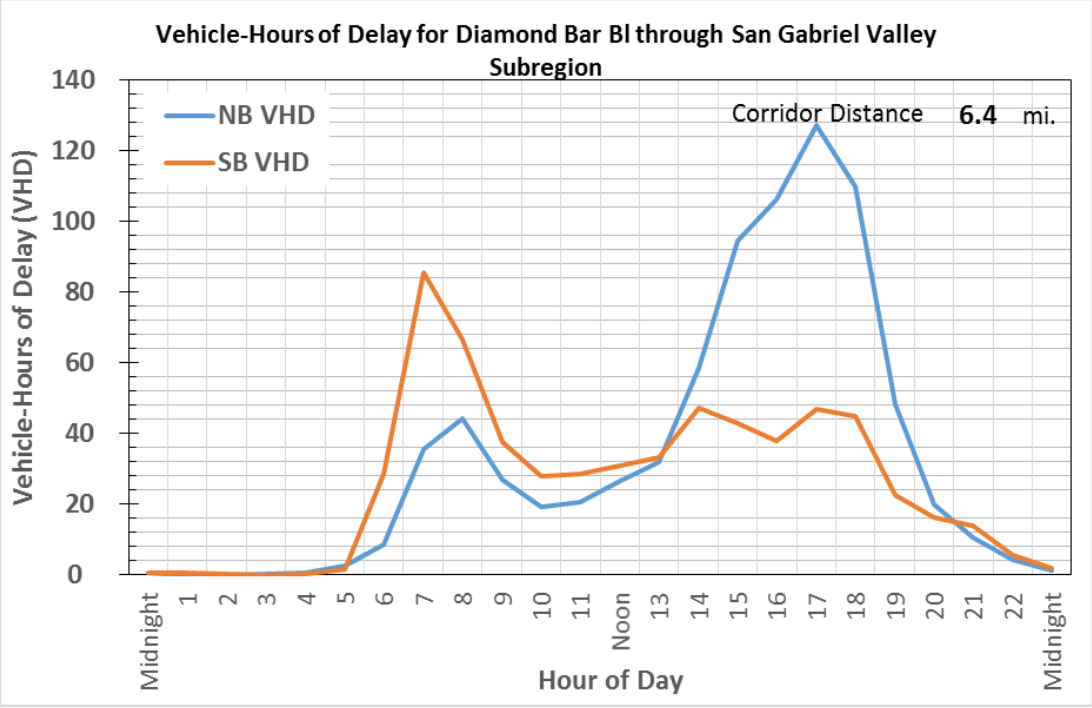
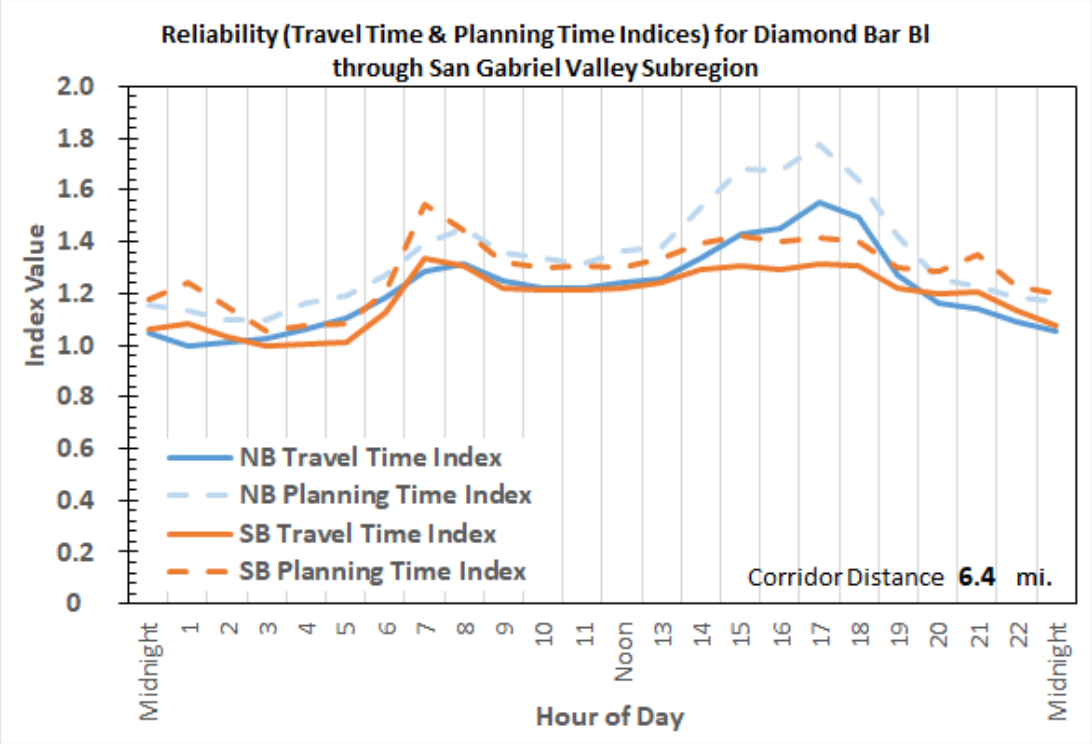


Exhibit 4.45: Diamond Bar Bl Hourly Reliability (TTI and PTI)



4.10 Fair Oaks Avenue

Fair Oak Avenue is a 5.4-mile corridor in the San Gabriel Valley, crossing the Cities of Pasadena and South Pasadena. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 29th and 32nd lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 28th and 34th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.46: Fair Oaks Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	5.4	9,538	20,940	17,181	12,737	60,396	584	642	790
	S	5.4	13,881	24,161	18,664	13,287	69,992	851	740	858
City of Pasadena	N	4.1	5,955	15,361	12,772	9,869	43,957	483	623	777
	S	4.1	11,099	18,746	13,246	9,083	52,174	900	760	806
City of South Pasadena	N	1.4	3,677	5,742	4,539	2,957	16,915	895	699	828
	S	1.4	2,872	5,583	5,572	4,320	18,347	699	679	1,017

Exhibit 4.47: Fair Oaks Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	5.4	101	251	693	18.6	46.2	127.3	18.9	18.4	1.36	1.40	1.54	1.56
	S	5.4	144	277	788	26.5	51.0	144.9	21.0	19.4	1.36	1.47	1.47	1.63
City of Pasadena	N	4.1	39	140	386	9.6	34.0	93.8	20.8	19.2	1.19	1.29	1.30	1.43
	S	4.1	116	151	527	28.2	36.8	128.1	20.6	20.9	1.35	1.33	1.48	1.46
City of South Pasadena	N	1.4	73	109	310	53.3	79.3	226.2	14.8	16.4	1.89	1.71	2.51	2.04
	S	1.4	26	135	264	19.1	98.9	192.3	22.2	15.9	1.32	1.84	1.49	2.21

Exhibit 4.48: Fair Oaks Avenue Hourly Flow Rates (VPH)

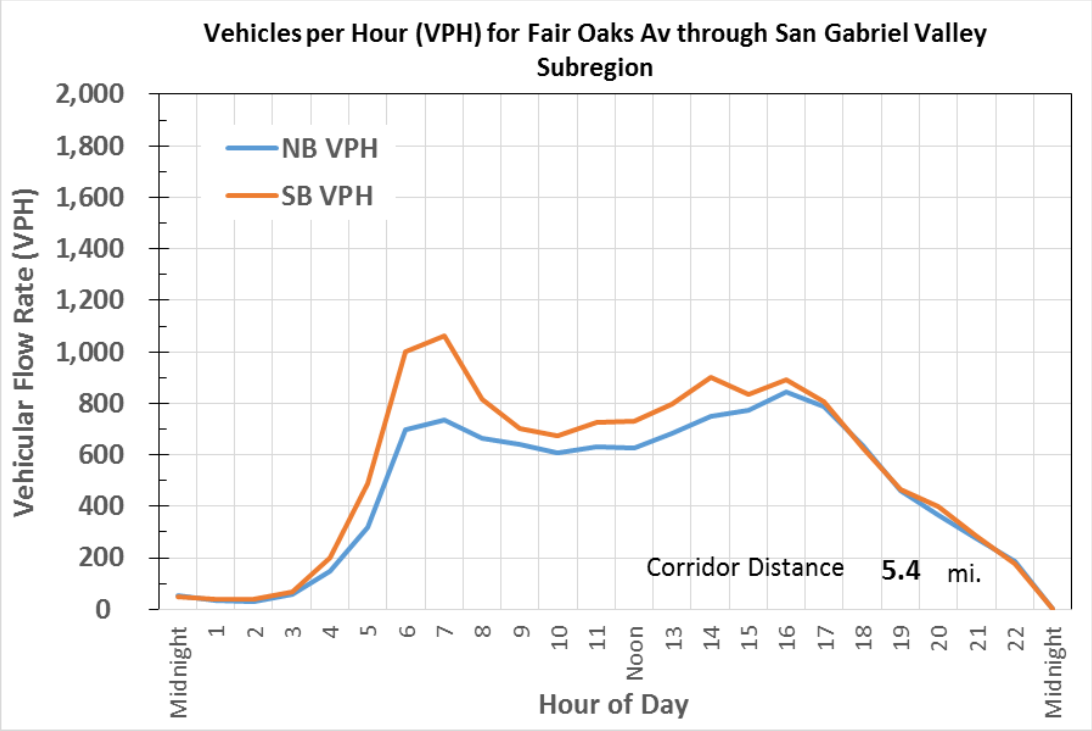


Exhibit 4.49: Fair Oaks Avenue Hourly Congestion (VHD)

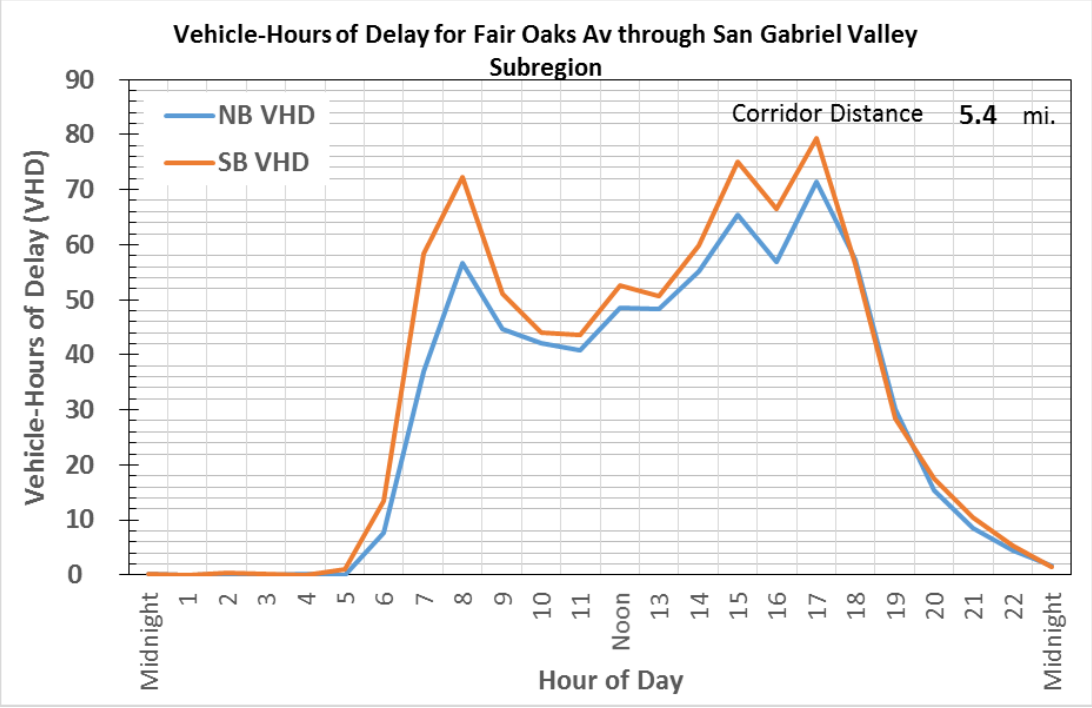
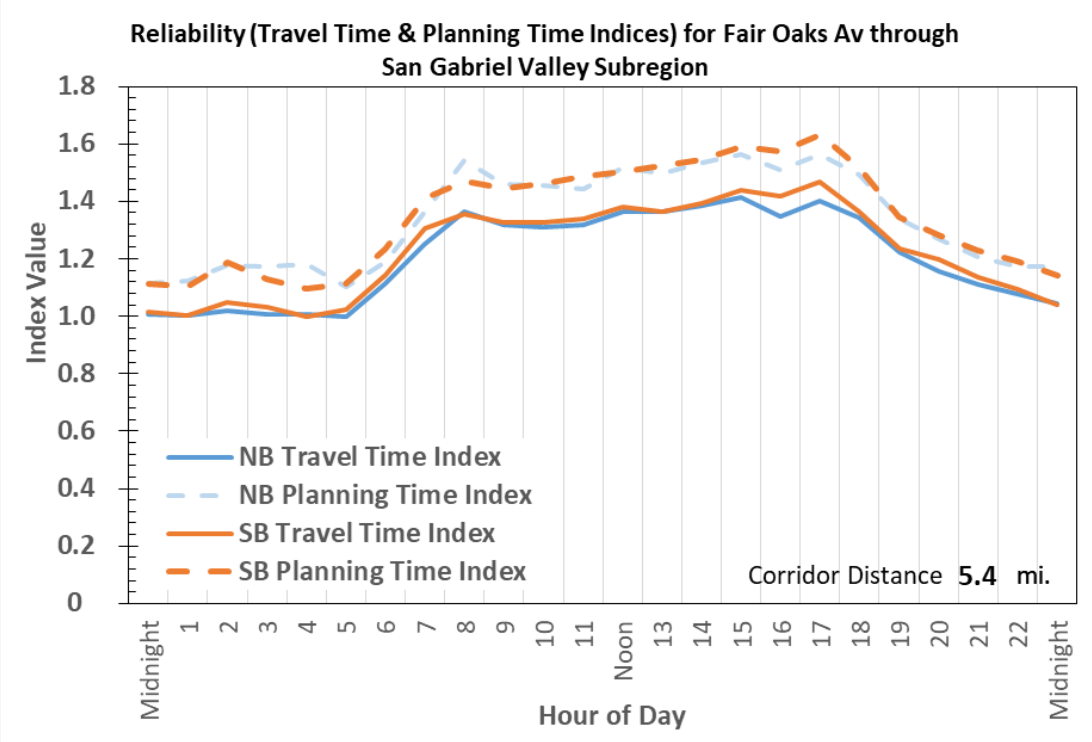


Exhibit 4.50: Fair Oaks Avenue Hourly Reliability (TTI and PTI)



4.11 Foothill Boulevard/Alosta Avenue

Foothill Boulevard/Alosta Avenue is a 3.1-mile corridor in the San Gabriel Valley, crossing the Cities of Azusa, Glendora, and Irwindale. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 7th and 15th lowest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 53rd and 61st highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.51: Foothill Bl/Alosta Av Travel Demand and Productivity

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	3.1	2,730	10,793	12,419	6,808	32,750	294	580	1,002
	W	3.1	7,267	10,667	6,219	6,015	30,168	781	573	502
City of Azusa	E	2.9	2,536	10,027	11,538	6,325	30,426	294	580	1,002
	W	2.9	6,752	9,910	5,777	5,588	28,027	781	573	502
City of Glendora	E	0.5	449	1,776	2,043	1,120	5,388	294	580	1,002
	W	0.5	1,196	1,755	1,023	990	4,963	781	573	502
City of Irwindale	E	0.2	211	836	961	527	2,535	294	580	1,002
	W	0.2	563	826	481	466	2,336	781	573	502

Exhibit 4.52: Foothill Bl/Alosta Av Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	3.1	24	175	325	7.8	56.6	104.7	23.0	20.2	1.28	1.46	1.40	1.61
	W	3.1	55	56	223	17.7	17.9	71.9	23.5	23.5	1.27	1.26	1.40	1.39
City of Azusa	E	2.9	25	166	314	8.5	57.7	109.0	22.5	20.1	1.30	1.45	1.44	1.61
	W	2.9	55	51	209	19.3	17.7	72.5	23.0	23.2	1.27	1.26	1.41	1.39
City of Glendora	E	0.5	3	23	46	5.7	45.6	89.3	22.9	20.5	1.21	1.35	1.34	1.56
	W	0.5	7	12	47	14.2	23.1	91.4	23.3	23.2	1.34	1.35	1.59	1.56
City of Irwindale	E	0.2	1	15	21	4.7	64.2	86.4	30.3	19.8	1.17	1.79	1.37	2.34
	W	0.2	2	3	8	9.1	11.6	35.2	31.8	29.9	1.14	1.21	1.36	1.48

Exhibit 4.53: Foothill Bl/Alosta Av Hourly Flow Rates (VPH)

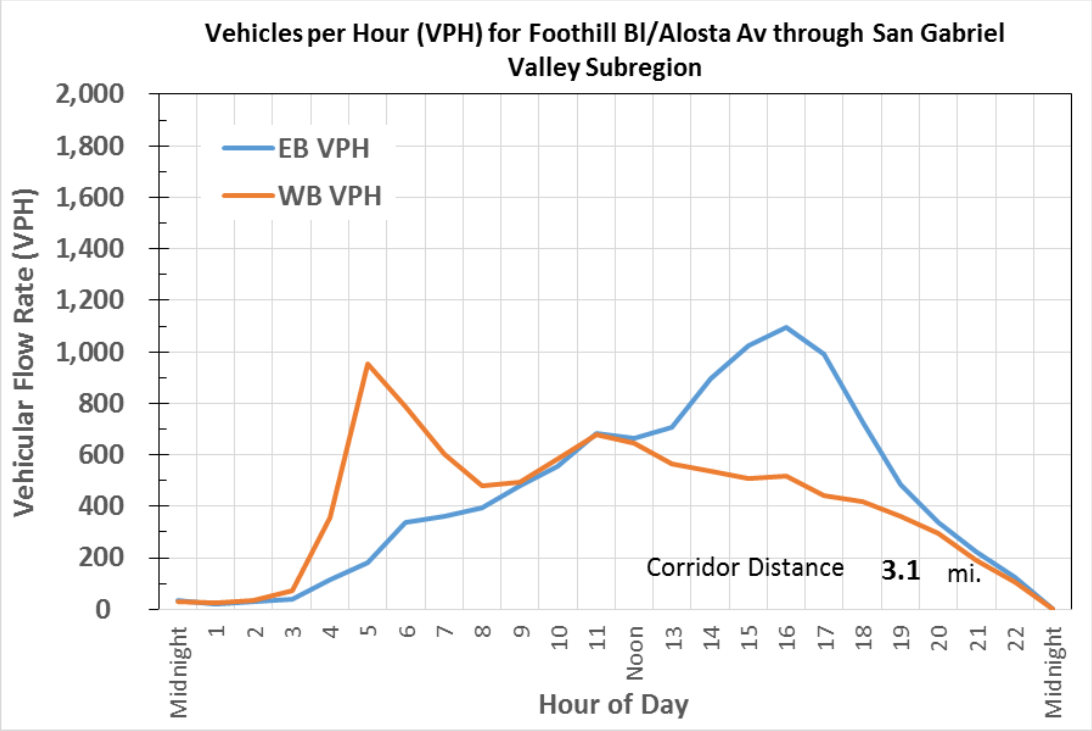


Exhibit 4.54: Foothill Bl/Alosta Av Hourly Congestion (VHD)

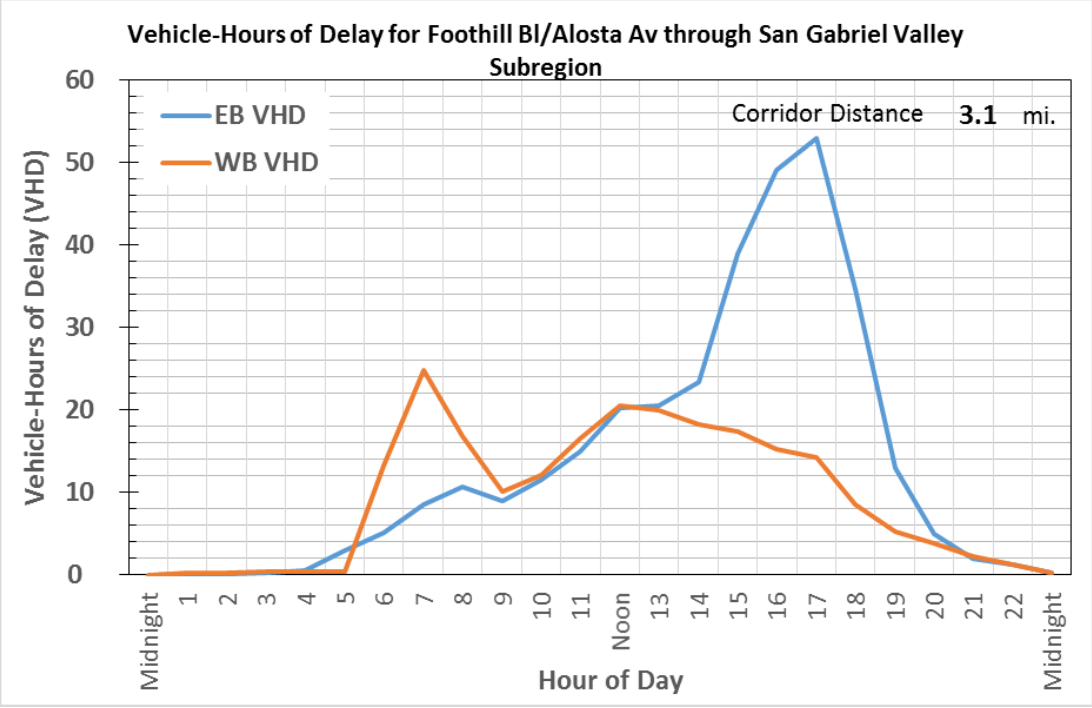
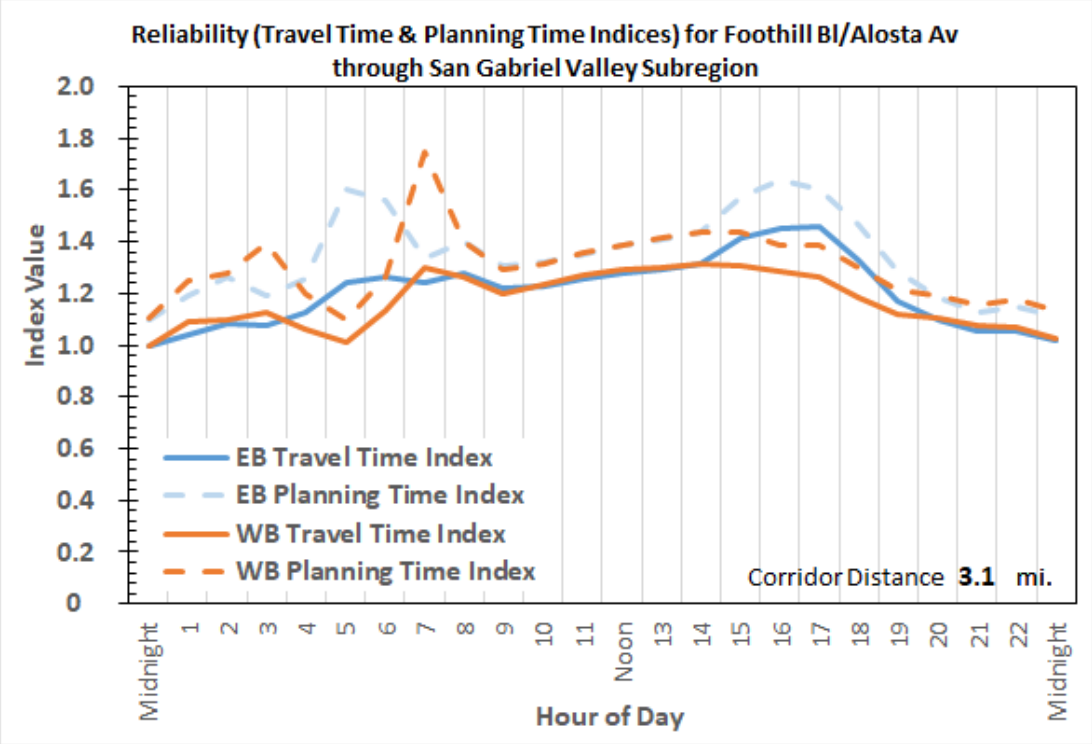


Exhibit 4.55: Foothill Bl/Alosta Av Hourly Reliability (TTI and PTI)



4.12 Foothill Boulevard/Walnut Street

Foothill Boulevard/Walnut Street is a 10-mile corridor in the San Gabriel Valley, crossing the Cities of Arcadia, Monrovia, Pasadena, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 27th and 29th highest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 41st and 42nd highest average daily VHD in the west and eastbound directions, respectively.

Exhibit 4.56: Foothill Bl/Walnut St Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	10.0	9,724	32,427	40,784	17,890	100,824	323	539	1,016
	W	10.0	26,701	36,261	28,116	13,892	104,970	886	602	700
City of Arcadia	E	2.7	2,196	8,269	13,689	4,743	28,897	271	510	1,267
	W	2.7	9,764	10,023	7,850	3,497	31,133	1,205	619	727
Los Angeles County	E	0.2	145	485	610	267	1,507	323	539	1,016
	W	0.2	399	542	420	208	1,568	886	602	700
City of Monrovia	E	2.0	1,967	6,560	8,250	3,619	20,396	323	539	1,016
	W	2.0	5,399	7,332	5,685	2,809	21,224	886	602	700
City of Pasadena	E	5.4	5,789	17,966	17,932	9,655	51,342	360	559	836
	W	5.4	10,591	18,973	14,601	7,756	51,920	659	590	681

Exhibit 4.57: Foothill Bl/Walnut St Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	10.0	38	310	534	3.8	30.9	53.3	22.2	20.1	1.11	1.23	1.21	1.47
	W	10.0	136	171	545	13.5	17.1	54.3	22.0	22.3	1.19	1.18	1.33	1.26
City of Arcadia	E	2.7	15	180	269	5.6	66.8	99.5	28.3	22.7	1.25	1.55	1.37	2.13
	W	2.7	84	35	176	31.0	13.0	65.3	22.4	27.2	1.39	1.14	1.69	1.26
Los Angeles County	E	0.2	1	9	16	4.7	60.7	108.2	19.0	15.3	1.09	1.35	1.26	1.80
	W	0.2	2	2	7	14.0	12.4	44.9	20.9	22.6	1.20	1.11	1.48	1.33
City of Monrovia	E	2.0	14	91	166	7.0	44.7	81.7	25.8	22.9	1.25	1.41	1.46	1.62
	W	2.0	36	34	119	17.9	16.8	58.8	26.7	27.4	1.25	1.22	1.45	1.32
City of Pasadena	E	5.4	40	179	435	7.5	33.4	81.2	19.2	18.2	1.19	1.25	1.31	1.45
	W	5.4	38	112	302	7.2	20.9	56.4	20.5	19.3	1.13	1.20	1.24	1.31

Exhibit 4.58: Foothill Bl/Walnut St Hourly Flow Rates (VPH)

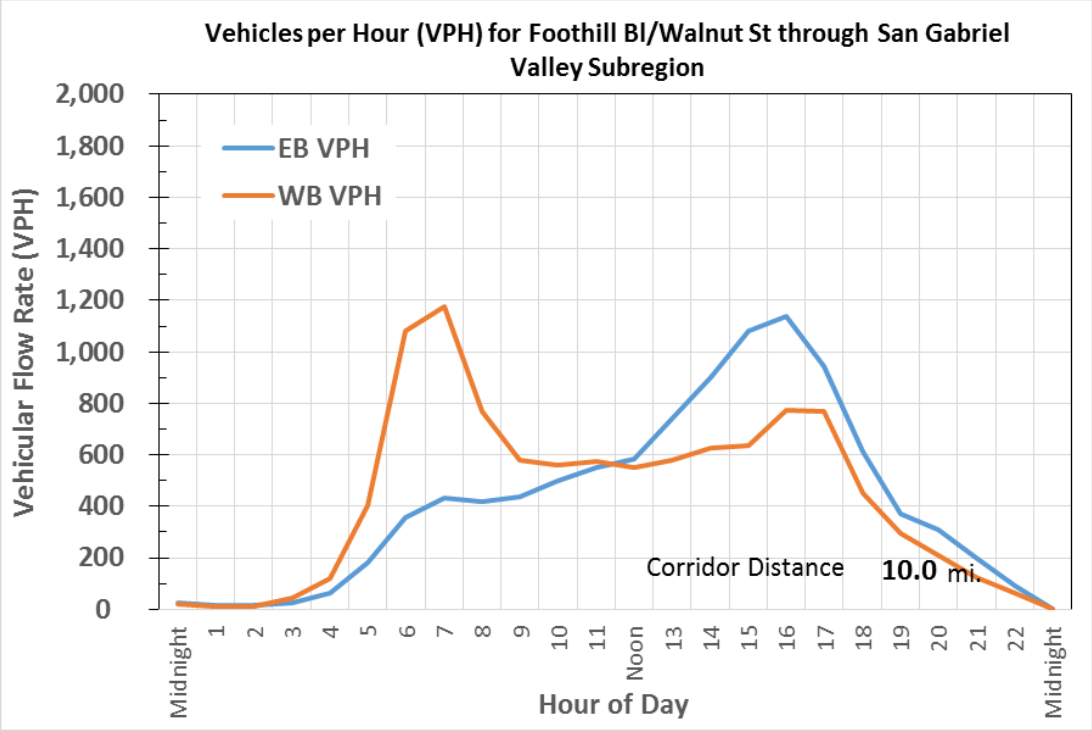


Exhibit 4.59: Foothill Bl/Walnut St Hourly Congestion (VHD)

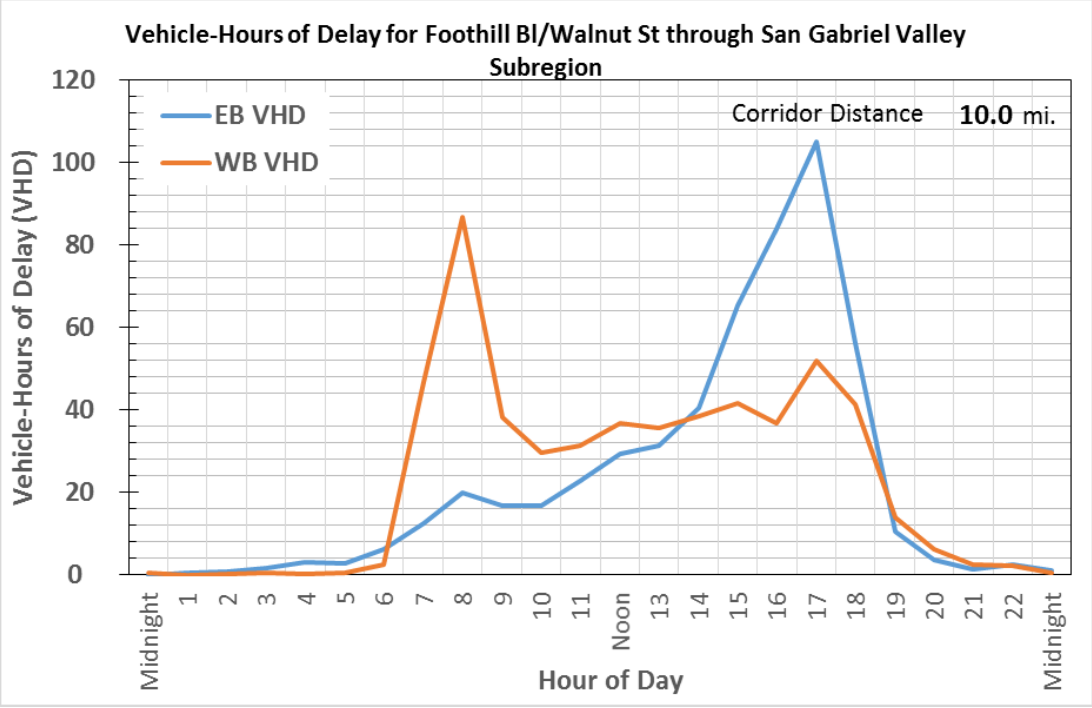
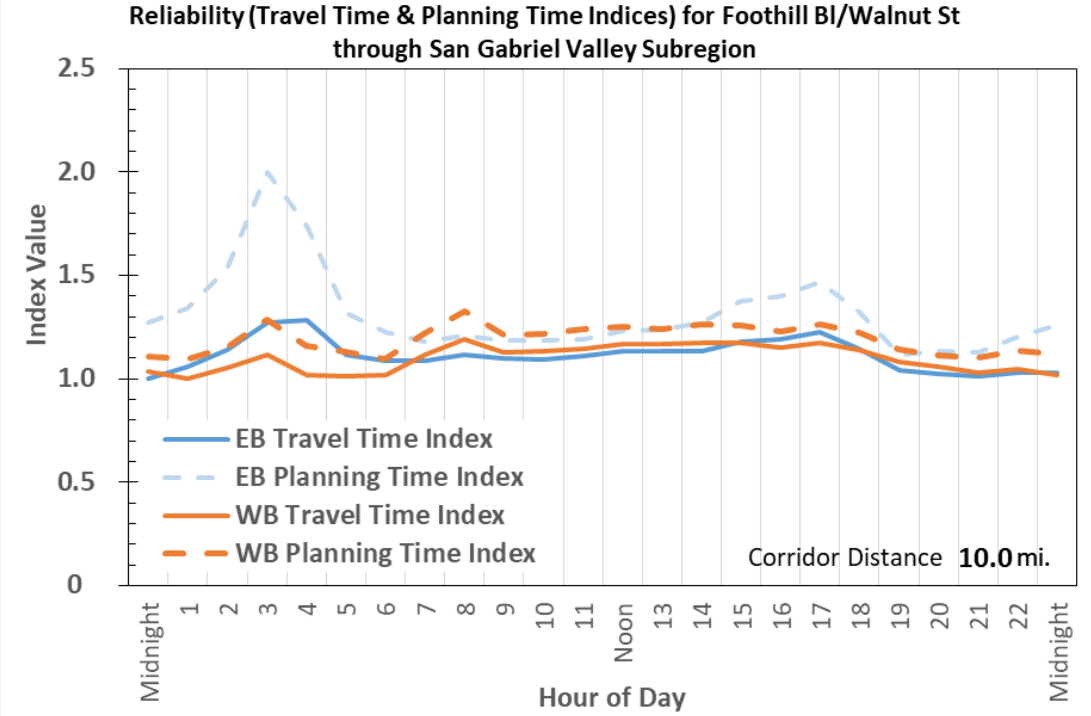


Exhibit 4.60: Foothill Bl/Walnut St Hourly Reliability (TTI and PTI)



4.13 Fremont Avenue

Fremont Avenue is a 3.9-mile corridor in the San Gabriel Valley, crossing the Cities of Alhambra and South Pasadena. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 25th and 26th lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 30th and 39th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.61: Fremont Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	3.9	7,685	15,344	10,972	10,485	44,488	664	663	711
	S	3.9	7,602	16,398	12,412	9,728	46,139	656	708	804
City of Alhambra	N	2.1	5,062	10,130	6,620	7,659	29,470	800	800	784
	S	2.1	4,401	10,352	8,233	6,711	29,697	695	818	976
City of South Pasadena	N	1.8	2,754	5,478	4,447	3,119	15,797	525	522	635
	S	1.8	3,238	6,256	4,398	3,228	17,120	617	596	628

Exhibit 4.62: Fremont Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	3.9	136	286	743	35.3	74.2	192.6	17.1	15.5	1.69	1.87	2.17	2.09
	S	3.9	99	256	587	25.6	66.3	152.0	19.6	17.0	1.49	1.72	1.74	1.97
City of Alhambra	N	2.1	65	144	383	30.8	68.2	181.6	19.8	16.9	1.46	1.72	1.72	1.92
	S	2.1	57	169	362	27.2	80.0	171.6	19.9	16.9	1.52	1.79	1.87	2.08
City of South Pasadena	N	1.8	64	138	335	36.4	78.6	191.7	14.7	14.2	1.95	2.03	2.87	2.41
	S	1.8	39	87	214	22.2	50.0	122.2	19.3	17.1	1.42	1.60	1.63	1.90

Exhibit 4.63: Fremont Avenue Hourly Flow Rates (VPH)

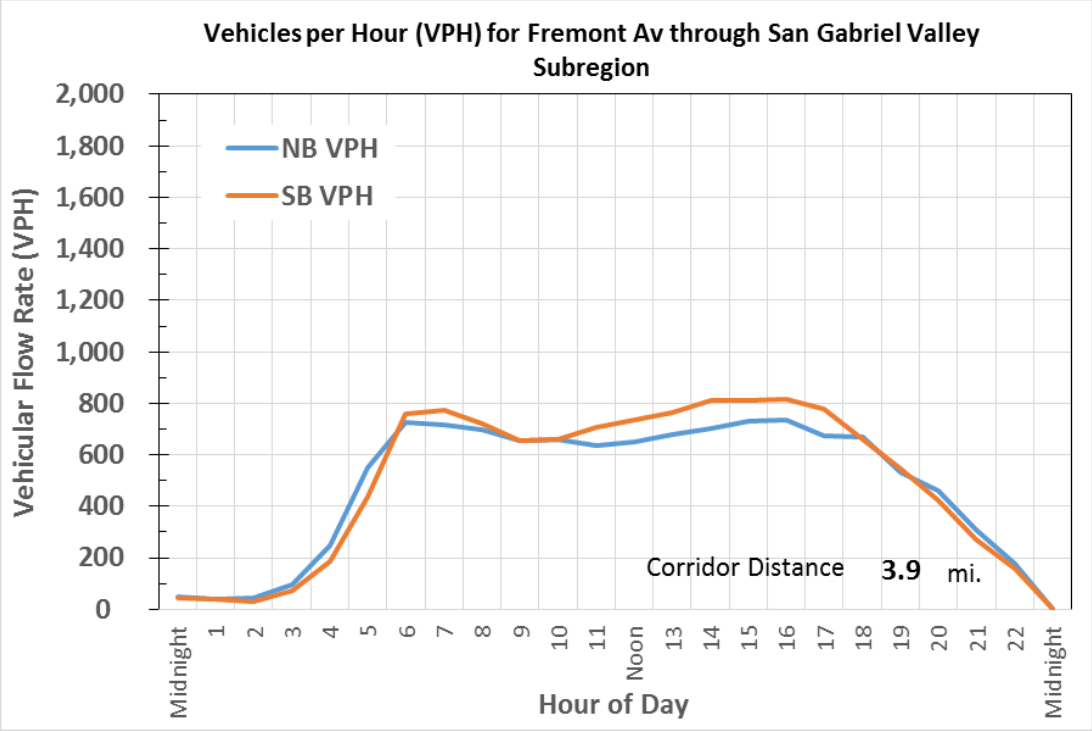


Exhibit 4.64: Fremont Avenue Hourly Congestion (VHD)

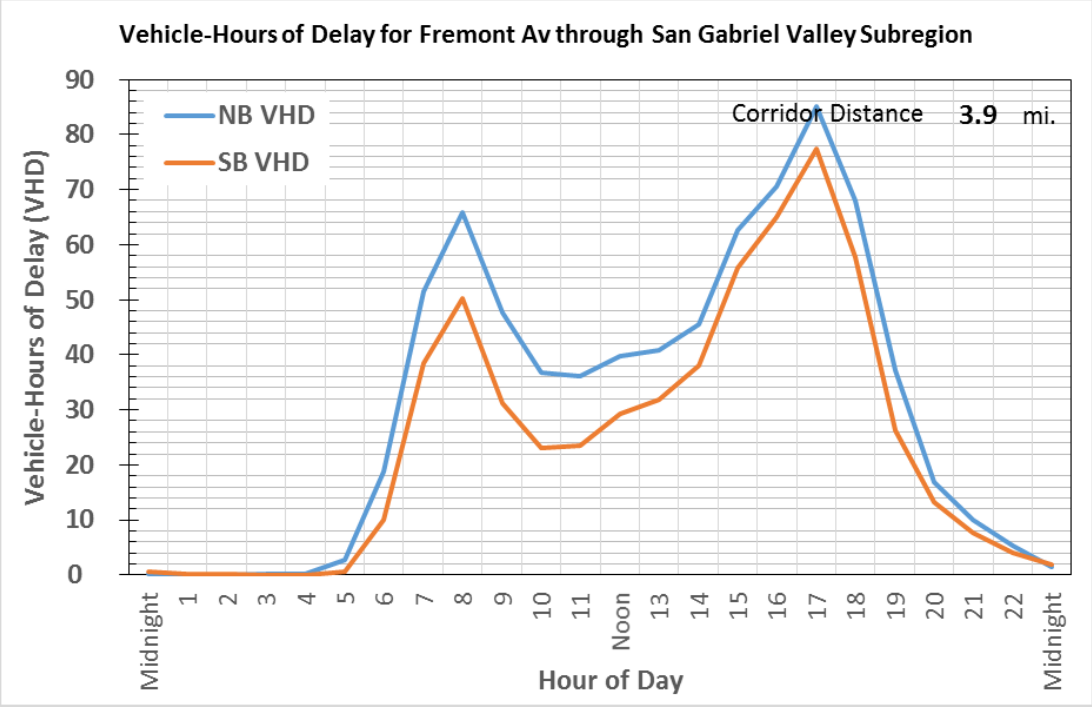
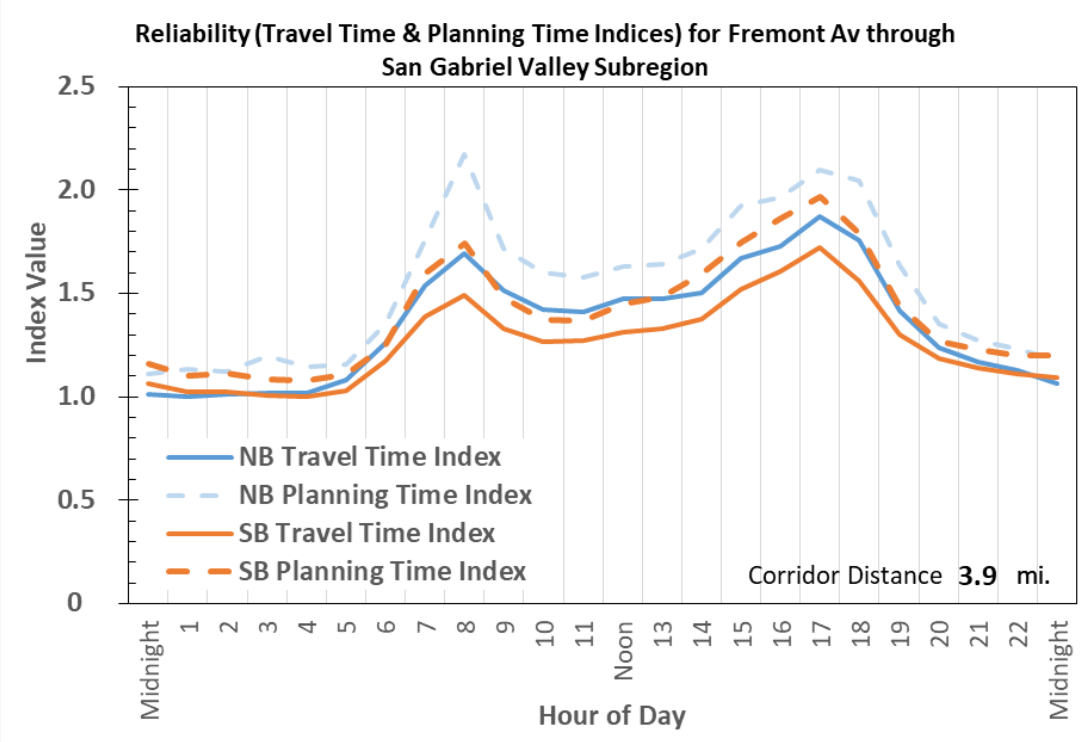


Exhibit 4.65: Fremont Avenue Hourly Reliability (TTI and PTI)



4.14 Fullerton Road

Fullerton Road is a 2-mile corridor in the San Gabriel Valley, crossing the City of Industry and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 11th and 17th lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 48th and 56th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.66: Fullerton Road Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	2.0	5,868	10,981	8,908	7,160	32,917	993	929	1,131
	S	2.0	7,054	10,541	10,197	8,657	36,448	1,194	892	1,294
City of Industry	N	0.1	298	557	452	363	1,671	993	929	1,131
	S	0.1	358	535	518	439	1,850	1,194	892	1,294
Los Angeles County	N	1.9	5,600	10,479	8,501	6,833	31,414	993	929	1,131
	S	1.9	6,732	10,059	9,731	8,261	34,783	1,194	892	1,294

Exhibit 4.67: Fullerton Road Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	2.0	38	163	413	19.2	82.5	209.9	25.4	20.0	1.35	1.71	1.76	2.23
	S	2.0	43	117	281	21.8	59.5	142.8	27.6	24.6	1.30	1.46	1.51	1.76
City of Industry	N	0.1	5	8	31	53.1	82.8	311.3	15.2	18.2	1.87	1.56	2.84	2.06
	S	0.1	1	8	21	12.7	84.1	207.8	20.3	16.6	1.18	1.44	1.48	2.00
Los Angeles County	N	1.9	33	156	387	17.4	83.0	205.9	26.3	20.0	1.31	1.73	1.70	2.27
	S	1.9	43	111	269	22.9	59.1	142.8	28.2	25.2	1.32	1.47	1.54	1.78

Exhibit 4.68: Fullerton Road Hourly Flow Rates (VPH)

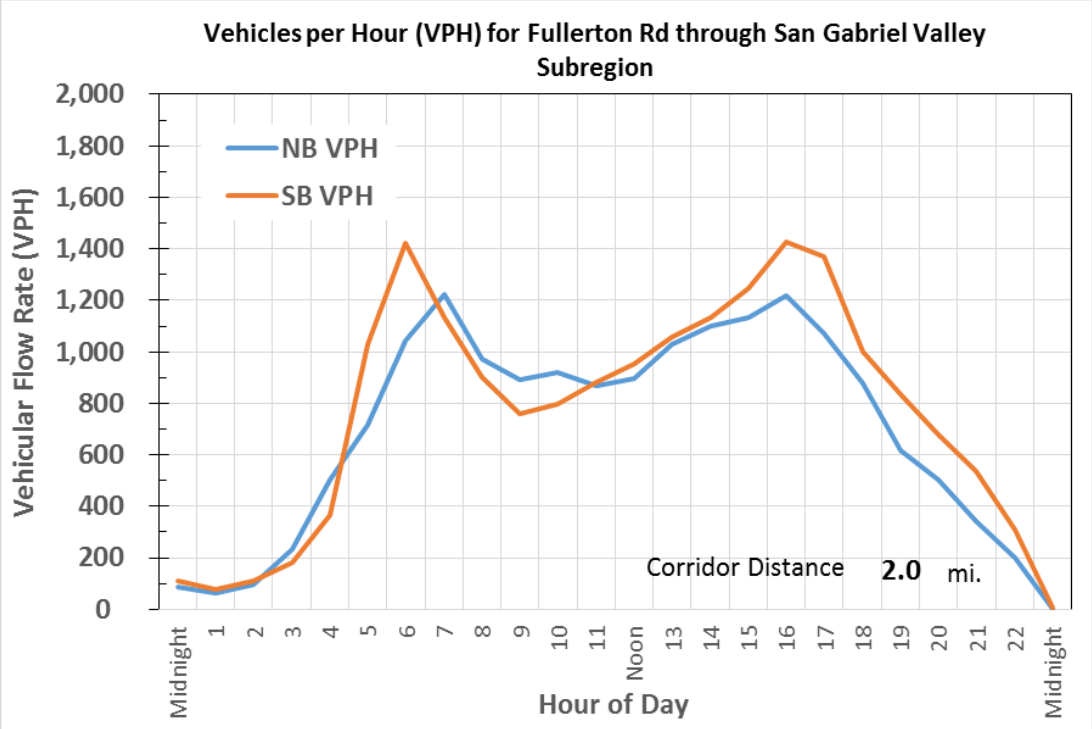


Exhibit 4.69: Fullerton Road Hourly Congestion (VHD)

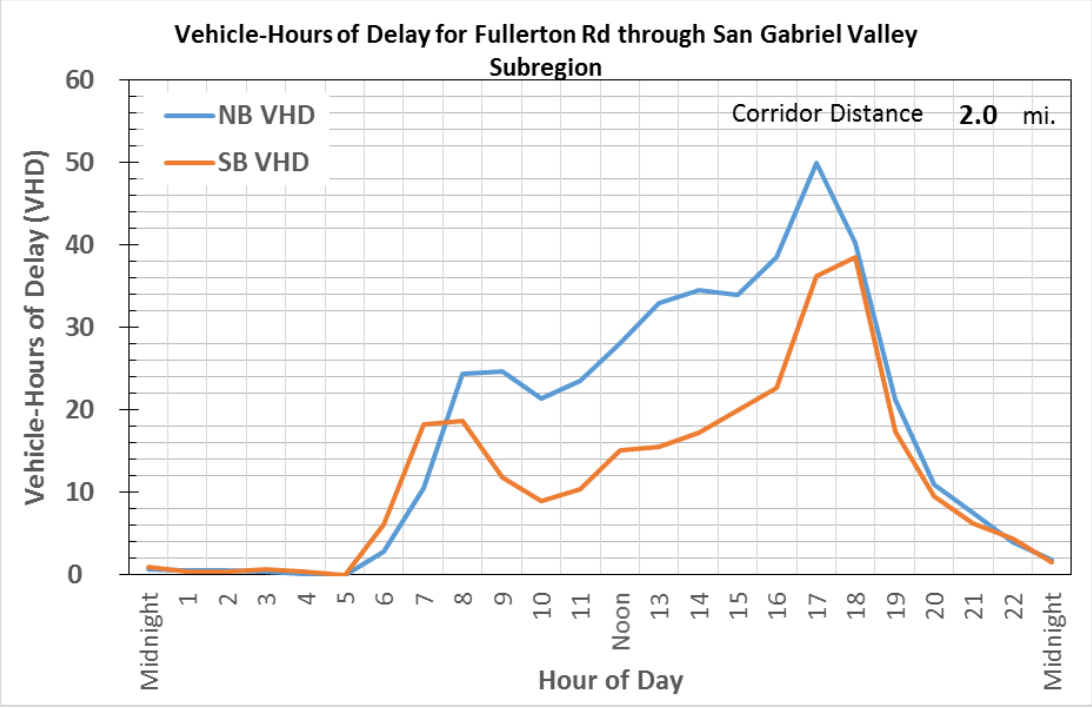
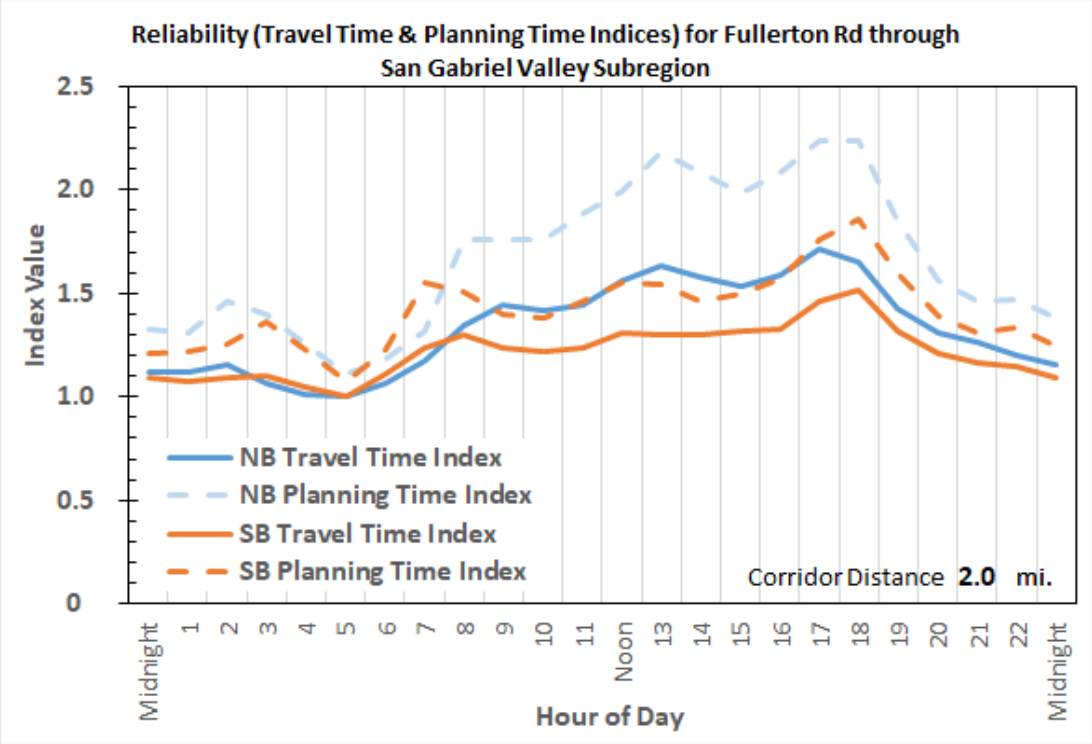


Exhibit 4.70: Fullerton Road Hourly Reliability (TTI and PTI)



4.15 Gale Avenue

Gale Avenue is a 3.6-mile corridor in the San Gabriel Valley, crossing the City of Industry and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 14th and 16th lowest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 66th and 71st highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.71: Gale Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	3.6	4,276	12,718	12,151	7,004	36,149	399	594	851
	W	3.6	7,141	12,981	8,191	6,905	35,218	667	606	574
City of Industry	E	2.8	4,197	13,660	12,381	6,079	36,317	500	813	1,105
	W	2.8	4,603	9,476	5,548	4,732	24,359	548	564	495
Los Angeles County	E	2.5	2,369	6,211	6,412	4,449	19,441	318	417	646
	W	2.5	5,671	9,519	6,314	5,284	26,788	762	640	637

Exhibit 4.72: Gale Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	3.6	13	68	138	3.7	19.1	38.6	26.7	24.8	1.11	1.19	1.20	1.41
	W	3.6	49	58	189	13.8	16.3	52.9	24.2	24.8	1.28	1.25	1.66	1.42
City of Industry	E	2.8	16	84	170	5.7	29.9	60.9	26.8	24.5	1.14	1.24	1.23	1.53
	W	2.8	21	40	117	7.6	14.3	41.8	26.4	25.0	1.20	1.26	1.49	1.45
Los Angeles County	E	2.5	10	46	89	3.8	18.7	36.0	25.1	23.1	1.14	1.24	1.26	1.54
	W	2.5	54	56	188	21.9	22.6	76.0	22.0	23.3	1.37	1.29	1.80	1.48

Exhibit 4.73: Gale Avenue Hourly Flow Rates (VPH)

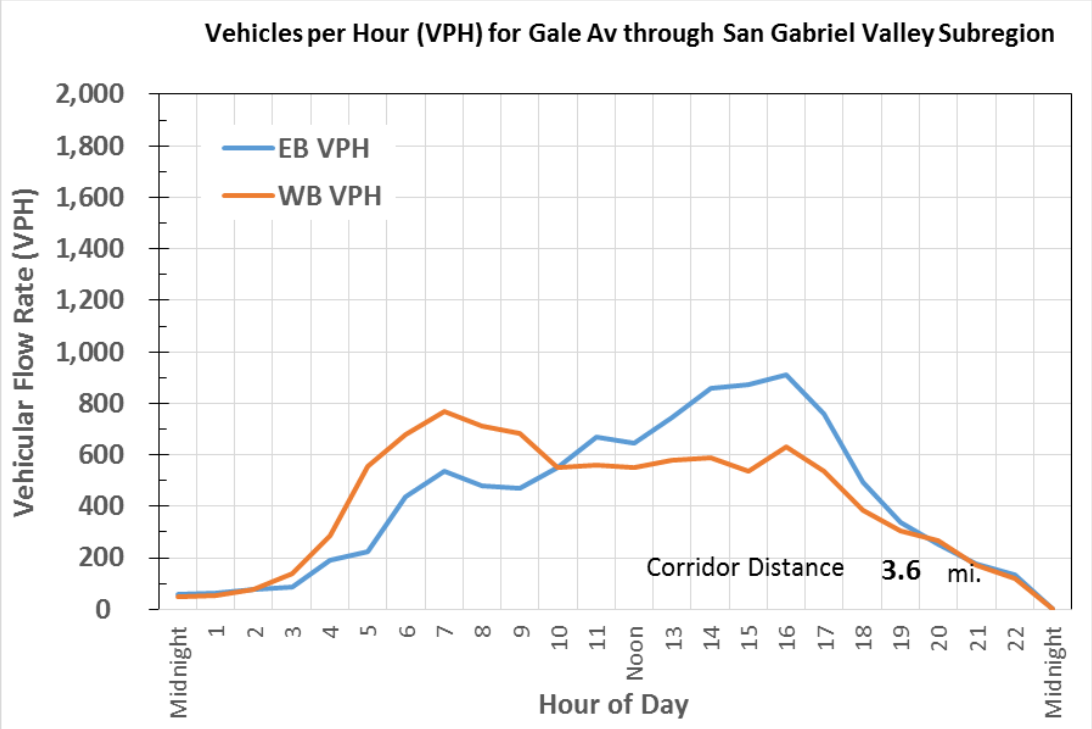


Exhibit 4.74: Gale Avenue Hourly Congestion (VHD)

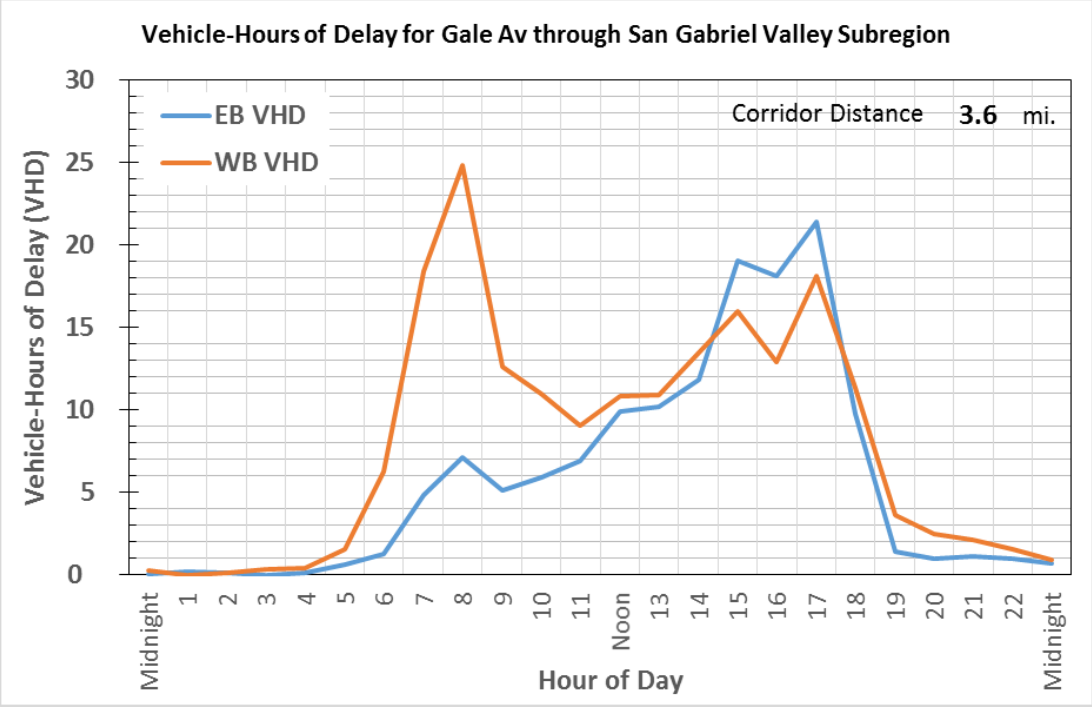
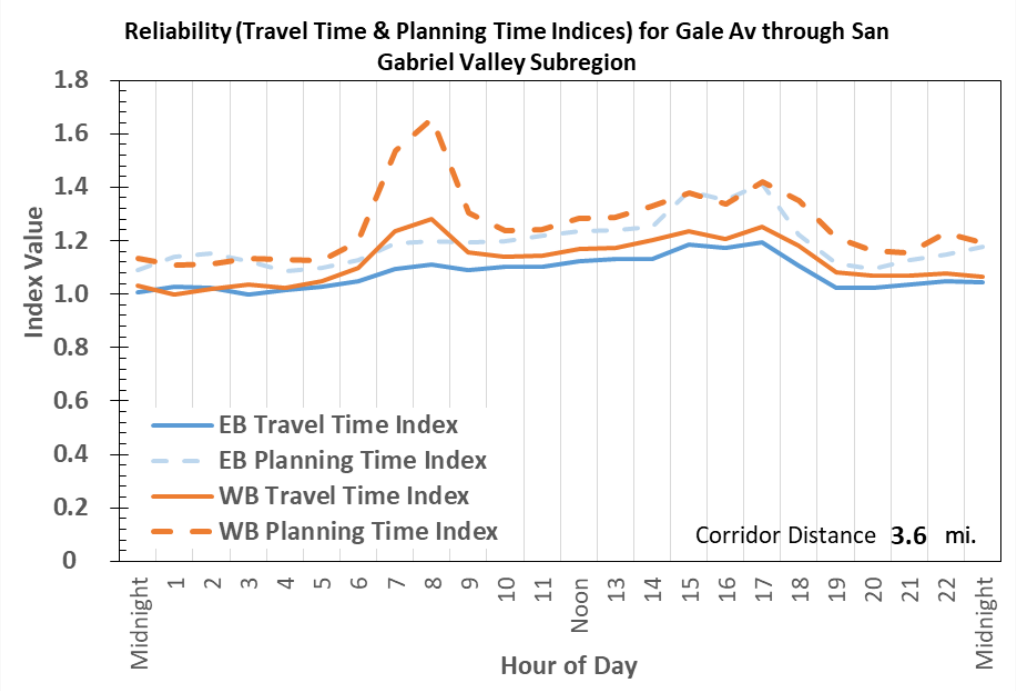


Exhibit 4.75: Gale Avenue Hourly Reliability (TTI and PTI)



4.16 Garfield Avenue

Garfield Avenue is a 2.6-mile corridor in the San Gabriel Valley, crossing the City of Monterey Park. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 12th and 13th lowest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 54th and 57th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.76: Garfield Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	2.6	5,445	12,178	9,788	7,156	34,566	698	781	941
	S	2.6	5,200	11,169	10,035	6,874	33,279	667	716	965
City of Monterey Park	N	2.6	5,309	11,620	9,214	7,621	33,764	681	745	886
	S	2.6	5,208	11,008	9,583	7,253	33,052	668	706	921

Exhibit 4.77: Garfield Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	2.6	33	111	299	12.7	42.6	115.2	22.9	21.0	1.26	1.37	1.41	1.56
	S	2.6	24	119	271	9.1	45.7	104.2	24.7	20.8	1.18	1.40	1.29	1.57
City of Monterey Park	N	2.6	32	105	288	12.2	40.2	110.8	22.9	21.0	1.26	1.37	1.41	1.56
	S	2.6	24	113	266	9.1	43.6	102.2	24.7	20.8	1.18	1.40	1.29	1.57

Exhibit 4.78: Garfield Avenue Hourly Flow Rates (VPH)

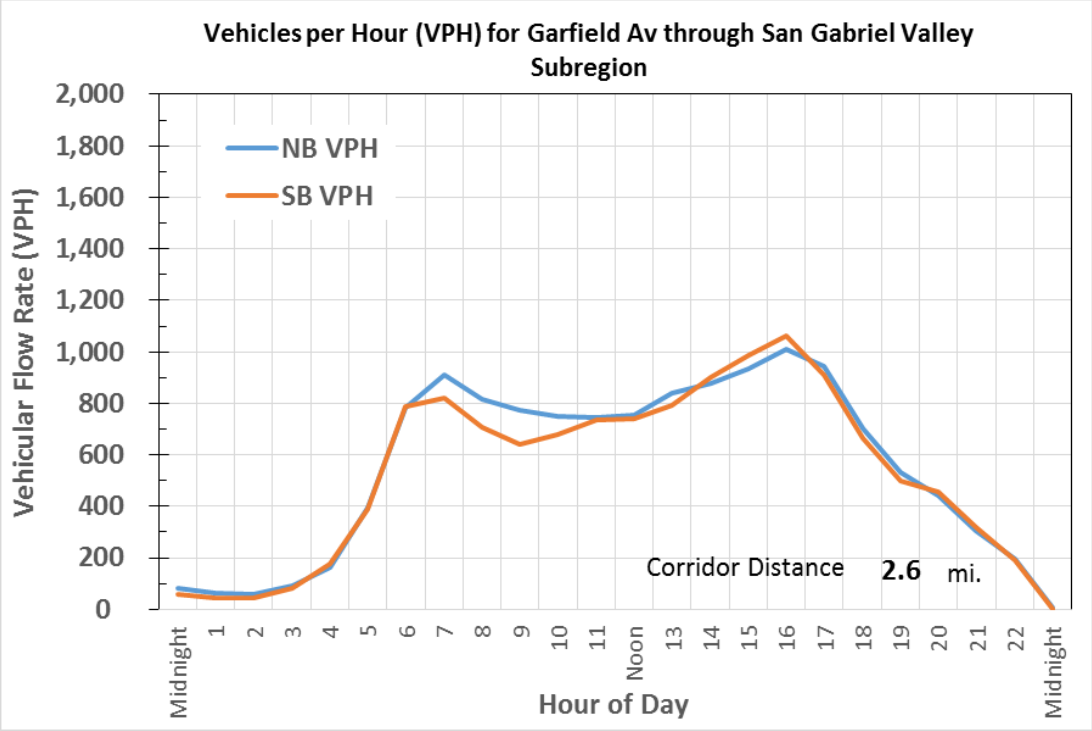


Exhibit 4.79: Garfield Avenue Hourly Congestion (VHD)

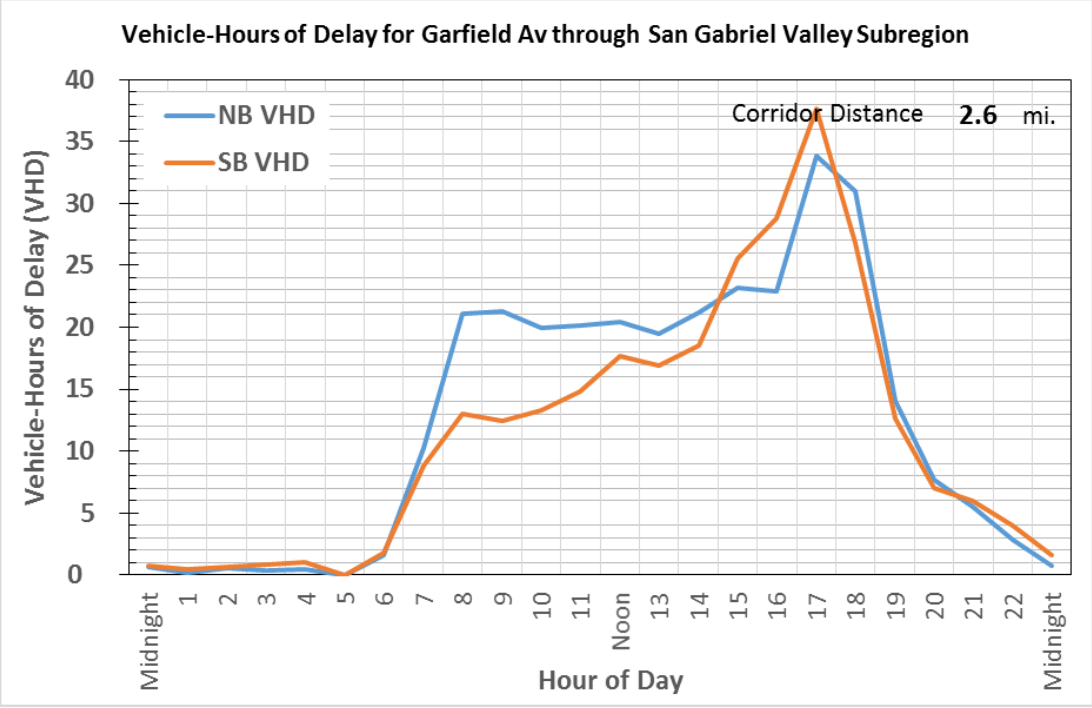
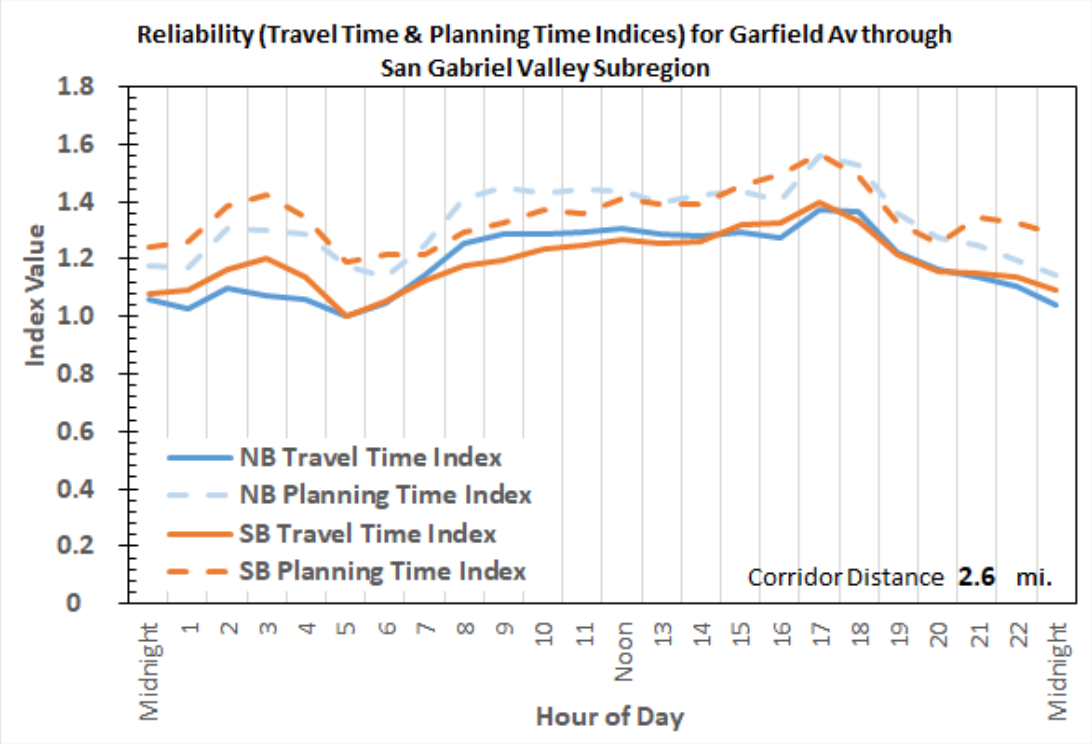


Exhibit 4.80: Garfield Avenue Hourly Reliability (TTI and PTI)



4.17 Garvey Avenue

Garvey Avenue is an 8.5-mile corridor in the San Gabriel Valley, crossing the Cities of Alhambra, El Monte, Monterey Park, Rosemead, and South El Monte. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 30th and 31st highest average daily VMT in the subregion in the east and westbound directions, respectively. The corridor experiences the 21st and 35th highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.81: Garvey Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	8.5	9,982	34,147	32,566	21,250	97,944	391	670	958
	W	8.5	19,396	36,831	22,563	18,696	97,487	761	722	664
City of Alhambra	E	1.4	1,585	5,423	5,172	3,375	15,556	391	670	958
	W	1.4	3,081	5,850	3,584	2,969	15,483	761	722	664
City of El Monte	E	2.5	3,528	10,743	9,704	6,799	30,774	467	711	963
	W	2.5	6,104	10,990	6,805	5,976	29,875	807	727	675
City of Monterey Park	E	2.7	2,321	10,004	10,382	6,050	28,757	283	611	951
	W	2.7	5,679	11,720	7,067	5,332	29,798	693	716	647
City of Rosemead	E	2.4	2,783	9,521	9,080	5,925	27,309	391	670	958
	W	2.4	5,408	10,269	6,291	5,213	27,182	761	722	664
City of South El Monte	E	0.7	869	2,973	2,835	1,850	8,527	391	670	958
	W	0.7	1,689	3,206	1,964	1,628	8,487	761	722	664

Exhibit 4.82: Garvey Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	8.5	83	443	977	9.7	52.1	114.9	20.1	17.7	1.23	1.40	1.32	1.61
	W	8.5	94	184	662	11.1	21.6	77.9	20.5	20.0	1.18	1.21	1.31	1.31
City of Alhambra	E	1.4	4	23	40	3.3	17.0	29.7	29.8	25.2	1.09	1.29	1.21	1.61
	W	1.4	6	13	57	4.7	9.6	42.4	27.1	26.4	1.08	1.11	1.19	1.29
City of El Monte	E	2.5	24	123	256	9.5	48.7	101.5	20.2	17.4	1.17	1.36	1.27	1.61
	W	2.5	25	50	164	10.0	19.7	65.1	20.7	20.3	1.16	1.18	1.36	1.30
City of Monterey Park	E	2.7	15	110	235	5.7	40.4	86.0	20.5	17.9	1.16	1.33	1.32	1.56
	W	2.7	28	59	241	10.1	21.6	88.2	20.5	20.2	1.18	1.19	1.39	1.38
City of Rosemead	E	2.4	35	190	427	14.8	80.2	180.3	19.0	16.5	1.40	1.61	1.58	1.98
	W	2.4	54	87	317	22.8	36.6	133.9	19.7	18.9	1.35	1.41	1.54	1.57
City of South El Monte	E	0.7	7	33	78	9.5	45.2	105.0	20.7	19.1	1.24	1.35	1.39	1.59
	W	0.7	17	21	82	23.5	28.5	111.3	19.5	20.2	1.38	1.34	1.75	1.54

Exhibit 4.83: Garvey Avenue Hourly Flow Rates (VPH)

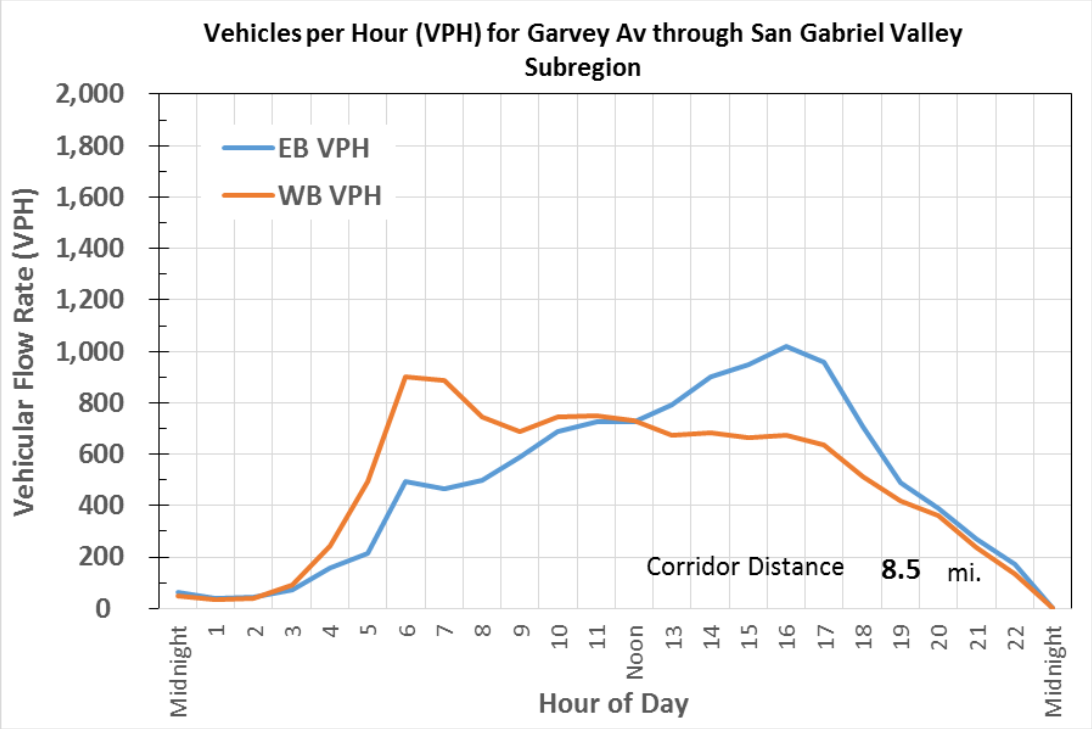


Exhibit 4.84: Garvey Avenue Hourly Congestion (VHD)

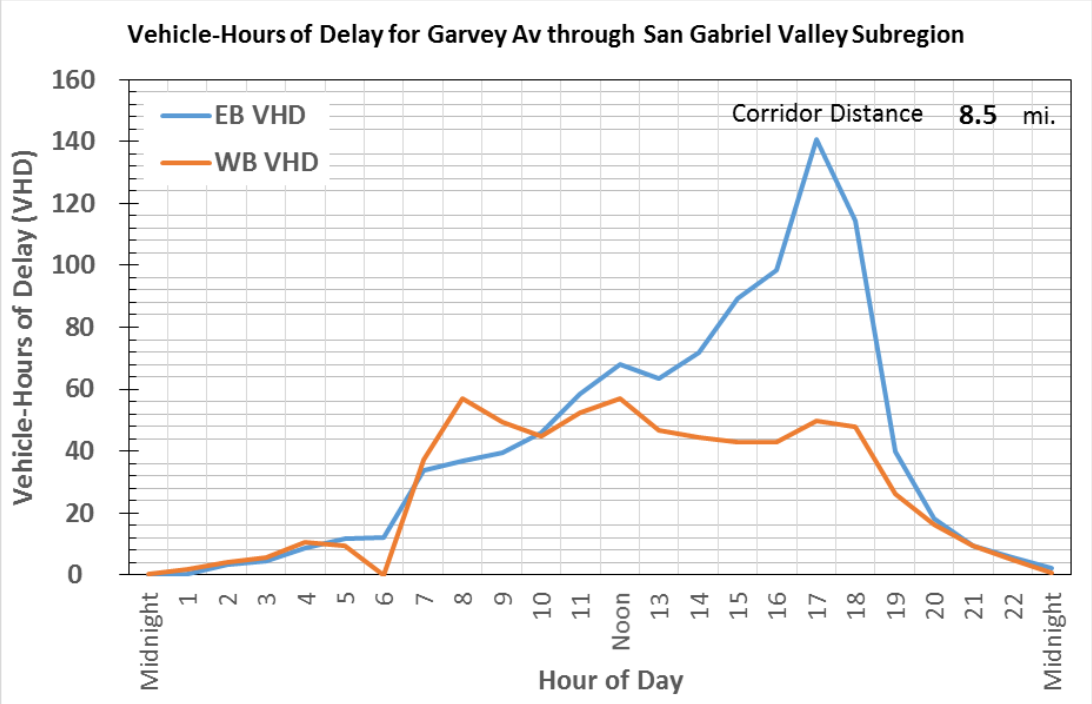
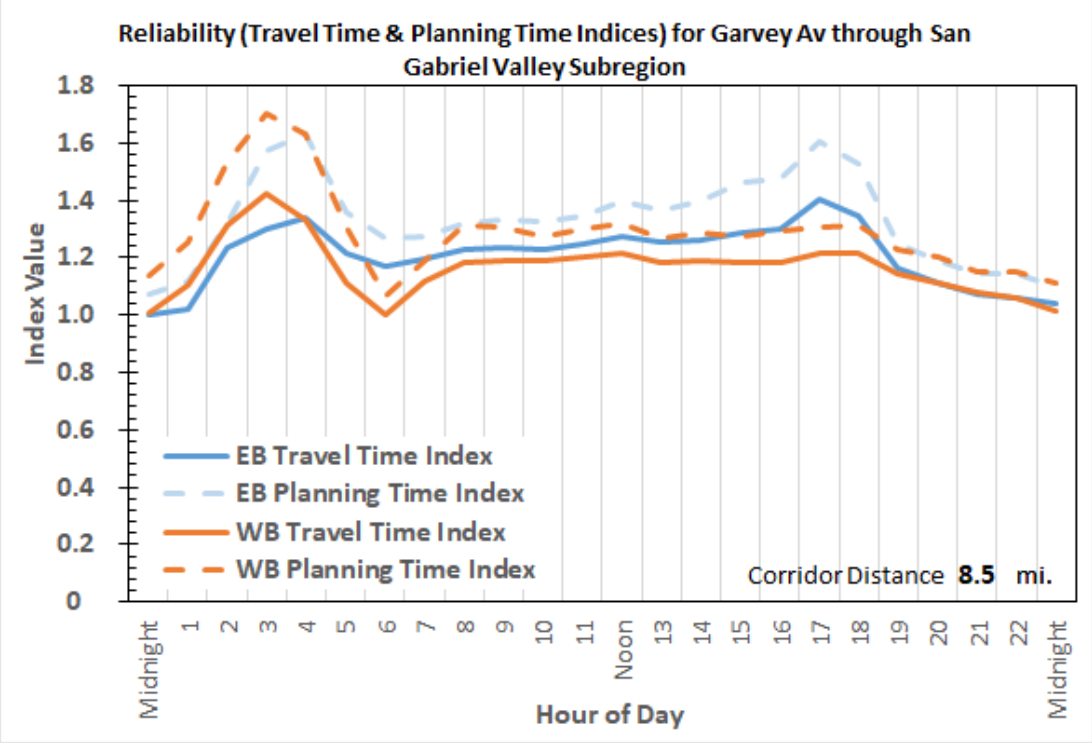


Exhibit 4.85: Garvey Avenue Hourly Reliability (TTI and PTI)



4.18 Grand Avenue

Grand Avenue is an 11-mile corridor in the San Gabriel Valley, crossing the Cities of Covina, Diamond Bar, Glendora, Industry, Walnut, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 13th and 14th highest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 16th and 19th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.86: Grand Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	11.0	26,225	54,682	46,450	33,226	160,584	795	829	1,056
	S	11.0	27,184	59,534	41,451	34,893	163,062	824	902	942
City of Covina	N	2.2	5,174	10,787	9,163	6,555	31,679	795	829	1,056
	S	2.2	5,363	11,744	8,177	6,883	32,168	824	902	942
City of Diamond Bar	N	1.1	2,926	6,321	5,276	3,960	18,484	912	985	1,233
	S	1.1	1,961	5,419	4,159	4,371	15,909	611	844	972
City of Glendora	N	2.1	2,904	8,548	5,672	4,091	21,215	472	695	692
	S	2.1	2,641	8,792	5,721	4,168	21,322	429	715	698
City of Industry	N	1.4	3,338	6,960	5,912	4,229	20,438	795	829	1,056
	S	1.4	3,460	7,577	5,276	4,441	20,753	824	902	942
Los Angeles County	N	1.9	4,411	9,197	7,812	5,588	27,007	795	829	1,056
	S	1.9	4,572	10,013	6,971	5,868	27,424	824	902	942
City of Walnut	N	2.6	10,022	17,265	15,674	8,873	51,833	1,310	1,128	1,537
	S	2.6	8,698	18,216	14,257	11,144	52,315	1,137	1,191	1,398
City of West Covina	N	1.8	3,317	6,785	6,485	5,664	22,251	621	635	911
	S	1.8	5,530	9,354	5,649	4,907	25,440	1,036	876	793

Exhibit 4.87: Grand Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	11.0	163	402	1,043	14.9	36.6	94.8	27.0	25.7	1.26	1.31	1.36	1.43
	S	11.0	164	413	1,111	14.9	37.5	101.0	26.7	24.6	1.26	1.36	1.39	1.46
City of Covina	N	2.2	41	111	284	18.9	51.2	131.1	24.1	22.1	1.31	1.42	1.45	1.57
	S	2.2	41	86	250	19.1	39.7	115.2	24.5	23.0	1.29	1.38	1.47	1.53
City of Diamond Bar	N	1.1	30	65	177	27.8	60.9	165.6	24.5	23.8	1.41	1.46	1.76	1.73
	S	1.1	15	72	159	14.4	67.6	149.0	24.0	18.9	1.27	1.61	1.49	1.95
City of Glendora	N	2.1	23	67	204	11.4	32.8	99.4	22.6	21.8	1.30	1.35	1.48	1.52
	S	2.1	23	68	207	11.2	33.3	101.1	23.8	22.9	1.30	1.35	1.47	1.51
City of Industry	N	1.4	15	33	89	10.8	23.6	63.7	28.6	27.9	1.17	1.20	1.37	1.48
	S	1.4	10	72	142	7.1	51.3	101.2	26.7	20.4	1.15	1.51	1.42	1.97
Los Angeles County	N	1.9	14	37	97	7.7	19.8	52.4	31.2	29.9	1.23	1.29	1.41	1.50
	S	1.9	18	32	106	9.8	17.4	57.2	31.8	31.5	1.23	1.26	1.39	1.42
City of Walnut	N	2.6	76	139	362	29.7	54.4	141.9	30.3	29.3	1.33	1.37	1.53	1.64
	S	2.6	63	133	393	24.6	52.3	154.3	29.6	30.3	1.41	1.38	1.64	1.54
City of West Covina	N	1.8	13	36	90	7.0	20.4	50.7	34.9	33.2	1.20	1.26	1.30	1.38
	S	1.8	33	38	132	18.3	21.1	74.0	31.8	31.9	1.32	1.31	1.50	1.49

Exhibit 4.88: Grand Avenue Hourly Flow Rates (VPH)

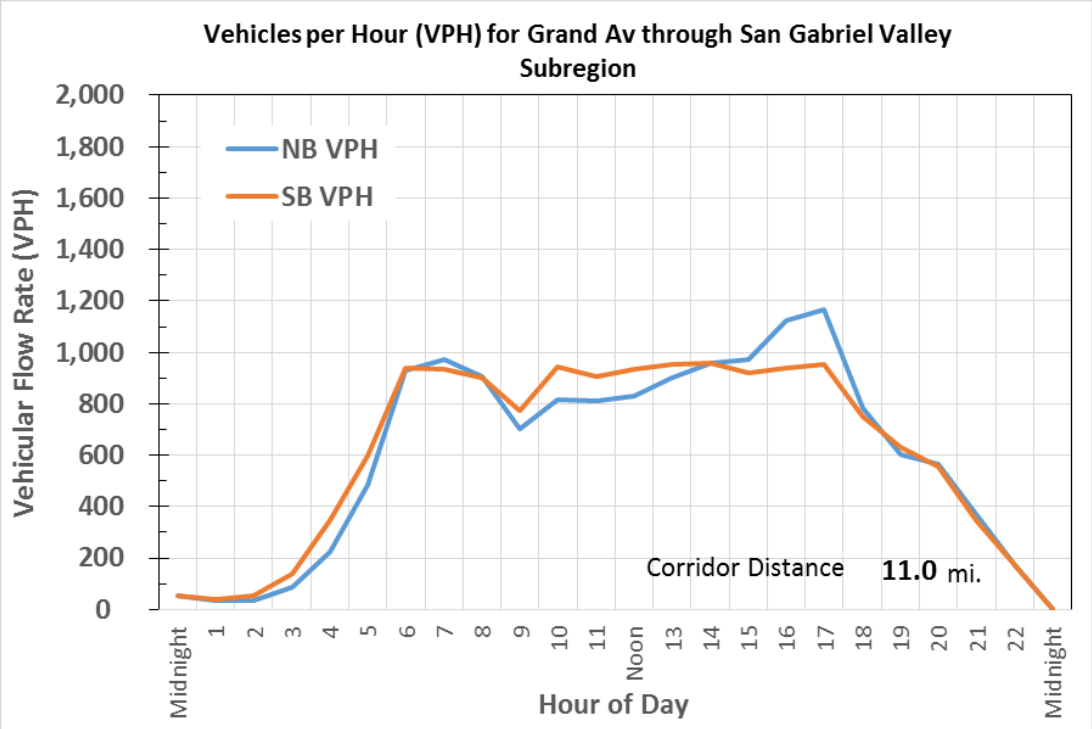


Exhibit 4.89: Grand Avenue Hourly Congestion (VHD)

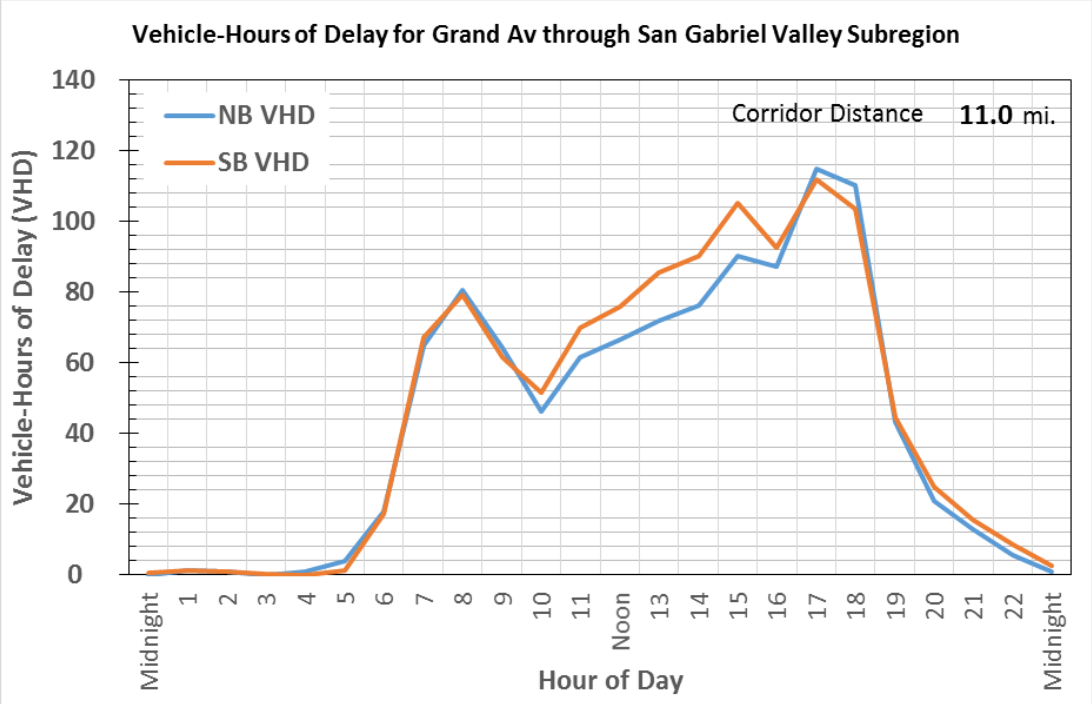
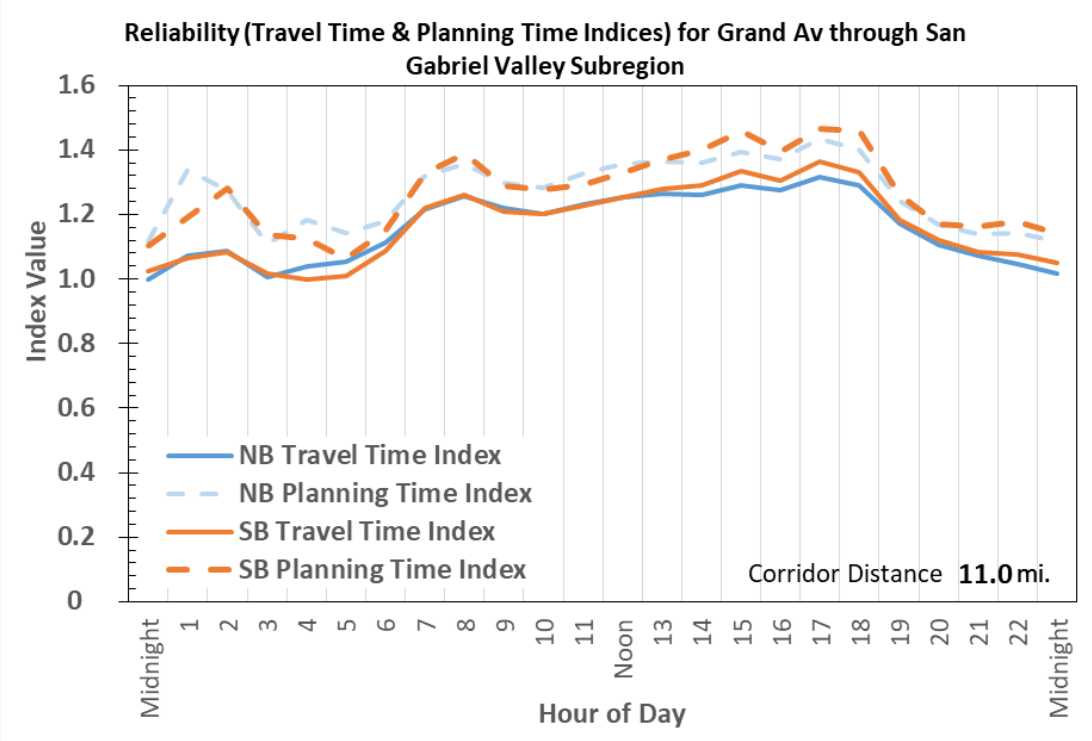


Exhibit 4.90: Grand Avenue Hourly Reliability (TTI and PTI)



4.19 Hacienda Boulevard/Glendora Avenue

Hacienda Boulevard/Glendora Avenue is a 7.8-mile corridor in the San Gabriel Valley, crossing the Cities of Industry, La Puente, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 21st and 24th highest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 8th and 12th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.91: Hacienda Bl/Glendora Av Travel Demand and Productivity

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	7.8	18,060	39,231	33,013	28,608	118,913	772	838	1,058
	S	7.8	18,590	42,195	41,370	35,369	137,524	794	902	1,326
City of Industry	N	0.9	2,084	4,527	3,809	3,301	13,721	772	838	1,058
	S	0.9	2,145	4,869	4,773	4,081	15,868	794	902	1,326
Los Angeles County	N	3.9	8,938	19,415	16,337	14,157	58,847	772	838	1,058
	S	3.9	9,200	20,881	20,473	17,503	68,057	794	902	1,326
City of La Puente	N	2.1	3,506	9,234	8,649	6,388	27,777	556	733	1,030
	S	2.1	6,164	14,418	14,625	12,953	48,159	978	1,144	1,741
City of West Covina	N	1.7	2,706	8,994	6,928	6,673	25,301	528	877	1,013
	S	1.7	2,323	8,097	6,460	6,505	23,385	453	789	945

Exhibit 4.92: Hacienda Bl/Glendora Av Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	7.8	176	581	1,404	22.5	74.5	180.0	22.8	19.8	1.36	1.56	1.51	1.72
	S	7.8	158	631	1,504	20.2	80.9	192.8	23.6	20.9	1.33	1.50	1.43	1.67
City of Industry	N	0.9	25	75	171	28.1	83.5	189.7	21.6	18.6	1.43	1.67	1.70	1.96
	S	0.9	28	83	216	30.8	91.9	239.7	19.5	18.9	1.44	1.49	1.67	1.72
Los Angeles County	N	3.9	81	217	570	20.9	56.1	147.6	24.1	22.6	1.30	1.38	1.55	1.59
	S	3.9	65	261	591	16.8	67.6	153.2	24.4	20.9	1.30	1.54	1.47	1.79
City of La Puente	N	2.1	33	182	374	15.7	86.8	178.1	22.8	17.7	1.30	1.67	1.48	1.94
	S	2.1	68	285	687	32.2	135.8	327.1	22.7	19.5	1.41	1.64	1.58	1.90
City of West Covina	N	1.7	25	120	323	14.6	70.0	188.7	22.4	19.3	1.29	1.49	1.44	1.70
	S	1.7	17	114	293	10.0	66.9	171.3	23.7	19.4	1.26	1.53	1.43	1.76

Exhibit 4.93: Hacienda Bl/Glendora Av Hourly Flow Rates (VPH)

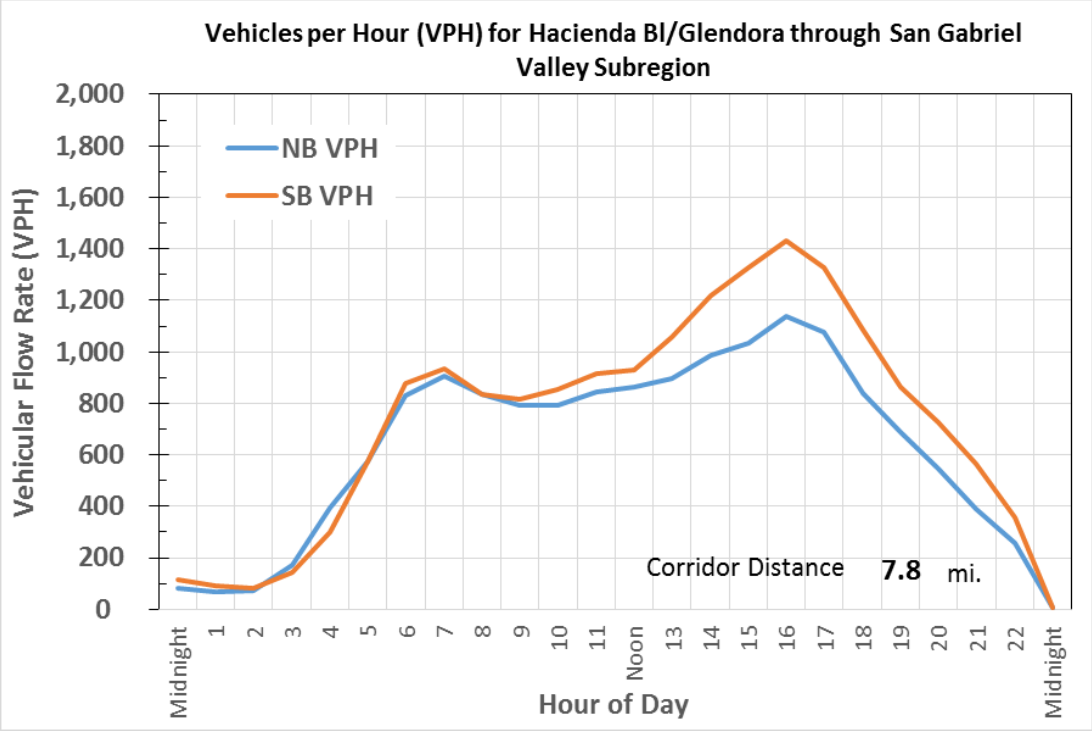


Exhibit 4.94: Hacienda Bl/Glendora Av Hourly Congestion (VHD)

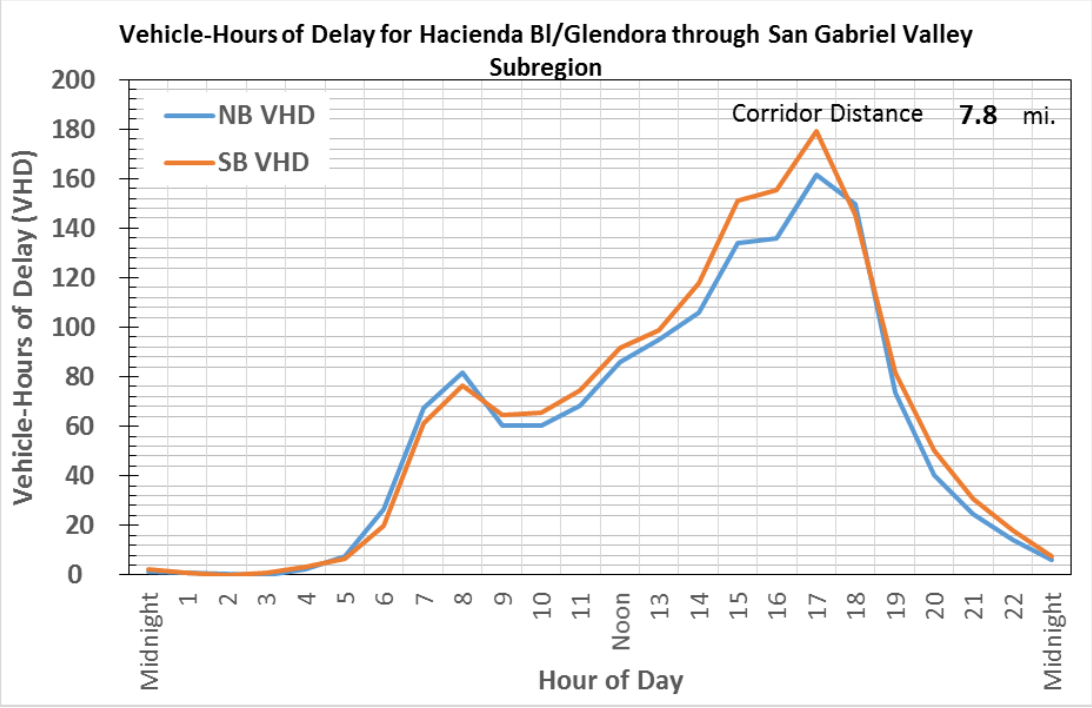
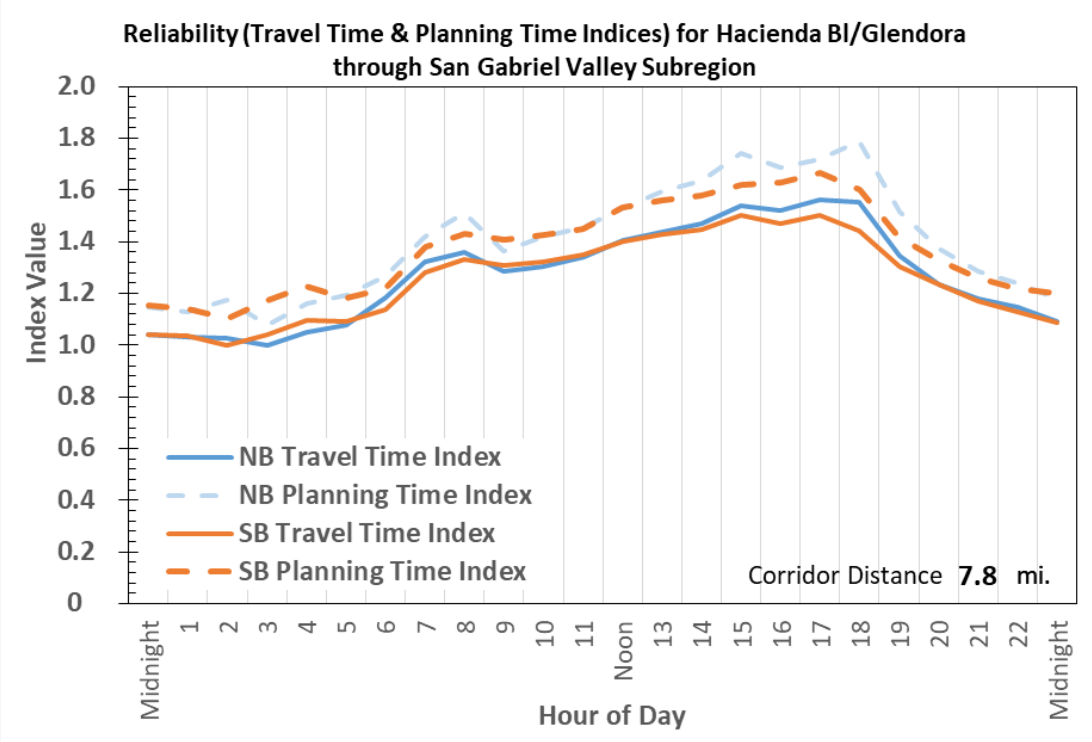


Exhibit 4.95: Hacienda Bl/Glendora Av Hourly Reliability (TTI and PTI)



4.20 Huntington Drive

Huntington Drive is a 15.4-mile corridor in the San Gabriel Valley, crossing the Cities of Alhambra, Arcadia, Duarte, Los Angeles, Monrovia, San Marino, South Pasadena, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 3rd and 5th highest average daily VMT in the subregion in the east and westbound directions, respectively. The corridor experiences the 3rd and 7th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.96: Huntington Drive Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	15.4	28,064	78,646	91,388	45,469	243,567	607	851	1,484
	W	15.4	61,456	78,234	57,944	41,829	239,463	1,330	847	941
City of Alhambra	E	2.5	4,556	12,767	14,836	7,381	39,540	607	851	1,484
	W	2.5	9,977	12,700	9,406	6,790	38,874	1,330	847	941
City of Arcadia	E	5.1	5,071	17,814	21,139	9,839	53,862	331	582	1,036
	W	5.1	12,000	18,576	13,308	9,387	53,270	784	607	652
City of Duarte	E	3.5	4,273	15,276	18,527	8,138	46,214	405	723	1,316
	W	3.5	18,305	16,569	9,667	6,191	50,732	1,733	784	687
City of Los Angeles	E	0.3	551	1,503	1,673	1,033	4,760	656	895	1,494
	W	0.3	1,351	1,573	1,119	955	4,998	1,609	936	999
Los Angeles County	E	2.0	3,656	11,504	14,068	6,229	35,456	597	940	1,724
	W	2.0	7,673	10,860	8,193	6,042	32,769	1,254	887	1,004
City of Monrovia	E	4.1	7,472	20,938	24,331	12,105	64,846	607	851	1,484
	W	4.1	16,362	20,829	15,427	11,136	63,753	1,330	847	941
City of San Marino	E	4.7	12,079	29,773	32,486	15,448	89,786	864	1,065	1,743
	W	4.7	20,027	28,375	22,773	15,229	86,404	1,433	1,015	1,222
City of South Pasadena	E	1.5	2,772	6,490	7,467	4,445	21,174	612	716	1,236
	W	1.5	5,547	6,701	5,139	3,712	21,100	1,225	740	851

Exhibit 4.97: Huntington Drive Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	15.4	208	1,070	2,033	13.5	69.5	132.0	24.4	21.2	1.24	1.43	1.33	1.70
	W	15.4	371	555	1,687	24.1	36.0	109.5	24.6	23.7	1.26	1.31	1.45	1.44
City of Alhambra	E	2.5	25	105	253	9.9	41.9	101.0	24.9	23.5	1.20	1.27	1.37	1.42
	W	2.5	32	86	224	12.9	34.3	89.6	27.7	24.2	1.14	1.31	1.36	1.43
City of Arcadia	E	5.1	40	253	496	7.9	49.6	97.3	25.2	22.2	1.25	1.42	1.38	1.71
	W	5.1	55	132	361	10.9	25.9	70.7	25.9	23.0	1.18	1.32	1.32	1.49
City of Duarte	E	3.5	26	318	466	7.2	90.3	132.5	24.5	17.5	1.19	1.66	1.30	2.69
	W	3.5	121	58	282	34.5	16.5	80.1	23.3	25.2	1.29	1.19	1.65	1.33
City of Los Angeles	E	0.3	2	1	13	8.7	2.2	46.1	30.2	36.3	1.20	1.00	1.35	1.10
	W	0.3	1	5	14	4.7	16.3	50.1	31.6	28.7	1.03	1.13	1.16	1.29
Los Angeles County	E	2.0	26	74	151	12.6	36.2	74.1	28.3	29.0	1.26	1.22	1.44	1.48
	W	2.0	23	61	168	11.4	29.9	82.1	31.5	28.2	1.15	1.28	1.35	1.54
City of Monrovia	E	4.1	84	452	888	20.5	110.1	216.5	20.4	16.5	1.30	1.60	1.45	2.00
	W	4.1	177	207	689	43.2	50.4	168.0	18.7	19.2	1.41	1.38	1.83	1.57
City of San Marino	E	4.7	102	333	721	21.8	71.5	154.8	25.8	25.1	1.36	1.39	1.53	1.61
	W	4.7	141	267	735	30.3	57.3	157.7	25.8	25.5	1.41	1.42	1.61	1.62
City of South Pasadena	E	1.5	22	73	178	14.6	48.5	117.8	24.1	22.5	1.28	1.37	1.45	1.56
	W	1.5	23	51	146	15.2	33.8	96.9	28.4	24.3	1.14	1.33	1.31	1.50

Exhibit 4.98: Huntington Drive Hourly Flow Rates (VPH)

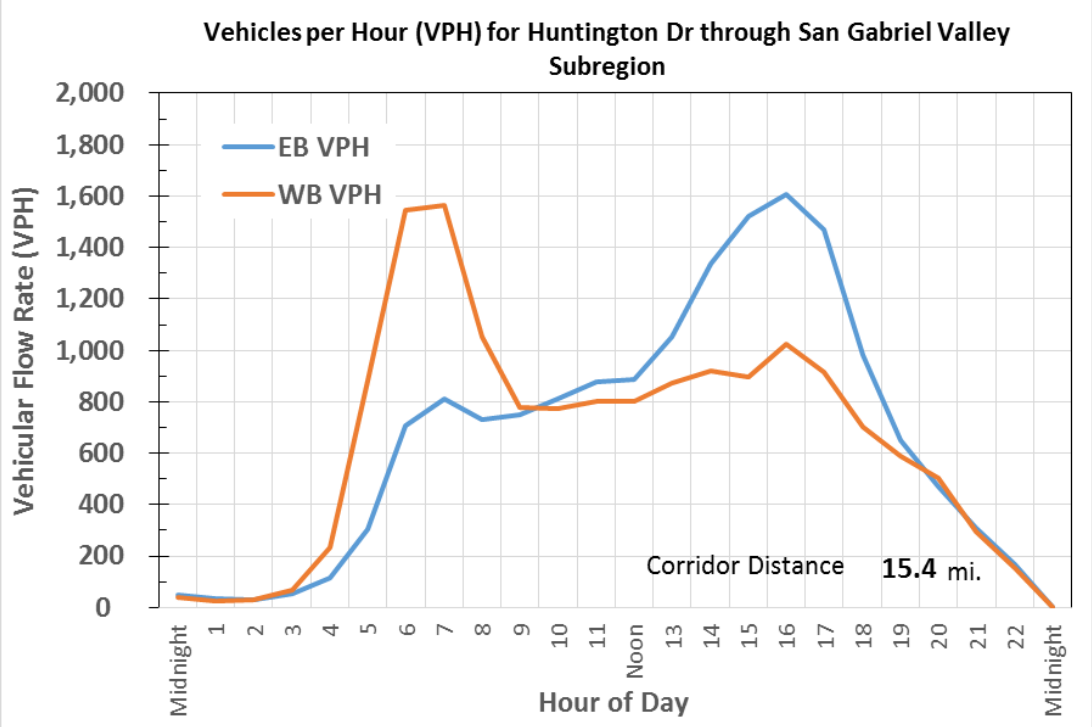


Exhibit 4.99: Huntington Drive Hourly Congestion (VHD)

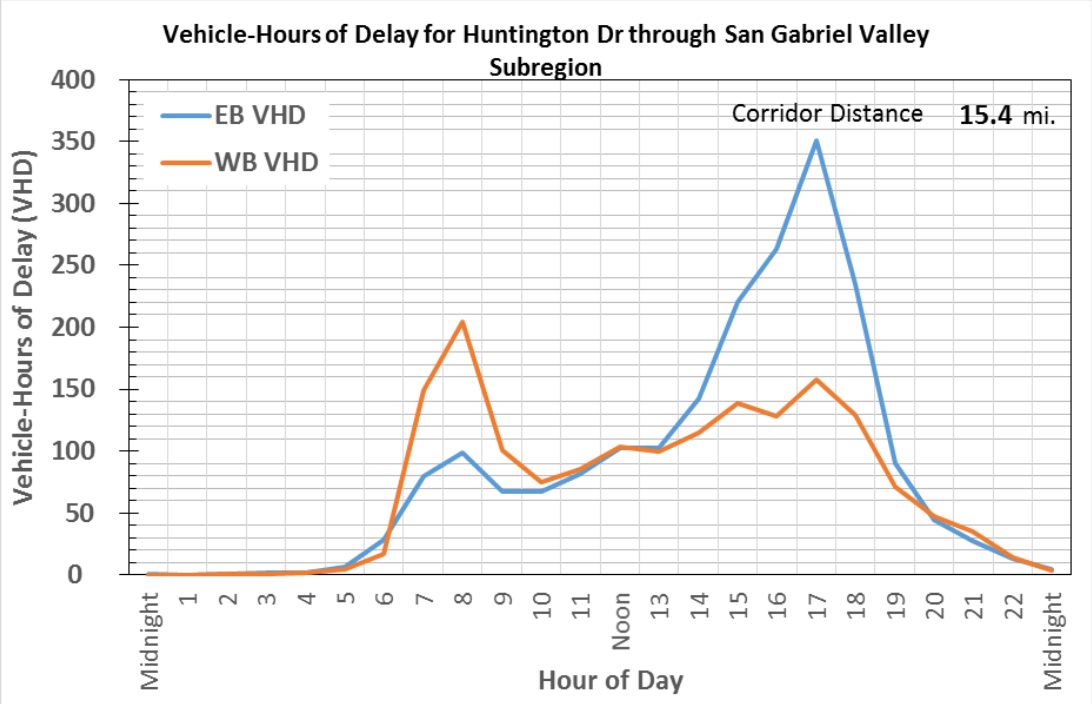
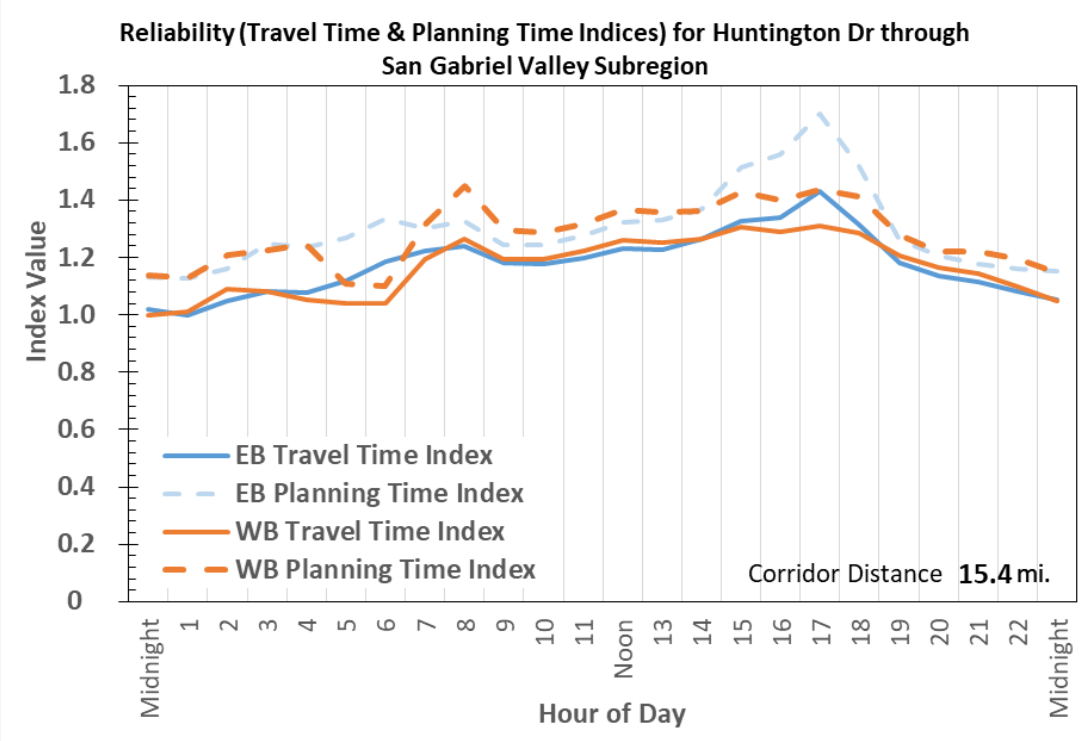


Exhibit 4.100: Huntington Drive Hourly Reliability (TTI and PTI)



4.21 Indian Hill Boulevard

Indian Hill Drive is a 1.7-mile corridor in the San Gabriel Valley, crossing the City of Claremont. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 4th and 5th lowest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 69th and 70th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.101: Indian Hill Bl Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	1.7	2,521	7,083	5,017	3,045	17,667	494	694	738
	S	1.7	2,378	6,303	4,917	4,057	17,655	466	618	723
City of Claremont	N	1.7	2,521	7,083	5,017	3,045	17,667	494	694	738
	S	1.7	2,378	6,303	4,917	4,057	17,655	466	618	723

Exhibit 4.102: Indian Hill Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	1.7	26	61	179	15.0	35.7	105.3	21.0	20.4	1.29	1.32	1.44	1.54
	S	1.7	18	58	160	10.7	33.9	94.4	22.1	20.8	1.25	1.33	1.40	1.56
City of Claremont	N	1.7	25	60	177	14.9	35.4	104.3	21.0	20.4	2.10	2.16	2.35	2.51
	S	1.7	19	58	163	10.9	34.2	95.7	22.1	20.8	2.06	2.19	2.30	2.56

Exhibit 4.103: Indian Hill Bl Hourly Flow Rates (VPH)

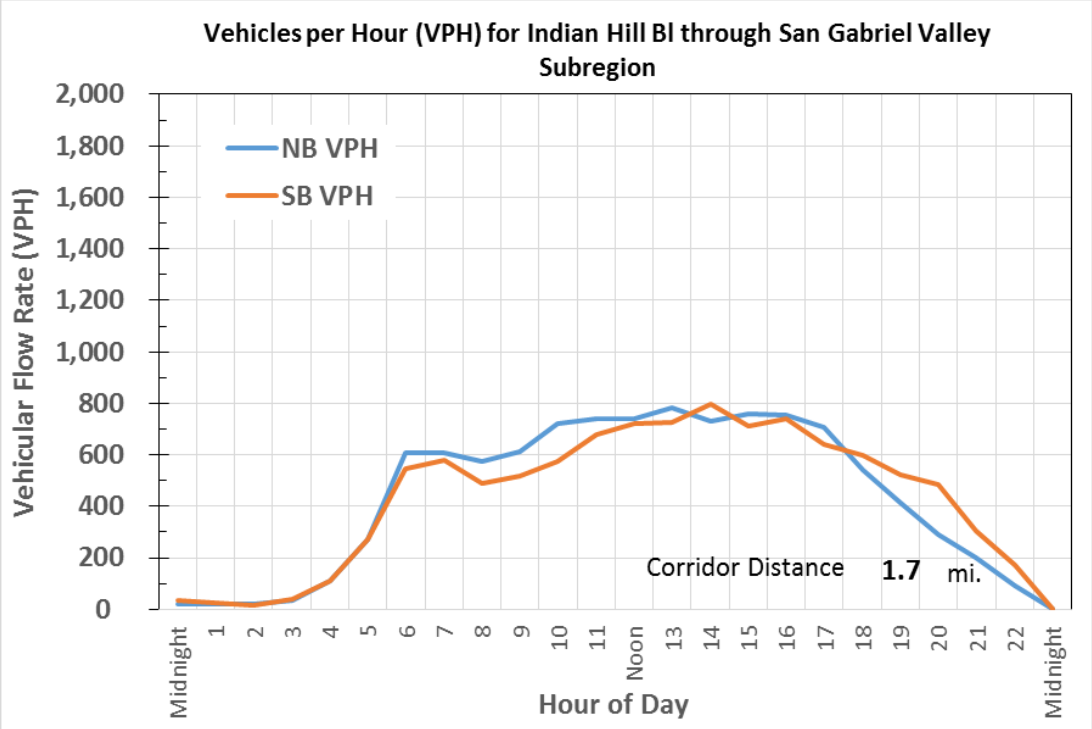


Exhibit 4.104: Indian Hill Bl Hourly Congestion (VHD)

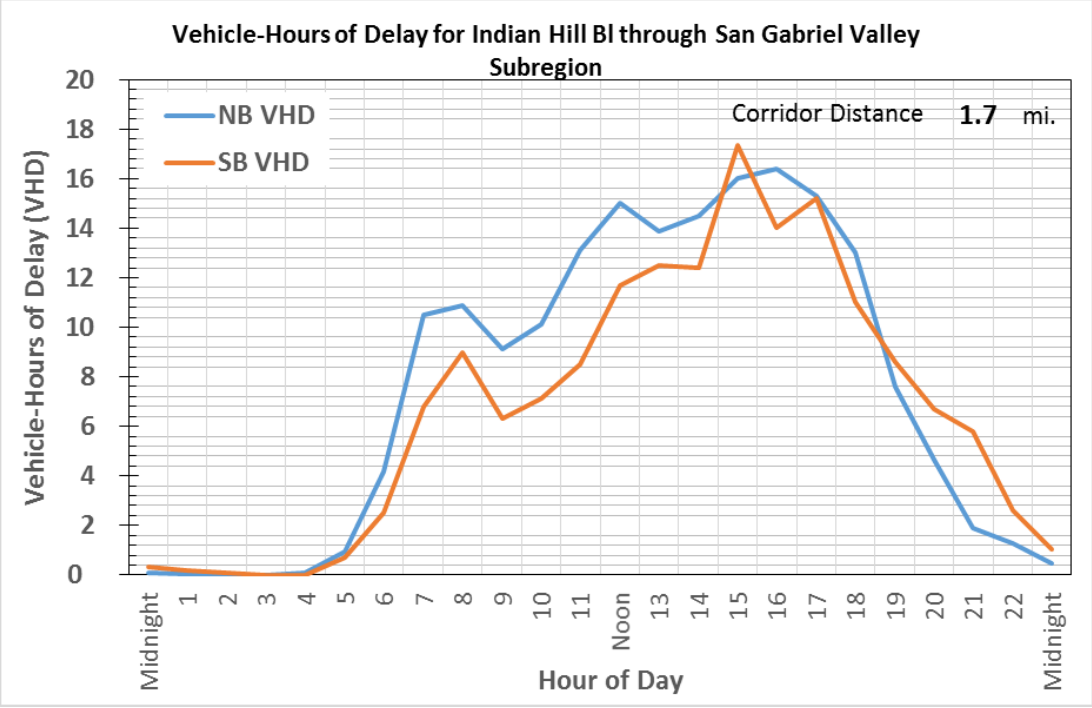
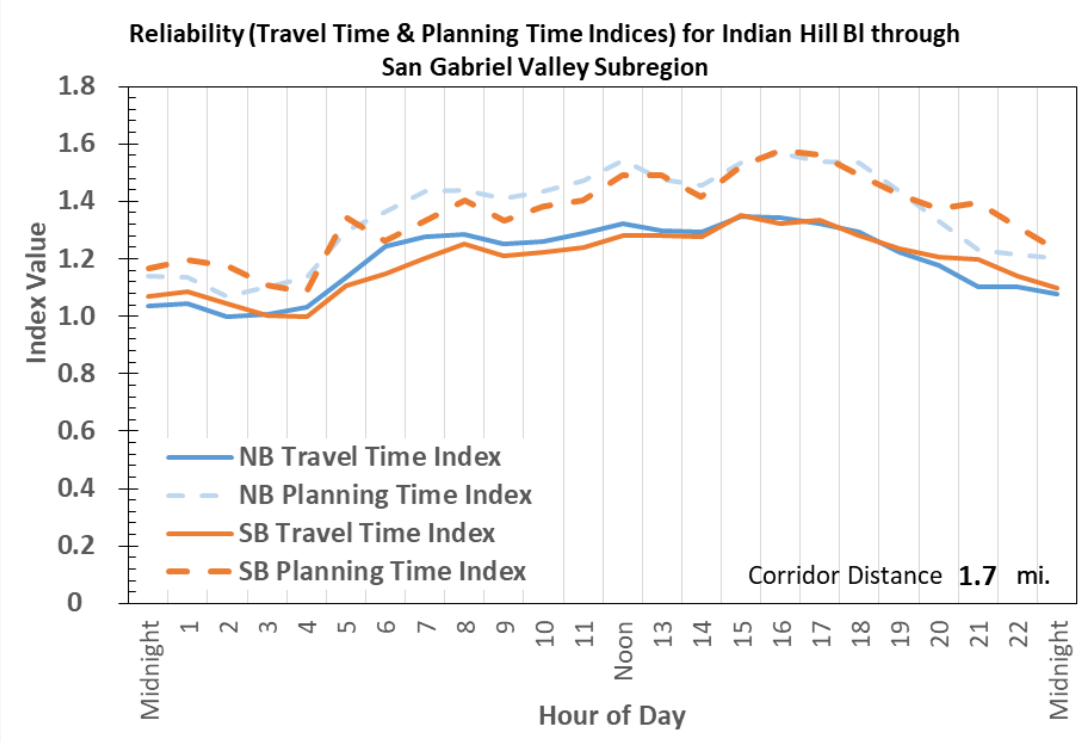


Exhibit 4.105: Indian Hill Bl Hourly Reliability (TTI and PTI)



4.22 Irwindale Avenue

Irwindale Avenue is a 3-mile corridor in the San Gabriel Valley, crossing the Cities of Azusa, Irwindale, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 19th and 21st lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 63rd and 65th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.106: Irwindale Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	3.0	8,877	14,548	9,760	8,111	41,297	986	808	813
	S	3.0	6,055	13,875	13,175	8,884	41,990	673	771	1,098
City of Azusa	N	0.5	1,509	2,473	1,659	1,379	7,020	986	808	813
	S	0.5	1,029	2,359	2,240	1,510	7,138	673	771	1,098
City of Irwindale	N	3.0	8,936	14,645	9,825	8,165	41,572	986	808	813
	S	3.0	6,096	13,968	13,263	8,944	42,270	673	771	1,098
Los Angeles County	N	0.4	1,272	2,085	1,399	1,163	5,919	986	808	813
	S	0.4	868	1,989	1,888	1,273	6,019	673	771	1,098

Exhibit 4.107: Irwindale Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	3.0	35	72	195	11.7	23.9	64.9	24.1	22.9	1.16	1.22	1.26	1.35
	S	3.0	40	82	207	13.2	27.5	68.9	25.3	25.2	1.21	1.21	1.33	1.35
City of Azusa	N	0.5	4	9	29	7.9	18.2	57.7	28.3	27.1	1.14	1.19	1.31	1.40
	S	0.5	6	11	32	11.2	21.2	62.8	29.4	30.0	1.21	1.19	1.38	1.35
City of Irwindale	N	3.0	35	72	196	11.7	23.9	64.9	24.1	22.9	1.16	1.22	1.26	1.35
	S	3.0	40	83	208	13.2	27.5	68.9	25.3	25.2	1.21	1.21	1.33	1.35
Los Angeles County	N	0.4	7	13	29	15.2	29.8	68.0	25.0	23.5	1.21	1.30	1.40	1.48
	S	0.4	9	21	47	19.8	49.1	108.8	23.3	22.2	1.31	1.38	1.49	1.58

Exhibit 4.108: Irwindale Avenue Hourly Flow Rates (VPH)

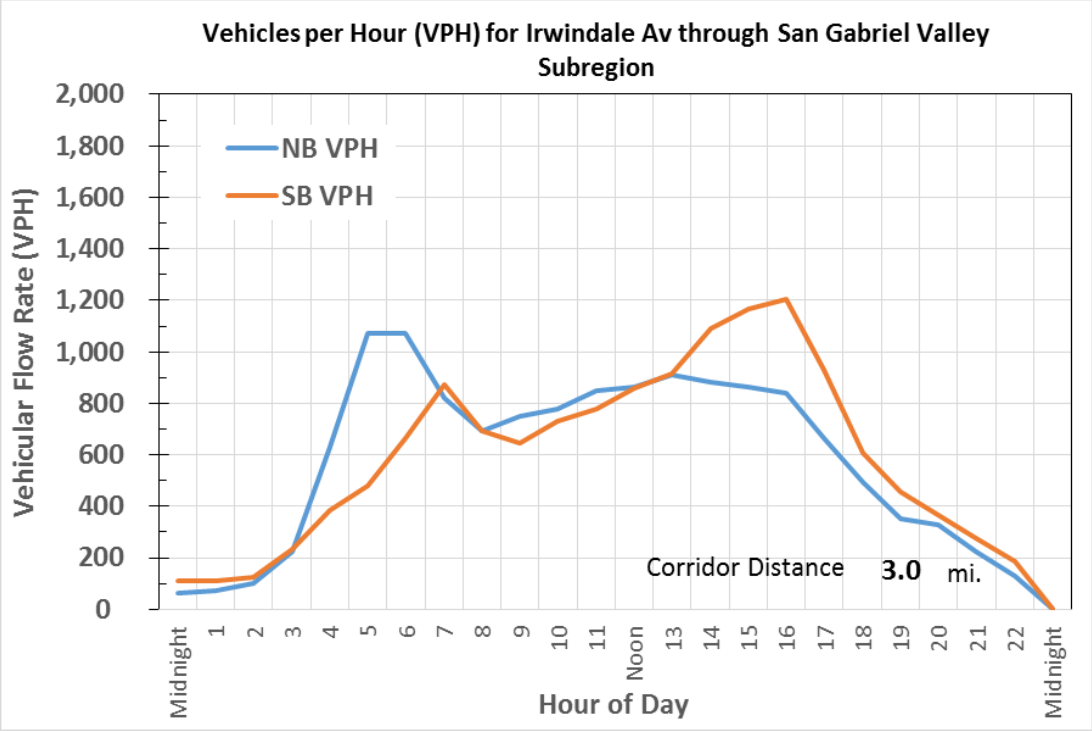


Exhibit 4.109: Irwindale Avenue Hourly Congestion (VHD)

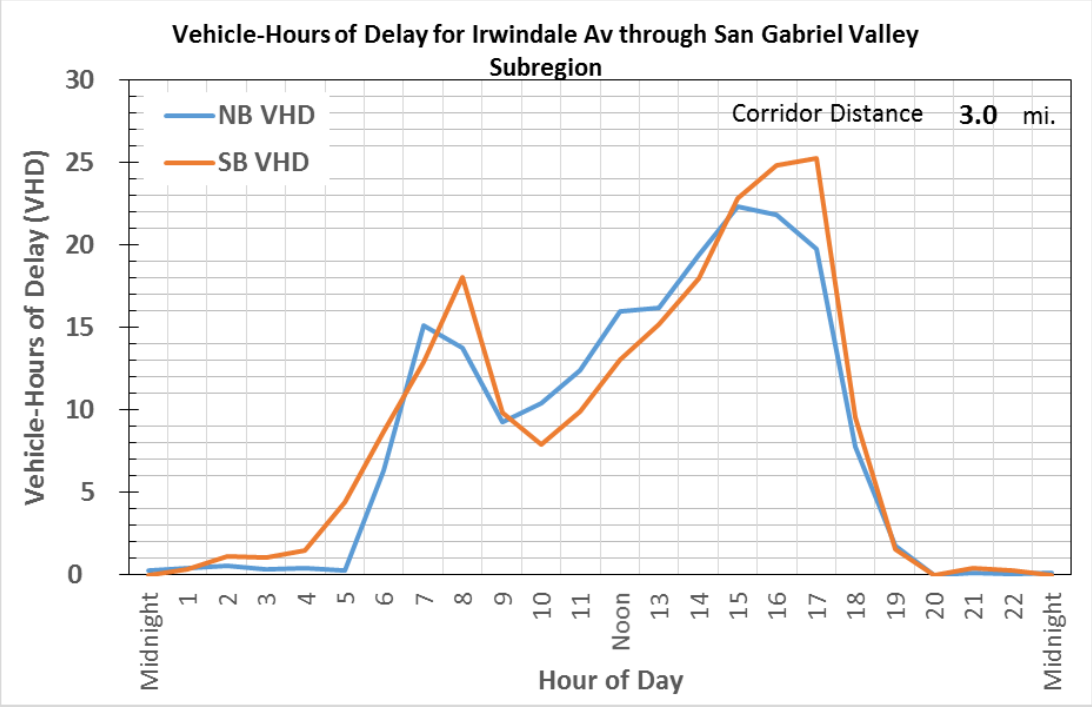
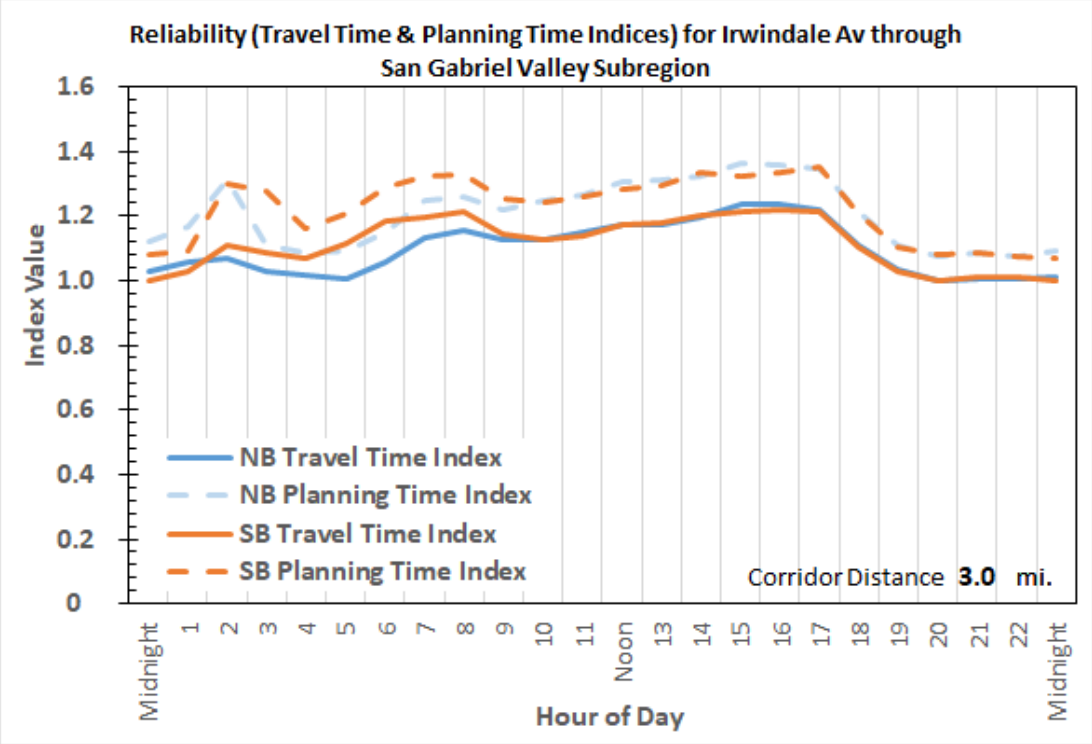


Exhibit 4.110: Irwindale Avenue Hourly Reliability (TTI and PTI)



4.23 Lake Avenue

Lake Avenue is a 3.8-mile corridor in the San Gabriel Valley, crossing the City of Pasadena, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 30th and 31st lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 29th and 40th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.111: Lake Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	3.8	7,209	21,667	17,813	14,948	61,636	641	963	1,188
	S	3.8	11,043	23,399	15,817	13,309	63,567	982	1,040	1,054
Los Angeles County	N	1.0	1,826	5,489	4,512	3,787	15,615	641	963	1,188
	S	1.0	2,797	5,928	4,007	3,372	16,104	982	1,040	1,054
City of Pasadena	N	2.8	5,459	16,410	13,490	11,320	46,679	641	963	1,188
	S	2.8	8,363	17,721	11,979	10,079	48,142	982	1,040	1,054

Exhibit 4.112: Lake Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	3.8	47	210	578	12.5	56.1	154.2	19.8	18.0	1.19	1.31	1.33	1.46
	S	3.8	109	233	782	29.0	62.0	208.6	18.9	17.7	1.31	1.40	1.43	1.59
Los Angeles County	N	1.0	14	30	89	14.2	31.6	93.2	24.4	25.1	1.23	1.19	1.36	1.32
	S	1.0	23	38	126	24.1	39.7	132.3	25.3	24.8	1.29	1.32	1.43	1.45
City of Pasadena	N	2.8	44	207	571	15.4	72.8	201.2	18.7	16.5	1.24	1.40	1.39	1.59
	S	2.8	101	217	737	35.5	76.4	259.4	17.5	16.3	1.37	1.47	1.52	1.68

Exhibit 4.113: Lake Avenue Hourly Flow Rates (VPH)

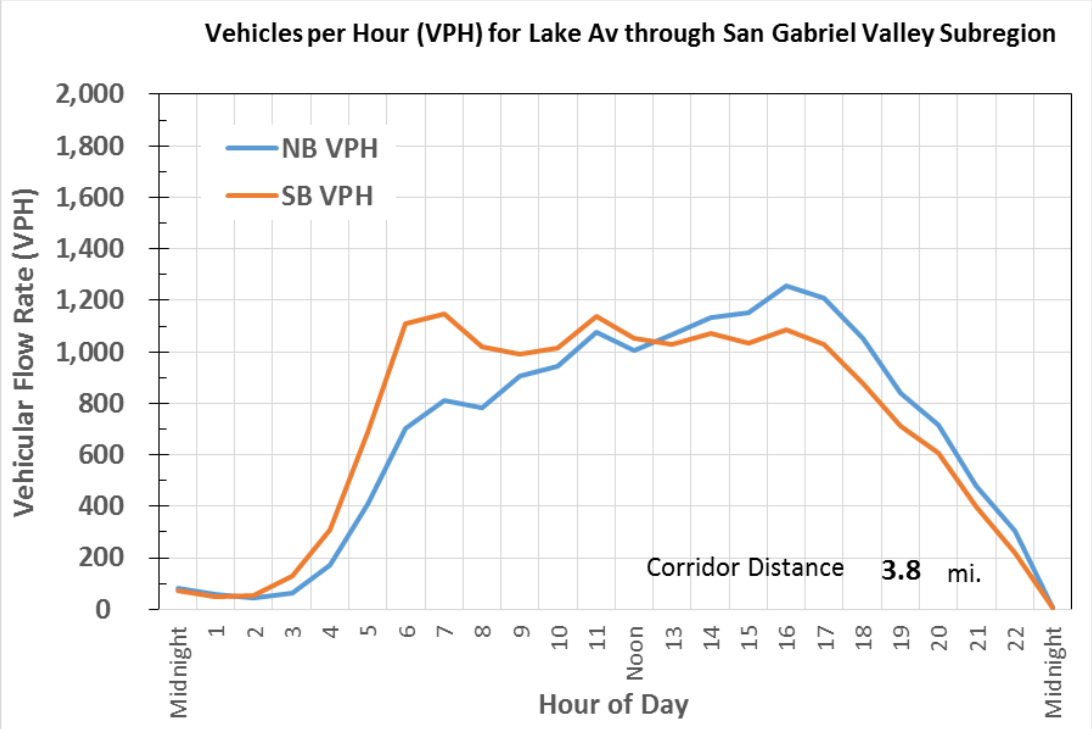


Exhibit 4.114: Lake Avenue Hourly Congestion (VHD)

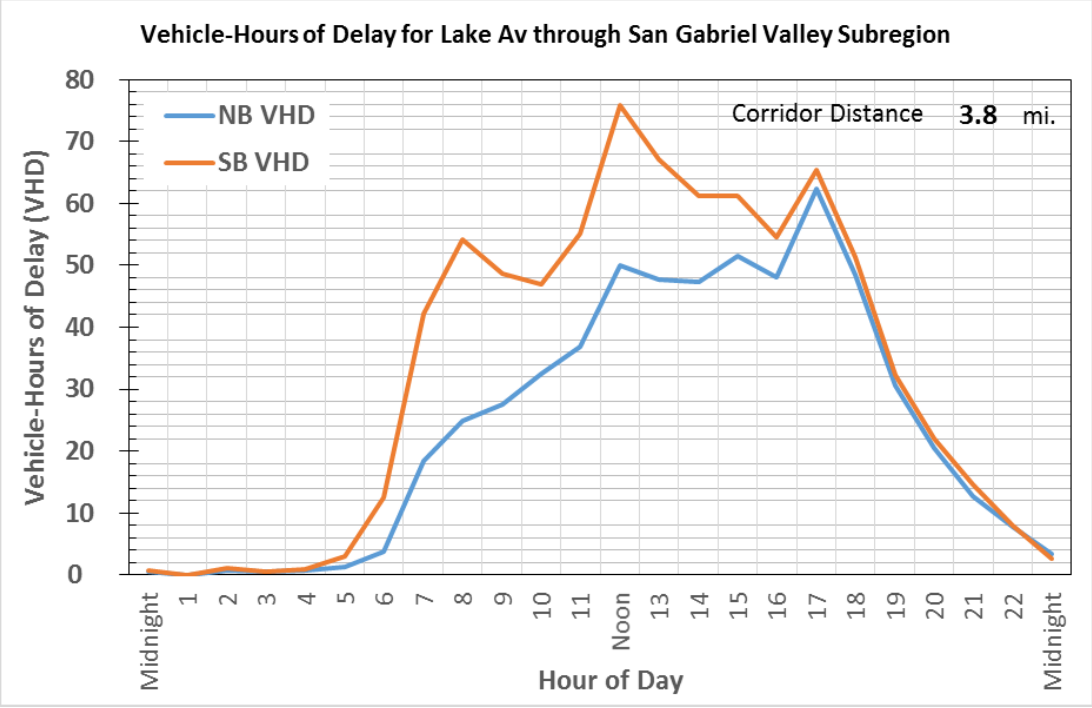
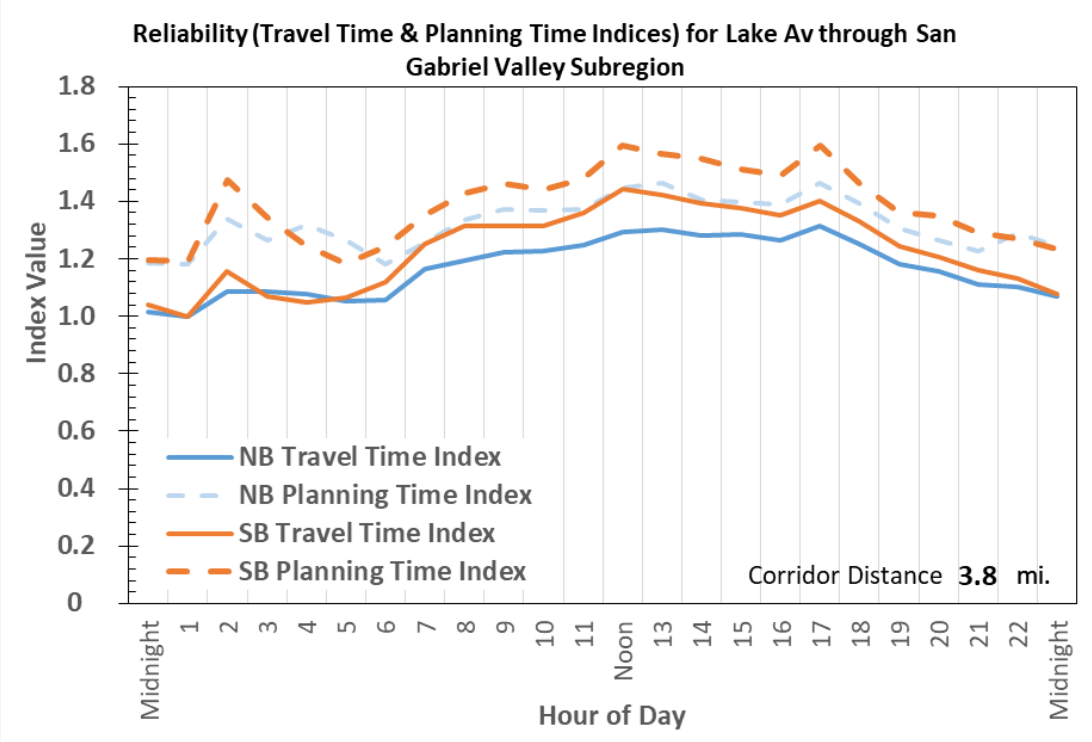


Exhibit 4.115: Lake Avenue Hourly Reliability (TTI and PTI)



4.24 Lower Azusa Road

Lower Azusa Road is a 3.1-mile corridor in the San Gabriel Valley, crossing the Cities of El Monte, and Temple City. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 15th and 18th lowest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 50th and 68th highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.116: Lower Azusa Road Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	3.1	4,903	12,838	14,144	9,106	40,991	522	684	1,130
	W	3.1	8,369	11,962	8,182	7,310	35,823	891	637	654
City of El Monte	E	3.1	4,960	11,306	13,824	8,737	38,827	528	602	1,104
	W	3.1	8,199	10,593	7,943	7,841	34,575	873	564	634
City of Temple City	E	1.1	1,768	5,157	5,252	3,432	15,608	517	754	1,152
	W	1.1	3,102	4,786	3,055	2,496	13,439	907	700	670

Exhibit 4.117: Lower Azusa Road Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	3.1	40	220	376	12.7	70.2	120.1	22.6	18.8	1.29	1.55	1.43	1.87
	W	3.1	48	60	182	15.2	19.2	58.0	24.1	23.6	1.21	1.23	1.38	1.35
City of El Monte	E	3.1	39	215	359	12.4	68.8	114.8	22.6	18.8	1.29	1.55	1.43	1.87
	W	3.1	47	58	174	15.0	18.7	55.5	24.1	23.6	1.21	1.23	1.38	1.35
City of Temple City	E	1.1	14	68	137	12.5	59.5	120.0	23.3	20.6	1.27	1.45	1.43	1.73
	W	1.1	13	27	80	11.6	23.5	70.1	24.3	22.8	1.19	1.27	1.35	1.45

Exhibit 4.118: Lower Azusa Road Hourly Flow Rates (VPH)

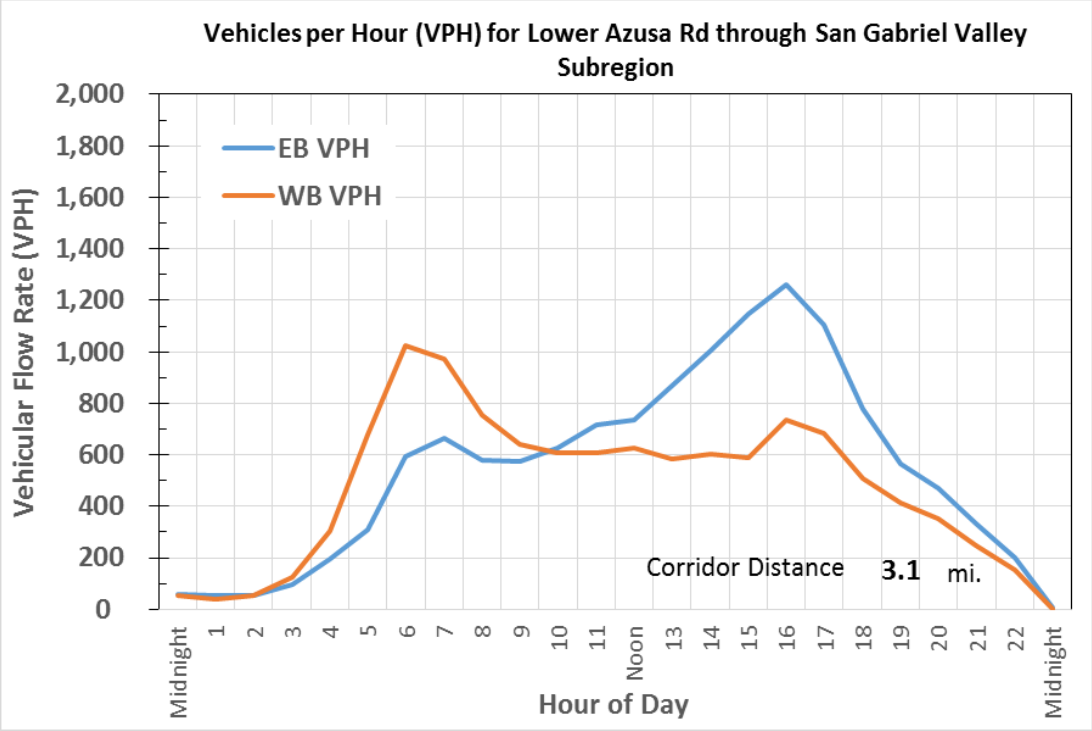


Exhibit 4.119: Lower Azusa Road Hourly Congestion (VHD)

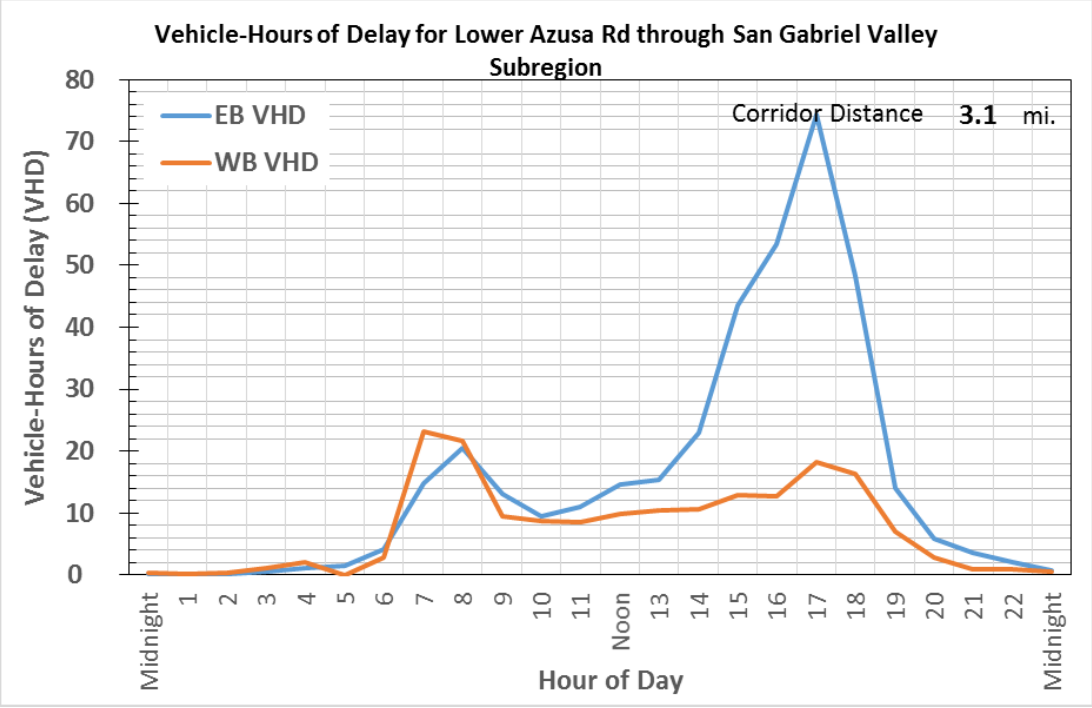
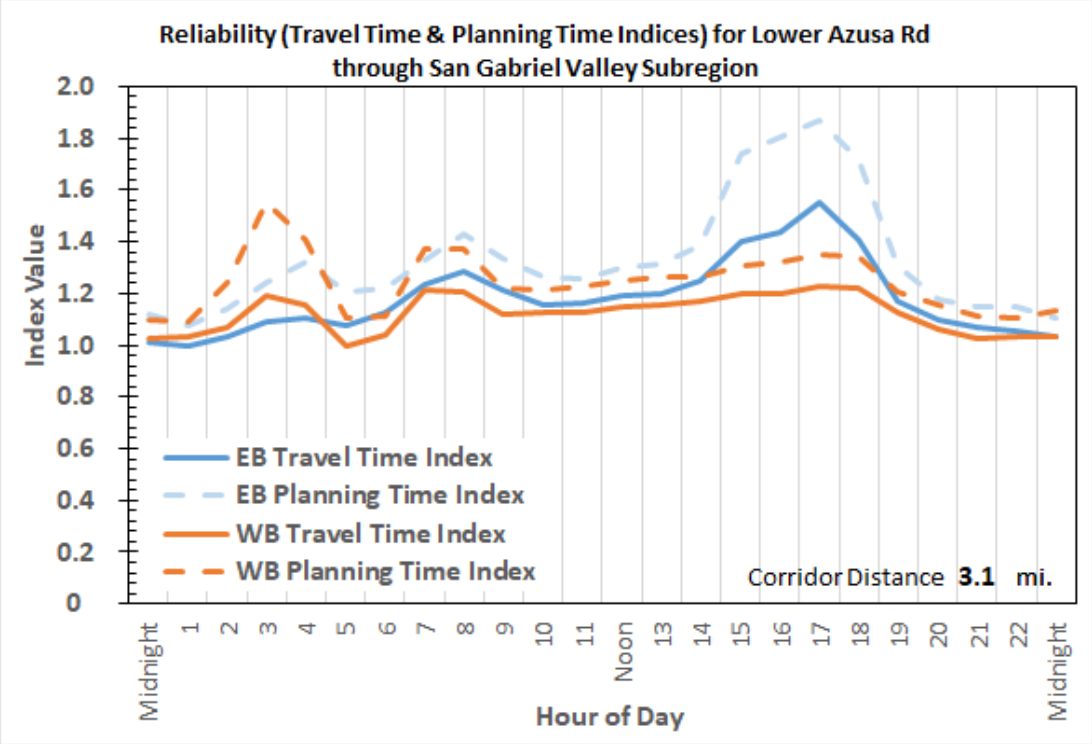


Exhibit 4.120: Lower Azusa Road Hourly Reliability (TTI and PTI)



4.25 Main Street/Las Tunas Drive/Live Oak Avenue

Main Street, Las Tunas Drive, and Live Oak Avenue represents an 11.7-mile corridor in the San Gabriel Valley, crossing the Cities of Alhambra, Arcadia, Irwindale, San Gabriel, Temple City, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 17th and 20th highest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 13th and 22nd highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.121: Main St/Las Tunas Dr/Live Oak Av Travel Demand and Productivity

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	11.7	14,032	49,106	48,541	28,765	140,445	400	700	1,037
	W	11.7	31,954	51,215	36,377	25,862	145,409	910	730	777
City of Alhambra	E	3.1	3,397	14,309	12,298	7,337	37,340	370	779	1,005
	W	3.1	7,354	15,052	10,167	8,335	40,909	801	820	831
City of Arcadia	E	2.1	2,360	6,859	9,005	4,539	22,763	368	534	1,052
	W	2.1	6,182	7,828	5,845	3,789	23,645	963	610	683
City of Irwindale	E	0.8	947	3,316	3,278	1,942	9,483	400	700	1,037
	W	0.8	2,158	3,458	2,456	1,746	9,818	910	730	777
Los Angeles County	E	0.7	840	2,938	2,904	1,721	8,403	400	700	1,037
	W	0.7	1,912	3,064	2,176	1,547	8,700	910	730	777
City of San Gabriel	E	2.1	3,113	11,696	9,249	6,219	30,277	501	942	1,117
	W	2.1	6,157	10,254	7,191	4,517	28,119	992	826	869
City of Temple City	E	1.8	2,097	6,799	6,700	4,712	20,308	397	644	952
	W	1.8	4,576	7,789	5,593	4,264	22,223	867	738	795

Exhibit 4.122: Main St/Las Tunas Dr/Live Oak Av Mobility and Reliability

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	11.7	97	662	1,366	8.3	56.6	116.8	22.1	18.6	1.20	1.43	1.29	1.59
	W	11.7	190	286	953	16.2	24.4	81.5	21.8	21.7	1.21	1.22	1.34	1.28
City of Alhambra	E	3.1	25	126	313	8.1	41.2	102.1	17.4	16.5	1.16	1.23	1.30	1.36
	W	3.1	32	79	255	10.4	25.7	83.4	19.2	18.3	1.11	1.16	1.24	1.27
City of Arcadia	E	2.1	11	93	156	5.3	43.6	72.8	28.4	22.9	1.17	1.45	1.26	1.84
	W	2.1	47	43	160	22.1	19.9	74.6	25.0	26.5	1.34	1.27	1.60	1.40
City of Irwindale	E	0.8	3	6	20	3.3	7.6	25.5	31.4	31.3	1.08	1.08	1.22	1.26
	W	0.8	20	10	48	24.8	12.7	60.9	25.6	29.0	1.32	1.16	1.77	1.35
Los Angeles County	E	0.7	4	45	73	5.4	63.7	104.9	27.3	19.0	1.18	1.70	1.33	2.29
	W	0.7	20	18	67	28.7	25.6	95.0	23.4	25.0	1.40	1.31	1.79	1.48
City of San Gabriel	E	2.1	4	111	187	1.8	53.6	90.3	22.4	17.2	1.05	1.36	1.18	1.60
	W	2.1	26	56	170	12.4	27.2	82.2	21.2	20.9	1.19	1.20	1.37	1.31
City of Temple City	E	1.8	17	131	262	9.8	74.7	148.7	21.7	16.9	1.25	1.60	1.38	1.82
	W	1.8	25	54	164	14.4	31.0	93.2	21.8	21.2	1.23	1.26	1.40	1.38

Exhibit 4.123: Main St/Las Tunas Dr/Live Oak Av Hourly Flow Rates (VPH)

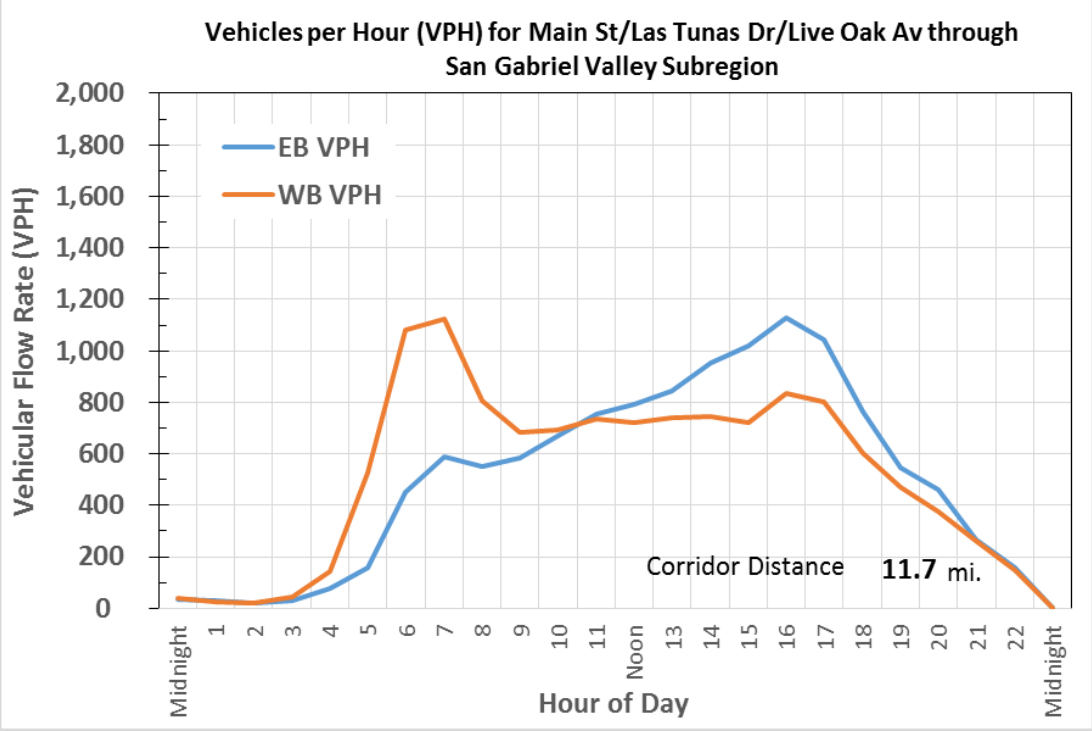


Exhibit 4.124: Main St/Las Tunas Dr/Live Oak Av Hourly Congestion (VHD)

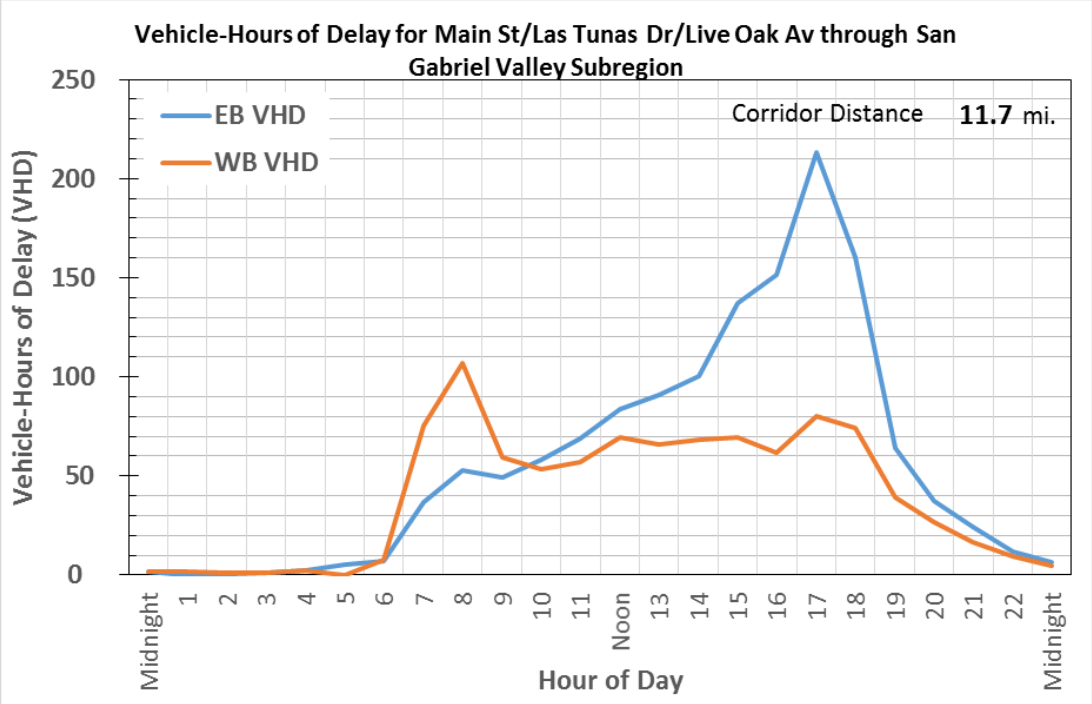
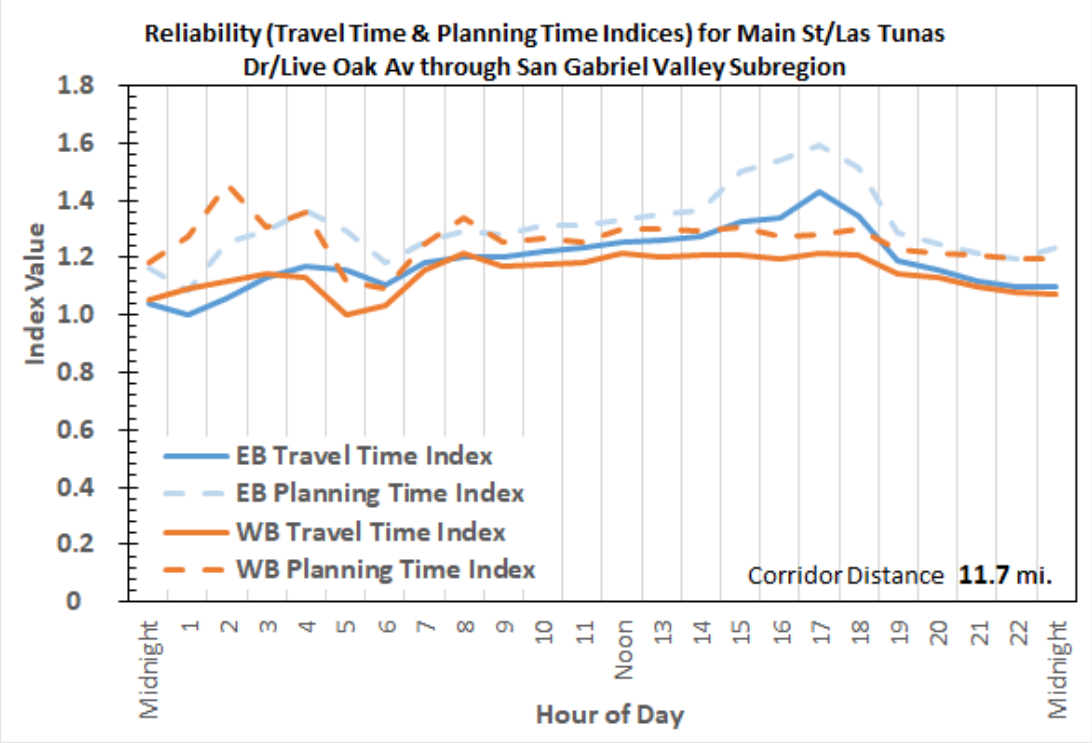


Exhibit 4.125: Main St/Las Tunas Dr/Live Oak Av Hourly Reliability (TTI and PTI)



4.26 Mountain Avenue

Mountain Avenue is a 1.3-mile corridor in the San Gabriel Valley, crossing the Cities of Duarte and Monrovia. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the lowest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 62nd and 67th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.126: Mountain Avenue Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	1.3	1,549	5,809	3,640	4,119	15,118	385	723	679
	S	1.3	1,461	5,700	4,721	4,005	15,887	363	709	881
City of Duarte	N	0.5	601	2,254	1,413	1,598	5,867	385	723	679
	S	0.5	567	2,212	1,832	1,554	6,165	363	709	881
City of Monrovia	N	1.3	1,549	5,809	3,640	4,119	15,118	385	723	679
	S	1.3	1,461	5,700	4,721	4,005	15,887	363	709	881

Exhibit 4.127: Mountain Avenue Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	1.3	18	56	185	13.3	41.7	138.3	17.3	16.4	1.29	1.35	1.49	1.55
	S	1.3	15	93	216	11.5	69.4	161.5	18.6	15.8	1.29	1.52	1.50	1.84
City of Duarte	N	0.5	10	31	103	19.3	59.9	197.3	15.5	14.5	1.40	1.50	1.64	1.75
	S	0.5	6	36	84	11.5	69.4	161.5	18.6	15.8	1.29	1.52	1.50	1.84
City of Monrovia	N	1.3	18	56	185	13.3	41.7	138.3	17.3	16.4	1.29	1.35	1.49	1.55
	S	1.3	15	93	216	11.5	69.4	161.5	18.6	15.8	1.29	1.52	1.50	1.84

Exhibit 4.128: Mountain Avenue Hourly Flow Rates (VPH)

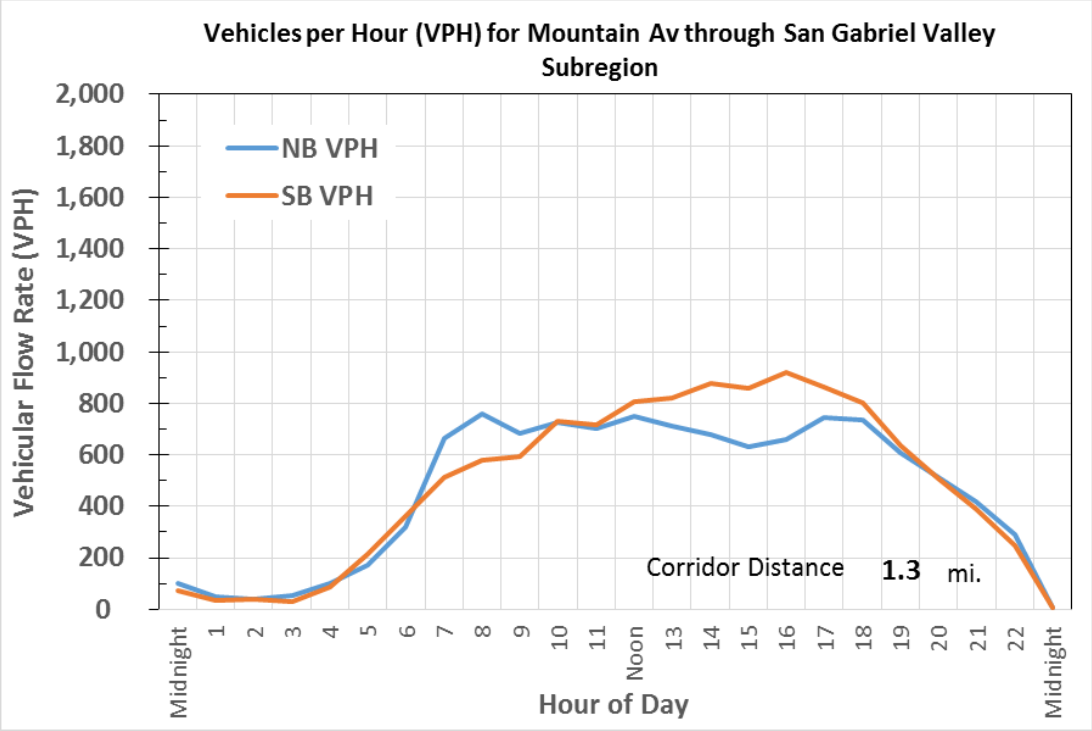


Exhibit 4.129: Mountain Oak Avenue Hourly Congestion (VHD)

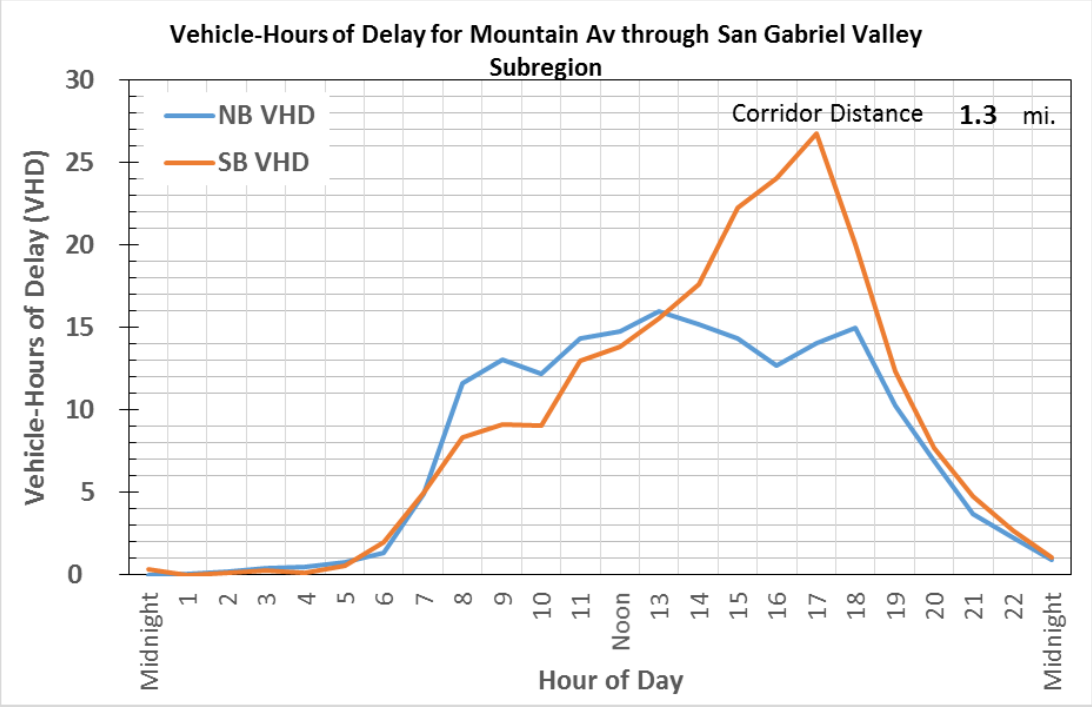
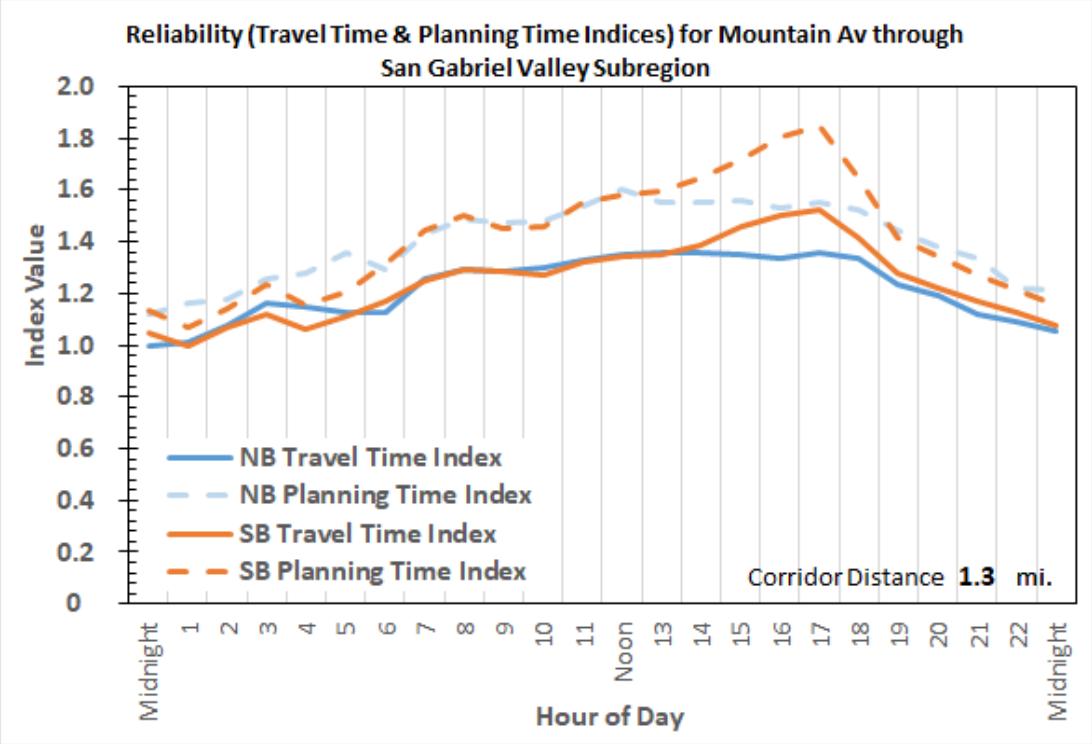


Exhibit 4.130: Mountain Avenue Hourly Reliability (TTI and PTI)



4.27 Myrtle Avenue/Peck Road

Myrtle Avenue/Peck Road is a 6.1-mile corridor in the San Gabriel Valley, crossing the Cities of Arcadia, El Monte, Irwindale, Monrovia, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 33rd and 34th lowest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 45th and 49th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.131: Myrtle Av/Peck Rd Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	6.1	11,437	25,720	21,451	14,903	73,511	625	703	879
	S	6.1	11,112	23,720	20,410	15,577	70,819	607	648	836
City of Arcadia	N	0.5	844	1,897	1,582	1,099	5,423	625	703	879
	S	0.5	820	1,750	1,506	1,149	5,224	607	648	836
City of El Monte	N	5.5	10,876	24,498	22,525	16,553	74,452	654	737	1,016
	S	5.5	12,026	24,629	21,611	17,380	75,646	724	741	975
City of Irwindale	N	1.0	2,239	3,758	3,691	2,045	11,733	786	659	971
	S	1.0	2,026	3,726	3,297	2,241	11,289	711	654	868
Los Angeles County	N	0.5	919	2,066	1,723	1,197	5,905	625	703	879
	S	0.5	893	1,905	1,640	1,251	5,689	607	648	836
City of Monrovia	N	3.2	4,170	12,687	6,440	4,686	27,983	434	661	503
	S	3.2	2,579	8,414	6,465	4,526	21,985	269	438	505

Exhibit 4.132: Myrtle Av/Peck Rd Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	6.1	54	217	503	8.9	35.7	82.4	22.4	19.7	1.14	1.29	1.24	1.43
	S	6.1	52	177	411	8.5	28.9	67.4	22.2	20.4	1.15	1.25	1.25	1.38
City of Arcadia	N	0.5	1	1	7	3.2	2.5	15.6	31.7	33.8	1.08	1.01	1.29	1.15
	S	0.5	1	3	10	2.2	7.1	21.9	34.6	33.6	1.06	1.09	1.18	1.20
City of El Monte	N	5.5	39	222	457	7.1	40.2	82.6	23.3	19.8	1.11	1.30	1.21	1.48
	S	5.5	52	175	389	9.4	31.7	70.2	22.1	20.5	1.14	1.23	1.29	1.39
City of Irwindale	N	1.0	6	14	30	6.3	14.4	31.2	27.5	26.9	1.11	1.13	1.31	1.29
	S	1.0	6	24	45	6.3	24.9	47.5	30.1	25.6	1.12	1.31	1.27	1.56
Los Angeles County	N	0.5	2	2	10	3.6	5.1	20.1	33.3	34.3	1.08	1.05	1.21	1.16
	S	0.5	7	22	48	13.7	44.2	97.0	24.9	20.7	1.26	1.51	1.47	1.90
City of Monrovia	N	3.2	39	89	306	12.3	27.7	95.7	20.2	18.6	1.26	1.37	1.45	1.56
	S	3.2	21	82	216	6.5	25.6	67.6	21.6	19.2	1.22	1.37	1.34	1.57

Exhibit 4.133: Myrtle Av/Peck Rd Hourly Flow Rates (VPH)

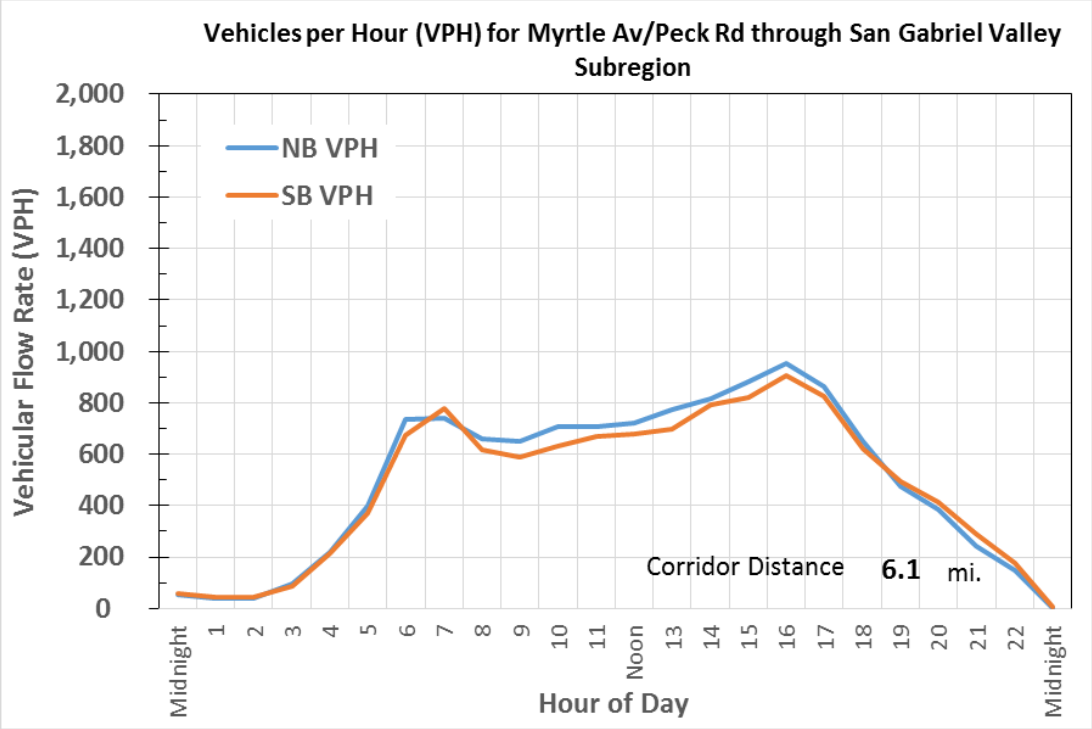


Exhibit 4.134: Myrtle Av/Peck Rd Hourly Congestion (VHD)

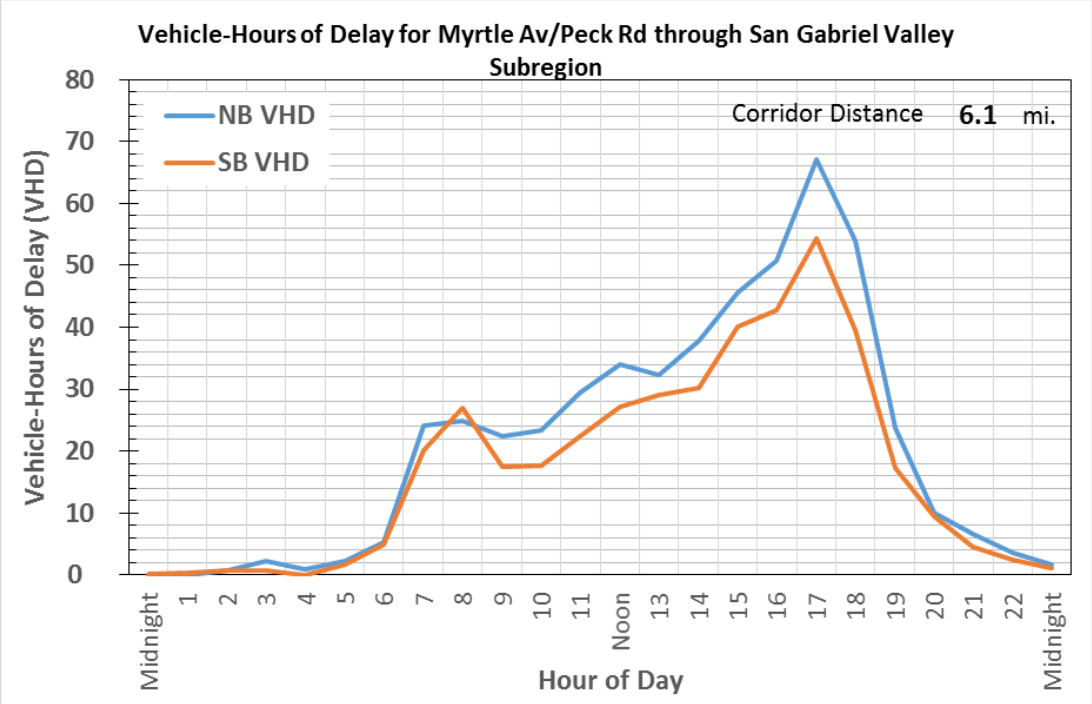
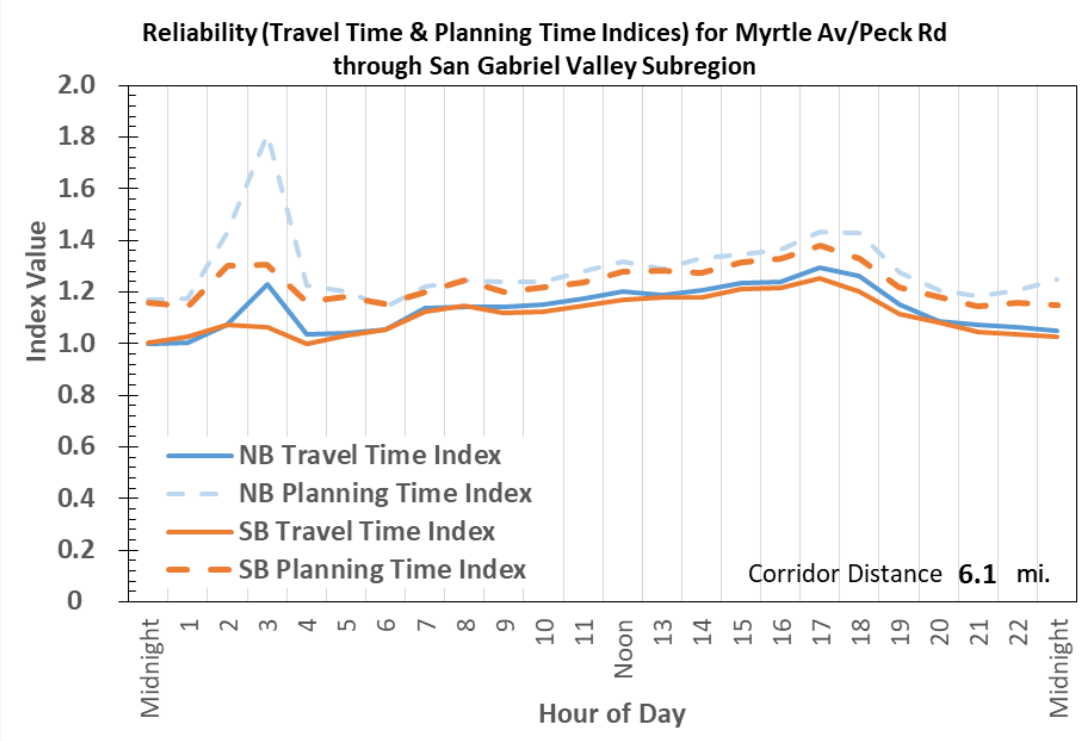


Exhibit 4.135: Myrtle Av/Peck Rd Hourly Reliability (TTI and PTI)



4.28 Nogales Street

Nogales Street is a 3.7-mile corridor in the San Gabriel Valley, crossing the Cities of Industry, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 20th and 23rd lowest average daily VMT in the subregion in the south and northbound directions, respectively. The corridor experiences the 51st and 55th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.136: Nogales Street Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	3.7	8,815	14,542	13,052	7,332	43,742	786	648	872
	S	3.7	7,000	13,206	13,136	8,331	41,674	624	589	878
City of Industry	N	0.5	1,061	1,750	1,570	882	5,263	786	648	872
	S	0.5	842	1,589	1,581	1,002	5,014	624	589	878
Los Angeles County	N	2.1	5,009	7,943	6,737	3,525	23,213	791	627	798
	S	2.1	4,067	7,350	8,723	4,797	24,937	643	581	1,033
City of West Covina	N	1.9	4,384	7,232	6,491	3,646	21,754	786	648	872
	S	1.9	3,481	6,568	6,533	4,143	20,726	624	589	878

Exhibit 4.137: Nogales Street Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	3.7	77	123	372	20.7	32.9	99.5	21.9	22.1	1.31	1.29	1.45	1.49
	S	3.7	46	115	292	12.2	30.7	78.0	25.0	24.1	1.24	1.28	1.34	1.40
City of Industry	N	0.5	18	34	100	40.9	75.4	221.4	16.7	16.2	1.56	1.61	1.88	2.09
	S	0.5	6	22	51	14.2	48.2	113.8	23.2	21.3	1.31	1.43	1.50	1.66
Los Angeles County	N	2.1	45	68	218	21.3	32.1	103.4	21.2	20.6	1.28	1.31	1.50	1.64
	S	2.1	33	92	218	15.7	43.4	103.3	25.1	25.1	1.29	1.30	1.53	1.52
City of West Covina	N	1.9	32	46	122	17.1	24.5	65.8	26.2	25.3	1.21	1.25	1.36	1.52
	S	1.9	22	49	126	12.0	26.3	67.7	28.2	28.9	1.28	1.25	1.47	1.42

Exhibit 4.138: Nogales Street Hourly Flow Rates (VPH)

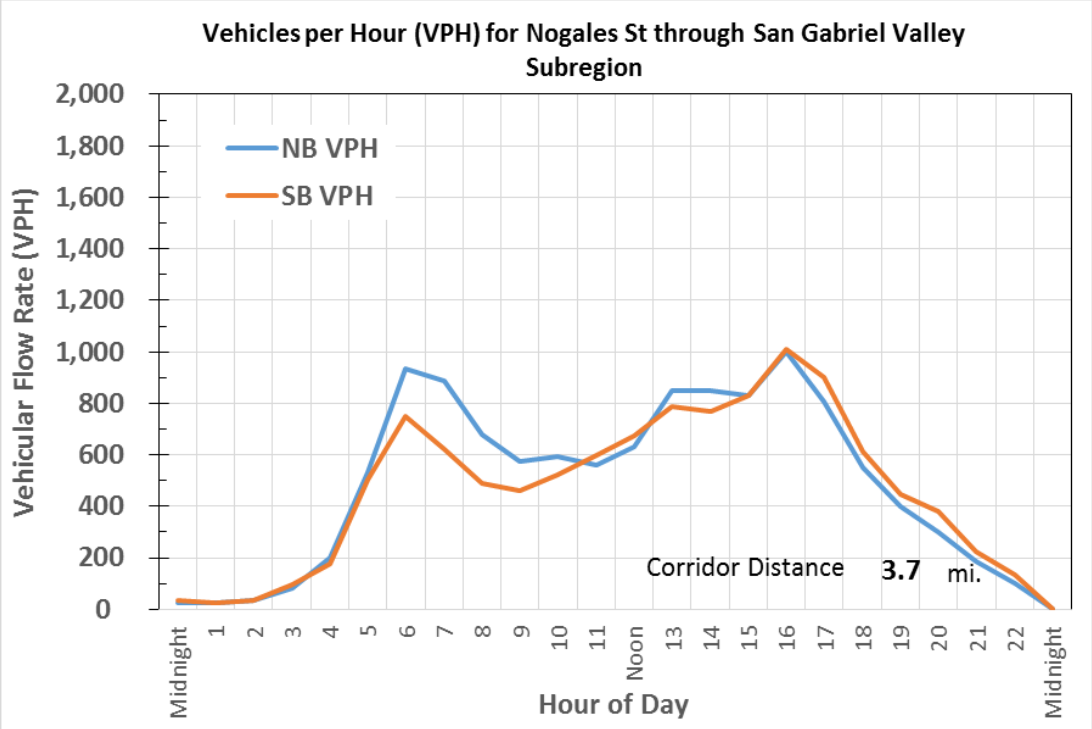


Exhibit 4.139: Nogales Street Hourly Congestion (VHD)

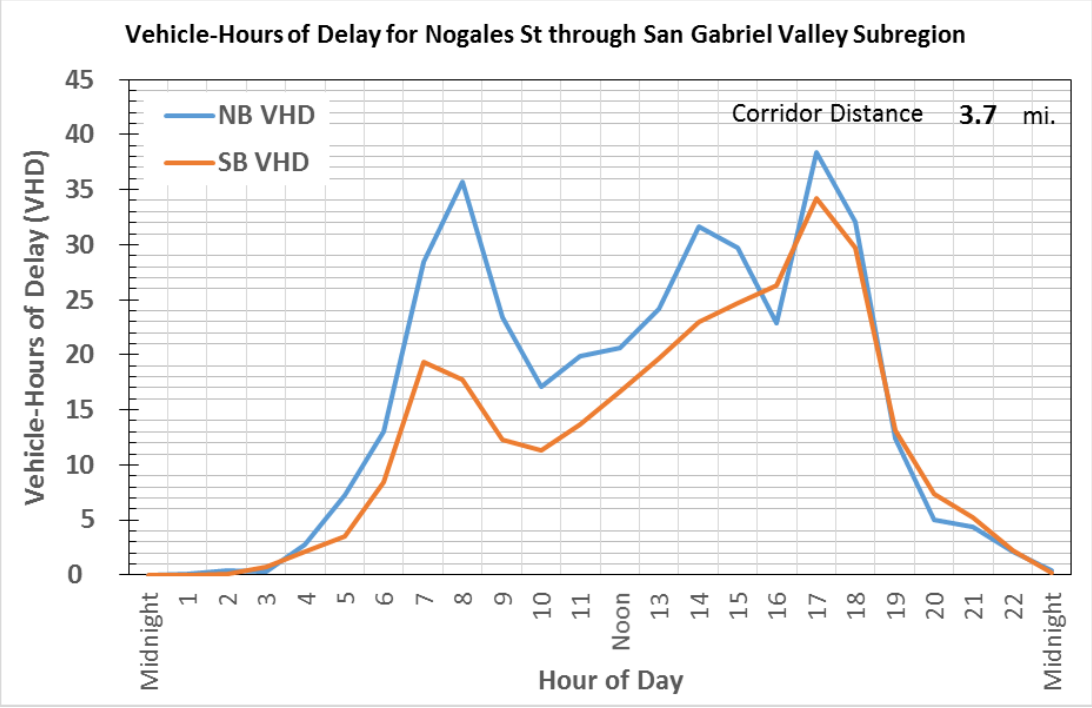
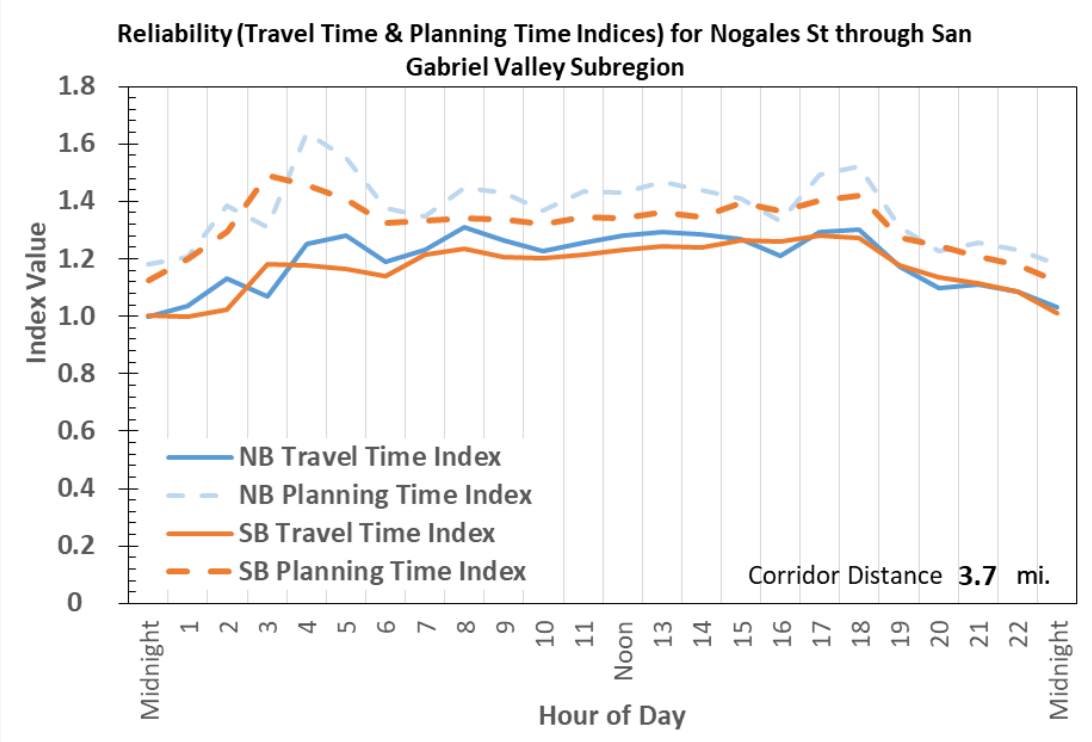


Exhibit 4.140: Nogales Street Hourly Reliability (TTI and PTI)



4.29 Orange Grove Boulevard

Orange Grove Boulevard is a 5.1-mile corridor in the San Gabriel Valley, crossing the City of Pasadena. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 22nd and 24th lowest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 59th and 60th highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.141: Orange Grove Bl Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	5.1	6,667	13,451	16,981	7,084	44,183	435	439	831
	W	5.1	9,590	14,245	13,649	6,156	43,639	626	465	668
City of Pasadena	E	5.1	6,667	13,451	16,981	7,084	44,183	435	439	831
	W	5.1	9,590	14,245	13,649	6,156	43,639	626	465	668

Exhibit 4.142: Orange Grove Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	5.1	51	93	232	9.9	18.2	45.5	22.7	23.5	1.19	1.15	1.29	1.26
	W	5.1	62	61	225	12.2	12.0	43.9	22.5	24.0	1.17	1.10	1.27	1.20
City of Pasadena	E	5.1	51	93	232	9.9	18.2	45.5	22.7	23.5	1.19	1.15	1.29	1.26
	W	5.1	62	61	225	12.2	12.0	43.9	22.5	24.0	1.17	1.10	1.27	1.20

Exhibit 4.143: Orange Grove Boulevard Hourly Flow Rates (VPH)

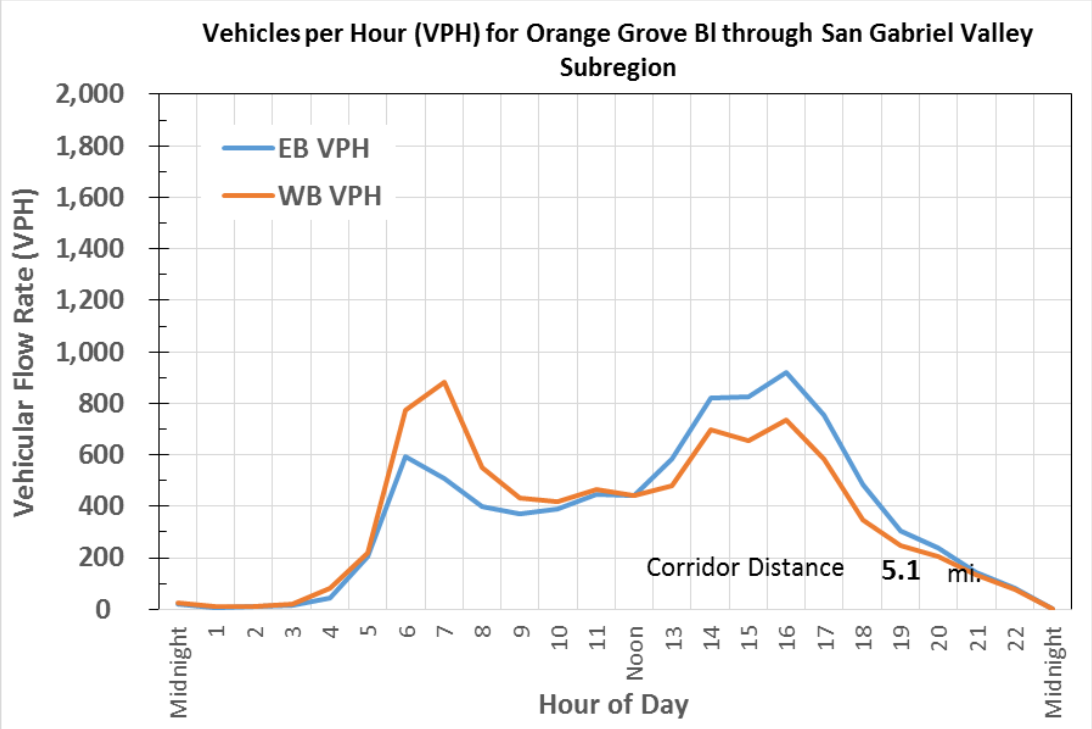


Exhibit 4.144: Orange Grove Boulevard Hourly Congestion (VHD)

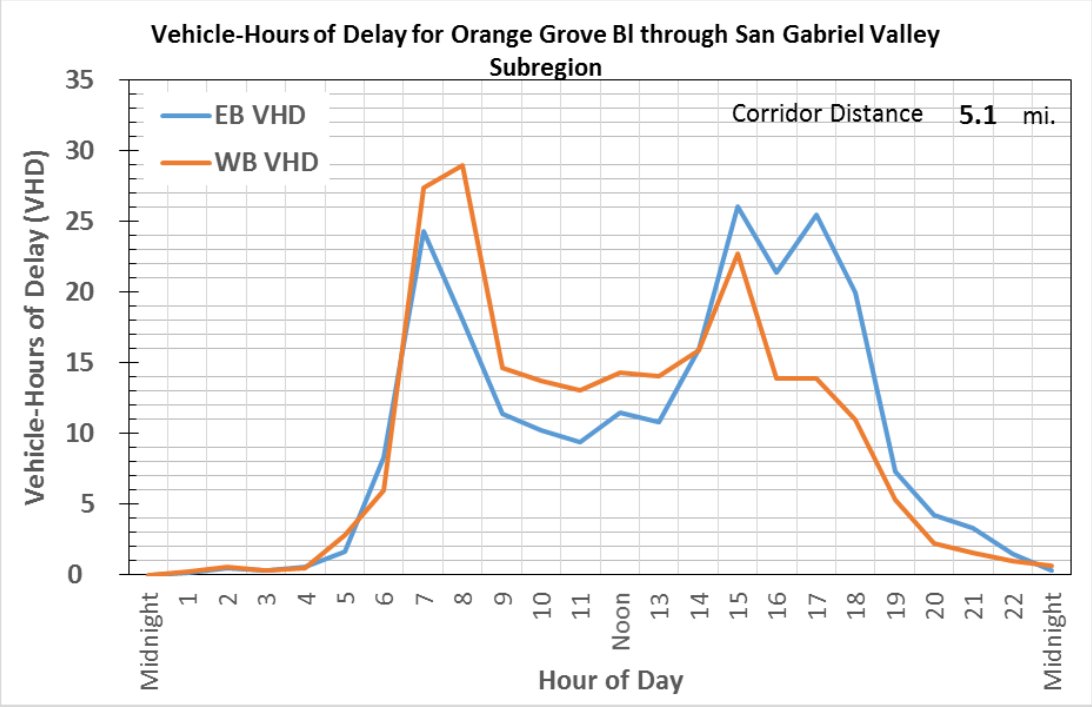
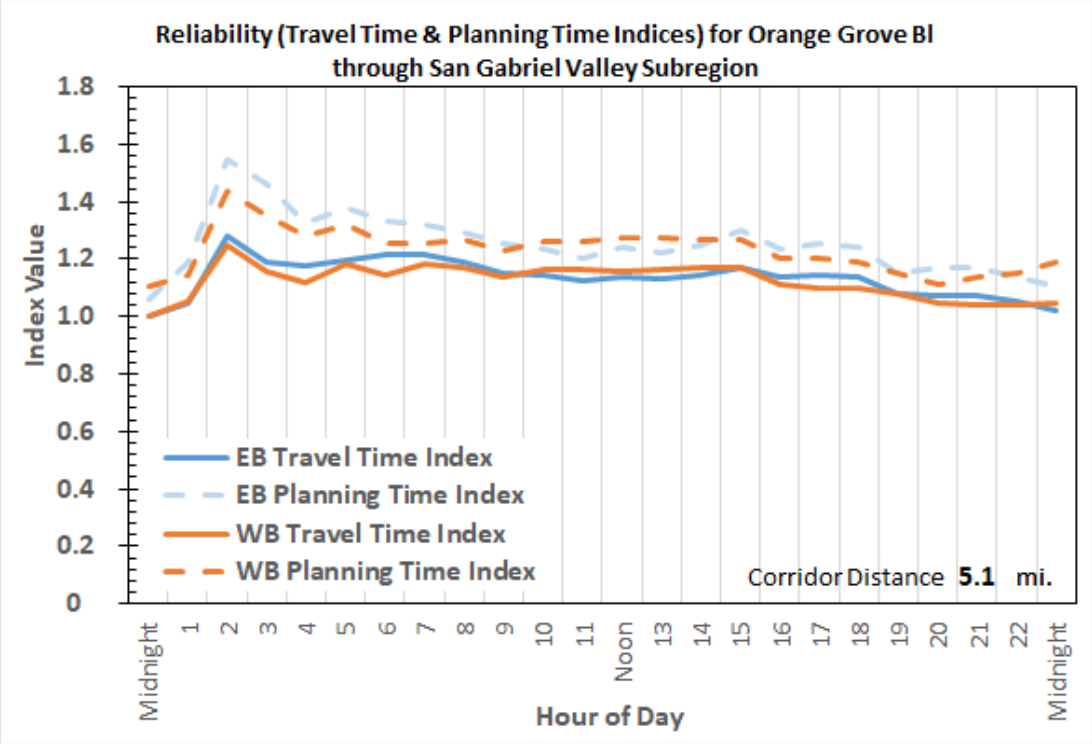


Exhibit 4.145: Orange Grove Boulevard Hourly Reliability (TTI and PTI)



4.30 Ramona Boulevard/Badillo Street

Ramona B/Badillo Street is a 13.8-mile corridor in the San Gabriel Valley, crossing the Cities of Baldwin Park, Covina, El Monte, Irwindale, San Dimas, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 15th and 18th highest average daily VMT in the subregion in the east and westbound directions, respectively. The corridor experiences the 14th and 25th highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.146: Ramona Bl/Badillo St Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	13.8	17,297	48,849	56,777	32,712	155,635	418	590	1,029
	W	13.8	36,569	45,974	32,514	27,332	142,389	883	555	589
City of Baldwin Park	E	3.4	5,717	15,704	19,092	12,114	52,628	569	781	1,425
	W	3.4	10,620	14,714	9,999	9,931	45,264	1,057	732	746
City of Covina	E	4.5	4,944	13,362	15,063	7,729	41,098	363	491	829
	W	4.5	11,560	12,815	9,571	6,893	40,839	849	470	527
City of El Monte	E	2.5	1,775	7,021	7,490	4,066	20,352	233	461	737
	W	2.5	4,360	6,263	4,208	2,908	17,739	572	411	414
City of Irwindale	E	1.1	1,935	5,710	7,811	4,821	20,276	614	906	1,860
	W	1.1	4,438	5,343	3,287	3,603	16,671	1,409	848	783
Los Angeles County	E	0.9	1,065	3,009	3,497	2,015	9,586	418	590	1,029
	W	0.9	2,252	2,832	2,003	1,683	8,770	883	555	589
City of San Dimas	E	2.2	2,745	7,752	9,010	5,191	24,699	418	590	1,029
	W	2.2	5,803	7,296	5,160	4,337	22,597	883	555	589
City of West Covina	E	2.4	3,378	7,662	9,439	4,838	25,316	465	528	975
	W	2.4	7,927	7,176	5,364	4,717	25,184	1,092	494	554

Exhibit 4.147: Ramona Bl/Badillo St Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	13.8	121	720	1,311	8.8	52.2	95.0	25.2	21.2	1.22	1.45	1.28	1.68
	W	13.8	214	233	828	15.5	16.9	60.0	25.1	25.2	1.23	1.23	1.33	1.30
City of Baldwin Park	E	3.4	61	450	754	18.1	134.3	225.0	22.2	16.6	1.35	1.81	1.49	2.24
	W	3.4	103	121	413	30.8	36.0	123.3	21.8	21.9	1.37	1.36	1.61	1.49
City of Covina	E	4.5	22	116	231	4.8	25.6	50.8	30.1	26.8	1.15	1.29	1.24	1.43
	W	4.5	58	60	214	12.7	13.2	47.2	29.3	29.4	1.23	1.23	1.34	1.32
City of El Monte	E	2.5	12	114	198	4.9	44.8	78.0	22.0	17.5	1.18	1.48	1.31	1.96
	W	2.5	38	41	146	15.0	16.3	57.3	20.7	20.5	1.27	1.28	1.42	1.43
City of Irwindale	E	1.1	15	213	291	14.4	202.6	277.6	21.9	14.1	1.25	1.94	1.48	2.78
	W	1.1	57	27	139	54.6	25.9	132.6	21.3	24.1	1.43	1.26	1.78	1.44
Los Angeles County	E	0.9	6	18	39	6.6	21.1	45.8	28.2	27.2	1.15	1.20	1.30	1.38
	W	0.9	5	7	25	6.1	8.4	29.8	29.2	29.2	1.10	1.10	1.26	1.23
City of San Dimas	E	2.2	20	60	135	9.3	27.2	61.8	26.5	26.6	1.22	1.22	1.35	1.35
	W	2.2	23	22	88	10.6	9.9	40.0	28.4	29.0	1.15	1.13	1.24	1.22
City of West Covina	E	2.4	17	61	127	7.2	25.1	52.4	27.9	25.9	1.15	1.25	1.29	1.43
	W	2.4	21	20	78	8.5	8.4	32.3	28.2	28.5	1.12	1.11	1.22	1.21

Exhibit 4.148: Ramona Bl/Badillo St Hourly Flow Rates (VPH)

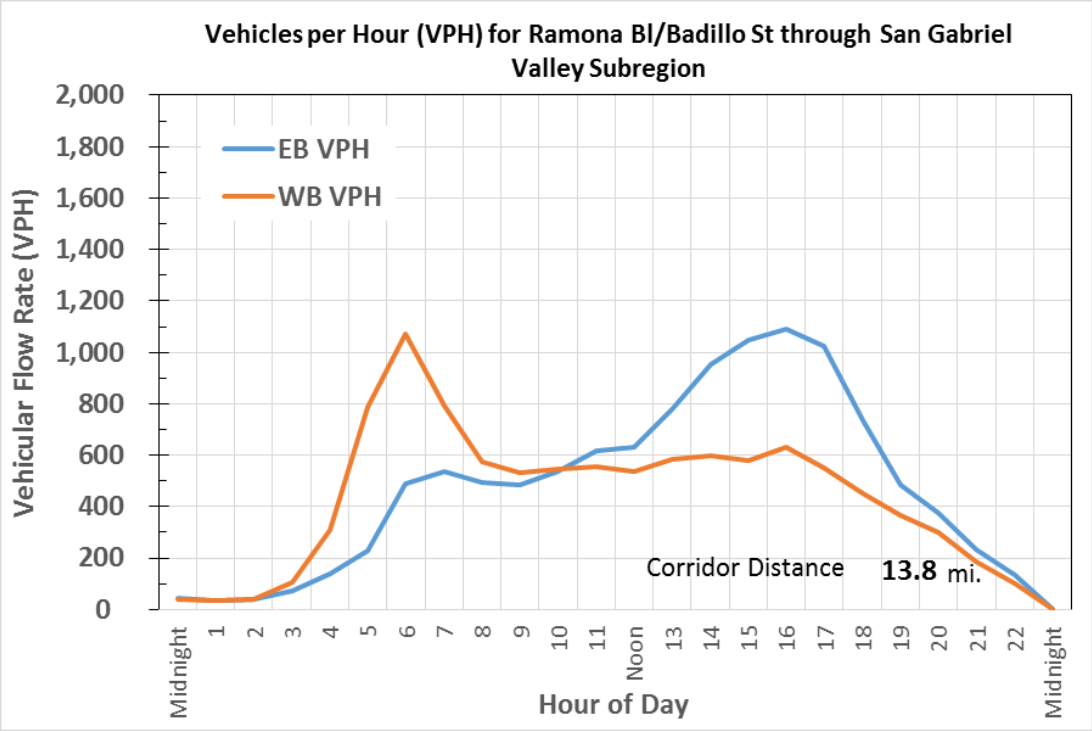


Exhibit 4.149: Ramona Bl/Badillo St Hourly Congestion (VHD)

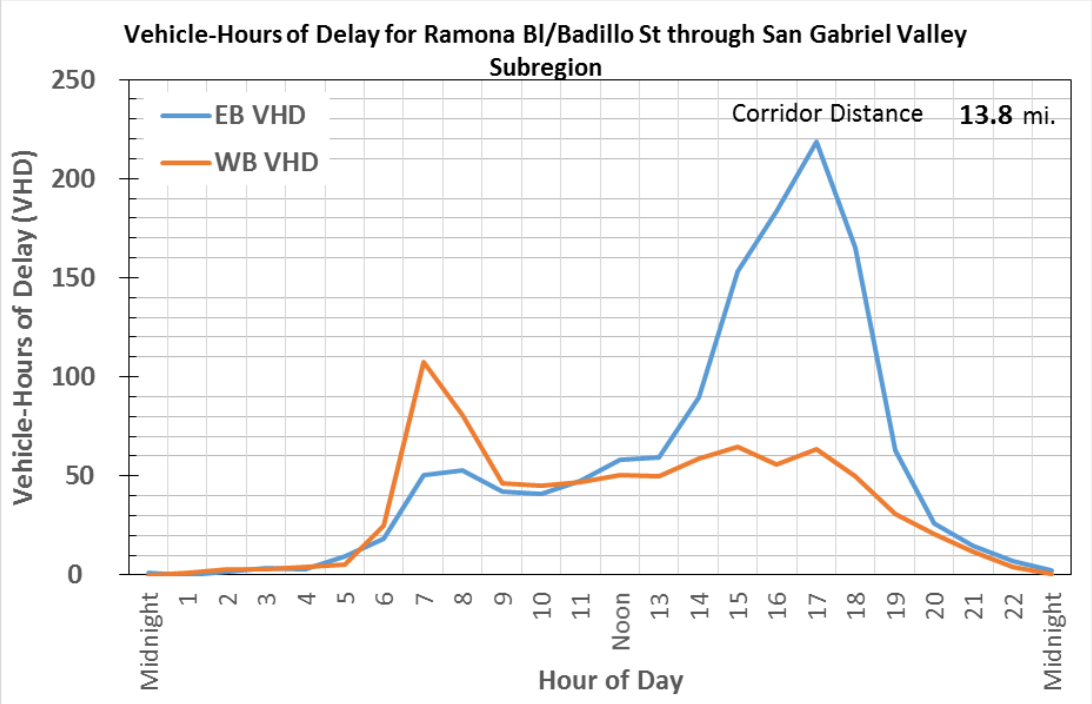
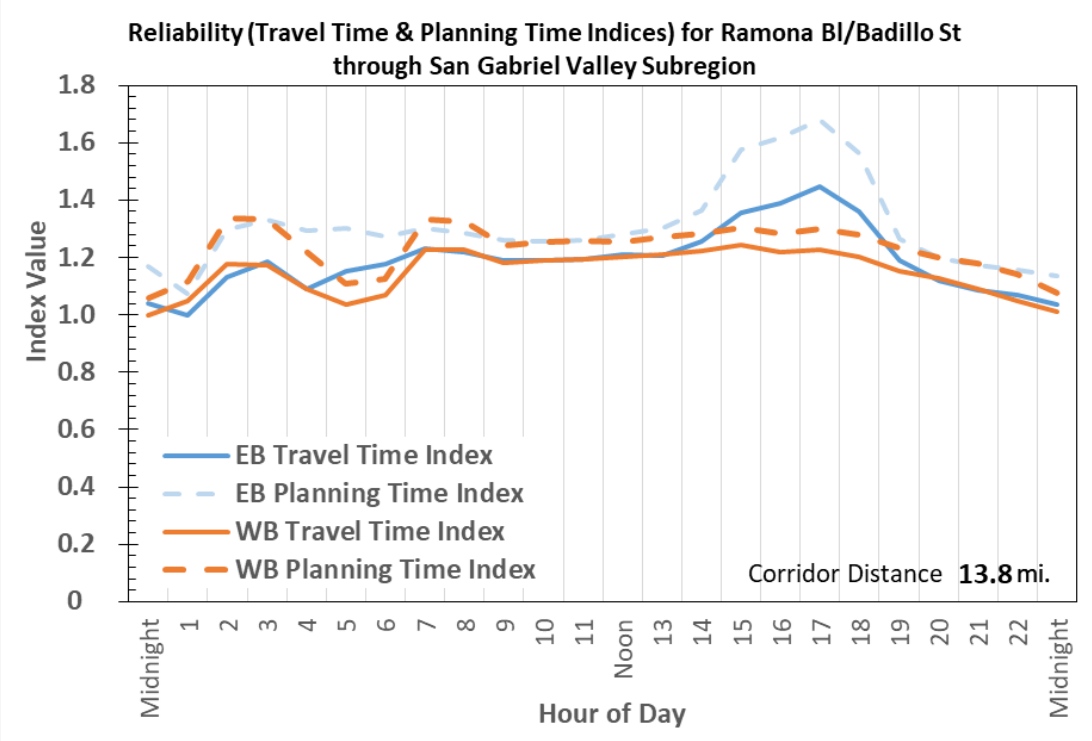


Exhibit 4.150: Ramona Bl/Badillo St Hourly Reliability (TTI and PTI)



4.31 Rosemead Boulevard

Rosemead Boulevard is a 10.9-mile corridor in the San Gabriel Valley, crossing the Cities of El Monte, Pasadena, Rosemead, South El Monte, Temple City, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 9th and 10th highest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 10th and 11th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.151: Rosemead Bl Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	10.9	38,240	67,405	49,303	45,111	200,059	1,169	1,031	1,131
	S	10.9	27,209	65,613	53,098	40,308	186,228	832	1,003	1,218
City of El Monte	N	0.8	2,701	4,762	3,483	3,187	14,133	1,169	1,031	1,131
	S	0.8	1,922	4,635	3,751	2,847	13,156	832	1,003	1,218
Los Angeles County	N	7.6	27,694	45,056	31,567	31,841	136,159	1,216	989	1,040
	S	7.6	19,110	45,654	38,552	26,448	129,765	839	1,003	1,270
City of Pasadena	N	0.9	1,662	2,887	2,330	1,338	8,216	609	529	640
	S	0.9	655	2,829	2,844	1,467	7,796	240	518	781
City of Rosemead	N	3.7	17,864	36,459	28,421	26,211	108,955	1,605	1,638	1,915
	S	3.7	15,272	32,117	21,721	21,981	91,090	1,372	1,443	1,464
City of South El Monte	N	2.0	7,087	12,492	9,137	8,360	37,075	1,169	1,031	1,131
	S	2.0	5,042	12,159	9,840	7,470	34,512	832	1,003	1,218
City of Temple City	N	3.4	11,387	20,124	14,192	12,136	57,839	1,120	989	1,047
	S	3.4	8,187	20,281	16,542	13,039	58,049	805	997	1,220

Exhibit 4.152: Rosemead Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	10.9	232	524	1,441	21.3	48.1	132.2	25.6	23.4	1.29	1.42	1.45	1.58
	S	10.9	137	732	1,430	12.6	67.2	131.2	26.5	21.5	1.28	1.58	1.44	1.81
City of El Monte	N	0.8	11	59	110	13.8	77.0	143.1	30.5	18.9	1.18	1.91	1.37	2.70
	S	0.8	10	62	98	12.4	80.1	127.5	28.3	19.5	1.33	1.94	1.74	2.70
Los Angeles County	N	7.6	175	237	785	23.0	31.2	103.4	27.6	28.6	1.42	1.33	1.71	1.51
	S	7.6	69	392	765	9.1	51.6	100.7	31.6	24.3	1.19	1.58	1.32	1.89
City of Pasadena	N	0.9	16	33	101	17.1	36.8	110.4	21.2	19.5	1.30	1.41	1.54	1.71
	S	0.9	4	54	98	4.9	58.9	107.6	20.6	16.0	1.16	1.49	1.34	1.87
City of Rosemead	N	3.7	96	557	1,166	25.8	150.0	314.4	23.9	16.9	1.23	1.75	1.41	2.12
	S	3.7	126	408	906	34.0	109.9	244.2	21.8	18.5	1.43	1.69	1.81	2.04
City of South El Monte	N	2.0	59	94	320	29.0	46.4	158.3	24.1	24.0	1.36	1.37	1.60	1.59
	S	2.0	38	152	314	18.9	75.4	155.2	25.5	21.5	1.45	1.72	1.82	2.03
City of Temple City	N	3.4	74	145	442	21.7	42.7	130.4	23.9	22.9	1.31	1.36	1.53	1.58
	S	3.4	50	271	562	14.8	79.9	165.7	23.9	20.2	1.34	1.59	1.66	1.88

Exhibit 4.153: Rosemead Bl Hourly Flow Rates (VPH)

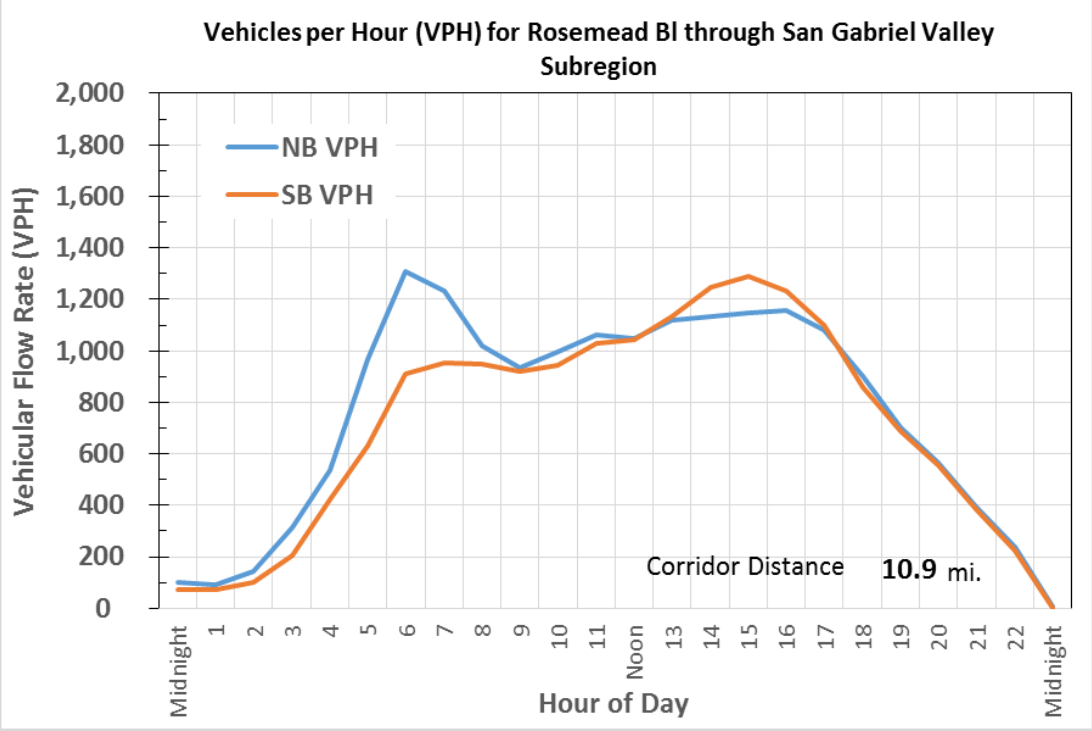


Exhibit 4.154: Rosemead Bl Hourly Congestion (VHD)

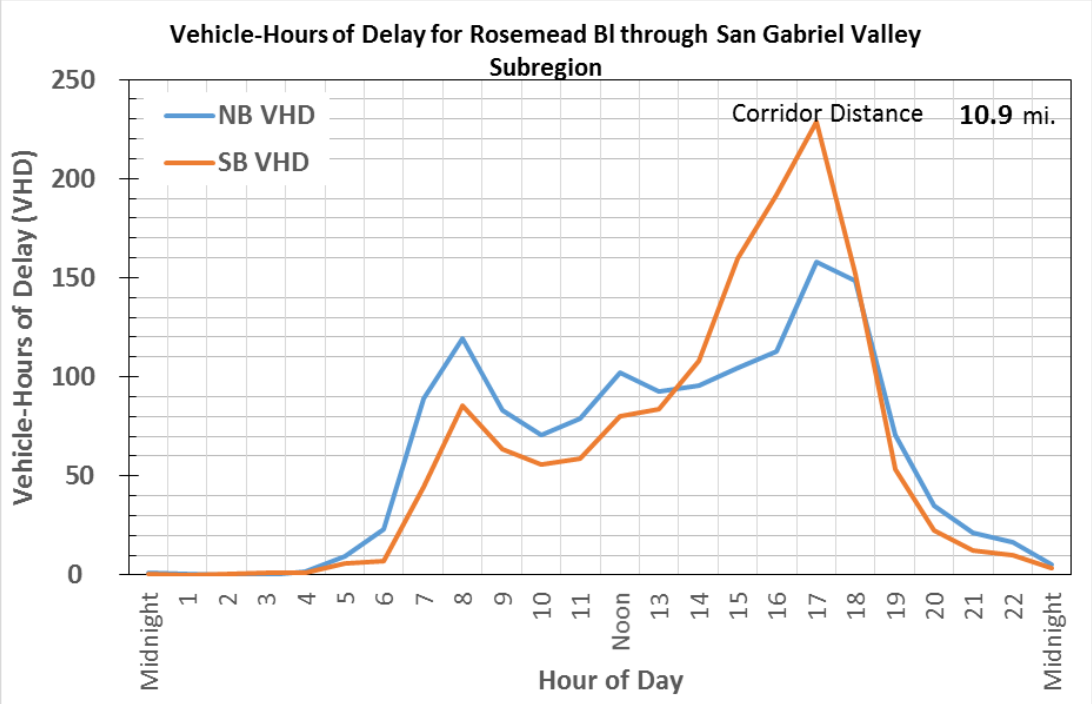
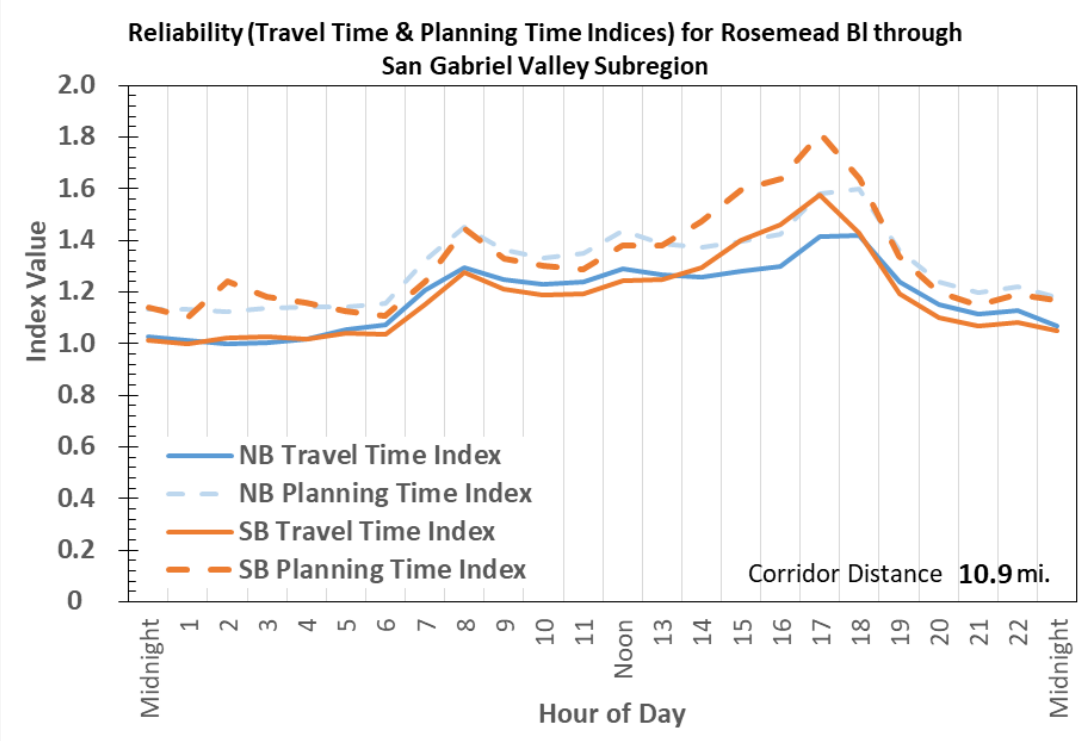


Exhibit 4.155: Rosemead Bl Hourly Reliability (TTI and PTI)



4.32 San Gabriel Boulevard

San Gabriel Boulevard is a 9.3-mile corridor in the San Gabriel Valley, crossing the Cities of Pasadena, Rosemead, San Gabriel, San Marino, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 16th and 19th highest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 17th and 26th highest average daily VHD in the south and northbound directions, respectively.

Exhibit 4.156: San Gabriel Bl Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	9.3	25,535	51,449	40,628	27,866	145,478	917	924	1,095
	S	9.3	21,376	48,675	43,085	29,240	142,377	768	874	1,161
Los Angeles County	N	3.1	8,613	17,353	13,703	9,399	49,068	917	924	1,095
	S	3.1	7,210	16,417	14,532	9,862	48,022	768	874	1,161
City of Pasadena	N	1.2	4,077	5,837	4,044	2,459	16,417	1,105	791	822
	S	1.2	2,006	4,757	5,562	3,206	15,532	544	645	1,131
City of Rosemead	N	2.1	5,190	12,896	10,390	7,084	35,560	820	1,019	1,231
	S	2.1	5,217	12,408	9,472	6,929	34,026	824	980	1,122
City of San Gabriel	N	3.0	8,486	15,013	12,304	9,086	44,889	959	848	1,043
	S	3.0	7,313	14,992	14,768	9,735	46,808	826	847	1,252
City of San Marino	N	1.5	4,210	8,482	6,698	4,594	23,985	917	924	1,095
	S	1.5	3,524	8,025	7,104	4,821	23,474	768	874	1,161

Exhibit 4.157: San Gabriel Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	9.3	139	326	809	15.0	35.1	87.1	22.7	22.2	1.22	1.25	1.35	1.37
	S	9.3	123	522	1,088	13.3	56.2	117.3	24.2	20.5	1.22	1.44	1.30	1.63
Los Angeles County	N	3.1	65	90	286	20.6	28.9	91.3	25.3	26.4	1.28	1.20	1.52	1.37
	S	3.1	29	193	338	9.3	61.8	108.1	26.9	20.4	1.17	1.56	1.33	2.00
City of Pasadena	N	1.2	33	49	141	26.9	39.6	114.6	20.5	20.2	1.33	1.35	1.57	1.53
	S	1.2	14	55	137	11.7	45.0	111.3	22.3	21.1	1.24	1.31	1.41	1.55
City of Rosemead	N	2.1	18	65	157	8.3	30.9	74.3	24.5	22.7	1.12	1.21	1.22	1.36
	S	2.1	27	84	215	12.8	39.8	101.8	24.9	22.8	1.19	1.30	1.32	1.50
City of San Gabriel	N	3.0	49	138	314	16.6	46.7	106.6	21.7	19.9	1.23	1.34	1.42	1.56
	S	3.0	73	238	524	24.6	80.7	177.7	21.9	19.6	1.38	1.54	1.55	1.79
City of San Marino	N	1.5	50	65	200	32.6	42.7	130.4	20.5	24.2	1.57	1.33	1.95	1.48
	S	1.5	16	103	181	10.3	67.4	118.2	29.0	20.7	1.20	1.68	1.38	2.06

Exhibit 4.158: San Gabriel Bl Hourly Flow Rates (VPH)

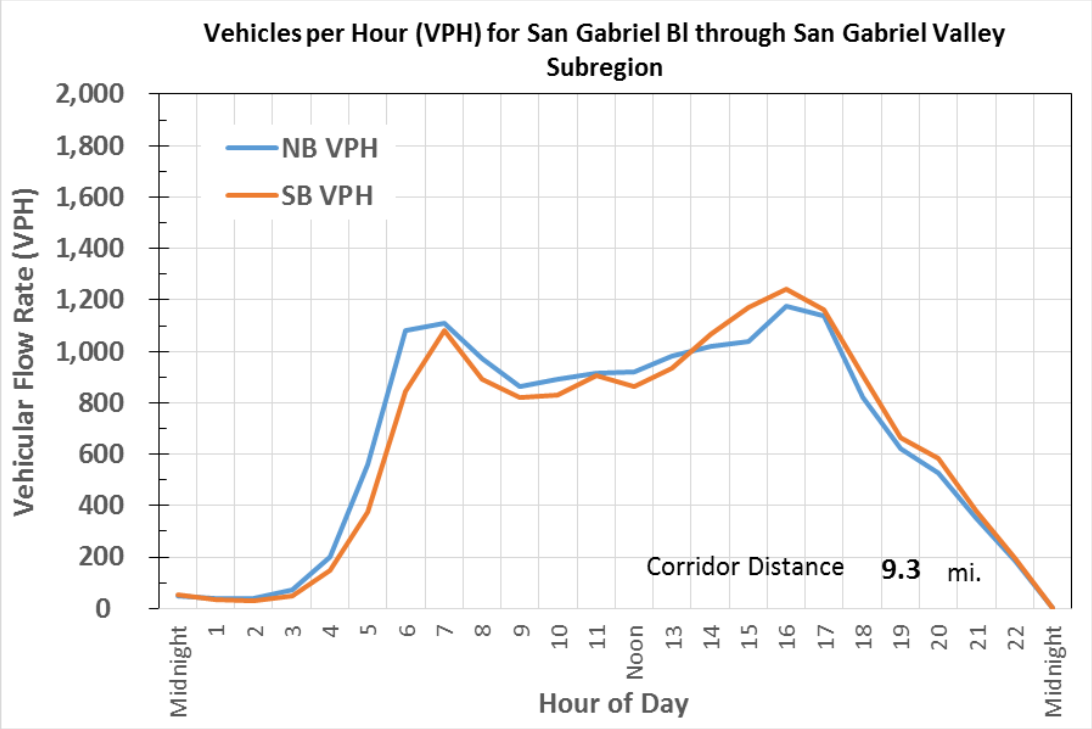


Exhibit 4.159: San Gabriel Boulevard Hourly Congestion (VHD)

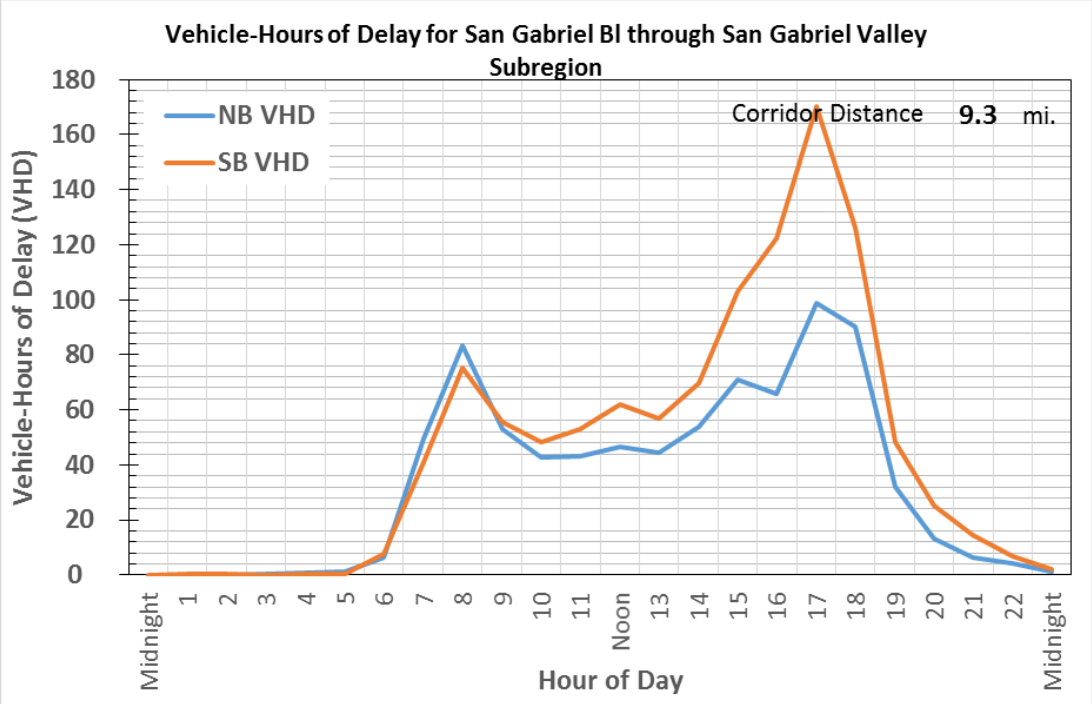
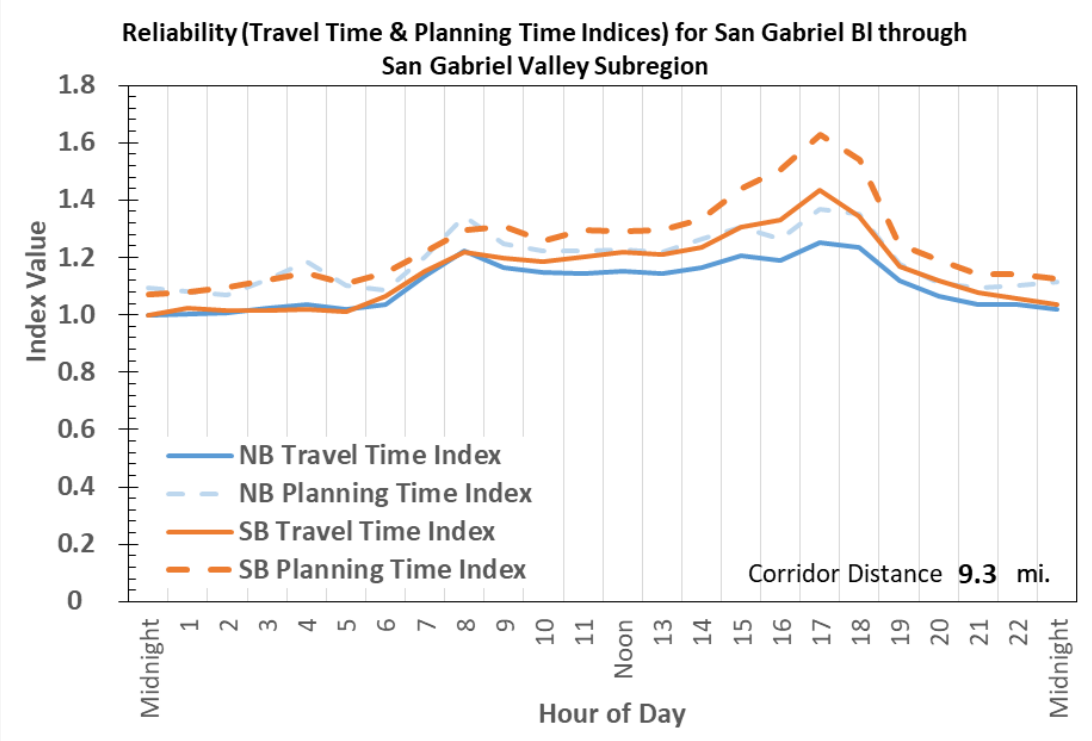


Exhibit 4.160: San Gabriel Bl Hourly Reliability (TTI and PTI)



4.33 San Gabriel/Sierra Madre Boulevards

San Gabriel and Sierra Madre Boulevards are a 4.1-mile corridor in the San Gabriel Valley, crossing the Cities of Arcadia, Pasadena, and Sierra Madre. The corridor has a daily average VMT below the subregion's median of 78,900 per direction, presenting the 3rd and 6th lowest average daily VMT in the subregion in the west and eastbound directions, respectively. The corridor experiences the 64th and 72nd highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.161: San Gabriel Bl/Sierra Madre Bl Travel Demand and Productivity

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	4.1	2,949	6,935	8,942	2,957	21,782	242	284	550
	W	4.1	4,371	6,139	4,775	2,213	17,498	358	252	294
City of Arcadia	E	0.4	290	682	879	291	2,142	242	284	550
	W	0.4	430	604	470	218	1,721	358	252	294
City of Pasadena	E	2.0	1,457	3,427	4,419	1,461	10,764	242	284	550
	W	2.0	2,160	3,034	2,360	1,093	8,647	358	252	294
City of Sierra Madre	E	1.7	1,233	2,898	3,737	1,236	9,104	242	284	550
	W	1.7	1,827	2,566	1,996	925	7,313	358	252	294

Exhibit 4.162: San Gabriel Bl/Sierra Madre Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	4.1	40	79	205	9.8	19.4	50.4	21.4	22.8	1.35	1.27	1.55	1.40
	W	4.1	24	15	68	5.8	3.7	16.6	22.4	23.2	1.11	1.07	1.23	1.18
City of Arcadia	E	0.4	2	1	6	3.9	2.4	15.4	24.1	26.9	1.15	1.03	1.42	1.13
	W	0.4	3	1	8	6.3	2.7	19.8	21.7	23.6	1.15	1.06	1.35	1.15
City of Pasadena	E	2.0	23	33	98	11.2	16.5	48.9	22.7	26.7	1.48	1.25	1.79	1.39
	W	2.0	25	26	91	12.5	13.1	45.5	25.2	25.2	1.35	1.35	1.51	1.56
City of Sierra Madre	E	1.7	12	32	74	7.0	19.0	43.4	19.6	18.8	1.17	1.22	1.34	1.41
	W	1.7	16	9	47	9.2	5.4	27.8	19.9	21.3	1.18	1.11	1.34	1.22

Exhibit 4.163: San Gabriel Bl/Sierra Madre Bl Hourly Flow Rates (VPH)

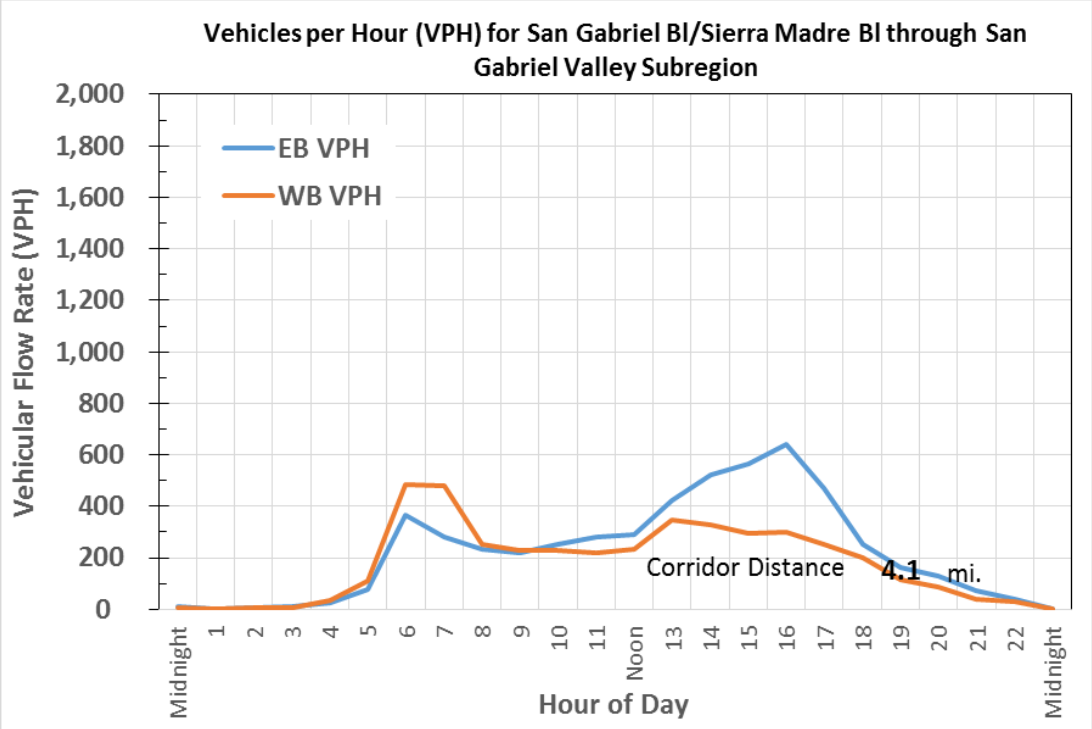


Exhibit 4.164: San Gabriel Bl/Sierra Madre Bl Hourly Congestion (VHD)

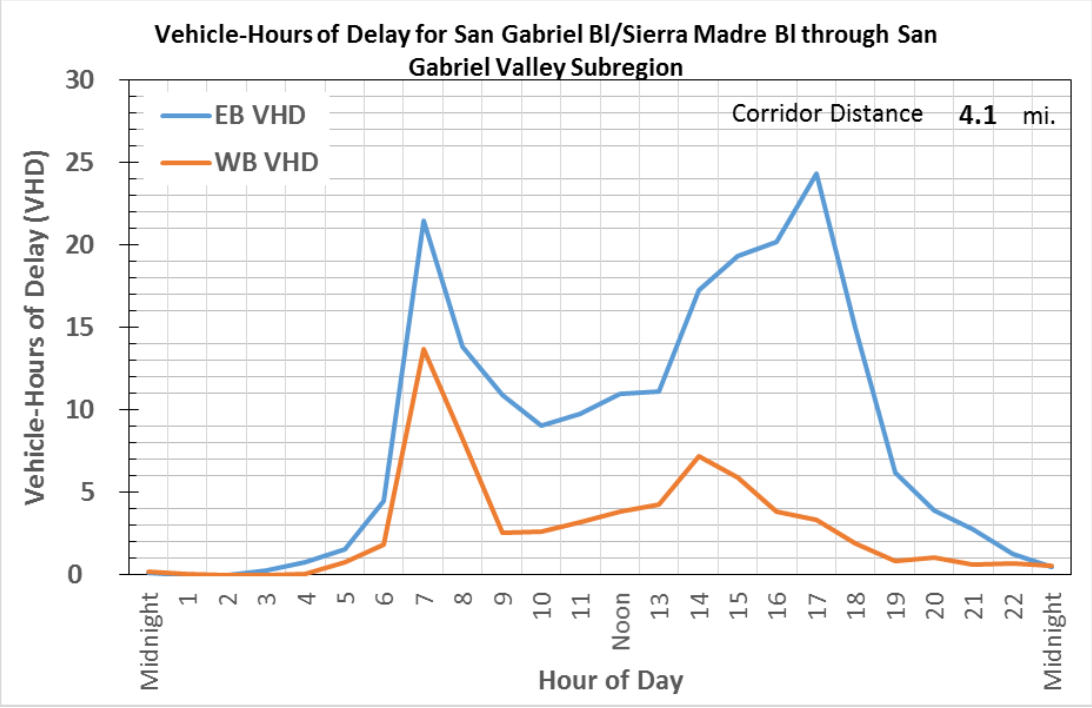
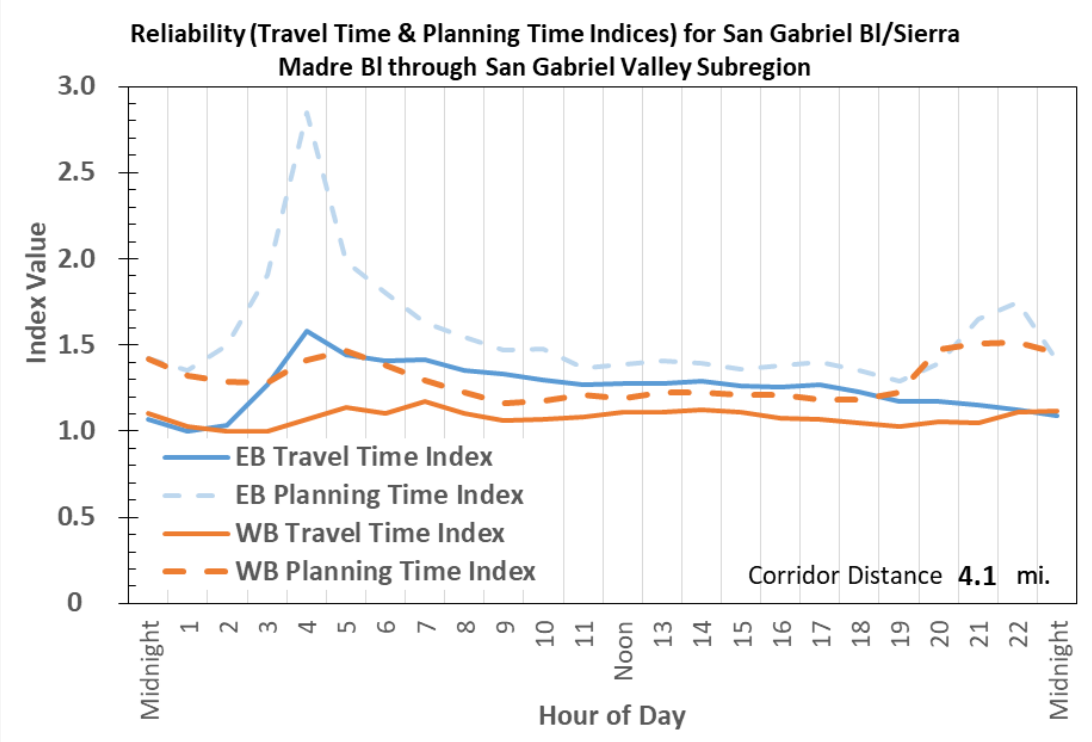


Exhibit 4.165: San Gabriel Bl/Sierra Madre Bl Hourly Reliability (TTI and PTI)



4.34 Santa Anita Avenue

Santa Anita Avenue is a 7.3-mile corridor in the San Gabriel Valley, crossing the Cities of Arcadia, El Monte, Temple City, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 33rd and 34th highest average daily VMT in the subregion in the north and southbound directions, respectively. The corridor experiences the 44th and 47th highest average daily VHD in the north and southbound directions, respectively.

Exhibit 4.166: Santa Anita Av Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	N	7.3	13,314	29,719	24,542	17,451	85,025	608	679	840
	S	7.3	13,614	28,889	23,252	17,662	83,418	622	660	796
City of Arcadia	N	3.8	7,110	14,033	9,978	6,548	37,670	619	611	651
	S	3.8	4,986	12,630	11,062	6,669	35,347	434	550	722
City of El Monte	N	4.4	7,138	20,921	20,586	14,541	63,187	537	787	1,162
	S	4.4	13,677	21,797	14,330	12,379	62,182	1,029	820	809
Los Angeles County	N	0.3	557	1,100	848	657	3,162	664	655	757
	S	0.3	380	1,069	979	805	3,233	453	636	874
City of Temple City	N	0.7	1,331	2,972	2,454	1,745	8,503	608	679	840
	S	0.7	1,361	2,889	2,325	1,766	8,342	622	660	796

Exhibit 4.167: Santa Anita Av Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	N	7.3	90	208	518	12.4	28.5	70.9	21.4	21.0	1.27	1.29	1.43	1.44
	S	7.3	76	187	436	10.5	25.7	59.7	22.9	21.7	1.20	1.27	1.33	1.42
City of Arcadia	N	3.8	81	107	362	21.3	28.0	94.6	19.7	22.0	1.48	1.33	1.71	1.44
	S	3.8	53	154	362	13.8	40.1	94.5	22.6	21.2	1.39	1.49	1.54	1.71
City of El Monte	N	4.4	31	171	311	7.1	38.7	70.2	22.6	19.9	1.15	1.31	1.33	1.55
	S	4.4	53	80	231	12.0	18.1	52.0	23.0	22.1	1.14	1.18	1.32	1.36
Los Angeles County	N	0.3	3	8	19	12.5	26.9	66.1	23.7	22.3	1.26	1.35	1.48	1.56
	S	0.3	3	10	19	9.8	34.7	66.1	24.8	22.2	1.32	1.47	1.65	2.15
City of Temple City	N	0.7	8	18	46	11.3	24.2	63.1	24.6	24.2	1.27	1.29	1.45	1.44
	S	0.7	10	23	48	13.4	31.2	66.2	24.8	22.2	1.32	1.47	1.64	2.14

Exhibit 4.168: Santa Anita Av Hourly Flow Rates (VPH)

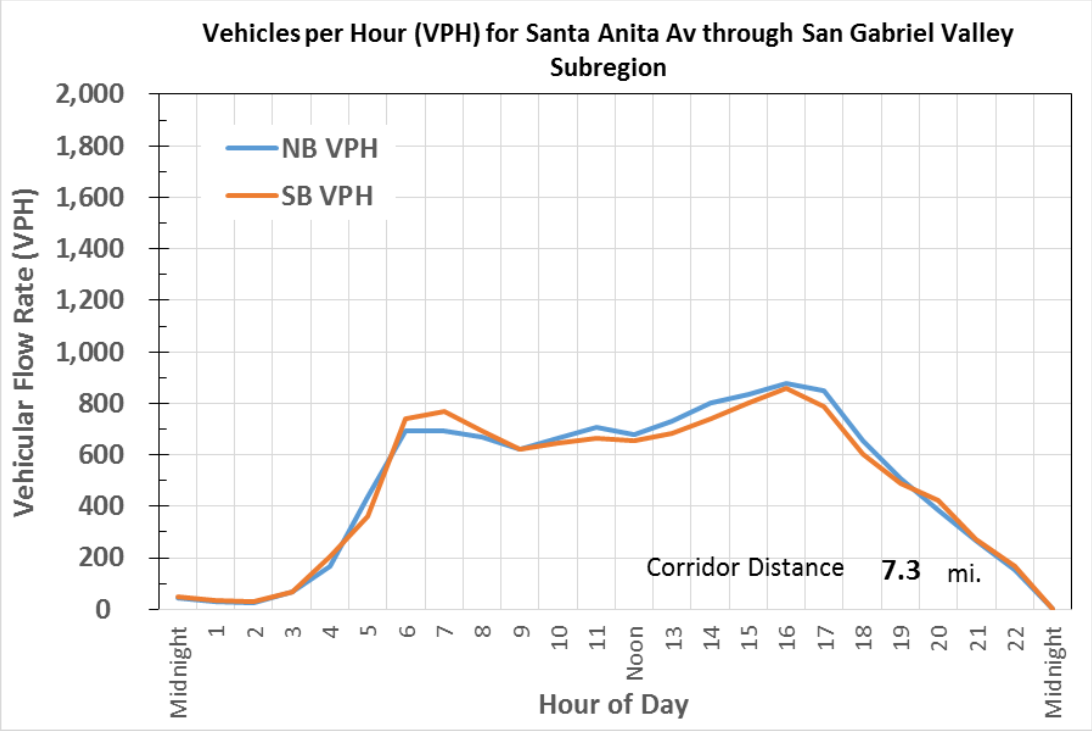


Exhibit 4.169: Santa Anita Av Hourly Congestion (VHD)

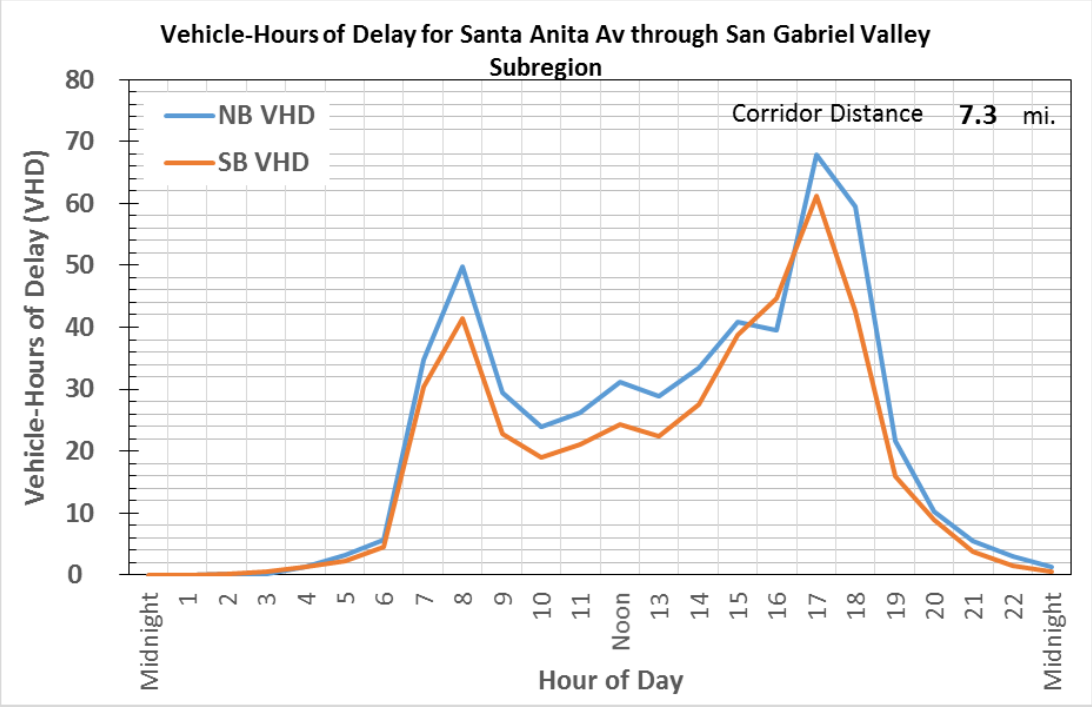
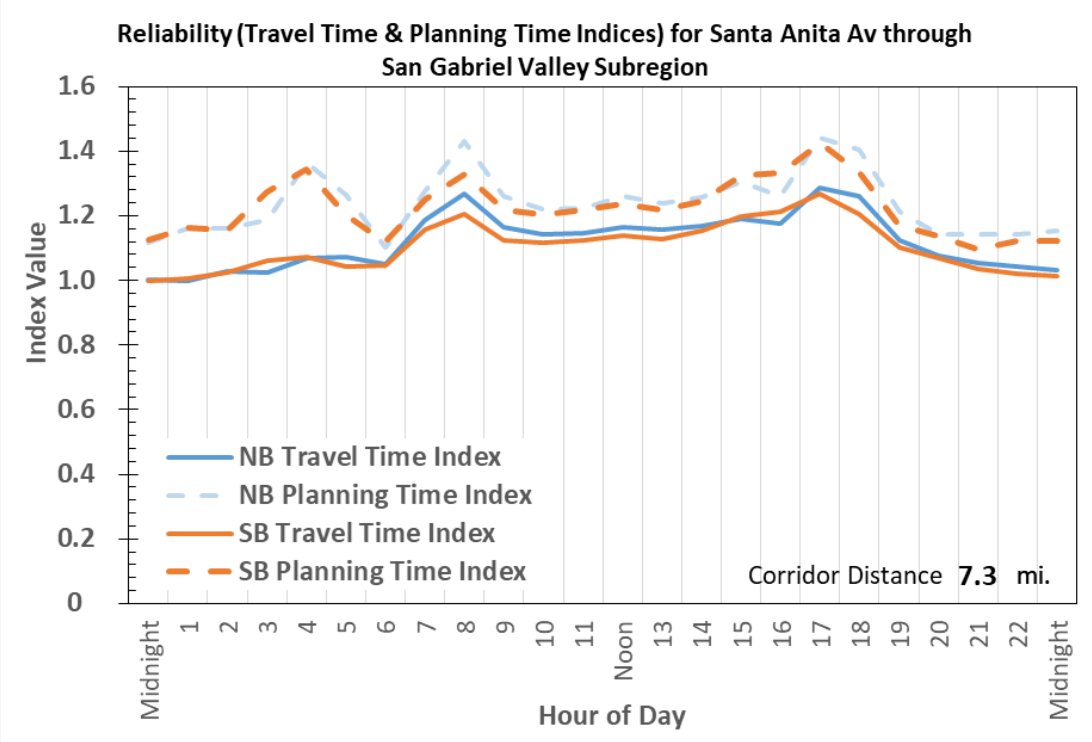


Exhibit 4.170: Santa Anita Av Hourly Reliability (TTI and PTI)



4.35 Valley Boulevard

Valley Boulevard is a 24.8-mile corridor in the San Gabriel Valley, crossing the Cities Alhambra, El Monte, Industry, La Puente, Pomona, Rosemead, San Gabriel, Walnut, West Covina, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the highest average daily VMT in the subregion in the east and westbound directions, respectively. The corridor experiences the highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.171: Valley Boulevard Travel Demand and Productivity Performance

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	24.8	42,091	108,685	125,056	66,001	341,833	566	730	1,261
	W	24.8	65,933	106,916	75,978	58,188	307,014	886	719	766
City of Alhambra	E	3.0	4,304	13,788	13,011	8,298	39,401	472	756	1,070
	W	3.0	7,999	13,197	8,301	7,122	36,619	877	724	683
City of El Monte	E	3.7	7,042	16,722	13,471	10,760	47,995	631	749	905
	W	3.7	10,307	17,281	11,729	8,259	47,576	924	774	788
City of Industry	E	12.9	30,646	61,168	70,723	37,923	200,461	791	789	1,368
	W	12.9	35,109	54,716	41,051	30,428	161,304	906	706	794
Los Angeles County	E	9.4	15,988	41,283	47,501	25,070	129,841	566	730	1,261
	W	9.4	25,044	40,611	28,859	22,102	116,616	886	719	766
City of La Puente	E	1.4	2,427	6,267	7,211	3,806	19,711	566	730	1,261
	W	1.4	3,802	6,165	4,381	3,355	17,703	886	719	766
City of Pomona	E	4.1	6,874	17,749	20,422	10,778	55,824	566	730	1,261
	W	4.1	10,767	17,460	12,408	9,502	50,137	886	719	766
City of Rosemead	E	1.9	1,503	5,513	4,507	3,305	14,827	271	497	609
	W	1.9	3,422	6,565	3,880	2,361	16,229	617	591	524
City of San Gabriel	E	1.3	1,613	6,750	4,989	5,209	18,561	427	893	990
	W	1.3	3,265	6,999	4,638	4,330	19,232	864	926	920
City of Walnut	E	5.8	10,770	29,896	46,148	16,221	103,034	621	862	1,996
	W	5.8	15,198	27,280	17,548	13,209	73,235	876	787	759
City of West Covina	E	1.1	1,202	3,154	4,387	1,616	10,359	364	478	997
	W	1.1	2,718	4,690	3,989	2,663	14,060	824	711	907

Exhibit 4.172: Valley Boulevard Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	24.8	250	1,576	2,939	10.1	63.6	118.5	25.7	21.4	1.21	1.46	1.28	1.68
	W	24.8	410	709	2,154	16.5	28.6	86.9	24.9	24.2	1.28	1.32	1.42	1.41
City of Alhambra	E	3.0	58	284	604	19.2	93.3	198.8	17.0	15.1	1.36	1.54	1.54	1.88
	W	3.0	82	148	481	26.9	48.8	158.1	17.3	16.5	1.37	1.44	1.64	1.62
City of El Monte	E	3.7	39	246	479	10.6	66.1	128.6	21.3	16.0	1.16	1.55	1.28	2.09
	W	3.7	77	117	376	20.8	31.5	101.1	19.4	19.1	1.25	1.27	1.45	1.42
City of Industry	E	12.9	111	515	954	8.6	39.9	73.8	29.9	26.1	1.22	1.40	1.30	1.59
	W	12.9	154	267	743	11.9	20.7	57.5	28.6	28.0	1.31	1.34	1.48	1.45
Los Angeles County	E	9.4	72	414	774	7.7	44.0	82.1	29.8	25.2	1.17	1.39	1.31	1.69
	W	9.4	130	203	598	13.8	21.5	63.5	29.6	29.0	1.23	1.25	1.40	1.40
City of La Puente	E	1.4	5	18	33	3.3	12.6	23.3	36.2	34.0	1.07	1.14	1.16	1.32
	W	1.4	11	18	57	7.9	12.2	40.0	33.6	34.6	1.22	1.18	1.86	1.32
City of Pomona	E	4.1	21	205	302	5.3	50.7	74.6	33.6	25.1	1.13	1.51	1.22	1.87
	W	4.1	46	52	174	11.5	12.8	42.9	33.5	34.4	1.21	1.18	1.35	1.28
City of Rosemead	E	1.9	13	83	201	7.1	44.7	108.5	20.5	16.9	1.25	1.51	1.39	1.82
	W	1.9	31	54	183	16.9	29.3	99.1	20.1	18.9	1.29	1.38	1.50	1.52
City of San Gabriel	E	1.3	11	105	291	8.9	83.6	230.7	20.1	15.8	1.20	1.53	1.32	1.86
	W	1.3	18	85	265	14.2	67.4	210.1	21.0	17.4	1.23	1.49	1.41	1.69
City of Walnut	E	5.8	32	224	408	5.5	38.7	70.5	34.0	31.0	1.11	1.22	1.19	1.35
	W	5.8	44	79	246	7.6	13.6	42.6	33.3	32.4	1.15	1.18	1.27	1.30
City of West Covina	E	1.1	2	16	28	2.2	14.6	25.9	33.6	31.9	1.08	1.14	1.26	1.31
	W	1.1	6	19	46	5.6	17.4	41.4	33.6	32.0	1.14	1.20	1.29	1.37

Exhibit 4.173: Valley Boulevard Hourly Flow Rates (VPH)

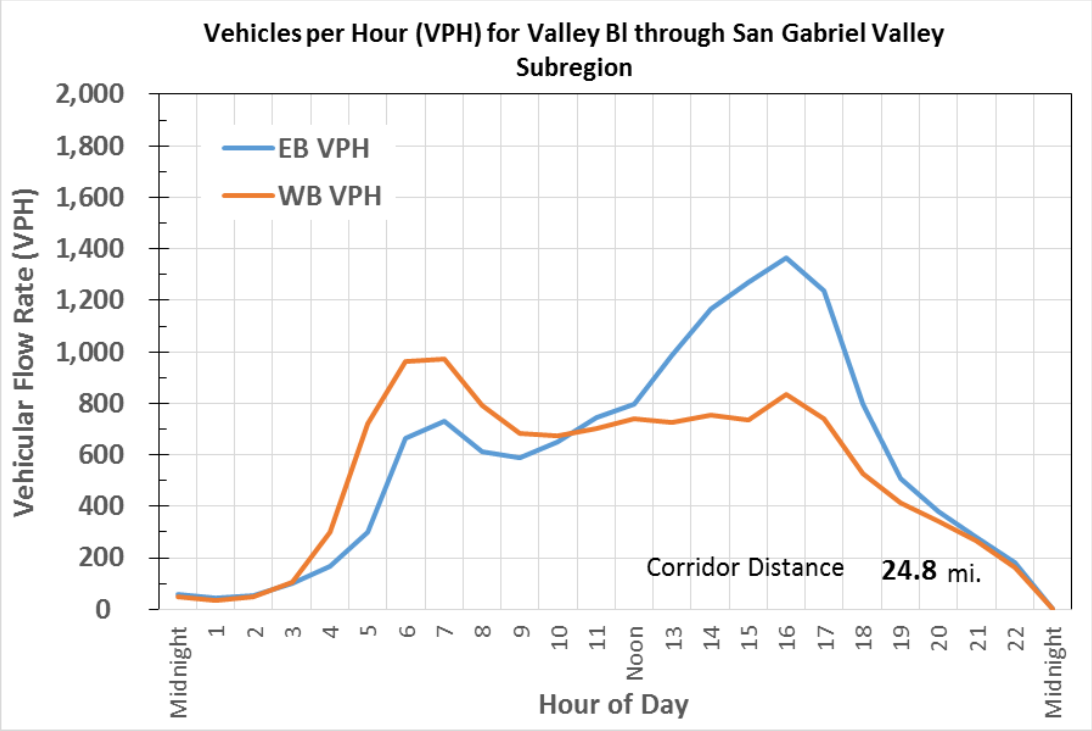


Exhibit 4.174: Valley Boulevard Hourly Congestion (VHD)

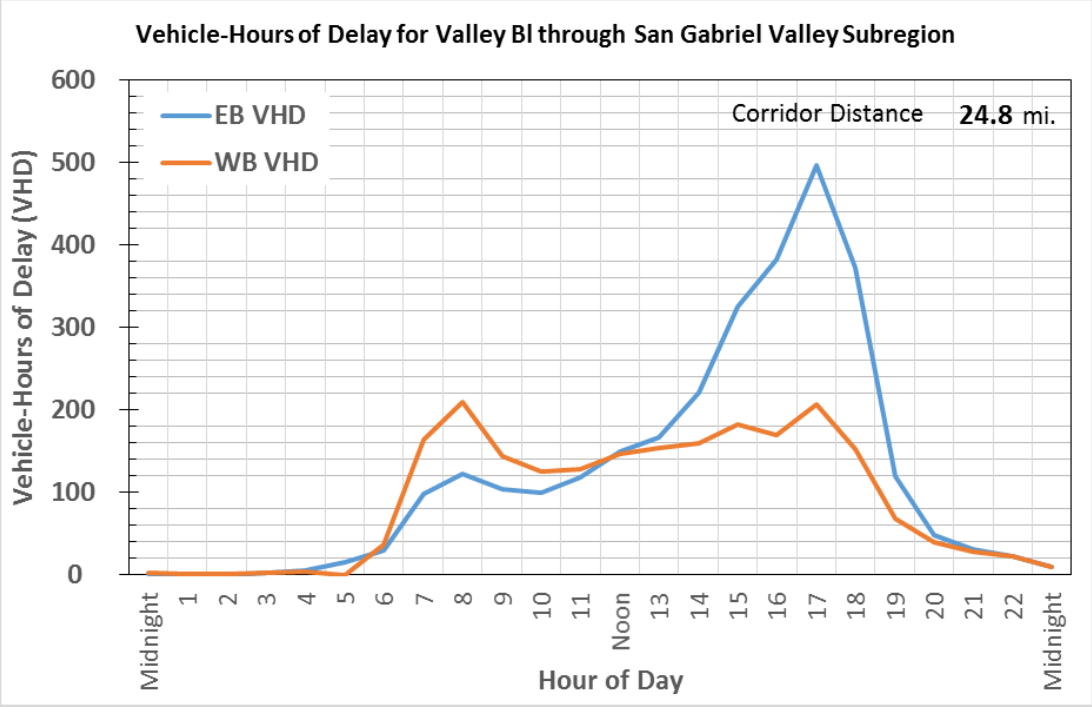
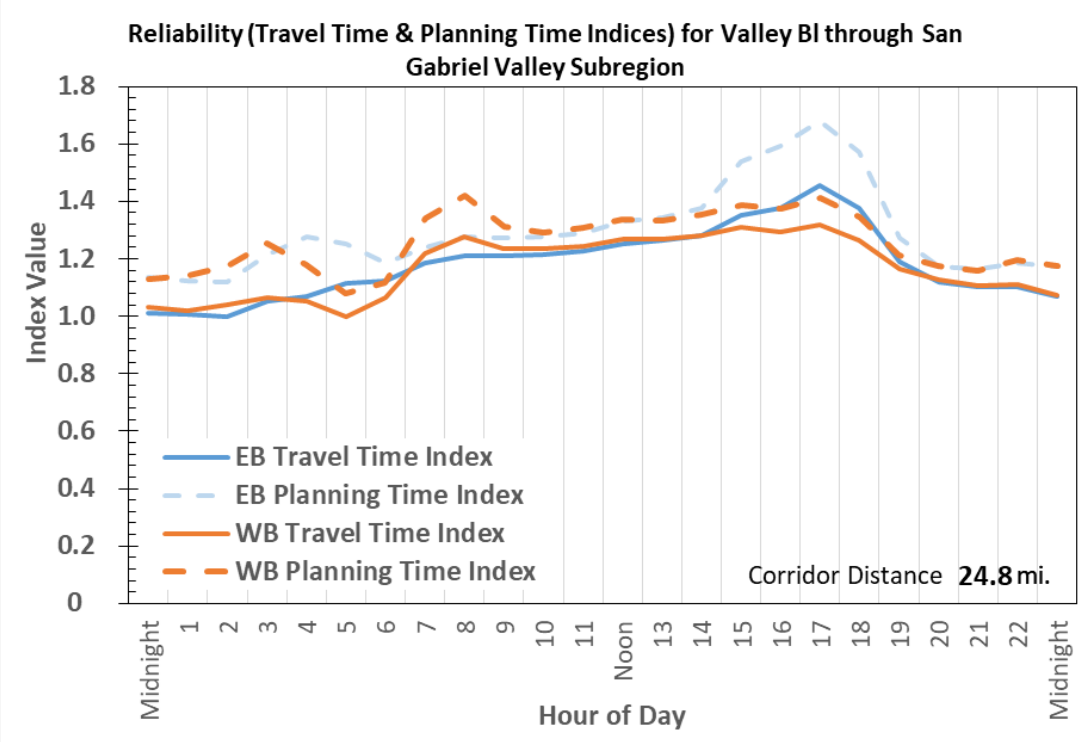


Exhibit 4.175: Valley Boulevard Hourly Reliability (TTI and PTI)



4.36 W Colorado St/E Colorado St/Colorado Bl

Colorado Street and Boulevard represent an 11.7-mile corridor in the San Gabriel Valley, crossing the Cities of Arcadia, Los Angeles, Pasadena, and parts of unincorporated Los Angeles County. The corridor has a daily average VMT above the subregion's median of 78,900 per direction, presenting the 22nd and 23rd highest average daily VMT in the east and westbound directions, respectively. The corridor experiences the 20th and 23rd highest average daily VHD in the east and westbound directions, respectively.

Exhibit 4.176: W/E Colorado St/ Colorado Bl Travel Demand and Productivity

Jurisdiction	Dir	Arterial Length	Travel Demand					Productivity		
			Vehicle Miles Traveled (VMT)					Average Hourly Flow During Period		
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)	Total Daily VMT	AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)
San Gabriel Valley Subregion	E	11.7	14,170	47,474	43,532	26,778	131,953	404	676	930
	W	11.7	22,194	45,258	32,957	24,317	124,726	632	645	704
City of Arcadia	E	2.1	2,555	8,561	7,851	4,829	23,797	404	676	930
	W	2.1	4,002	8,162	5,944	4,385	22,493	632	645	704
City of Los Angeles	E	3.0	5,899	14,989	13,009	9,038	42,936	660	838	1,091
	W	3.0	7,177	15,109	11,752	8,313	42,350	803	845	986
Los Angeles County	E	0.6	454	2,390	2,561	1,078	6,483	240	632	1,016
	W	0.6	1,446	2,140	1,217	820	5,622	765	566	483
City of Pasadena	E	6.4	7,115	21,454	18,090	11,047	57,705	373	562	711
	W	6.4	9,046	22,404	18,710	13,176	63,336	474	587	735

Exhibit 4.177: W/E Colorado St/ Colorado Bl Mobility and Reliability Performance

Jurisdiction	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7 PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7 PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Valley Subregion	E	11.7	83	441	1,013	7.1	37.7	86.6	21.3	19.3	1.17	1.29	1.27	1.41
	W	11.7	67	303	846	5.7	25.9	72.3	21.0	19.1	1.13	1.24	1.22	1.33
City of Arcadia	E	2.1	12	85	150	5.6	40.3	71.1	30.1	24.4	1.21	1.49	1.37	1.81
	W	2.1	9	26	83	4.4	12.2	39.4	32.9	31.3	1.12	1.17	1.22	1.26
City of Los Angeles	E	3.0	36	110	296	12.2	36.8	99.3	22.8	21.9	1.21	1.26	1.37	1.39
	W	3.0	26	86	227	8.8	28.8	76.2	24.5	22.9	1.15	1.23	1.29	1.35
Los Angeles County	E	0.6	3	36	61	4.8	56.4	97.6	25.5	20.9	1.23	1.50	1.36	1.84
	W	0.6	3	16	45	5.3	24.8	71.5	22.0	18.3	1.11	1.34	1.33	1.56
City of Pasadena	E	6.4	60	238	625	9.4	37.4	98.2	18.8	17.2	1.21	1.33	1.35	1.46
	W	6.4	36	209	542	5.6	32.8	85.2	18.7	17.0	1.15	1.26	1.27	1.37

Exhibit 4.178: W/E Colorado St/ Colorado Bl Hourly Flow Rates (VPH)

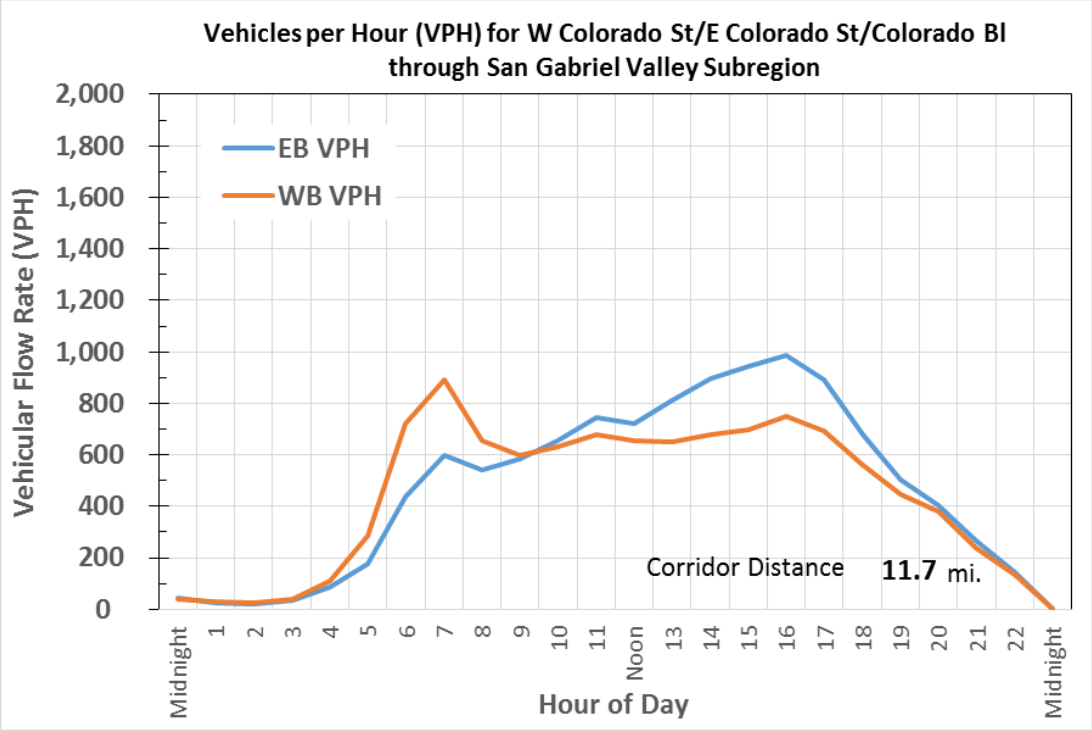


Exhibit 4.179: W/E Colorado St/ Colorado Bl Hourly Congestion (VHD)

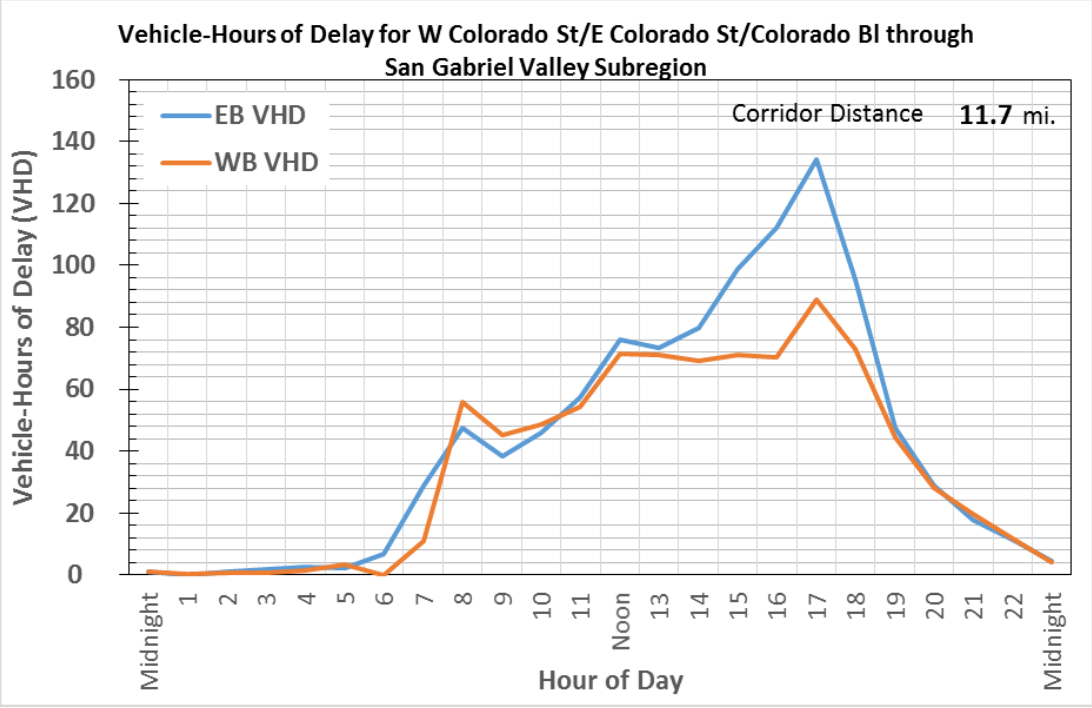
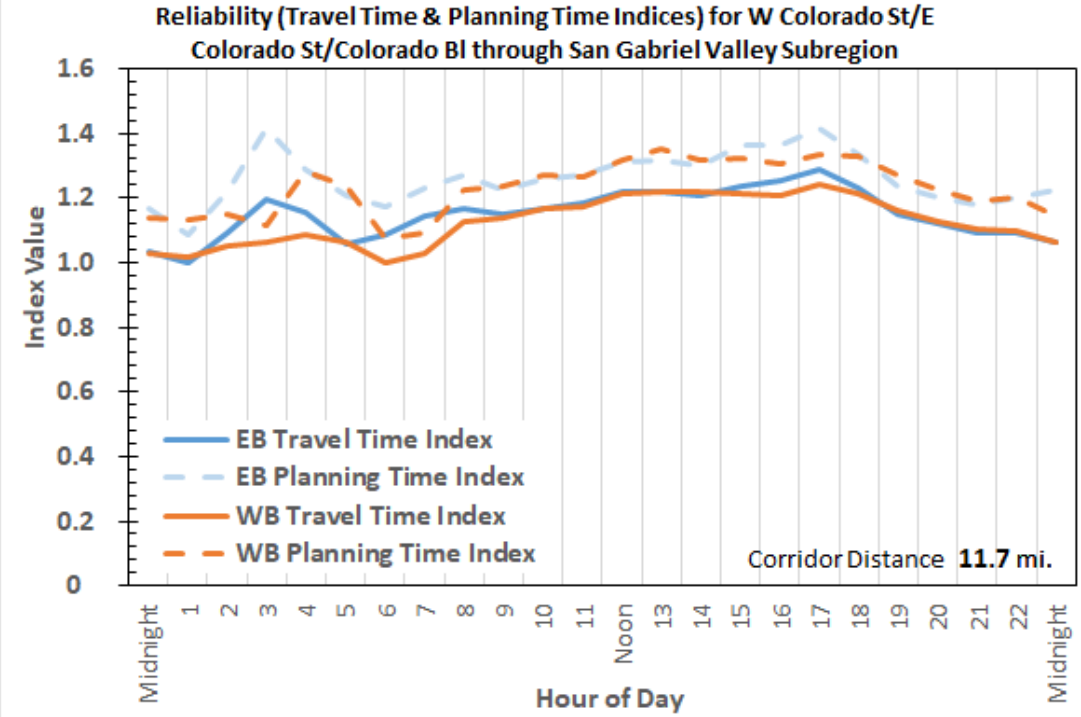


Exhibit 4.180: W/E Colorado St/ Colorado Bl Hourly Reliability (TTI and PTI)



5.0 Analysis Results Summary by City

The performance measurement results are also summarized for corridors within each San Gabriel Valley city, describing various performance characteristics. The same performance metrics are evaluated and presented. The "Sum-Arterial by Jurisdiction" worksheet in the APMT was used for this analysis.

5.1 City of Alhabra

Exhibits 5.1 and 5.1 summarize arterial performance through the City of Alhambra. Among the selected arterials for this study, Huntington Drive has the highest demand (VMT) and is the most productive in terms of traffic flow. Valley Boulevard has the most total delay and the most delay per mile. Fremont Avenue has the highest travel time reliability index.

Exhibit 5.1: Travel Demand and Productivity Performance – City of Alhambra

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Atlantic Av	N	2.6	5,401	11,180	9,556	7,142	33,279	13,000	703	728	933	254
Atlantic Av	S	2.6	7,199	12,361	9,508	7,378	36,446	14,237	937	805	929	262
Fremont Av	N	2.1	5,062	10,130	6,620	7,659	29,470	13,967	800	800	784	330
Fremont Av	S	2.1	4,401	10,352	8,233	6,711	29,697	14,074	695	818	976	289
Garvey Av	E	1.4	1,585	5,423	5,172	3,375	15,556	11,523	391	670	958	227
Garvey Av	W	1.4	3,081	5,850	3,584	2,969	15,483	11,469	761	722	664	200
Huntington Dr	E	2.5	4,556	12,767	14,836	7,381	39,540	15,816	607	851	1,484	268
Huntington Dr	W	2.5	9,977	12,700	9,406	6,790	38,874	15,550	1,330	847	941	247
Main St/Las Tunas Dr/Live Oak Av	E	3.1	3,397	14,309	12,298	7,337	37,340	12,203	370	779	1,005	218
Valley Bl	E	3.0	4,304	13,788	13,011	8,298	39,401	12,961	472	756	1,070	248
Valley Bl	W	3.0	7,999	13,197	8,301	7,122	36,619	12,046	877	724	683	213
City of Alhambra Totals		**26.2**	**56,961**	**122,058**	**100,524**	**72,162**	**351,705**	**146,844**				

Exhibit 5.2: Mobility and Reliability Performance – City of Alhambra

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Atlantic Av	N	2.6	40	152	325	15.5	59.3	126.9	19.2	17.2	1.29	1.44	1.58	1.72
Atlantic Av	S	2.6	45	137	320	17.6	53.3	125.0	21.3	18.1	1.24	1.45	1.43	1.65
Fremont Av	N	2.1	65	144	383	30.8	68.2	181.6	19.8	16.9	1.46	1.72	1.72	1.92
Fremont Av	S	2.1	57	169	362	27.2	80.0	171.6	19.9	16.9	1.52	1.79	1.87	2.08
Garvey Av	E	1.4	4	23	40	3.3	17.0	29.7	29.8	25.2	1.09	1.29	1.21	1.61
Garvey Av	W	1.4	6	13	57	4.7	9.6	42.4	27.1	26.4	1.08	1.11	1.19	1.29
Huntington Dr	E	2.5	25	105	253	9.9	41.9	101.0	24.9	23.5	1.20	1.27	1.37	1.42
Huntington Dr	W	2.5	32	86	224	12.9	34.3	89.6	27.7	24.2	1.14	1.31	1.36	1.43
Main St/Las Tunas Dr/Live Oak Av	E	3.1	25	126	313	8.1	41.2	102.1	17.4	16.5	1.16	1.23	1.30	1.36
Valley Bl	E	3.0	58	284	604	19.2	93.3	198.8	17.0	15.1	1.36	1.54	1.54	1.88
Valley Bl	W	3.0	82	148	481	26.9	48.8	158.1	17.3	16.5	1.37	1.44	1.64	1.62
City of Alhambra Totals		**26.2**	**440**	**1,385**	**3,361**	**16.8**	**52.9**	**128**						

5.2 City of Arcadia

Exhibits 5.3 and 5.4 summarize arterial performance through the City of Arcadia. Among the selected arterials for this study, Huntington Drive has the highest demand (VMT), Baldwin Avenue is the most productive in terms of traffic flow. Huntington Drive has the most total delay and Baldwin Avenue has the most delay per mile. Foothill Boulevard/Walnut Street has the highest travel time reliability index.

Exhibit 5.3: Travel Demand and Productivity Performance – City of Arcadia

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM- 6AM)
Baldwin Av	N	3.3	9,333	17,700	11,945	9,012	47,990	14,766	957	908	919	252
Baldwin Av	S	3.3	5,127	17,189	15,562	10,493	48,372	14,884	526	881	1,197	294
Foothill Bl/Walnut St	E	2.7	2,196	8,269	13,689	4,743	28,897	10,703	271	510	1,267	160
Foothill Bl/Walnut St	W	2.7	9,764	10,023	7,850	3,497	31,133	11,531	1,205	619	727	118
Huntington Dr	E	5.1	5,071	17,814	21,139	9,839	53,862	10,561	331	582	1,036	175
Huntington Dr	W	5.1	12,000	18,576	13,308	9,387	53,270	10,445	784	607	652	167
Main St/Las Tunas Dr/Live Oak Av	E	2.1	2,360	6,859	9,005	4,539	22,763	10,637	368	534	1,052	193
Main St/Las Tunas Dr/Live Oak Av	W	2.1	6,182	7,828	5,845	3,789	23,645	11,049	963	610	683	161
Myrtle Av/Peck Rd	N	0.5	844	1,897	1,582	1,099	5,423	12,051	625	703	879	222
Myrtle Av/Peck Rd	S	0.5	820	1,750	1,506	1,149	5,224	11,610	607	648	836	232
San Gabriel Bl/Sierra Madre Bl	E	0.4	290	682	879	291	2,142	5,355	242	284	550	66
San Gabriel Bl/Sierra Madre Bl	W	0.4	430	604	470	218	1,721	4,302	358	252	294	49
Santa Anita Av	N	3.8	7,110	14,033	9,978	6,548	37,670	9,835	619	611	651	155
Santa Anita Av	S	3.8	4,986	12,630	11,062	6,669	35,347	9,229	434	550	722	158
W Colorado St/E Colorado St/Colorado Bl	E	2.1	2,555	8,561	7,851	4,829	23,797	11,278	404	676	930	208
W Colorado St/E Colorado St/Colorado Bl	W	2.1	4,002	8,162	5,944	4,385	22,493	10,660	632	645	704	189
City of Arcadia Totals		**40.0**	**73,072**	**152,577**	**137,614**	**80,486**	**443,749**	**168,896**				

Exhibit 5.4: Mobility and Reliability Performance – City of Arcadia

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Baldwin Av	N	3.3	55	161	469	17.0	49.5	144.2	24.2	21.2	1.27	1.44	1.42	1.61
Baldwin Av	S	3.3	22	177	387	6.6	54.3	119.0	27.3	22.5	1.18	1.43	1.29	1.59
Foothill Bl/Walnut St	E	2.7	15	180	269	5.6	66.8	99.5	28.3	22.7	1.25	1.55	1.37	2.13
Foothill Bl/Walnut St	W	2.7	84	35	176	31.0	13.0	65.3	22.4	27.2	1.39	1.14	1.69	1.26
Huntington Dr	E	5.1	40	253	496	7.9	49.6	97.3	25.2	22.2	1.25	1.42	1.38	1.71
Huntington Dr	W	5.1	55	132	361	10.9	25.9	70.7	25.9	23.0	1.18	1.32	1.32	1.49
Main St/Las Tunas Dr/Live Oak Av	E	2.1	11	93	156	5.3	43.6	72.8	28.4	22.9	1.17	1.45	1.26	1.84
Main St/Las Tunas Dr/Live Oak Av	W	2.1	47	43	160	22.1	19.9	74.6	25.0	26.5	1.34	1.27	1.60	1.40
Myrtle Av/Peck Rd	N	0.5	1	1	7	3.2	2.5	15.6	31.7	33.8	1.08	1.01	1.29	1.15
Myrtle Av/Peck Rd	S	0.5	1	3	10	2.2	7.1	21.9	34.6	33.6	1.06	1.09	1.18	1.20
San Gabriel Bl/Sierra Madre Bl	E	0.4	2	1	6	3.9	2.4	15.4	24.1	26.9	1.15	1.03	1.42	1.13
San Gabriel Bl/Sierra Madre Bl	W	0.4	3	1	8	6.3	2.7	19.8	21.7	23.6	1.15	1.06	1.35	1.15
Santa Anita Av	N	3.8	81	107	362	21.3	28.0	94.6	19.7	22.0	1.48	1.33	1.71	1.44
Santa Anita Av	S	3.8	53	154	362	13.8	40.1	94.5	22.6	21.2	1.39	1.49	1.54	1.71
W Colorado St/E Colorado St/Colorado Bl	E	2.1	12	85	150	5.6	40.3	71.1	30.1	24.4	1.21	1.49	1.37	1.81
W Colorado St/E Colorado St/Colorado Bl	W	2.1	9	26	83	4.4	12.2	39.4	32.9	31.3	1.12	1.17	1.22	1.26
City of Arcadia Totals		**40.0**	**492**	**1,452**	**3,462**	**12.3**	**36.3**	**86.6**						

5.3 City of Azusa

Exhibits 5.5 and 5.6 summarize arterial performance through the City of Azusa. Among the selected arterials for this study, Azusa Avenue has the highest demand (VMT), Arrow Highway is the most productive in terms of traffic flow. Azusa Avenue has the most total delay the most delay per mile. Foothill Boulevard/Alosta Avenue has the highest travel time reliability index.

Exhibit 5.5: Travel Demand and Productivity Performance – City of Azusa

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.2	4,036	11,523	11,814	7,713	35,086	15,663	601	857	1,319	313
Arrow Hwy	W	2.2	7,512	10,532	7,318	6,783	32,145	14,350	1,118	784	817	275
Azusa Av	N	2.9	5,811	16,148	12,785	13,580	48,324	16,606	666	925	1,098	424
Azusa Av	S	2.9	8,645	17,853	12,780	13,123	52,402	18,007	990	1,023	1,098	410
Citrus Av	N	1.4	3,375	7,312	4,843	3,948	19,477	14,217	821	889	884	262
Citrus Av	S	1.4	1,913	6,841	5,721	5,303	19,778	14,436	465	832	1,044	352
Foothill Bl/Alosta Av	E	2.9	2,536	10,027	11,538	6,325	30,426	10,564	294	580	1,002	200
Foothill Bl/Alosta Av	W	2.9	6,752	9,910	5,777	5,588	28,027	9,732	781	573	502	176
Irwindale Av	N	0.5	1,509	2,473	1,659	1,379	7,020	13,766	986	808	813	246
Irwindale Av	S	0.5	1,029	2,359	2,240	1,510	7,138	13,997	673	771	1,098	269
City of Azusa Totals		**19.8**	**43,118**	**94,978**	**76,475**	**65,252**	**279,823**	**141,339**				

Exhibit 5.6: Mobility and Reliability Performance – City of Azusa

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.2	10	118	184	4.5	52.8	82.0	27.8	22.2	1.08	1.36	1.20	1.59
Arrow Hwy	W	2.2	65	42	172	28.9	18.7	76.9	25.6	27.8	1.29	1.19	1.51	1.31
Azusa Av	N	2.9	53	201	512	18.2	69.1	176.1	20.5	17.9	1.22	1.40	1.35	1.55
Azusa Av	S	2.9	52	105	307	17.7	36.1	105.3	21.9	21.0	1.17	1.22	1.30	1.39
Citrus Av	N	1.4	42	56	211	30.8	40.9	153.8	19.9	20.5	1.38	1.33	1.57	1.51
Citrus Av	S	1.4	15	67	174	10.6	49.3	126.9	22.2	20.5	1.23	1.33	1.39	1.55
Foothill Bl/Alosta Av	E	2.9	25	166	314	8.5	57.7	109.0	22.5	20.1	1.30	1.45	1.44	1.61
Foothill Bl/Alosta Av	W	2.9	55	51	209	19.3	17.7	72.5	23.0	23.2	1.27	1.26	1.41	1.39
Irwindale Av	N	0.5	4	9	29	7.9	18.2	57.7	28.3	27.1	1.14	1.19	1.31	1.40
Irwindale Av	S	0.5	6	11	32	11.2	21.2	62.8	29.4	30.0	1.21	1.19	1.38	1.35
City of Azusa Totals		**19.8**	**326**	**827**	**2,144**	**16.4**	**41.7**	**108.2**						

5.4 City of Baldwin Park

Ramona Boulevard/Badillo Street is the only arterial that runs through City of Baldwin. Results for that segment are presented in Exhibits 5.7 and 5.8.

Exhibit 5.7: Travel Demand and Productivity Performance – City of Baldwin Park

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Ramona Bl/Badillo St	E	3.4	5,717	15,704	19,092	12,114	52,628	15,710	569	781	1,425	329
Ramona Bl/Badillo St	W	3.4	10,620	14,714	9,999	9,931	45,264	13,512	1,057	732	746	269
City of Baldwin Park Totals		**6.7**	**16,337**	**30,419**	**29,091**	**22,045**	**97,892**					

Exhibit 5.8: Mobility and Reliability Performance – City of Baldwin Park

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Ramona Bl/Badillo St	E	3.4	61	450	754	18.1	134.3	225.0	22.2	16.6	1.35	1.81	1.49	2.24
Ramona Bl/Badillo St	W	3.4	103	121	413	30.8	36.0	123.3	21.8	21.9	1.37	1.36	1.61	1.49
City of Baldwin Park Totals		**6.7**	**164**	**571**	**1,167**	**24.4**	**85.2**	**174.2**						

5.5 City of Claremont

Exhibits 5.9 and 5.10 summarize arterial performance through the City of Claremont. Of the two arterials that traverse the City of Claremont, Indian Hill Boulevard has the highest demand (VMT), Arrow Highway is the most productive in terms of traffic flow. Indian Hill Boulevard has the most total delay and the most delay per mile. Arrow Highway has the highest travel time reliability index.

Exhibit 5.9: Travel Demand and Productivity Performance – City of Claremont

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.3	2,547	8,238	9,579	3,707	24,072	10,376	366	592	1,032	145
Arrow Hwy	W	2.3	4,633	6,843	5,269	3,969	20,714	8,928	666	492	568	156
Indian Hill Bl	N	1.7	2,521	7,083	5,017	3,045	17,667	10,392	494	694	738	163
Indian Hill Bl	S	1.7	2,378	6,303	4,917	4,057	17,655	10,385	466	618	723	217
City of Claremont Totals		**8.0**	**12,078**	**28,468**	**24,782**	**14,778**	**80,107**					

Exhibit 5.10: Mobility and Reliability Performance – City of Claremont

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.3	9	75	129	3.9	32.5	55.6	29.9	24.8	1.12	1.35	1.23	1.57
Arrow Hwy	W	2.3	18	30	98	7.6	13.1	42.2	29.8	29.3	1.18	1.20	1.29	1.31
Indian Hill Bl	N	1.7	25	60	177	14.9	35.4	104.3	21.0	20.4	2.10	2.16	2.35	2.51
Indian Hill Bl	S	1.7	19	58	163	10.9	34.2	95.7	22.1	20.8	2.06	2.19	2.30	2.56
City of Claremont Totals		**8.0**	**70**	**224**	**567**	**8.8**	**27.9**	**70.5**						

5.6 City of Covina

Exhibits 5.11 and 5.12 summarize arterial performance through the City of Covina. Among the selected arterials for this study, Ramona Boulevard/Badillo Street has the highest demand (VMT), Arrow Highway is the most productive in terms of traffic flow. Azusa Avenue has the most total delay and the most delay per mile. Azusa Avenue has the highest travel time reliability index

Exhibit 5.11: Travel Demand and Productivity Performance – City of Covina

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.7	4,595	12,445	14,341	7,238	38,619	14,303	567	768	1,328	244
Arrow Hwy	W	2.7	9,993	12,195	8,224	7,123	37,535	13,902	1,234	753	761	240
Azusa Av	N	2.8	3,904	12,404	9,989	8,025	34,322	12,346	468	744	898	262
Azusa Av	S	2.8	5,478	13,350	10,221	8,745	37,793	13,595	657	800	919	286
Citrus Av	N	2.2	3,152	8,590	6,147	5,283	23,172	10,581	480	654	702	219
Citrus Av	S	2.2	1,947	9,171	6,842	5,393	23,352	10,663	296	698	781	224
Grand Av	N	2.2	5,174	10,787	9,163	6,555	31,679	14,599	795	829	1,056	275
Grand Av	S	2.2	5,363	11,744	8,177	6,883	32,168	14,824	824	902	942	288
Ramona Bl/Badillo St	E	4.5	4,944	13,362	15,063	7,729	41,098	9,052	363	491	829	155
Ramona Bl/Badillo St	W	4.5	11,560	12,815	9,571	6,893	40,839	8,995	849	470	527	138
City of Covina Totals		**28.8**	**56,109**	**116,863**	**97,737**	**69,868**	**340,577**					

Exhibit 5.12: Mobility and Reliability Performance – City of Covina

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.7	7	123	196	2.7	45.4	72.8	28.4	23.7	1.07	1.28	1.18	1.45
Arrow Hwy	W	2.7	61	48	187	22.4	17.8	69.4	27.3	28.5	1.25	1.20	1.41	1.32
Azusa Av	N	2.8	26	130	334	9.2	46.9	120.2	21.5	19.4	1.20	1.33	1.35	1.52
Azusa Av	S	2.8	45	145	384	16.1	52.2	138.0	20.6	18.4	1.24	1.39	1.40	1.58
Citrus Av	N	2.2	30	79	238	13.5	35.9	108.6	19.8	18.5	1.25	1.34	1.38	1.48
Citrus Av	S	2.2	7	76	167	3.2	34.9	76.5	21.7	18.6	1.09	1.28	1.23	1.44
Grand Av	N	2.2	41	111	284	18.9	51.2	131.1	24.1	22.1	1.31	1.42	1.45	1.57
Grand Av	S	2.2	41	86	250	19.1	39.7	115.2	24.5	23.0	1.29	1.38	1.47	1.53
Ramona Bl/Badillo St	E	4.5	22	116	231	4.8	25.6	50.8	30.1	26.8	1.15	1.29	1.24	1.43
Ramona Bl/Badillo St	W	4.5	58	60	214	12.7	13.2	47.2	29.3	29.4	1.23	1.23	1.34	1.32
City of Covina Totals		**28.8**	**337**	**974**	**2,486**	**11.7**	**33.9**	**86.4**						

5.7 City of Diamond Bar

Exhibits 5.13 and 5.14 summarize arterial performance through the City of Diamond Bar. Of the three arterials that traverse the jurisdiction, Diamond Bar Boulevard has the highest demand (VMT), and is the most productive in terms of traffic flow. Diamond Bar Boulevard has the most total delay, and Grand Avenue has the most delay per mile. Grand Avenue has the highest travel time reliability index.

Exhibit 5.13: Travel Demand and Productivity Performance – City of Diamond Bar

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Colima Rd/Golden Springs	E	5.4	5,691	21,874	29,739	14,294	71,599	13,333	353	679	1,384	242
Colima Rd/Golden Springs	W	5.4	16,978	22,503	12,267	9,621	61,369	11,428	1,054	698	571	163
Diamond Bar Bl	N	6.4	11,483	25,546	33,002	18,796	88,826	13,793	594	661	1,281	265
Diamond Bar Bl	S	6.4	26,726	33,960	21,952	18,645	101,283	15,727	1,383	879	852	263
Grand Av	N	1.1	2,926	6,321	5,276	3,960	18,484	17,274	912	985	1,233	336
Grand Av	S	1.1	1,961	5,419	4,159	4,371	15,909	14,869	611	844	972	371
City of Diamond Bar Totals		**25.8**	**65,765**	**115,624**	**106,394**	**69,687**	**357,469**					

Exhibit 5.14: Mobility and Reliability Performance – City of Diamond Bar

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Colima Rd/Golden Springs	E	5.4	24	262	416	4.6	48.9	77.4	29.0	24.1	1.17	1.40	1.26	1.63
Colima Rd/Golden Springs	W	5.4	75	73	305	14.0	13.7	56.8	30.0	29.4	1.22	1.24	1.38	1.39
Diamond Bar Bl	N	6.4	88	437	798	13.7	67.9	123.9	27.8	23.5	1.31	1.55	1.45	1.77
Diamond Bar Bl	S	6.4	180	173	622	28.0	26.8	96.5	29.7	29.6	1.31	1.31	1.44	1.42
Grand Av	N	1.1	30	65	177	27.8	60.9	165.6	24.5	23.8	1.41	1.46	1.76	1.73
Grand Av	S	1.1	15	72	159	14.4	67.6	149.0	24.0	18.9	1.27	1.61	1.49	1.95
City of Diamond Bar Totals		**25.8**	**413**	**1,083**	**2,476**	**16.0**	**42.0**	**96.1**						

5.8 City of Duarte

Exhibits 5.15 and 5.16 summarize arterial performance through the City of Duarte. Of the two arterials that traverse Duarte, Huntington Drive has the highest demand (VMT), and is the most productive in terms of traffic flow. Huntington Drive has the most total delay, and Mountain Avenue has the most delay per mile. Huntington Drive has the highest travel time reliability index.

Exhibit 5.15: Travel Demand and Productivity Performance – City of Duarte

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Huntington Dr	E	3.5	4,273	15,276	18,527	8,138	46,214	13,129	405	723	1,316	210
Huntington Dr	W	3.5	18,305	16,569	9,667	6,191	50,732	14,412	1,733	784	687	160
Mountain Av	N	0.5	601	2,254	1,413	1,598	5,867	11,282	385	723	679	279
Mountain Av	S	0.5	567	2,212	1,832	1,554	6,165	11,856	363	709	881	272
City of Duarte Totals		**8.1**	**23,747**	**36,311**	**31,438**	**17,482**	**108,977**					

Exhibit 5.16: Mobility and Reliability Performance – City of Duarte

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Huntington Dr	E	3.5	26	318	466	7.2	90.3	132.5	24.5	17.5	1.19	1.66	1.30	2.69
Huntington Dr	W	3.5	121	58	282	34.5	16.5	80.1	23.3	25.2	1.29	1.19	1.65	1.33
Mountain Av	N	0.5	10	31	103	19.3	59.9	197.3	15.5	14.5	1.40	1.50	1.64	1.75
Mountain Av	S	0.5	6	36	84	11.5	69.4	161.5	18.6	15.8	1.29	1.52	1.50	1.84
City of Duarte Totals		**8.1**	**163**	**443**	**935**	**20.2**	**54.8**	**115.7**						

5.9 City of El Monte

Exhibits 5.17 and 5.18 summarize arterial performance through the City of El Monte. Among the selected arterials for this study, Myrtle Av/Peck Road has the highest demand (VMT), Rosemead Boulevard is the most productive in terms of traffic flow. Valley Boulevard has the most total delay, Baldwin Avenue has the most delay per mile. Rosemead Boulevard has the highest travel time reliability index.

Exhibit 5.17: Travel Demand and Productivity Performance – City of El Monte

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Baldwin Av	N	1.3	3,121	6,522	5,078	3,760	18,481	14,438	813	849	992	267
Baldwin Av	S	1.3	2,572	6,359	5,287	3,857	18,074	14,120	670	828	1,033	274
Garvey Av	E	2.5	3,528	10,743	9,704	6,799	30,774	12,212	467	711	963	245
Garvey Av	W	2.5	6,104	10,990	6,805	5,976	29,875	11,855	807	727	675	216
Lower Azusa Rd	E	3.1	4,960	11,306	13,824	8,737	38,827	12,405	528	602	1,104	254
Lower Azusa Rd	W	3.1	8,199	10,593	7,943	7,841	34,575	11,046	873	564	634	228
Myrtle Av/Peck Rd	N	5.5	10,876	24,498	22,525	16,553	74,452	13,439	654	737	1,016	272
Myrtle Av/Peck Rd	S	5.5	12,026	24,629	21,611	17,380	75,646	13,655	724	741	975	285
Ramona Bl/Badillo St	E	2.5	1,775	7,021	7,490	4,066	20,352	8,013	233	461	737	146
Ramona Bl/Badillo St	W	2.5	4,360	6,263	4,208	2,908	17,739	6,984	572	411	414	104
Rosemead Bl	N	0.8	2,701	4,762	3,483	3,187	14,133	18,354	1,169	1,031	1,131	376
Rosemead Bl	S	0.8	1,922	4,635	3,751	2,847	13,156	17,085	832	1,003	1,218	336
Santa Anita Av	N	4.4	7,138	20,921	20,586	14,541	63,187	14,263	537	787	1,162	298
Santa Anita Av	S	4.4	13,677	21,797	14,330	12,379	62,182	14,037	1,029	820	809	254
Valley Bl	E	3.7	7,042	16,722	13,471	10,760	47,995	12,902	631	749	905	263
Valley Bl	W	3.7	10,307	17,281	11,729	8,259	47,576	12,789	924	774	788	202
City of El Monte Totals		**47.9**	**100,308**	**205,042**	**171,824**	**129,848**	**607,023**					

Exhibit 5.18: Mobility and Reliability Performance – City of El Monte

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Baldwin Av	N	1.3	41	95	248	32.3	73.9	193.7	21.1	18.4	1.43	1.63	1.78	1.91
Baldwin Av	S	1.3	39	53	178	30.2	41.2	139.4	17.8	21.5	1.57	1.30	1.85	1.46
Garvey Av	E	2.5	24	123	256	9.5	48.7	101.5	20.2	17.4	1.17	1.36	1.27	1.61
Garvey Av	W	2.5	25	50	164	10.0	19.7	65.1	20.7	20.3	1.16	1.18	1.36	1.30
Lower Azusa Rd	E	3.1	39	215	359	12.4	68.8	114.8	22.6	18.8	1.29	1.55	1.43	1.87
Lower Azusa Rd	W	3.1	47	58	174	15.0	18.7	55.5	24.1	23.6	1.21	1.23	1.38	1.35
Myrtle Av/Peck Rd	N	5.5	39	222	457	7.1	40.2	82.6	23.3	19.8	1.11	1.30	1.21	1.48
Myrtle Av/Peck Rd	S	5.5	52	175	389	9.4	31.7	70.2	22.1	20.5	1.14	1.23	1.29	1.39
Ramona Bl/Badillo St	E	2.5	12	114	198	4.9	44.8	78.0	22.0	17.5	1.18	1.48	1.31	1.96
Ramona Bl/Badillo St	W	2.5	38	41	146	15.0	16.3	57.3	20.7	20.5	1.27	1.28	1.42	1.43
Rosemead Bl	N	0.8	11	59	110	13.8	77.0	143.1	30.5	18.9	1.18	1.91	1.37	2.70
Rosemead Bl	S	0.8	10	62	98	12.4	80.1	127.5	28.3	19.5	1.33	1.94	1.74	2.70
Santa Anita Av	N	4.4	31	171	311	7.1	38.7	70.2	22.6	19.9	1.15	1.31	1.33	1.55
Santa Anita Av	S	4.4	53	80	231	12.0	18.1	52.0	23.0	22.1	1.14	1.18	1.32	1.36
Valley Bl	E	3.7	39	246	479	10.6	66.1	128.6	21.3	16.0	1.16	1.55	1.28	2.09
Valley Bl	W	3.7	77	117	376	20.8	31.5	101.1	19.4	19.1	1.25	1.27	1.45	1.42
City of El Monte Totals		**47.9**	**578**	**1,882**	**4,174**	**12.1**	**39.3**	**87.2**						

5.10 City of Glendora

Exhibits 5.19 and 5.20 summarize arterial performance through the City of Glendora. Among the selected arterials for this study, Arrow Highway has the highest demand (VMT), and is the most productive in terms of traffic flow. Grand Avenue has the most total delay and the most delay per mile. Foothill Boulevard/Alosta Avenue has the highest travel time reliability index.

Exhibit 5.19: Travel Demand and Productivity Performance – City of Glendora

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.7	3,895	11,963	12,028	6,102	33,988	12,635	483	741	1,118	206
Arrow Hwy	W	2.7	10,424	12,361	8,659	8,285	39,728	14,769	1,292	766	805	280
Foothill Bl/Alosta Av	E	0.5	449	1,776	2,043	1,120	5,388	10,564	294	580	1,002	200
Foothill Bl/Alosta Av	W	0.5	1,196	1,755	1,023	990	4,963	9,732	781	573	502	176
Grand Av	N	2.1	2,904	8,548	5,672	4,091	21,215	10,349	472	695	692	181
Grand Av	S	2.1	2,641	8,792	5,721	4,168	21,322	10,401	429	715	698	185
City of Glendora Totals		**10.5**	**21,508**	**45,194**	**35,146**	**24,755**	**126,604**					

Exhibit 5.20: Mobility and Reliability Performance – City of Glendora

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.7	11	67	149	4.0	24.8	55.5	31.0	29.0	1.12	1.20	1.22	1.30
Arrow Hwy	W	2.7	30	47	164	11.2	17.3	60.9	31.0	30.9	1.19	1.20	1.31	1.29
Foothill Bl/Alosta Av	E	0.5	3	23	46	5.7	45.6	89.3	22.9	20.5	1.21	1.35	1.34	1.56
Foothill Bl/Alosta Av	W	0.5	7	12	47	14.2	23.1	91.4	23.3	23.2	1.34	1.35	1.59	1.56
Grand Av	N	2.1	23	67	204	11.4	32.8	99.4	22.6	21.8	1.30	1.35	1.48	1.52
Grand Av	S	2.1	23	68	207	11.2	33.3	101.1	23.8	22.9	1.30	1.35	1.47	1.51
City of Glendora Totals		**10.5**	**97**	**284**	**816**	**9.3**	**27.0**	**77.7**						

5.11 City of Industry

Exhibits 5.21 and 5.22 summarize arterial performance through the City of Industry. Among the selected arterials for this study, Valley Boulevard has the highest demand (VMT), Azusa Avenue is the most productive in terms of traffic flow. Azusa Avenue has the most total delay, Fullerton Road has the most delay per mile and the highest travel time reliability index.

Exhibit 5.21: Travel Demand and Productivity Performance – City of Industry

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Amar Rd	E	0.4	336	1,041	1,164	787	3,329	8,998	303	469	787	193
Amar Rd	W	0.4	1,158	1,268	769	874	4,069	10,998	1,044	571	519	215
Azusa Av	N	4.9	7,887	28,784	21,987	31,845	90,503	18,395	534	975	1,117	588
Azusa Av	S	4.9	19,038	37,835	24,762	27,641	109,276	22,211	1,290	1,282	1,258	511
Colima Rd/Golden Springs	E	1.2	1,770	6,095	5,754	3,906	17,525	15,108	509	876	1,240	306
Colima Rd/Golden Springs	W	1.2	2,402	6,886	4,706	3,485	17,479	15,068	690	989	1,014	273
Fullerton Rd	N	0.1	298	557	452	363	1,671	16,709	993	929	1,131	330
Fullerton Rd	S	0.1	358	535	518	439	1,850	18,502	1,194	892	1,294	399
Gale Av	E	2.8	4,197	13,660	12,381	6,079	36,317	12,970	500	813	1,105	197
Gale Av	W	2.8	4,603	9,476	5,548	4,732	24,359	8,700	548	564	495	154
Grand Av	N	1.4	3,338	6,960	5,912	4,229	20,438	14,599	795	829	1,056	275
Grand Av	S	1.4	3,460	7,577	5,276	4,441	20,753	14,824	824	902	942	288
Hacienda Bl/Glendora	N	0.9	2,084	4,527	3,809	3,301	13,721	15,245	772	838	1,058	333
Hacienda Bl/Glendora	S	0.9	2,145	4,869	4,773	4,081	15,868	17,631	794	902	1,326	412
Nogales St	N	0.5	1,061	1,750	1,570	882	5,263	11,696	786	648	872	178
Nogales St	S	0.5	842	1,589	1,581	1,002	5,014	11,143	624	589	878	203
Valley Bl	E	12.9	30,646	61,168	70,723	37,923	200,461	15,516	791	789	1,368	267
Valley Bl	W	12.9	35,109	54,716	41,051	30,428	161,304	12,485	906	706	794	214
City of Industry Totals		**50.0**	**120,733**	**249,292**	**212,736**	**166,440**	**749,201**					

Exhibit 5.22: Mobility and Reliability Performance – City of Industry

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Amar Rd	E	0.4	4	13	31	11.0	35.9	84.2	22.8	22.8	1.40	1.40	1.68	1.62
Amar Rd	W	0.4	11	9	37	29.5	25.0	100.2	24.7	23.9	1.37	1.42	1.61	1.64
Azusa Av	N	4.9	94	494	1,103	19.1	100.5	224.2	21.3	16.8	1.46	1.86	1.87	2.32
Azusa Av	S	4.9	176	479	1,318	35.8	97.4	267.8	23.2	19.1	1.42	1.72	1.63	1.92
Colima Rd/Golden Springs	E	1.2	3	85	182	2.6	73.1	156.6	29.2	21.0	1.10	1.54	1.21	2.16
Colima Rd/Golden Springs	W	1.2	8	86	234	6.7	74.6	201.5	27.4	19.8	1.17	1.62	1.33	1.99
Fullerton Rd	N	0.1	5	8	31	53.1	82.8	311.3	15.2	18.2	1.87	1.56	2.84	2.06
Fullerton Rd	S	0.1	1	8	21	12.7	84.1	207.8	20.3	16.6	1.18	1.44	1.48	2.00
Gale Av	E	2.8	16	84	170	5.7	29.9	60.9	26.8	24.5	1.14	1.24	1.23	1.53
Gale Av	W	2.8	21	40	117	7.6	14.3	41.8	26.4	25.0	1.20	1.26	1.49	1.45
Grand Av	N	1.4	15	33	89	10.8	23.6	63.7	28.6	27.9	1.17	1.20	1.37	1.48
Grand Av	S	1.4	10	72	142	7.1	51.3	101.2	26.7	20.4	1.15	1.51	1.42	1.97
Hacienda Bl/Glendora	N	0.9	25	75	171	28.1	83.5	189.7	21.6	18.6	1.43	1.67	1.70	1.96
Hacienda Bl/Glendora	S	0.9	28	83	216	30.8	91.9	239.7	19.5	18.9	1.44	1.49	1.67	1.72
Nogales St	N	0.5	18	34	100	40.9	75.4	221.4	16.7	16.2	1.56	1.61	1.88	2.09
Nogales St	S	0.5	6	22	51	14.2	48.2	113.8	23.2	21.3	1.31	1.43	1.50	1.66
Valley Bl	E	12.9	111	515	954	8.6	39.9	73.8	29.9	26.1	1.22	1.40	1.30	1.59
Valley Bl	W	12.9	154	267	743	11.9	20.7	57.5	28.6	28.0	1.31	1.34	1.48	1.45
City of Industry Totals		**50.0**	**707**	**2,409**	**5,708**	**14.1**	**48.1**	**114.1**						

5.12 City of Irwindale

Exhibits 5.23 and 5.24 summarize arterial performance through the City of Irwindale. Among the selected arterials for this study, Arrow Highway has the highest demand (VMT), and is the most productive in terms of traffic flow. Arrow Highway has the most total delay, Ramona Boulevard/Badillo Street has the most delay per mile and the highest travel time reliability index.

Exhibit 5.23: Travel Demand and Productivity Performance – City of Irwindale

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	4.0	10,813	27,356	28,900	16,097	83,166	20,949	908	1,148	1,820	369
Arrow Hwy	W	4.0	26,108	27,292	14,988	14,759	83,148	20,944	2,192	1,146	944	338
Foothill Bl/Alosta Av	E	0.2	211	836	961	527	2,535	10,564	294	580	1,002	200
Foothill Bl/Alosta Av	W	0.2	563	826	481	466	2,336	9,732	781	573	502	176
Irwindale Av	N	3.0	8,936	14,645	9,825	8,165	41,572	13,766	986	808	813	246
Irwindale Av	S	3.0	6,096	13,968	13,263	8,944	42,270	13,997	673	771	1,098	269
Main St/Las Tunas Dr/Live Oak Av	E	0.8	947	3,316	3,278	1,942	9,483	12,004	400	700	1,037	224
Main St/Las Tunas Dr/Live Oak Av	W	0.8	2,158	3,458	2,456	1,746	9,818	12,428	910	730	777	201
Myrtle Av/Peck Rd	N	1.0	2,239	3,758	3,691	2,045	11,733	12,351	786	659	971	196
Myrtle Av/Peck Rd	S	1.0	2,026	3,726	3,297	2,241	11,289	11,883	711	654	868	214
Ramona Bl/Badillo St	E	1.1	1,935	5,710	7,811	4,821	20,276	19,311	614	906	1,860	417
Ramona Bl/Badillo St	W	1.1	4,438	5,343	3,287	3,603	16,671	15,877	1,409	848	783	312
City of Irwindale Totals		**20.0**	**66,470**	**110,234**	**92,237**	**65,356**	**334,297**					

Exhibit 5.24: Mobility and Reliability Performance – City of Irwindale

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	4.0	51	397	611	12.7	100.1	154.0	28.8	21.4	1.18	1.58	1.27	2.01
Arrow Hwy	W	4.0	127	56	293	31.9	14.2	73.8	30.9	32.0	1.18	1.14	1.31	1.25
Foothill Bl/Alosta Av	E	0.2	1	15	21	4.7	64.2	86.4	30.3	19.8	1.17	1.79	1.37	2.34
Foothill Bl/Alosta Av	W	0.2	2	3	8	9.1	11.6	35.2	31.8	29.9	1.14	1.21	1.36	1.48
Irwindale Av	N	3.0	35	72	196	11.7	23.9	64.9	24.1	22.9	1.16	1.22	1.26	1.35
Irwindale Av	S	3.0	40	83	208	13.2	27.5	68.9	25.3	25.2	1.21	1.21	1.33	1.35
Main St/Las Tunas Dr/Live Oak Av	E	0.8	3	6	20	3.3	7.6	25.5	31.4	31.3	1.08	1.08	1.22	1.26
Main St/Las Tunas Dr/Live Oak Av	W	0.8	20	10	48	24.8	12.7	60.9	25.6	29.0	1.32	1.16	1.77	1.35
Myrtle Av/Peck Rd	N	1.0	6	14	30	6.3	14.4	31.2	27.5	26.9	1.11	1.13	1.31	1.29
Myrtle Av/Peck Rd	S	1.0	6	24	45	6.3	24.9	47.5	30.1	25.6	1.12	1.31	1.27	1.56
Ramona Bl/Badillo St	E	1.1	15	213	291	14.4	202.6	277.6	21.9	14.1	1.25	1.94	1.48	2.78
Ramona Bl/Badillo St	W	1.1	57	27	139	54.6	25.9	132.6	21.3	24.1	1.43	1.26	1.78	1.44
City of Irwindale Totals		**20.0**	**362**	**920**	**1,911**	**18.1**	**45.9**	**95.4**						

5.13 Los Angeles County

Exhibits 5.25 and 5.26 summarize arterial performance through unincorporated areas of Los Angeles County. Among the selected arterials for this study, Rosemead Boulevard has the highest demand (VMT), Huntington Drive is the most productive in terms of traffic flow. Colima Road/Golden Springs has the most total delay, Azusa Avenue has the most delay per mile and the highest travel time reliability index.

Exhibit 5.25: Travel Demand and Productivity Performance – Los Angeles County

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Amar Rd	E	1.5	3,011	5,608	5,253	3,606	17,478	11,499	660	615	864	216
Amar Rd	W	1.5	3,467	5,790	5,032	4,231	18,521	12,185	760	635	828	253
Amar Rd	E	1.6	3,888	5,861	4,495	4,137	18,381	11,561	815	614	707	237
Amar Rd	W	1.6	2,284	5,762	5,777	4,357	18,180	11,434	479	604	908	249
Arrow Hwy	E	2.0	3,387	9,172	10,570	5,335	28,464	14,303	567	768	1,328	244
Arrow Hwy	W	2.0	7,365	8,988	6,061	5,250	27,665	13,902	1,234	753	761	240
Arrow Hwy	E	0.9	1,566	4,240	4,886	2,466	13,159	14,303	567	768	1,328	244
Arrow Hwy	W	0.9	3,405	4,155	2,802	2,427	12,790	13,902	1,234	753	761	240
Arrow Hwy	E	0.8	1,430	3,872	4,462	2,252	12,015	14,303	567	768	1,328	244
Arrow Hwy	W	0.8	3,109	3,794	2,559	2,216	11,678	13,902	1,234	753	761	240
Azusa Av	N	1.0	1,997	5,549	4,393	4,667	16,606	16,606	666	925	1,098	424
Azusa Av	S	1.0	2,971	6,135	4,392	4,510	18,007	18,007	990	1,023	1,098	410
Azusa Av	N	0.7	1,478	4,106	3,251	3,453	12,289	16,606	666	925	1,098	424
Azusa Av	S	0.7	2,198	4,540	3,250	3,337	13,326	18,007	990	1,023	1,098	410
Citrus Av	N	1.2	2,305	5,467	3,744	3,125	14,641	12,407	651	772	793	241
Citrus Av	S	1.2	1,350	5,419	4,310	3,740	14,819	12,558	381	765	913	288
Colima Rd/Golden Springs	E	7.1	9,445	29,632	35,857	19,601	94,535	13,296	443	695	1,261	251
Colima Rd/Golden Springs	W	7.1	19,689	31,537	19,982	15,702	86,909	12,223	923	739	703	201
Foothill Bl/Walnut St	E	0.2	145	485	610	267	1,507	10,047	323	539	1,016	162
Foothill Bl/Walnut St	W	0.2	399	542	420	208	1,568	10,455	886	602	700	126
Fullerton Rd	N	1.9	5,600	10,479	8,501	6,833	31,414	16,709	993	929	1,131	330
Fullerton Rd	S	1.9	6,732	10,059	9,731	8,261	34,783	18,502	1,194	892	1,294	399
Gale Av	E	2.5	2,369	6,211	6,412	4,449	19,441	7,839	318	417	646	163
Gale Av	W	2.5	5,671	9,519	6,314	5,284	26,788	10,802	762	640	637	194

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Grand Av	N	0.3	787	1,640	1,393	997	4,818	14,599	795	829	1,056	275
Grand Av	S	0.3	816	1,786	1,244	1,047	4,892	14,824	824	902	942	288
Grand Av	N	1.3	3,147	6,562	5,574	3,987	19,270	14,599	795	829	1,056	275
Grand Av	S	1.3	3,262	7,144	4,974	4,187	19,567	14,824	824	902	942	288
Grand Av	N	0.2	477	994	845	604	2,920	14,599	795	829	1,056	275
Grand Av	S	0.2	494	1,082	754	634	2,965	14,824	824	902	942	288
Hacienda Bl/Glendora	N	3.1	7,201	15,642	13,163	11,407	47,413	15,245	772	838	1,058	333
Hacienda Bl/Glendora	S	3.1	7,412	16,824	16,495	14,102	54,833	17,631	794	902	1,326	412
Hacienda Bl/Glendora	N	0.8	1,737	3,772	3,174	2,751	11,434	15,245	772	838	1,058	333
Hacienda Bl/Glendora	S	0.8	1,788	4,057	3,978	3,401	13,223	17,631	794	902	1,326	412
Huntington Dr	E	2.0	3,656	11,504	14,068	6,229	35,456	17,380	597	940	1,724	278
Huntington Dr	W	2.0	7,673	10,860	8,193	6,042	32,769	16,063	1,254	887	1,004	269
Irwindale Av	N	0.4	1,272	2,085	1,399	1,163	5,919	13,766	986	808	813	246
Irwindale Av	S	0.4	868	1,989	1,888	1,273	6,019	13,997	673	771	1,098	269
Lake Av	N	1.0	1,826	5,489	4,512	3,787	15,615	16,436	641	963	1,188	362
Lake Av	S	1.0	2,797	5,928	4,007	3,372	16,104	16,951	982	1,040	1,054	323
Main St/Las Tunas Dr/Live Oak Av	E	0.7	840	2,938	2,904	1,721	8,403	12,004	400	700	1,037	224
Main St/Las Tunas Dr/Live Oak Av	W	0.7	1,912	3,064	2,176	1,547	8,700	12,428	910	730	777	201
Myrtle Av/Peck Rd	N	0.5	919	2,066	1,723	1,197	5,905	12,051	625	703	879	222
Myrtle Av/Peck Rd	S	0.5	893	1,905	1,640	1,251	5,689	11,610	607	648	836	232
Nogales St	N	1.7	3,995	6,271	5,236	2,682	18,184	10,824	793	622	779	145
Nogales St	S	1.7	3,263	5,831	7,212	3,839	20,145	11,991	647	579	1,073	208
Nogales St	N	0.4	1,014	1,672	1,501	843	5,029	11,696	786	648	872	178
Nogales St	S	0.4	805	1,518	1,510	958	4,791	11,143	624	589	878	203

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Ramona Bl/Badillo St	E	0.9	1,065	3,009	3,497	2,015	9,586	11,278	418	590	1,029	215
Ramona Bl/Badillo St	W	0.9	2,252	2,832	2,003	1,683	8,770	10,318	883	555	589	180
Rosemead Bl	N	5.2	19,450	30,524	20,938	22,116	93,027	17,753	1,237	971	999	384
Rosemead Bl	S	5.2	13,244	31,508	27,105	17,758	89,615	17,102	843	1,002	1,293	308
Rosemead Bl	N	2.4	8,244	14,532	10,630	9,726	43,132	18,354	1,169	1,031	1,131	376
Rosemead Bl	S	2.4	5,866	14,146	11,448	8,690	40,150	17,085	832	1,003	1,218	336
San Gabriel Bl	N	0.8	2,256	4,546	3,590	2,462	12,855	15,677	917	924	1,095	273
San Gabriel Bl	S	0.8	1,889	4,301	3,807	2,584	12,581	15,342	768	874	1,161	286
San Gabriel Bl	N	1.5	3,990	8,039	6,348	4,354	22,731	15,677	917	924	1,095	273
San Gabriel Bl	S	1.5	3,340	7,606	6,732	4,569	22,246	15,342	768	874	1,161	286
San Gabriel Bl	N	0.9	2,366	4,768	3,765	2,582	13,482	15,677	917	924	1,095	273
San Gabriel Bl	S	0.9	1,981	4,511	3,993	2,710	13,194	15,342	768	874	1,161	286
Santa Anita Av	N	0.3	557	1,100	848	657	3,162	11,294	664	655	757	213
Santa Anita Av	S	0.3	380	1,069	979	805	3,233	11,546	453	636	874	261
Valley Bl	E	3.4	5,805	14,988	17,246	9,102	47,140	13,784	566	730	1,261	242
Valley Bl	W	3.4	9,092	14,744	10,478	8,024	42,338	12,380	886	719	766	213
Valley Bl	E	4.7	7,943	20,510	23,599	12,455	64,507	13,784	566	730	1,261	242
Valley Bl	W	4.7	12,442	20,176	14,338	10,981	57,937	12,380	886	719	766	213
Valley Bl	E	1.3	2,240	5,785	6,656	3,513	18,194	13,784	566	730	1,261	242
Valley Bl	W	1.3	3,509	5,691	4,044	3,097	16,341	12,380	886	719	766	213
W Colorado St/E Colorado St/Colorado Bl	E	0.6	454	2,390	2,561	1,078	6,483	10,291	240	632	1,016	156
W Colorado St/E Colorado St/Colorado Bl	W	0.6	1,446	2,140	1,217	820	5,622	8,924	765	566	483	118
Los Angeles County Totals		**111.5**	**263,926**	**528,462**	**458,445**	**330,518**	**1,581,351**					

Exhibit 5.26: Mobility and Reliability Performance – Los Angeles County

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Amar Rd	E	1.5	25	68	174	16.6	45.0	114.2	27.2	24.3	1.34	1.50	1.50	1.70
Amar Rd	W	1.5	9	32	82	6.1	21.2	53.6	28.5	26.8	1.13	1.21	1.25	1.36
Amar Rd	E	1.6	34	57	158	21.7	35.6	99.5	25.6	23.1	1.33	1.47	1.49	1.67
Amar Rd	W	1.6	17	56	143	10.7	34.9	90.2	26.0	25.5	1.30	1.32	1.48	1.45
Arrow Hwy	E	2.0	8	43	98	4.1	21.6	49.1	31.8	30.7	1.11	1.15	1.21	1.26
Arrow Hwy	W	2.0	21	33	116	10.5	16.4	58.5	31.8	31.3	1.18	1.20	1.27	1.30
Arrow Hwy	E	0.9	3	41	74	3.0	44.2	80.5	29.1	25.0	1.09	1.27	1.22	1.46
Arrow Hwy	W	0.9	14	17	58	15.0	17.9	63.4	28.2	28.4	1.23	1.22	1.44	1.38
Arrow Hwy	E	0.8	8	57	91	9.9	67.9	108.2	27.3	21.6	1.19	1.50	1.36	1.92
Arrow Hwy	W	0.8	36	16	77	43.4	18.6	92.0	24.4	27.6	1.34	1.19	1.67	1.34
Azusa Av	N	1.0	34	118	298	34.1	118.1	298.4	15.5	15.4	1.70	1.71	2.85	1.97
Azusa Av	S	1.0	45	134	349	45.3	133.8	349.4	16.6	13.6	1.52	1.85	1.82	2.18
Azusa Av	N	0.7	13	68	147	17.3	92.0	198.1	23.7	17.6	1.32	1.78	1.58	2.13
Azusa Av	S	0.7	13	36	97	17.7	48.9	131.6	27.6	25.6	1.30	1.40	1.52	1.58
Citrus Av	N	1.2	29	44	157	24.4	36.9	133.1	22.1	22.7	1.42	1.38	1.60	1.53
Citrus Av	S	1.2	12	47	124	10.6	39.4	105.2	23.4	22.4	1.28	1.34	1.42	1.49
Colima Rd/Golden Springs	E	7.1	50	412	791	7.0	58.0	111.3	28.8	24.5	1.23	1.45	1.33	1.66
Colima Rd/Golden Springs	W	7.1	110	214	676	15.5	30.0	95.1	28.6	25.8	1.27	1.41	1.39	1.56
Foothill Bl/Walnut St	E	0.2	1	9	16	4.7	60.7	108.2	19.0	15.3	1.09	1.35	1.26	1.80
Foothill Bl/Walnut St	W	0.2	2	2	7	14.0	12.4	44.9	20.9	22.6	1.20	1.11	1.48	1.33
Fullerton Rd	N	1.9	33	156	387	17.4	83.0	205.9	26.3	20.0	1.31	1.73	1.70	2.27
Fullerton Rd	S	1.9	43	111	269	22.9	59.1	142.8	28.2	25.2	1.32	1.47	1.54	1.78
Gale Av	E	2.5	10	46	89	3.8	18.7	36.0	25.1	23.1	1.14	1.24	1.26	1.54
Gale Av	W	2.5	54	56	188	21.9	22.6	76.0	22.0	23.3	1.37	1.29	1.80	1.48

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Grand Av	N	0.3	5	15	37	15.6	44.0	111.4	24.2	22.5	1.25	1.35	1.44	1.56
Grand Av	S	0.3	5	10	30	14.6	31.5	92.2	25.9	24.6	1.22	1.29	1.41	1.48
Grand Av	N	1.3	5	14	36	3.9	10.5	27.3	40.4	39.6	1.10	1.13	1.18	1.22
Grand Av	S	1.3	11	15	55	8.4	11.3	41.9	38.8	41.2	1.21	1.14	1.35	1.23
Grand Av	N	0.2	4	8	24	20.0	41.4	120.6	28.9	27.6	1.35	1.41	1.62	1.72
Grand Av	S	0.2	2	7	20	10.8	34.6	99.7	30.7	28.7	1.26	1.34	1.42	1.56
Hacienda Bl/Glendora	N	3.1	72	185	487	23.1	59.6	156.6	23.5	23.1	1.45	1.48	1.77	1.68
Hacienda Bl/Glendora	S	3.1	50	176	398	16.0	56.7	128.1	25.8	23.8	1.30	1.40	1.42	1.56
Hacienda Bl/Glendora	N	0.8	9	31	83	12.0	41.8	110.3	24.7	22.2	1.16	1.29	1.34	1.50
Hacienda Bl/Glendora	S	0.8	15	85	193	19.9	112.9	257.5	23.1	18.0	1.31	1.68	1.53	2.02
Huntington Dr	E	2.0	26	74	151	12.6	36.2	74.1	28.3	29.0	1.26	1.22	1.44	1.48
Huntington Dr	W	2.0	23	61	168	11.4	29.9	82.1	31.5	28.2	1.15	1.28	1.35	1.54
Irwindale Av	N	0.4	7	13	29	15.2	29.8	68.0	25.0	23.5	1.21	1.30	1.40	1.48
Irwindale Av	S	0.4	9	21	47	19.8	49.1	108.8	23.3	22.2	1.31	1.38	1.49	1.58
Lake Av	N	1.0	14	30	89	14.2	31.6	93.2	24.4	25.1	1.23	1.19	1.36	1.32
Lake Av	S	1.0	23	38	126	24.1	39.7	132.3	25.3	24.8	1.29	1.32	1.43	1.45
Main St/Las Tunas Dr/Live Oak Av	E	0.7	4	45	73	5.4	63.7	104.9	27.3	19.0	1.18	1.70	1.33	2.29
Main St/Las Tunas Dr/Live Oak Av	W	0.7	20	18	67	28.7	25.6	95.0	23.4	25.0	1.40	1.31	1.79	1.48
Myrtle Av/Peck Rd	N	0.5	2	2	10	3.6	5.1	20.1	33.3	34.3	1.08	1.05	1.21	1.16
Myrtle Av/Peck Rd	S	0.5	7	22	48	13.7	44.2	97.0	24.9	20.7	1.26	1.51	1.47	1.90
Nogales St	N	1.7	36	52	179	21.6	31.0	106.8	19.2	20.2	1.33	1.27	1.57	1.46
Nogales St	S	1.7	27	81	189	16.1	47.9	112.4	22.6	21.0	1.26	1.35	1.40	1.51
Nogales St	N	0.4	9	16	39	20.3	36.5	90.0	23.1	21.0	1.22	1.35	1.44	1.82
Nogales St	S	0.4	6	11	29	14.1	25.8	68.1	27.5	29.1	1.33	1.26	1.65	1.53
Ramona Bl/Badillo St	E	0.9	6	18	39	6.6	21.1	45.8	28.2	27.2	1.15	1.20	1.30	1.38
Ramona Bl/Badillo St	W	0.9	5	7	25	6.1	8.4	29.8	29.2	29.2	1.10	1.10	1.26	1.23
Rosemead Bl	N	5.2	65	96	307	12.5	18.3	58.6	35.4	34.6	1.18	1.21	1.31	1.36
Rosemead Bl	S	5.2	41	198	387	7.9	37.7	73.9	35.6	29.4	1.17	1.41	1.29	1.77
Rosemead Bl	N	2.4	109	141	478	46.6	59.9	203.2	19.8	22.7	1.66	1.45	2.11	1.66
Rosemead Bl	S	2.4	28	194	377	11.8	82.5	160.5	27.6	19.2	1.21	1.75	1.35	2.02
San Gabriel Bl	N	0.8	6	10	34	6.9	12.6	42.1	29.1	28.7	1.09	1.10	1.30	1.33
San Gabriel Bl	S	0.8	4	62	84	4.8	75.2	102.4	25.7	16.8	1.10	1.68	1.26	2.34
San Gabriel Bl	N	1.5	46	59	181	31.6	40.7	124.6	20.7	24.6	1.56	1.31	1.93	1.47
San Gabriel Bl	S	1.5	15	97	169	10.3	67.0	116.8	29.3	20.9	1.21	1.69	1.38	2.07
San Gabriel Bl	N	0.9	13	21	70	15.3	24.5	81.9	26.0	26.0	1.18	1.18	1.33	1.33
San Gabriel Bl	S	0.9	10	35	85	12.2	40.3	98.9	25.6	23.4	1.20	1.31	1.35	1.58
Santa Anita Av	N	0.3	3	8	19	12.5	26.9	66.1	23.7	22.3	1.26	1.35	1.48	1.56
Santa Anita Av	S	0.3	3	10	19	9.8	34.7	66.1	24.8	22.2	1.32	1.47	1.65	2.15
Valley Bl	E	3.4	39	219	413	11.4	63.9	120.6	23.9	20.7	1.23	1.42	1.39	1.72
Valley Bl	W	3.4	80	116	339	23.5	33.8	99.3	23.0	22.6	1.35	1.37	1.58	1.54
Valley Bl	E	4.7	25	130	267	5.3	27.8	57.1	33.3	29.7	1.12	1.25	1.21	1.40
Valley Bl	W	4.7	41	68	204	8.7	14.5	43.7	32.7	31.7	1.16	1.19	1.29	1.32
Valley Bl	E	1.3	9	66	94	6.5	50.0	71.0	32.3	25.0	1.15	1.49	1.34	1.95
Valley Bl	W	1.3	9	19	54	6.9	14.5	41.2	33.2	32.7	1.18	1.20	1.33	1.34
W Colorado St/E Colorado St/Colorado Bl	E	0.6	3	36	61	4.8	56.4	97.6	25.5	20.9	1.23	1.50	1.36	1.84
W Colorado St/E Colorado St/Colorado Bl	W	0.6	3	16	45	5.3	24.8	71.5	22.0	18.3	1.11	1.34	1.33	1.56
Los Angeles County Totals		**111.5**	**1,577**	**4,523**	**11,027**	**14.2**	**40.6**	**98.9**						

5.14 City of La Puente

Exhibits 5.27 and 5.28 summarize arterial performance through the City of La Puente. Among the selected arterials for this study, Hacienda Boulevard/Glendora Avenue has the highest demand (VMT), and is the most productive in terms of traffic flow. Hacienda Boulevard/Glendora Avenue has the most total delay and the most delay per mile. Azusa Avenue has the highest travel time reliability index.

Exhibit 5.27: Travel Demand and Productivity Performance – City of La Puente

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Amar Rd	E	2.7	3,197	10,163	10,220	7,309	30,888	11,656	402	639	964	251
Amar Rd	W	2.7	8,581	10,583	7,670	8,151	34,985	13,202	1,079	666	724	280
Azusa Av	N	1.2	2,336	6,493	5,140	5,460	19,429	16,606	666	925	1,098	424
Azusa Av	S	1.2	3,476	7,178	5,138	5,276	21,069	18,007	990	1,023	1,098	410
Hacienda Bl/Glendora	N	2.1	3,506	9,234	8,649	6,388	27,777	13,227	556	733	1,030	277
Hacienda Bl/Glendora	S	2.1	6,164	14,418	14,625	12,953	48,159	22,933	978	1,144	1,741	561
Valley Bl	E	1.4	2,427	6,267	7,211	3,806	19,711	13,784	566	730	1,261	242
Valley Bl	W	1.4	3,802	6,165	4,381	3,355	17,703	12,380	886	719	766	213
City of La Puente Totals		**14.7**	**33,488**	**70,499**	**63,035**	**52,698**	**219,721**					

Exhibit 5.28: Mobility and Reliability Performance – City of La Puente

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Amar Rd	E	2.7	24	136	270	9.1	51.4	101.9	26.2	22.4	1.28	1.49	1.41	1.76
Amar Rd	W	2.7	49	62	212	18.4	23.2	80.1	27.2	26.8	1.25	1.27	1.43	1.40
Azusa Av	N	1.2	7	113	156	6.4	96.7	132.9	30.1	16.5	1.13	2.07	1.38	2.57
Azusa Av	S	1.2	16	75	167	13.7	64.1	143.1	28.6	23.1	1.24	1.53	1.45	1.70
Hacienda Bl/Glendora	N	2.1	33	182	374	15.7	86.8	178.1	22.8	17.7	1.30	1.67	1.48	1.94
Hacienda Bl/Glendora	S	2.1	68	285	687	32.2	135.8	327.1	22.7	19.5	1.41	1.64	1.58	1.90
Valley Bl	E	1.4	5	18	33	3.3	12.6	23.3	36.2	34.0	1.07	1.14	1.16	1.32
Valley Bl	W	1.4	11	18	57	7.9	12.2	40.0	33.6	34.6	1.22	1.18	1.86	1.32
City of La Puente Totals		**14.7**	**213**	**889**	**1,957**	**14.5**	**60.5**	**133.1**						

5.15 City of La Verne

Arrow Highway is the only arterial that runs through City of La Verne. Results for that segment are presented in Exhibits 5.29 and 5.30.

Exhibit 5.29: Travel Demand and Productivity Performance – City of La Verne

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.5	3,119	6,661	10,754	4,175	24,708	9,728	409	437	1,058	149
Arrow Hwy	W	2.5	6,839	8,639	7,126	4,749	27,353	10,769	898	567	701	170
City of La Verne Totals		**5.1**	**9,958**	**15,300**	**17,879**	**8,924**	**52,062**					

Exhibit 5.30: Mobility and Reliability Performance – City of La Verne

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.5	14	66	117	5.7	26.0	46.2	29.9	28.0	1.18	1.26	1.28	1.48
Arrow Hwy	W	2.5	22	39	110	8.8	15.2	43.1	30.2	29.6	1.17	1.19	1.29	1.31
City of La Verne Totals		**5.1**	**37**	**105**	**227**	**7.3**	**20.6**	**44.7**						

5.16 City of Los Angeles

Exhibits 5.31 and 5.32 summarize arterial performance through the two San Gabriel Valley arterial corridors that pass in the City of Los Angeles. Of these, West Colorado Street has the highest demand (VMT), and is the most productive in terms of traffic flow. This corridor also has the most total delay, the most delay per mile, and the highest travel time reliability index.

Exhibit 5.31: Travel Demand and Productivity Performance – City of Los Angeles

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Huntington Dr	E	0.3	551	1,503	1,673	1,033	4,760	17,002	656	895	1,494	336
Huntington Dr	W	0.3	1,351	1,573	1,119	955	4,998	17,851	1,609	936	999	310
W Colorado St/E Colorado St/Colorado Bl	E	3.0	5,899	14,989	13,009	9,038	42,936	14,408	660	838	1,091	276
W Colorado St/E Colorado St/Colorado Bl	W	3.0	7,177	15,109	11,752	8,313	42,350	14,212	803	845	986	254
City of Los Angeles Totals		**6.5**	**14,978**	**33,174**	**27,553**	**19,339**	**95,045**					

Exhibit 5.32: Mobility and Reliability Performance – City of Los Angeles

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Huntington Dr	E	0.3	2	1	13	8.7	2.2	46.1	30.2	36.3	1.20	1.00	1.35	1.10
Huntington Dr	W	0.3	1	5	14	4.7	16.3	50.1	31.6	28.7	1.03	1.13	1.16	1.29
W Colorado St/E Colorado St/Colorado Bl	E	3.0	36	110	296	12.2	36.8	99.3	22.8	21.9	1.21	1.26	1.37	1.39
W Colorado St/E Colorado St/Colorado Bl	W	3.0	26	86	227	8.8	28.8	76.2	24.5	22.9	1.15	1.23	1.29	1.35
City of Los Angeles Totals		**6.5**	**66**	**201**	**550**	**10.2**	**30.8**	**84.3**						

5.17 City of Monrovia

Exhibits 5.33 and 5.34 summarize arterial performance through the City of Monrovia. Among the selected arterials for this study, Huntington Drive has the highest demand (VMT), and is the most productive in terms of traffic flow. Huntington Drive has the most total delay, the most delay per mile, and the highest travel time reliability index

Exhibit 5.33: Travel Demand and Productivity Performance – City of Monrovia

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Foothill Bl/Walnut St	E	2.0	1,967	6,560	8,250	3,619	20,396	10,047	323	539	1,016	162
Foothill Bl/Walnut St	W	2.0	5,399	7,332	5,685	2,809	21,224	10,455	886	602	700	126
Huntington Dr	E	4.1	7,472	20,938	24,331	12,105	64,846	15,816	607	851	1,484	268
Huntington Dr	W	4.1	16,362	20,829	15,427	11,136	63,753	15,550	1,330	847	941	247
Mountain Av	N	1.3	1,549	5,809	3,640	4,119	15,118	11,282	385	723	679	279
Mountain Av	S	1.3	1,461	5,700	4,721	4,005	15,887	11,856	363	709	881	272
Myrtle Av/Peck Rd	N	3.2	4,170	12,687	6,440	4,686	27,983	8,745	434	661	503	133
Myrtle Av/Peck Rd	S	3.2	2,579	8,414	6,465	4,526	21,985	6,870	269	438	505	129
City of Monrovia Totals		**21.3**	**40,958**	**88,268**	**74,959**	**47,006**	**251,191**					

Exhibit 5.34: Mobility and Reliability Performance – City of Monrovia

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Foothill Bl/Walnut St	E	2.0	14	91	166	7.0	44.7	81.7	25.8	22.9	1.25	1.41	1.46	1.62
Foothill Bl/Walnut St	W	2.0	36	34	119	17.9	16.8	58.8	26.7	27.4	1.25	1.22	1.45	1.32
Huntington Dr	E	4.1	84	452	888	20.5	110.1	216.5	20.4	16.5	1.30	1.60	1.45	2.00
Huntington Dr	W	4.1	177	207	689	43.2	50.4	168.0	18.7	19.2	1.41	1.38	1.83	1.57
Mountain Av	N	1.3	18	56	185	13.3	41.7	138.3	17.3	16.4	1.29	1.35	1.49	1.55
Mountain Av	S	1.3	15	93	216	11.5	69.4	161.5	18.6	15.8	1.29	1.52	1.50	1.84
Myrtle Av/Peck Rd	N	3.2	39	89	306	12.3	27.7	95.7	20.2	18.6	1.26	1.37	1.45	1.56
Myrtle Av/Peck Rd	S	3.2	21	82	216	6.5	25.6	67.6	21.6	19.2	1.22	1.37	1.34	1.57
City of Monrovia Totals		**21.3**	**405**	**1,102**	**2,786**	**19.0**	**51.7**	**130.5**						

5.18 City of Monterey Park

Exhibits 5.35 and 5.36 summarize arterial performance through the City of Monterey Park. For the three arterials analyzed in this city, Atlantic Avenue has the highest demand (VMT), and is the most productive in terms of traffic flow. Atlantic Avenue has the most total delay, the most delay per mile, and the highest travel time reliability index.

Exhibit 5.35: Travel Demand and Productivity Performance – City of Monterey Park

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Atlantic Av	N	2.9	6,363	16,238	13,701	10,219	46,522	15,824	721	920	1,165	316
Atlantic Av	S	2.9	5,902	15,663	11,510	9,200	42,275	14,379	669	888	979	284
Garfield Av	N	2.6	5,309	11,620	9,214	7,621	33,764	12,986	681	745	886	266
Garfield Av	S	2.6	5,208	11,008	9,583	7,253	33,052	12,712	668	706	921	254
Garvey Av	E	2.7	2,321	10,004	10,382	6,050	28,757	10,534	283	611	951	201
Garvey Av	W	2.7	5,679	11,720	7,067	5,332	29,798	10,915	693	716	647	178
City of Monterey Park Totals		**16.5**	**30,783**	**76,253**	**61,457**	**45,675**	**214,167**					

Exhibit 5.36: Mobility and Reliability Performance – City of Monterey Park

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Atlantic Av	N	2.9	30	216	538	10.2	73.6	183.0	22.9	18.2	1.18	1.49	1.32	1.71
Atlantic Av	S	2.9	27	166	432	9.2	56.6	146.9	23.1	19.3	1.17	1.40	1.27	1.60
Garfield Av	N	2.6	32	105	288	12.2	40.2	110.8	22.9	21.0	1.26	1.37	1.41	1.56
Garfield Av	S	2.6	24	113	266	9.1	43.6	102.2	24.7	20.8	1.18	1.40	1.29	1.57
Garvey Av	E	2.7	15	110	235	5.7	40.4	86.0	20.5	17.9	1.16	1.33	1.32	1.56
Garvey Av	W	2.7	28	59	241	10.1	21.6	88.2	20.5	20.2	1.18	1.19	1.39	1.38
City of Monterey Park Totals		**16.5**	**155**	**770**	**1,999**	**9.4**	**46.6**	**120.9**						

5.19 City of Pasadena

Exhibits 5.37 and 5.38 summarize arterial performance through the City of Pasadena. Among the selected arterials for this study, W Colorado St/E Colorado St/Colorado Boulevard has the highest demand (VMT), Lake Avenue is the most productive in terms of traffic flow. Lake Avenue has the most total delay and the most delay per mile. Rosemead Boulevard has the highest travel time reliability index

Exhibit 5.37: Travel Demand and Productivity Performance – City of Pasadena

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Del Mar Bl	E	3.4	3,705	9,813	10,252	5,121	28,891	8,423	360	477	747	136
Del Mar Bl	W	3.4	7,040	11,432	8,640	5,114	32,226	9,395	684	555	630	136
Fair Oaks Av	N	4.1	5,955	15,361	12,772	9,869	43,957	10,695	483	623	777	218
Fair Oaks Av	S	4.1	11,099	18,746	13,246	9,083	52,174	12,694	900	760	806	201
Foothill Bl/Walnut St	E	5.4	5,789	17,966	17,932	9,655	51,342	9,579	360	559	836	164
Foothill Bl/Walnut St	W	5.4	10,591	18,973	14,601	7,756	51,920	9,687	659	590	681	132
Lake Av	N	2.8	5,459	16,410	13,490	11,320	46,679	16,436	641	963	1,188	362
Lake Av	S	2.8	8,363	17,721	11,979	10,079	48,142	16,951	982	1,040	1,054	323
Orange Grove Bl	E	5.1	6,667	13,451	16,981	7,084	44,183	8,646	435	439	831	126
Orange Grove Bl	W	5.1	9,590	14,245	13,649	6,156	43,639	8,540	626	465	668	110
Rosemead Bl	N	0.9	1,662	2,887	2,330	1,338	8,216	9,029	609	529	640	134
Rosemead Bl	S	0.9	655	2,829	2,844	1,467	7,796	8,567	240	518	781	147
San Gabriel Bl	N	1.2	4,077	5,837	4,044	2,459	16,417	13,347	1,105	791	822	182
San Gabriel Bl	S	1.2	2,006	4,757	5,562	3,206	15,532	12,628	544	645	1,131	237
San Gabriel Bl/Sierra Madre Bl	E	2.0	1,457	3,427	4,419	1,461	10,764	5,355	242	284	550	66
San Gabriel Bl/Sierra Madre Bl	W	2.0	2,160	3,034	2,360	1,093	8,647	4,302	358	252	294	49
W Colorado St/E Colorado St/Colorado Bl	E	6.4	7,115	21,454	18,090	11,047	57,705	9,073	373	562	711	158
W Colorado St/E Colorado St/Colorado Bl	W	6.4	9,046	22,404	18,710	13,176	63,336	9,958	474	587	735	188
City of Pasadena Totals		**62.7**	**102,436**	**220,747**	**191,900**	**116,484**	**631,567**					

Exhibit 5.38: Mobility and Reliability Performance – City of Pasadena

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Del Mar Bl	E	3.4	34	105	242	10.0	30.6	70.7	19.5	19.0	1.27	1.30	1.41	1.51
Del Mar Bl	W	3.4	69	114	350	20.1	33.2	102.0	18.9	18.6	1.36	1.39	1.55	1.57
Fair Oaks Av	N	4.1	39	140	386	9.6	34.0	93.8	20.8	19.2	1.19	1.29	1.30	1.43
Fair Oaks Av	S	4.1	116	151	527	28.2	36.8	128.1	20.6	20.9	1.35	1.33	1.48	1.46
Foothill Bl/Walnut St	E	5.4	40	179	435	7.5	33.4	81.2	19.2	18.2	1.19	1.25	1.31	1.45
Foothill Bl/Walnut St	W	5.4	38	112	302	7.2	20.9	56.4	20.5	19.3	1.13	1.20	1.24	1.31
Lake Av	N	2.8	44	207	571	15.4	72.8	201.2	18.7	16.5	1.24	1.40	1.39	1.59
Lake Av	S	2.8	101	217	737	35.5	76.4	259.4	17.5	16.3	1.37	1.47	1.52	1.68
Orange Grove Bl	E	5.1	51	93	232	9.9	18.2	45.5	22.7	23.5	1.19	1.15	1.29	1.26
Orange Grove Bl	W	5.1	62	61	225	12.2	12.0	43.9	22.5	24.0	1.17	1.10	1.27	1.20
Rosemead Bl	N	0.9	16	33	101	17.1	36.8	110.4	21.2	19.5	1.30	1.41	1.54	1.71
Rosemead Bl	S	0.9	4	54	98	4.9	58.9	107.6	20.6	16.0	1.16	1.49	1.34	1.87
San Gabriel Bl	N	1.2	33	49	141	26.9	39.6	114.6	20.5	20.2	1.33	1.35	1.57	1.53
San Gabriel Bl	S	1.2	14	55	137	11.7	45.0	111.3	22.3	21.1	1.24	1.31	1.41	1.55
San Gabriel Bl/Sierra Madre Bl	E	2.0	23	33	98	11.2	16.5	48.9	22.7	26.7	1.48	1.25	1.79	1.39
San Gabriel Bl/Sierra Madre Bl	W	2.0	25	26	91	12.5	13.1	45.5	25.2	25.2	1.35	1.35	1.51	1.56
W Colorado St/E Colorado St/Colorado Bl	E	6.4	60	238	625	9.4	37.4	98.2	18.8	17.2	1.21	1.33	1.35	1.46
W Colorado St/E Colorado St/Colorado Bl	W	6.4	36	209	542	5.6	32.8	85.2	18.7	17.0	1.15	1.26	1.27	1.37
City of Pasadena Totals		**62.7**	**806**	**2,075**	**5,840**	**12.8**	**33.1**	**93.1**						

5.20 City of Pomona

Exhibits 5.39 and 5.40 summarize arterial performance through the City of Pomona. Of the two arterials evaluated for this city, Valley Boulevard has the highest demand (VMT), and is the most productive in terms of traffic flow. Valley Boulevard has the most total delay, the most delay per mile, and the highest travel time reliability index

Exhibit 5.39: Travel Demand and Productivity Performance – City of Pomona

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.3	1,562	4,654	7,397	2,683	16,296	6,994	223	333	794	105
Arrow Hwy	W	2.3	3,903	4,941	3,752	2,915	15,511	6,657	558	353	403	114
Valley Bl	E	4.1	6,874	17,749	20,422	10,778	55,824	13,784	566	730	1,261	242
Valley Bl	W	4.1	10,767	17,460	12,408	9,502	50,137	12,380	886	719	766	213
City of Pomona Totals		**12.8**	**23,106**	**44,804**	**43,979**	**25,879**	**137,768**					

Exhibit 5.40: Mobility and Reliability Performance – City of Pomona

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.3	5	30	52	2.2	13.0	22.4	29.0	27.6	1.11	1.16	1.20	1.35
Arrow Hwy	W	2.3	12	19	65	5.3	8.3	28.0	30.4	30.0	1.15	1.17	1.28	1.28
Valley Bl	E	4.1	21	205	302	5.3	50.7	74.6	33.6	25.1	1.13	1.51	1.22	1.87
Valley Bl	W	4.1	46	52	174	11.5	12.8	42.9	33.5	34.4	1.21	1.18	1.35	1.28
City of Pomona Totals		**12.8**	**85**	**307**	**594**	**6.7**	**24.1**	**46.5**						

5.21 City of Rosemead

Exhibits 5.41 and 5.42 summarize arterial performance through the City of Rosemead. Among the selected arterials for this study, Rosemead Boulevard has the highest demand (VMT), and is the most productive in terms of traffic flow. Rosemead Boulevard has the most total delay, the most delay per mile, and the highest travel time reliability index.

Exhibit 5.41: Travel Demand and Productivity Performance – City of Rosemead

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Garvey Av	E	2.4	2,783	9,521	9,080	5,925	27,309	11,523	391	670	958	227
Garvey Av	W	2.4	5,408	10,269	6,291	5,213	27,182	11,469	761	722	664	200
Rosemead Bl	N	3.7	17,864	36,459	28,421	26,211	108,955	29,368	1,605	1,638	1,915	642
Rosemead Bl	S	3.7	15,272	32,117	21,721	21,981	91,090	24,553	1,372	1,443	1,464	539
San Gabriel Bl	N	2.1	5,190	12,896	10,390	7,084	35,560	16,853	820	1,019	1,231	305
San Gabriel Bl	S	2.1	5,217	12,408	9,472	6,929	34,026	16,126	824	980	1,122	299
Valley Bl	E	1.9	1,503	5,513	4,507	3,305	14,827	8,015	271	497	609	162
Valley Bl	W	1.9	3,422	6,565	3,880	2,361	16,229	8,772	617	591	524	116
City of Rosemead Totals		**20.1**	**56,659**	**125,750**	**93,762**	**79,008**	**355,178**					

Exhibit 5.42: Mobility and Reliability Performance – City of Rosemead

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Garvey Av	E	2.4	35	190	427	14.8	80.2	180.3	19.0	16.5	1.40	1.61	1.58	1.98
Garvey Av	W	2.4	54	87	317	22.8	36.6	133.9	19.7	18.9	1.35	1.41	1.54	1.57
Rosemead Bl	N	3.7	96	557	1,166	25.8	150.0	314.4	23.9	16.9	1.23	1.75	1.41	2.12
Rosemead Bl	S	3.7	126	408	906	34.0	109.9	244.2	21.8	18.5	1.43	1.69	1.81	2.04
San Gabriel Bl	N	2.1	18	65	157	8.3	30.9	74.3	24.5	22.7	1.12	1.21	1.22	1.36
San Gabriel Bl	S	2.1	27	84	215	12.8	39.8	101.8	24.9	22.8	1.19	1.30	1.32	1.50
Valley Bl	E	1.9	13	83	201	7.1	44.7	108.5	20.5	16.9	1.25	1.51	1.39	1.82
Valley Bl	W	1.9	31	54	183	16.9	29.3	99.1	20.1	18.9	1.29	1.38	1.50	1.52
City of Rosemead Totals		**20.1**	**400**	**1,527**	**3,572**	**19.9**	**76.1**	**177.9**						

5.22 City of San Dimas

Exhibits 5.43 and 5.44 summarize arterial performance for the two arterial corridors that traverse the City of San Dimas. Of the two analyzed for this study, Arrow Highway has the highest demand (VMT) and is the most productive in terms of traffic flow. Arrow Highway has the most total delay, the most delay per mile, and the highest travel time reliability index.

Exhibit 5.43: Travel Demand and Productivity Performance – City of San Dimas

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Arrow Hwy	E	2.6	4,956	12,811	17,589	7,339	42,695	16,358	633	818	1,685	256
Arrow Hwy	W	2.6	7,766	11,306	8,564	5,795	33,431	12,809	992	722	820	202
Ramona Bl/Badillo St	E	2.2	2,745	7,752	9,010	5,191	24,699	11,278	418	590	1,029	215
Ramona Bl/Badillo St	W	2.2	5,803	7,296	5,160	4,337	22,597	10,318	883	555	589	180
City of San Dimas Totals		**9.6**	**21,271**	**39,164**	**40,323**	**22,663**	**123,422**					

Exhibit 5.44: Mobility and Reliability Performance – City of San Dimas

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Arrow Hwy	E	2.6	36	232	430	13.7	88.7	164.7	25.7	21.8	1.26	1.48	1.37	1.79
Arrow Hwy	W	2.6	45	103	293	17.2	39.6	112.3	27.9	24.6	1.29	1.46	1.43	1.61
Ramona Bl/Badillo St	E	2.2	20	60	135	9.3	27.2	61.8	26.5	26.6	1.22	1.22	1.35	1.35
Ramona Bl/Badillo St	W	2.2	23	22	88	10.6	9.9	40.0	28.4	29.0	1.15	1.13	1.24	1.22
City of San Dimas Totals		**9.6**	**124**	**416**	**946**	**12.9**	**43.3**	**98.6**						

5.23 City of San Gabriel

Exhibits 5.45 and 5.46 summarize arterial performance through the City of San Gabriel. Among the selected arterials for this study, San Gabriel Boulevard has the highest demand (VMT), and is the most productive in terms of traffic flow. San Gabriel Boulevard has the most total delay; Valley Boulevard has the most delay per mile and the highest travel time reliability index.

Exhibit 5.45: Travel Demand and Productivity Performance – City of San Gabriel

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Main St/Las Tunas Dr/Live Oak Av	E	2.1	3,113	11,696	9,249	6,219	30,277	14,627	501	942	1,117	273
Main St/Las Tunas Dr/Live Oak Av	W	2.1	6,157	10,254	7,191	4,517	28,119	13,584	992	826	869	198
San Gabriel Bl	N	3.0	8,486	15,013	12,304	9,086	44,889	15,217	959	848	1,043	280
San Gabriel Bl	S	3.0	7,313	14,992	14,768	9,735	46,808	15,867	826	847	1,252	300
Valley Bl	E	1.3	1,613	6,750	4,989	5,209	18,561	14,731	427	893	990	376
Valley Bl	W	1.3	3,265	6,999	4,638	4,330	19,232	15,263	864	926	920	312
City of San Gabriel Totals		**12.6**	**29,947**	**65,702**	**53,139**	**39,096**	**187,885**					

Exhibit 5.46: Mobility and Reliability Performance – City of San Gabriel

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Main St/Las Tunas Dr/Live Oak Av	E	2.1	4	111	187	1.8	53.6	90.3	22.4	17.2	1.05	1.36	1.18	1.60
Main St/Las Tunas Dr/Live Oak Av	W	2.1	26	56	170	12.4	27.2	82.2	21.2	20.9	1.19	1.20	1.37	1.31
San Gabriel Bl	N	3.0	49	138	314	16.6	46.7	106.6	21.7	19.9	1.23	1.34	1.42	1.56
San Gabriel Bl	S	3.0	73	238	524	24.6	80.7	177.7	21.9	19.6	1.38	1.54	1.55	1.79
Valley Bl	E	1.3	11	105	291	8.9	83.6	230.7	20.1	15.8	1.20	1.53	1.32	1.86
Valley Bl	W	1.3	18	85	265	14.2	67.4	210.1	21.0	17.4	1.23	1.49	1.41	1.69
City of San Gabriel Totals		**12.6**	**180**	**733**	**1,751**	**14.3**	**58.4**	**139.4**						

5.24 City of San Marino

Exhibits 5.47 and 5.48 summarize arterial performance for the two study arterials that pass through the City of San Marino. Among the selected arterials, Huntington Drive has the highest demand (VMT), and is the most productive in terms of traffic flow. Huntington Drive has the most total delay, and the most delay per mile. San Gabriel Boulevard has the highest travel time reliability index.

Exhibit 5.47: Travel Demand and Productivity Performance – City of San Marino

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Huntington Dr	E	4.7	12,079	29,773	32,486	15,448	89,786	19,267	864	1,065	1,743	301
Huntington Dr	W	4.7	20,027	28,375	22,773	15,229	86,404	18,542	1,433	1,015	1,222	297
San Gabriel Bl	N	1.5	4,210	8,482	6,698	4,594	23,985	15,677	917	924	1,095	273
San Gabriel Bl	S	1.5	3,524	8,025	7,104	4,821	23,474	15,342	768	874	1,161	286
City of San Marino Totals		**12.4**	**39,840**	**74,655**	**69,062**	**40,092**	**223,649**					

Exhibit 5.48: Mobility and Reliability Performance – City of San Marino

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Huntington Dr	E	4.7	102	333	721	21.8	71.5	154.8	25.8	25.1	1.36	1.39	1.53	1.61
Huntington Dr	W	4.7	141	267	735	30.3	57.3	157.7	25.8	25.5	1.41	1.42	1.61	1.62
San Gabriel Bl	N	1.5	50	65	200	32.6	42.7	130.4	20.5	24.2	1.57	1.33	1.95	1.48
San Gabriel Bl	S	1.5	16	103	181	10.3	67.4	118.2	29.0	20.7	1.20	1.68	1.38	2.06
City of San Marino Totals		**12.4**	**309**	**769**	**1,837**	**24.9**	**62.1**	**148.4**						

5.25 City of Sierra Madre

San Gabriel and Sierra Madre Boulevards represent the only arterial corridor that passes through City of Sierra Madre. Results for that segment are presented in Exhibits 5.49 and 5.50.

Exhibit 5.49: Travel Demand and Productivity Performance – City of Sierra Madre

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
San Gabriel Bl/Sierra Madre Bl	E	1.7	1,233	2,898	3,737	1,236	9,104	5,355	242	284	550	66
San Gabriel Bl/Sierra Madre Bl	W	1.7	1,827	2,566	1,996	925	7,313	4,302	358	252	294	49
City of Sierra Madre Totals		**3.4**	**3,059**	**5,464**	**5,733**	**2,161**	**16,417**					

Exhibit 5.50: Mobility and Reliability Performance – City of Sierra Madre

Arterial Corridor	Dir	Arterial Length	Mobility							Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)	Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
San Gabriel Bl/Sierra Madre Bl	E	1.7	12	32	74	7.0	19.0	43.4	19.6	18.8	1.17	1.22	1.34	1.41
San Gabriel Bl/Sierra Madre Bl	W	1.7	16	9	47	9.2	5.4	27.8	19.9	21.3	1.18	1.11	1.34	1.22
City of Sierra Madre Totals		**3.4**	**28**	**41**	**121**	**8.1**	**12.2**	**35.6**						

5.26 City of South El Monte

Exhibits 5.51 and 5.52 summarize arterial performance for the two arterials that pass through the City of South El Monte. Rosemead Boulevard has the highest demand (VMT), and is the most productive in terms of traffic flow. Rosemead Boulevard has the most total delay, the most delay per mile, and the highest travel time reliability index.

Exhibit 5.51: Travel Demand and Productivity Performance – City of South El Monte

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Garvey Av	E	0.7	869	2,973	2,835	1,850	8,527	11,523	391	670	958	227
Garvey Av	W	0.7	1,689	3,206	1,964	1,628	8,487	11,469	761	722	664	200
Rosemead Bl	N	2.0	7,087	12,492	9,137	8,360	37,075	18,354	1,169	1,031	1,131	376
Rosemead Bl	S	2.0	5,042	12,159	9,840	7,470	34,512	17,085	832	1,003	1,218	336
City of South El Monte Totals		**5.5**	**14,687**	**30,830**	**23,777**	**19,308**	**88,601**					

Exhibit 5.52: Mobility and Reliability Performance – City of South El Monte

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Garvey Av	E	0.7	7	33	78	9.5	45.2	105.0	20.7	19.1	1.24	1.35	1.39	1.59
Garvey Av	W	0.7	17	21	82	23.5	28.5	111.3	19.5	20.2	1.38	1.34	1.75	1.54
Rosemead Bl	N	2.0	59	94	320	29.0	46.4	158.3	24.1	24.0	1.36	1.37	1.60	1.59
Rosemead Bl	S	2.0	38	152	314	18.9	75.4	155.2	25.5	21.5	1.45	1.72	1.82	2.03
City of South El Monte Totals		**5.5**	**121**	**301**	**793**	**22.0**	**54.4**	**143.7**						

5.27 City of South Pasadena

Exhibits 5.53 and 5.54 summarize arterial performance through the City of South Pasadena. Of the three arterials evaluated by this study, Huntington Drive has the highest demand (VMT), and is the most productive in terms of traffic flow. Fremont Avenue has the most total delay, while Fair Oaks Avenue the most delay per mile. Fremont Avenue has the highest travel time reliability index.

Exhibit 5.53: Travel Demand and Productivity Performance – City of South Pasadena

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Fair Oaks Av	N	1.4	3,677	5,742	4,539	2,957	16,915	12,347	895	699	828	196
Fair Oaks Av	S	1.4	2,872	5,583	5,572	4,320	18,347	13,392	699	679	1,017	287
Fremont Av	N	1.8	2,754	5,478	4,447	3,119	15,797	9,027	525	522	635	162
Fremont Av	S	1.8	3,238	6,256	4,398	3,228	17,120	9,783	617	596	628	168
Huntington Dr	E	1.5	2,772	6,490	7,467	4,445	21,174	14,023	612	716	1,236	268
Huntington Dr	W	1.5	5,547	6,701	5,139	3,712	21,100	13,974	1,225	740	851	224
City of South Pasadena Totals		**9.3**	**20,860**	**36,250**	**31,562**	**21,781**	**110,453**					

Exhibit 5.54: Mobility and Reliability Performance – City of South Pasadena

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Fair Oaks Av	N	1.4	73	109	310	53.3	79.3	226.2	14.8	16.4	1.89	1.71	2.51	2.04
Fair Oaks Av	S	1.4	26	135	264	19.1	98.9	192.3	22.2	15.9	1.32	1.84	1.49	2.21
Fremont Av	N	1.8	64	138	335	36.4	78.6	191.7	14.7	14.2	1.95	2.03	2.87	2.41
Fremont Av	S	1.8	39	87	214	22.2	50.0	122.2	19.3	17.1	1.42	1.60	1.63	1.90
Huntington Dr	E	1.5	22	73	178	14.6	48.5	117.8	24.1	22.5	1.28	1.37	1.45	1.56
Huntington Dr	W	1.5	23	51	146	15.2	33.8	96.9	28.4	24.3	1.14	1.33	1.31	1.50
City of South Pasadena Totals		**9.3**	**247**	**593**	**1,447**	**26.7**	**64.1**	**156.2**						

5.28 City of Temple City

Exhibits 5.55 and 5.56 summarize arterial performance through the City of Temple City. Among the selected arterials for this study, Rosemead Boulevard has the highest demand (VMT), and is the most productive in terms of traffic flow. Rosemead Boulevard has the most total delay, and the most delay per mile. Santa Anita Avenue has the highest travel time reliability index.

Exhibit 5.55: Travel Demand and Productivity Performance – City of Temple City

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Baldwin Av	N	1.1	2,261	5,358	4,816	3,506	15,942	14,108	667	790	1,065	282
Baldwin Av	S	1.1	2,762	5,248	3,917	3,159	15,087	13,351	815	774	867	254
Lower Azusa Rd	E	1.1	1,768	5,157	5,252	3,432	15,608	13,691	517	754	1,152	274
Lower Azusa Rd	W	1.1	3,102	4,786		2,496	10,384	11,788	907	700	670	199
Main St/Las Tunas Dr/Live Oak Av	E	1.8	2,097	6,799	6,700	4,712	20,308	11,539	397	644	952	243
Main St/Las Tunas Dr/Live Oak Av	W	1.8	4,576	7,789	5,593	4,264	22,223	12,627	867	738	795	220
Rosemead Bl	N	3.4	11,387	20,124	14,192	12,136	57,839	17,062	1,120	989	1,047	325
Rosemead Bl	S	3.4	8,187	20,281	16,542	13,039	58,049	17,124	805	997	1,220	350
Santa Anita Av	N	0.7	1,331	2,972	2,454	1,745	8,503	11,647	608	679	840	217
Santa Anita Av	S	0.7	1,361	2,889	2,325	1,766	8,342	11,427	622	660	796	220
City of Temple City Totals		**16.3**	**38,833**	**81,403**	**61,791**	**50,256**	**232,283**					

Exhibit 5.56: Mobility and Reliability Performance – City of Temple City

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Baldwin Av	N	1.1	12	38	90	10.4	33.3	79.5	25.6	23.8	1.19	1.28	1.40	1.47
Baldwin Av	S	1.1	16	27	86	14.1	23.5	76.1	28.6	28.3	1.25	1.26	1.43	1.42
Lower Azusa Rd	E	1.1	14	68	137	12.5	59.5	120.0	23.3	20.6	1.27	1.45	1.43	1.73
Lower Azusa Rd	W	1.1	13	27	80	11.6	23.5	70.1	24.3	22.8	1.19	1.27	1.35	1.45
Main St/Las Tunas Dr/Live Oak Av	E	1.8	17	131	262	9.8	74.7	148.7	21.7	16.9	1.25	1.60	1.38	1.82
Main St/Las Tunas Dr/Live Oak Av	W	1.8	25	54	164	14.4	31.0	93.2	21.8	21.2	1.23	1.26	1.40	1.38
Rosemead Bl	N	3.4	74	145	442	21.7	42.7	130.4	23.9	22.9	1.31	1.36	1.53	1.58
Rosemead Bl	S	3.4	50	271	562	14.8	79.9	165.7	23.9	20.2	1.34	1.59	1.66	1.88
Santa Anita Av	N	0.7	8	18	46	11.3	24.2	63.1	24.6	24.2	1.27	1.29	1.45	1.44
Santa Anita Av	S	0.7	10	23	48	13.4	31.2	66.2	24.8	22.2	1.32	1.47	1.64	2.14
City of Temple City Totals		**16.3**	**239**	**801**	**1,917**	**14.7**	**49.1**	**117.6**						

5.29 City of Walnut

Exhibits 5.57 and 5.58 summarize arterial performance through the City of Walnut. Of the three selected arterials for this jurisdiction, Valley Boulevard has the highest demand (VMT), although Grand Avenue is the most productive in terms of traffic flow. Valley Boulevard has the most total delay, although Grand Avenue the most delay per mile and has the highest travel time reliability index.

Exhibit 5.57: Travel Demand and Productivity Performance – City of Walnut

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Amar Rd	E	3.1	7,192	11,916	12,275	5,868	37,251	12,214	786	651	1,006	175
Amar Rd	W	3.1	7,020	12,308	11,169	8,491	38,988	12,783	767	673	916	253
Grand Av	N	2.6	10,022	17,265	15,674	8,873	51,833	20,327	1,310	1,128	1,537	316
Grand Av	S	2.6	8,698	18,216	14,257	11,144	52,315	20,516	1,137	1,191	1,398	397
Valley Bl	E	5.8	10,770	29,896	46,148	16,221	103,034	17,826	621	862	1,996	255
Valley Bl	W	5.8	15,198	27,280	17,548	13,209	73,235	12,670	876	787	759	208
City of Walnut Totals		**22.8**	**58,899**	**116,881**	**117,070**	**63,805**	**356,655**					

Exhibit 5.58: Mobility and Reliability Performance – City of Walnut

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Amar Rd	E	3.1	46	60	173	15.0	19.6	56.7	31.9	34.4	1.30	1.20	1.53	1.32
Amar Rd	W	3.1	20	34	107	6.6	11.1	35.2	36.5	37.9	1.18	1.13	1.32	1.22
Grand Av	N	2.6	76	139	362	29.7	54.4	141.9	30.3	29.3	1.33	1.37	1.53	1.64
Grand Av	S	2.6	63	133	393	24.6	52.3	154.3	29.6	30.3	1.41	1.38	1.64	1.54
Valley Bl	E	5.8	32	224	408	5.5	38.7	70.5	34.0	31.0	1.11	1.22	1.19	1.35
Valley Bl	W	5.8	44	79	246	7.6	13.6	42.6	33.3	32.4	1.15	1.18	1.27	1.30
City of Walnut Totals		**22.8**	**281**	**668**	**1,689**	**12.3**	**29.4**	**74.2**						

5.30 City of West Covina

Exhibits 5.59 and 5.60 summarize arterial performance through the City of West Covina. Among the selected arterials for this study, Azusa Avenue has the highest demand (VMT), and is the most productive in terms of traffic flow. Azusa Avenue has the most total delay, and the most delay per mile. Hacienda Boulevard/Glendora Avenue has the highest travel time reliability index.

Exhibit 5.59: Travel Demand and Productivity Performance – City of West Covina

Arterial Corridor	Dir	Arterial Length	Travel Demand					Productivity				
			Vehicle Miles Traveled (VMT)					Average Daily Traffic (ADT)	Average Hourly Flow During Period (VPH)			
			AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7PM)	Night (7PM - 6AM)	Total Daily VMT		AM Peak (6-9 AM)	Midday (9AM - 3PM)	PM Peak (3-7 PM)	Night (7PM-6AM)
Amar Rd	E	2.0	3,922	7,306	6,843	4,697	22,768	11,499	660	615	864	216
Amar Rd	W	2.0	4,516	7,543	6,555	5,512	24,126	12,185	760	635	828	253
Azusa Av	N	4.3	14,204	28,788	23,299	21,102	87,394	20,230	1,096	1,111	1,348	444
Azusa Av	S	4.3	13,981	26,139	19,797	21,663	81,580	18,884	1,079	1,008	1,146	456
Citrus Av	N	0.2	469	1,112	761	636	2,978	12,407	651	772	793	241
Citrus Av	S	0.2	274	1,102	877	761	3,014	12,558	381	765	913	288
Grand Av	N	1.8	3,317	6,785	6,485	5,664	22,251	12,500	621	635	911	289
Grand Av	S	1.8	5,530	9,354	5,649	4,907	25,440	14,292	1,036	876	793	251
Hacienda Bl/Glendora	N	1.7	2,706	8,994	6,928	6,673	25,301	14,796	528	877	1,013	355
Hacienda Bl/Glendora	S	1.7	2,323	8,097	6,460	6,505	23,385	13,676	453	789	945	346
Nogales St	N	1.9	4,384	7,232	6,491	3,646	21,754	11,696	786	648	872	178
Nogales St	S	1.9	3,481	6,568	6,533	4,143	20,726	11,143	624	589	878	203
Ramona Bl/Badillo St	E	2.4	3,378	7,662	9,439	4,838	25,316	10,461	465	528	975	182
Ramona Bl/Badillo St	W	2.4	7,927	7,176	5,364	4,717	25,184	10,407	1,092	494	554	177
Valley Bl	E	1.1	1,202	3,154	4,387	1,616	10,359	9,417	364	478	997	134
Valley Bl	W	1.1	2,718	4,690	3,989	2,663	14,060	12,782	824	711	907	220
City of West Covina Totals		**30.8**	**74,335**	**141,701**	**119,855**	**99,744**	**435,636**					

Exhibit 5.60: Mobility and Reliability Performance – City of West Covina

Arterial Corridor	Dir	Arterial Length	Mobility								Reliability			
			Average Weekday Vehicle-Hours of Delay (VHD)			Delay per Directional Mile (VHD/Mile)			Speed (MPH)		Travel Time Index		Planning Time Index	
			AM Peak (6-9 AM)	PM Peak (3-7PM)	Total Daily VHD	AM Peak (6-9 AM)	PM Peak (3-7PM)	Average Daily VHD/Mile	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)	AM Peak Hour (8 AM)	PM Peak Hour (5 PM)
Amar Rd	E	2.0	30	79	199	15.2	40.1	100.5	27.2	24.6	1.29	1.43	1.48	1.60
Amar Rd	W	2.0	28	63	177	14.4	32.1	89.6	28.0	26.8	1.30	1.36	1.47	1.53
Azusa Av	N	4.3	139	356	946	32.2	82.3	218.9	24.2	21.9	1.39	1.53	1.57	1.68
Azusa Av	S	4.3	107	255	726	24.8	58.9	168.1	26.1	23.7	1.33	1.47	1.47	1.63
Citrus Av	N	0.2	4	12	35	15.1	49.5	145.7	18.3	16.3	1.21	1.35	1.42	1.59
Citrus Av	S	0.2	2	17	41	7.7	72.0	171.6	19.2	15.5	1.19	1.47	1.34	1.69
Grand Av	N	1.8	13	36	90	7.0	20.4	50.7	34.9	33.2	1.20	1.26	1.30	1.38
Grand Av	S	1.8	33	38	132	18.3	21.1	74.0	31.8	31.9	1.32	1.31	1.50	1.49
Hacienda Bl/Glendora	N	1.7	25	120	323	14.6	70.0	188.7	22.4	19.3	1.29	1.49	1.44	1.70
Hacienda Bl/Glendora	S	1.7	17	114	293	10.0	66.9	171.3	23.7	19.4	1.26	1.53	1.43	1.76
Nogales St	N	1.9	32	46	122	17.1	24.5	65.8	26.2	25.3	1.21	1.25	1.36	1.52
Nogales St	S	1.9	22	49	126	12.0	26.3	67.7	28.2	28.9	1.28	1.25	1.47	1.42
Ramona Bl/Badillo St	E	2.4	17	61	127	7.2	25.1	52.4	27.9	25.9	1.15	1.25	1.29	1.43
Ramona Bl/Badillo St	W	2.4	21	20	78	8.5	8.4	32.3	28.2	28.5	1.12	1.11	1.22	1.21
Valley Bl	E	1.1	2	16	28	2.2	14.6	25.9	33.6	31.9	1.08	1.14	1.26	1.31
Valley Bl	W	1.1	6	19	46	5.6	17.4	41.4	33.6	32.0	1.14	1.20	1.29	1.37
City of West Covina Totals		**30.8**	**498**	**1,301**	**3,489**	**16.2**	**42.2**	**113.2**						

REPORT

DATE: April 23, 2020

TO: Planning Directors' Technical Advisory Committee

FROM: Marisa Creter, Executive Director

RE: CLIMATE RESOLVE & SOUTHERN CALIFORNIA EDISON GRANT WRITING ASSISTANCE PROGRAM FOR LOS ANGELES COUNTY

RECOMMENDED ACTION

For information only.

BACKGROUND

Climate Resolve, an organization that focuses on developing practical initiatives that reduce climate pollution and prepare for climate impacts, recently released a report that illustrates the current status of municipal climate preparedness planning in Southern California Edison's service territory. The report, known as "Ready for Tomorrow? A Snapshot of Climate Preparedness Planning in Southern California," also provides recommendations for municipalities to address gaps identified in the research. This report is complemented by a searchable matrix that details the status of climate preparedness planning by more than 200 municipalities. Both the report and the matrix can be found on the Climate Resolve website at https://www.climateresolve.org/ready-for-tomorrow/.

Climate Resolve recently received funding from Southern California Edison (SCE) to develop a pilot climate planning grant writing assistance program in Los Angeles County to support local jurisdictions with high numbers of disadvantaged communities to pursue federal, state, and foundation grants for climate planning. The grant writing assistance program includes pilot areas in the San Gabriel Valley region and the cities of Commerce and Compton.

Climate Resolve representatives will provide a brief presentation on the Pilot Grant Writing Assistance Program at this meeting.

Prepared by: _____
Alexander P. Fung
Management Analyst

Approved by: Marisa Creter
Marisa Creter
Executive Director

ATTACHMENTS

Attachment A – Climate Resolve “Ready For Tomorrow” Report

Climate Resolve

READY FOR TOMORROW?

A snapshot of climate preparedness planning in Southern California

2020

Acknowledgements

Many thanks to the following individuals and organizations who contributed knowledge, time, services, or funding to this research and report.

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Alison Splinder, City of Long Beach
Jean Kayano, Center for Community Action and Environmental Justice
Patricia Lin Hachiya and Iris Chi, County of Los Angeles Department of Regional Planning
Phoebe Seaton, Leadership Counsel for Justice and Accountability

Design and Webpage

Ride or Cry (rideorcry.com)

Grantor

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EXECUTIVE SUMMARY

Climate change will increase the frequency of wildfires and extreme heat days, will exacerbate water scarcity and coastal flooding, and will affect communities throughout California. In response, the state has mandated that communities plan for the impacts of climate change. Understanding the local climate policy landscape will inform policymakers, community-based organizations (CBOs), industry, and other stakeholders about additional support that municipalities may need to ensure climate resilience, especially for disadvantaged communities (DACs).

The research presented in this report gives a snapshot of the current status of municipal-level climate preparedness planning within and near Southern California Edison's (SCE's) service territory. This report frames and defines several types of local climate preparedness plans and gives examples of best practices. The report is complemented by a searchable Matrix on Climate Resolve's website that details the status of climate preparedness planning by more than 200 municipalities. This research also identifies third-party funding sources to support municipal climate planning.

Additionally, we conducted five interviews with stakeholders to share their own experiences about climate preparedness planning. Our findings from these interviews helped to ground-truth the online research and informed the following issues and recommendations.

Our report identifies the following issues and makes recommendations with respect to improving local climate preparedness planning throughout the state:

Issue #1: State policymakers and key stakeholders are unaware of the current status of municipal-level planning for the impacts of climate change.
Recommendation #1: The Governor's Office of Planning and Research (OPR), the Governor's Office of Emergency Services (Cal OES), industry, and/or philanthropy can fund the creation and management of a statewide database to track climate preparedness planning.

Issue #2: The State lacks consistent criteria for assessing strengths/weaknesses of climate planning efforts.
Recommendation #2: The Governor's Office of Planning and Research can produce a report that evaluates the strengths and weaknesses of current municipal compliance with SB379, SB1035, and SB1000, and that updates best planning practices. The report can be featured on the state's Adaptation Clearinghouse (resilientCA.org).

Issue #3: Many municipalities lack capacity and resources for climate preparedness planning, particularly those with significant disadvantaged communities (DACs).
Recommendation #3: Where appropriate, Strategic Growth Council, metropolitan planning organizations, and industry can fund technical assistance providers, such as regional Councils of Governments or other organizations, to help DACs with grant writing, grant matching funds, and/or planning assistance.

We believe that this research can benefit local government, nonprofit stakeholders, and industry representatives who are grappling with climate change planning, particularly in DACs.

FRAMING CLIMATE PREPAREDNESS PLANNING

The state has mandated that municipalities and counties engage in processes characterized as "climate preparedness planning" to prepare for local climate change impacts and to develop certain climate planning documents.[1] Effective climate preparedness planning necessitates that planners solicit input from diverse perspectives, including local leaders, municipal departments, regional organizations, state agencies, and CBOs. Planners engage with local communities to ensure that climate policies and strategies address climate needs both equitably and successfully in the near-term (within five years) and in the long-term (within ten to twenty-five years). The State does not track municipal-level climate preparedness planning via a public database or annual report. Therefore Climate Resolve researched the status of climate preparedness planning by more than 200 municipalities and organized this information in "Matrix 1.0 - Status of Municipal Climate Preparedness in SCE's Service Area," which is publicly available on our website.

This matrix was created via web research and details each municipality's documented status on their climate preparedness plans including:

- Climate Adaptation Plan
- Climate Action and Adaptation Plan
- Sustainability Plan
- Resilience Plan
- Local Hazard Mitigation Plan
- General Plan (SB375, SB1035, and SB1000)
- Emergency Operations/Management Plan

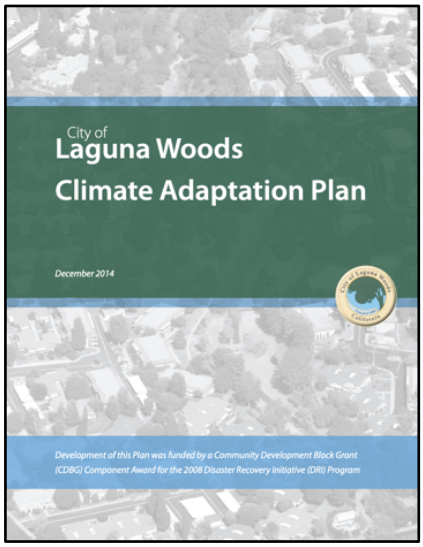
This matrix also includes municipal contacts, examples of climate strategies, relevant dates of plan completion, and a tab for general resources on climate preparedness planning. Climate Resolve plans to update the matrix periodically.

The following section further describes climate preparedness planning by:

- Describing the different characteristics of each type of climate preparedness plan
- Showcasing one exemplary version of each type of plan

Climate Adaptation Plan

Climate adaptation planning is the process of assessing vulnerability to projected climate impacts and creating strategies to be ready for those impacts.[2] Climate adaptation planning seeks to reduce the local impacts of climate change such as increased wildfire, extreme heat, air pollution, flooding, drought, and sea level rise. Cal OES recommends that climate adaptation planning incorporates the following: 1) assessing exposure to climate change impacts; 2) assessing community sensitivity to the exposure; 3) assessing potential impacts; 4) evaluating existing community capacity to adapt to anticipated impacts; 5) evaluating risk and onset; 6) setting priority for adaptation needs; 7) identifying strategies; 8) evaluating and setting priorities and strategies; and 9) establishing phasing and information.[3]



City of Laguna Woods[4]

Laguna Woods provides an example of a successful Climate Adaptation Plan Climate Adaptation Plan, especially for a small city within Orange County. The Climate Adaptation Plan states that 80% of people living in Laguna Woods are 65 years or older and finds that older adults are particularly vulnerable to the effects of climate change, such as extreme heat and severe weather. The plan emphasizes social cohesion among neighbors and the creation of a centralized communication system to reach residents. It also outlines existing efforts that support climate adaptation goals, including residential energy retrofits and transit programs for older adults.

Climate Action and Adaptation Plans (CAAPs)

A CAAP builds upon the Climate Adaptation Plan process with action that a municipality can take to mitigate local greenhouse gas (GHG) emissions. The CAAP establishes consistency with state GHG emission reduction goals and allows municipalities to maintain local control over strategies that fit the character of its community. Tackling climate adaptation and mitigation simultaneously

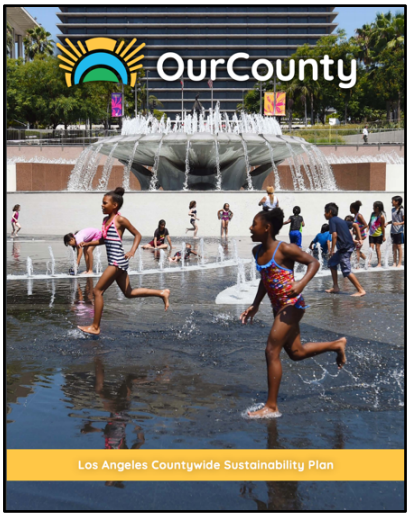
through a CAAP can lead to co-benefits, such as improving air quality, cost savings for both energy and water, and improved public health.[5]

City of Santa Monica[6]

The City of Santa Monica's CAAP utilizes best practices that place equal importance on both climate action and climate adaptation. The city's CAAP has eight broader goals: zero net carbon buildings, zero waste, sustainable mobility, climate ready community, water self-sufficiency, coastal flooding preparedness, and low carbon food and ecosystems. With respect to the proposed actions and policies, the CAAP also views factors such as carbon reduction potential, the cost to the city, who is leading implementation, collaboration, evaluation, and the timeframe for completion. For example, the CAAP proposes a carbon reduction ordinance for existing buildings, which both addresses the zero net carbon goal and would provide co-benefits that enhance environmental quality, equity, community resilience, and public health and safety.

Sustainability Plan

Sustainability planning incorporates climate preparedness and mitigation elements found in Climate Adaptation Plans and CAAPs with strategies and initiatives for a broader set of environment, economy, and equity goals. This includes establishing sustainability targets for key resources such as water usage and local energy power generation, as well as creating energy-efficient buildings, efficient transportation, and zero-waste programs. Framing these initiatives through a sustainability lens can result in co-benefits such as job creation, well-maintained nature spaces, and improved health.[7]



County of Los Angeles[8]

The OurCounty Sustainability Plan outlines 12 goals and 159 action items to address a broad range of environmental, economic, health, and quality-of-life issues for the County's 10.1 million residents. There is a clear commitment in the plan to integrate climate adaptation and resilience into planning, building, infrastructure, and community development decisions, as well as to safeguard communities against extreme heat, flooding, and other climate impacts. Moreover, the plan seeks to transition the County to a clean energy economy, to expand tree canopy over urban areas, to divert waste from landfills, to phase out plastic, to increase safe and clean drinking water, to train more people for clean energy jobs, and to build new affordable housing. Notably, the plan was developed by gathering input at 200 community events; nearly 1,000 community members participated in the planning process; and the plan explicitly incorporates an equity approach to assist DACs.

Resilience Plan

Recently, the framing of resilience has become more prominent in the planning field to address the needs of a jurisdiction's vulnerable populations and neighborhoods. Resilience plans build capacity into systems to enable the most at-risk populations to weather system shocks and stressors brought upon by external factors, including climate change impacts. Shocks are sudden or acute events that threaten or impact a municipality's well-being, and stressors are daily or chronic challenges that weaken natural, built, or human resources.[9] Resilience planning places importance on community networks and collaborative activities among individuals, governments, businesses, and nonprofit organizations.

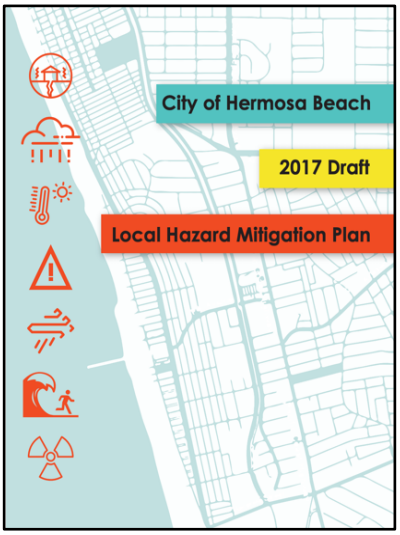
City of Los Angeles[10]

The City's Resilient Los Angeles Plan seeks to build adaptive capacity and increase social connectivity.[11] The plan addresses both external and internal factors such as climate change, homelessness, and aging infrastructure to outline policies and actions that will build community resilience and protect those most vulnerable. For climate change preparedness, the plan outlines how each climate adaptation and mitigation strategy addresses the impacts of shocks and stressors to mitigate risk in an integrated method. The plan describes policies, such as developing an urban heat vulnerability index, and lists agencies such as the Emergency Management Department, Department of Recreation and Parks, and the Los Angeles County Department of Public Health that can assist with implementation.

Local Hazard Mitigation Plan (LHMP)

The main objective of an LHMP is to document a municipality's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. An LHMP can be prepared either by a local government for a single city or as a multi-jurisdictional LHMP prepared at the county level.[12] An effective LHMP forecasts the extent of future climate change impacts and the probability of future occurrences. It also identifies and prioritizes mitigation strategies based on benefit-cost analysis and funding sources.

Federal and state agencies strongly encourage municipalities to adopt an LHMP. Funding from the Federal Emergency Management Agency (FEMA) is contingent upon a municipality's completion, adoption, and maintenance of an LHMP at least every five (5) years. Additionally, California's SB379 requires cities and counties to integrate climate adaptation upon the next revision of an LHMP on or after January 1, 2017; if the local jurisdiction has not adopted an LHMP by January 1, 2022, it must incorporate climate adaptation into the Safety Element of its General Plan.[13] Municipalities must follow a three-step approach to complying with SB 379: assessing risks to climate change impacts; developing adaptation and resilience goals, policies, and objectives; and implementing feasible measures.



City of Hermosa Beach[14]

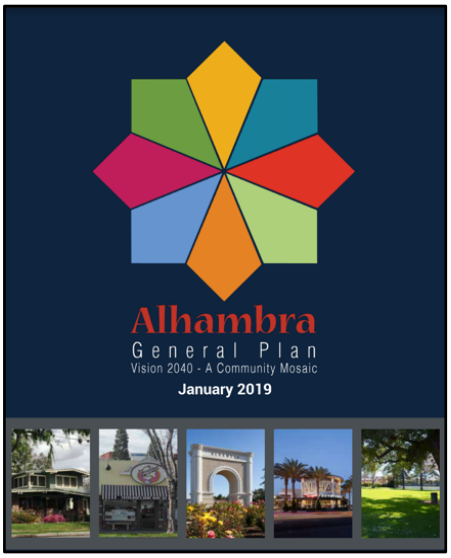
The City of Hermosa Beach's LHMP provides a comprehensive, long-term plan to reduce risk and future losses from hazards, including climate change. Compliant with SB379, the LHMP assesses local climate hazards and vulnerabilities, the potential extent of damages, and the probability of future occurrences. The City conducted extensive stakeholder engagement as it developed mitigation measures, and prioritized these measures based on benefit-cost analyses and available funding sources. The City encourages new real estate developments to incorporate design features that will mitigate the adverse effects of climate change.

General Plan (in compliance with SB379, SB1035, AND SB1000)

California law requires each city and county to adopt a General Plan, which expresses a community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.[15] As mentioned, SB379 requires cities and counties to include climate adaptation and resilience strategies in revisions either to their LHMPs after 2017 or to their General Plans by 2022, if they don't have LHMPs.

SB1035 is an extension of SB379 that requires the local planning agency to review and, if necessary, revise the General Plan's Safety Element upon each revision of either the General Plan's Housing Element or an LHMP, not less than every eight (8) years. This requirement gives the agency the opportunity to identify new information related to flood and fire hazards, as well as climate adaptation and resilience strategies.[16]

SB1000 is a complementary law which mandates that General Plans address environmental justice issues to ensure that DACs are not disproportionately affected by environmental pollution, climate change, and other hazards. In order to identify DACs, cities and counties may utilize the Office of Environmental Health Hazard Assessment's (OEHHA) CalEnviroScreen 3.0 mapping software and other social vulnerability tools. Guidance to identify DACs and overall approaches to SB 1000 are highlighted in the California Environmental Justice Alliance (CEJA) and PlaceWorks SB 1000 Implementation Toolkit.[17]

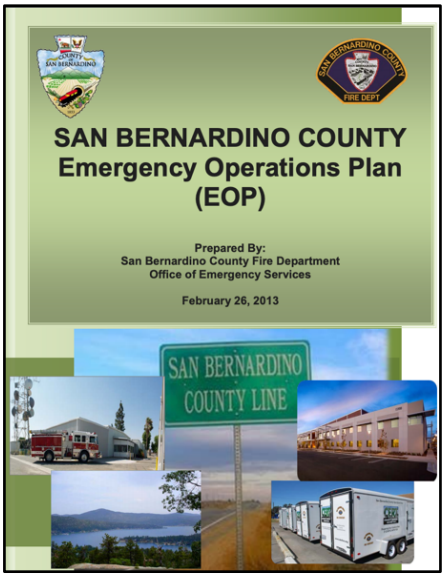


City of Alhambra[18]

The City of Alhambra's General Plan complies with SB379, SB1000, and SB1035 by incorporating environmental justice elements with climate adaptation and resilience strategies. Within its "Quality of Life" chapter, the General Plan references CES3.0 and includes a map of the City's DACs. The General Plan complies with SB1000: It incorporates environmental justice elements through its Land Use, Health and Safety, and Mobility sections. These elements seek to mitigate existing adverse conditions and to ensure that new development does not unduly impact vulnerable populations. In addition, the General Plan complies with SB379 and SB1035: It lists the effects of climate change most relevant to the City, and establishes strategies to mitigate local GHG emissions and adapt to climate change. These strategies include minimizing vehicle miles traveled (VMT), promoting renewable energies, and incorporating climate change into its emergency operations plan.

Emergency Operations/Management Plan

An Emergency Operations/Management Plan addresses a county's or municipality's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies to ensure that the county or municipality is equipped with effective response and recovery processes. The fundamental difference between an LHMP and an Emergency Operations/Management Plan is that an LHMP seeks to mitigate potential risks while an Emergency Operations/Management Plan establishes a "playbook" of responses to actual events. Effective Emergency Operations/Management Plans both account for the impacts of climate change to increase the risk and severity of disasters (such as flooding due to sea-level rise) and establish a recovery system to return to a normal state of affairs after an extraordinary emergency situation.



County of San Bernardino[19]

The County of San Bernardino's Emergency Operations Plan identifies a set of hazards that are expected to intensify from climate change such as flooding, wildfires, and drought. The County has outlined four emergency management phases: mitigation, prepare/plan, response, and recover. Although the plan currently does not explicitly address climate change, it does address natural hazards, including wildfire, flooding, and droughts, that are likely to be exacerbated by climate change. For example, in response to wildfire threats, the County has identified efforts including its Mountain Area Safety Task Force to facilitate cooperation and coordination of fire hazard mitigation efforts with all stakeholders, development of mutual aid among first responders in the County, and identification of community-based fuels reduction projects to reduce the potential of catastrophic wildfires.

POTENTIAL FUNDING SOURCES

Local municipalities have used their fund balance, general purpose revenue, and departmental funding to develop and implement climate adaptation and action strategies. However, many municipalities face capacity and resource constraints to engage in climate planning. Following are a few potential funding resources that can support municipalities with their climate planning efforts:

- At the regional level, Southern California Association of Governments (SCAG) and several of Council of Governments (COGs), such as Gateway Cities and Western Riverside, have provided financial and technical assistance for climate planning grants and projects.[20,21,22]
- At the state planning level, the Transformative Climate Communities (TCC) Program offers competitive grants for planning and implementation. TCC is funded by California's cap-and-trade program and is open to cities, counties, planning organizations, and COGs throughout the state.[23] TCC funds multiple, coordinated greenhouse gas emissions reduction and adaptation strategies that empower communities most impacted by pollution to choose their own goals and projects.
- Particularly for LHMPs, Cal OES's hazard mitigation planning staff assists local governments in the development of LHMPs and provides technical assistance, training, and outreach. Additionally, Cal OES administers grants for FEMA's Pre-Disaster and Hazard Mitigation program; jurisdictions may apply for grants to support projects and plans aimed at reducing or eliminating future damages.[24,25]
- Within the private sector, utility companies are running competitive grant programs to support plans and projects involving climate adaptation.[26,27,28]
- The California Resilience Challenge, led by PG&E with a coalition of the public sector and non-profit partners (including Climate Resolve), will provide grants to public entities for diverse and replicable climate change resilience projects across California in 2020.[30]

STAKEHOLDER INTERVIEWS

Climate Resolve conducted five (5) interviews with various stakeholders that work on climate preparedness planning in Southern California.

1. Aaron Pfannenstiel - Atlas Planning Solutions
2. Alison Splinder - City of Long Beach
3. Jean Kayano - Center for Community Action and Environmental Justice
4. Patricia Lin Hachiya and Iris Chi - Los Angeles County Department of Regional Planning
5. Phoebe Seaton - Leadership Counsel for Justice and Accountability

Each interview was 30 - 45 minutes. Prior to each interview, we developed questions with respect to the status of climate preparedness plans from the research in our matrix.[29] We have included our interview questions in the Appendix.

Highlights

All interviewees are working on climate preparedness planning, but at different stages.

- Los Angeles County Department of Regional Planning is in the early stages of their Safety Element update and SB379 compliance.
- City of Long Beach is completing their CAAP to be adopted in the coming months.
- In Tulare and Kern County, Leadership Council for Justice and Accountability is involved with ongoing plans and community engagement processes, including the implementation of a TCC grant to focus on climate change and land use over the next couple of years in the Matheny Tract in Tulare County.[30]
- In San Bernardino, Center for Community Action and Environmental Justice (CCAEJ) is applying for grant funding for climate resilience work in partnership with Loma Linda Medical School.

Additionally, interviewees mentioned that extreme heat and air quality are not getting enough attention in climate preparedness plans compared with wildfires, floods, or sea-level rise. Their communities are already feeling the impacts of extreme heat and poor air quality due to climate change. For example, many low-income residents lack air conditioning or are concerned about the energy costs of using home air conditioning systems to cool off.

Moreover, interviewees emphasized a few climate planning best practices:

- CalEnviroScreen 3.0 and Healthy Places Index visual data tools are two major tools used for assessing environmental impacts on disadvantaged and unhealthy communities.
- Working closely across various city departments, such as public health or emergency management operations departments, helps prepare adequately for climate vulnerable populations in DACs.
- Community-based organizations should have a role in engaging communities and writing plans. For example, in Jurupa Valley, CCAEJ worked closely to write the environmental justice element in the General Plan.[31] Then the City of Long Beach actively engaged a quasi-local technical advisory committee throughout its CAAP planning process.

Many of the other highlights from our interviews are integrated into the following section on issues and recommendations.

CLIMATE PLANNING ISSUES & RECOMMENDATIONS

From our research on climate preparedness planning and best practices as well as stakeholder interviews we identified the following statewide planning needs and recommendations.

Issue #1: State policymakers and key stakeholders are unaware of the current status of municipal-level planning for the impacts of climate change.

The State lacks a centralized resource to monitor the current status of municipal-level climate preparedness planning. A database of current information would provide situational awareness to policymakers, CBOs, and the private sector to use with their climate planning. There have been attempts by the State (OPR tracking in 2016[32]) and COGs (SCAG's Green Region Initiative[33]), but they are not maintained.

Recommendation #1: OPR, Cal OES, industry, and/or philanthropic efforts can fund the creation and management of a statewide database to track climate preparedness planning.

Climate Resolve has developed a matrix that documents the status of climate preparedness planning for more than 200 municipalities across 15 counties. The State, industry, and/or philanthropic efforts can provide funding to both expand and maintain the matrix to track climate preparedness planning throughout California.

Our matrix research involved primarily web searches to track whether a municipality adopted state-mandated climate preparedness plans, to confirm whether the plans satisfy SB379, SB1035, and SB1000 requirements, and to provide relevant contact information for each municipality.[34] In a few cases, we were able to ground-truth this information through interviews with local stakeholders. We believe that web research should be thoroughly supplemented by interviews with local planners and other stakeholders across as many jurisdictions as possible. Funding could be used to conduct interviews to corroborate the status of each municipality's climate planning efforts, to understand their best practices and challenges, and to identify key hurdles that are preventing certain municipalities from starting their climate planning.

Issue #2: The State lacks criteria for assessing strengths/weaknesses of climate planning efforts.

We can confirm whether a city or county has developed a plan to satisfy SB379, SB1035, or SB1000, but currently there is no criteria for assessing the strengths/weaknesses of key municipal plans, particularly with respect to DACs within climate vulnerable areas. Moreover, there is a lack of understanding with respect to which planning solutions may be cost-effective for DACs within climate vulnerable areas, which have unique needs that are not addressed by state guidelines.

Recommendation #2: The Governor's Office of Planning and Research can produce a report that evaluates the strengths and weaknesses of current municipal compliance with SB379, SB1035, and SB1000, and that updates best planning practices which can be featured in the Adaptation Clearinghouse (resilientCA.org).

Although OPR is working to create SB1000 guidance and Cal OES is working to provide general adaptation planning guidance with respect to SB379 (APG 2.0), funding should be provided to a working group to assess local climate plans. The working group could also provide guidance with respect to best practices, policies, and initiatives. Its guidance could ensure that General Plans and LHMPs comply with environmental justice requirements, as well as with climate resilience and adaptation requirements, with a focus on supporting DACs and frontline communities. This approach would build off of the grassroots "SB1000 Toolkit" by CEJA and PlaceWorks,[35] and best practices could identify cost-effective solutions for municipalities that are severely resource-constrained. The State may then task the working group to assess and confirm that climate policy planning efforts throughout the state meet or exceed a standard threshold for quality.

Issue #3: Many municipalities lack capacity and resources for climate preparedness planning, particularly those with significant DACs.

Many municipalities do not have the time, budget, or technical expertise to conduct the analyses necessary for effective local climate preparedness planning, which is expensive. A few of the plans that we identified as exemplary were completed by high-resource municipalities (like Hermosa Beach and the City of Los Angeles) either in-house through their local planning office or by outsourcing the work to planning consultants. For example, the estimated cost to update a General Plan's Safety Element ranges from $30,000 - $75,000 (addendum) to $50,000 - $100,000 (standalone).

Federal, state, and foundation grants for climate preparedness planning are available, but many low-income municipalities do not have either the staff or the budget to hire consultants to write grant proposals to obtain these funds for climate planning. For example, Cal OES/FEMA provides Hazard Mitigation Program grants, but our research indicates that so few California municipalities have submitted proposals that the State is having trouble giving the money away. In addition, Hazard Mitigation Program grants require 25% local matching funds, which many municipalities cannot afford to meet.

Recommendation #3: Where appropriate, Strategic Growth Council (SGC), municipal planning organizations (MPOs), and industry can fund technical assistance providers like COGs or other organizations, to assist low-resource municipalities with grant writing, grant matching funds, and/or planning assistance.

COGs have demonstrated the ability to create sub-regional resources to assist smaller cities. For example, the Gateway Cities COG created a Climate Action Planning Framework that includes toolkits for GHG reduction measures, climate adaptation, and public engagement.[36] This toolkit has helped 26 small cities in the region apply for state grant funding, such as the California Climate Investments.

Additionally, funding may provide technical assistance and/or microgrants for climate planning to municipalities with significant DACs. For example, Western Riverside Council of Governments (WRCOG) has a Grant Writing Assistance Program to provide grant writers for free to municipalities to pursue five types of grants:

- Active Transportation Program
- Caltrans Sustainable Transportation Planning Grant Program (Transportation Planning Grants & Adaptation Planning Grants)
- Affordable Housing and Sustainable Communities Program
- Clean Cities related grants
- New planning grant opportunities[37]

Local industry and regional COGs should follow WRCOG's lead, perhaps in coordination with nonprofit organizations as grant writers. In addition, COGs and/or local industry could provide these municipalities with grants to satisfy the local match requirements for the federal Pre-Disaster and Hazard Mitigation grants. For example, certain utilities offer climate planning grants to municipalities.[38,39]

APPENDIX

Interview Questions

Aaron Pfannenstiel - Atlas Planning Solutions

1. How are these jurisdictions you are working with assessing climate vulnerable communities?
2. Do they use a mapping tool to project sea level rise, flooding, heat, et cetera.?
3. What are the major climate impacts of concern in SCE territory?
4. How are the communities you are working with engaging frontline communities (those most impacted by climate change and socioeconomically challenged)?
5. How could we assess cost benefits for frontline communities in terms of policy planning and mitigation efforts?

Alison Splinder - City of Long Beach

1. City of Long Beach conducted a vulnerability assessment for its Climate Action and Adaptation Plan. In particular (pg. 61-67), it integrated public health indicators to focus on vulnerable populations. How did City of Long Beach choose these indicators and how did this analysis play into the vulnerability assessment as a whole? (i.e. Social factors were coupled with: Sea Level Rise, Coastal Flooding, and Riverine Flooding; Extreme Heat; Air Quality; and Drought)
2. City of Long Beach preferred to use data from the TPL Climate Smart Cities Los Angeles tool and EPA EJScreen for its climate vulnerability assessment. Did you consider using other tools like CalEnviroScreen 3.0, Healthy Places Index, Cal-Adapt, or the CA Heat Assessment Tool?
3. We, and Southern California Edison, are particularly interested in how jurisdictions are preparing disadvantaged communities for climate impacts. Can you speak to how the DRAFT CAAP process created adaptation strategies that address disadvantaged communities?
4. How can Southern California Edison support the climate planning work you are doing in Long Beach and/or with neighboring jurisdictions?

Jean Kayano - Center for Community Action and Environmental Justice (CCAEJ)

1. We learned about CCAEJ and Jurupa Valley through the case study in the SB 1000 toolkit (pg. 113 - 115), and how CCAEJ worked with the city to create the environmental justice element in the General Plan. Can you speak to how the EJ element is still used in present day?
2. We know CCAEJ has been a part of local climate change advocacy. Particularly, it was great that you all helped secure Transformative Climate Communities funds for the Ontario Connects award. Can you speak to other local climate change related work you do? Anything with influencing climate planning processes, like with the Western Riverside COG's Adaptation and Resiliency Strategy?

3. Climate Resolve, and Southern California Edison, are interested in how cities are planning and preparing for climate change impacts in disadvantaged communities. For example, SB 1000 complements SB 379, a law that integrates climate resilience into the General Plan or local hazard mitigation plans. What are other ways you think local government should engage and prepare disadvantaged communities to be resilient to climate impacts?
4. How can Southern California Edison support climate change planning work that CCAEJ engages on?

Patricia Lin Hachiya and Iris Chi - County of LA Department of Regional Planning

1. How is County of LA Dept of Regional Planning assessing climate vulnerable communities for the unincorporated areas it oversees? For example, do you use a mapping tool, like Cal-Adapt, to predict climate vulnerabilities? Do you use CalEnviroScreen or Healthy Places Index as well?
2. We, and Southern California Edison, are particularly interested in assessing the climate impacts to disadvantaged communities (DACs). County of LA oversees several DACs identified by CalEnviroScreen 3.0 such as East Los Angeles, Florence Graham, and Rancho Dominguez. What major climate impacts do you foresee as being concerns in unincorporated DACs?
3. How is the County of LA going about complying with/implementing SB 379?
4. How is County of LA engaging DACs on the issue of climate change?

Phoebe Seaton - Leadership Council Justice and Accountability

1. We are specifically interested in Leadership Council's climate and land use work in Tulare and Kern County, though we realize you all do work all over the San Joaquin Valley and in the Coachella Valley. Can you tell us a little about what you do and how you influence local planning processes?
2. Anecdotally, what impacts and concerns about climate change have you seen in Tulare and Kern Counties?
3. What are ways local government and utilities should engage and prepare disadvantaged communities to be resilient to climate impacts? For example, local governments are now required to comply with SB 379, a law that integrates climate resilience into the General Plan or local hazard mitigation plans.

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