

# Designated CMP Roadway Network

## 2



The primary objective of designating a CMP roadway network is to monitor performance in relation to established level-of-service (LOS) standards. If adopted standards are not maintained on a specific roadway in the designated system, actions must be taken to address problems, or delivery plans must be developed to improve the overall LOS of the system and improve air quality. To effectively manage congestion on Alameda County's transportation system, Alameda CTC has identified the components of Alameda County's CMP-designated roadway network, considered the core transportation network for the county.

California law requires that, at a minimum, the designated roadway system include all state highways and principal arterials.<sup>3</sup> Highways or roadways designated as part of the system cannot be removed from the system. The statutes also refer to the regional transportation systems as part of the required Land Use Analysis Program.<sup>4</sup> In the 1991 Alameda County CMP, the roadway system designated in the CMP was presumed to be the highway/street component of the

regional transportation system. This changed with the passage of the federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). ISTEA required the Metropolitan Transportation Commission (MTC) to develop a Metropolitan Transportation System (MTS)<sup>5</sup> that included both transit and highways. When the MTS was developed in 1991, it included roadways recognized as "regionally significant" and included all interstate highways, state routes, and portions of the street and road system operated and maintained by local jurisdictions.

MTC coordinated with the congestion management agencies (CMAs) in the Bay Area to develop the MTS and to use the CMPs to link land-use decisions to the MTS. The 1993 Alameda County CMP made a distinction between the CMP network and the MTS:

- The CMP network is used to monitor conformance with the level of service (LOS) standards; and
- The MTS<sup>6</sup> network is used for the Land Use Analysis Program.

<sup>3</sup> California Government Code Section 65089(b)(1)(A).

<sup>4</sup> California Government Code Section 65089(b)(4).

<sup>5</sup> MTS prior to 2005.

<sup>6</sup> In 2005, MTC updated the MTS to include Rural Major Collector streets and higher based on the Federal Functional Classification System. The updated MTS is used by MTC for the purposes of funding and programming as well as in estimating roadway maintenance needs. The updated MTS was reviewed by the Commission during the 2009 CMP update to determine its usefulness and applicability to the Land Use Analysis Program. Based on this input and discussions with MTC, it was determined that the updated MTS was not appropriate for the Land Use Analysis Program, because it was too detailed for planning purposes and the previous version of the MTS would continue to be used.

MTC removed the reference to the MTS in its updated Countywide Transportation Plan guidelines adopted in September 2014. Given the regional significance of the MTS and its historical use for the CMP Land Use Analysis Program, the 2015 CMP and 2017 CMP maintained reference to the separate MTS.

Alameda CTC's long-range Countywide Transportation Plan is the primary vehicle for coordination with the MTS. Since MTC has removed the reference to the MTS in the September 2014 CTP guidelines, the role of the MTS for the purposes of CMP will need to be evaluated in the 2019 CMP update. Since 2011, the CMP network has been expanded to monitor a larger network in the county to better capture the land development that occurred since 1991, and the 2019 CMP will evaluate the use of the larger CMP network for the Land Use Analysis Program rather than the MTS.

## Designated CMP Network

The Alameda County CMP roadway network was initially adopted in 1991 by the local CMA, based on CMP legislation. Since the adoption of the CMP network, land use and transportation patterns across the county have changed significantly; however, until 2011, the CMP network had very limited expansion with only the addition of Hegenberger Road between I-880 and Doolittle Drive near Oakland Airport in 2007.

Recognizing the need to expand the CMP network to reflect changes in land use patterns over the years, the Alameda CTC Commission discussed various options in 2011 and adopted an expanded two-tier CMP network. The first tier (Tier 1) is the original adopted CMP network, and the second tier (Tier 2) consists of an expanded number of roadways identified using a set of adopted criteria that reflects the countywide significance. This Tier 2 network forms a supplemental network that Alameda CTC monitors for informational purposes only and is not used in the conformity findings process. The 2015 CMP identified as a next step to review and

update the CMP network criteria in the 2017 CMP to reflect the outcomes of the three countywide modal plans—the Countywide Multimodal Arterial Plan, the Countywide Transit Plan, and the Countywide Goods Movement Plan. As part of the 2017 CMP update, Alameda CTC developed additional criteria described in the next section that resulted in the addition of approximately 220 miles to the Tier 2 arterial network. The criteria came directly from the modal plans.

The Countywide Multimodal Arterial Plan also identified a series of roadways that have a transit modal priority. These roadways correspond to the highest-ridership bus routes for both AC Transit and LAVTA. To prepare for future multimodal performance monitoring, as part of the 2017 CMP update, Alameda CTC has also identified a transit monitoring network. This network is comprised of arterial roadways that are a subset of the overall designated CMP network and will be used to monitor transit performance on the major transit corridors beginning with the 2018 monitoring cycle.

The characteristics of the CMP-designated network are as follows:

### Tier 1:

- When established in 1991, it carried 72 percent of the countywide vehicle miles traveled (VMT); and
- It contains 232 miles of roadways, of which 134 miles (58 percent) are interstate freeways, 71 miles (31 percent) are state highways, and 27 miles (11 percent) are city/county arterials.

### Tier 2:

- All of the roadways are city/county arterials and of local or countywide significance, and
- It contains 310 miles of roadways.

### Transit Monitoring Network:

- These city/county arterials are AC Transit's and LAVTA's major corridors and support operations of the highest-ridership bus routes.

- It contains 146 miles of city/county arterials and is a subset of the designated CMP network.

### Criteria for Identifying the CMP Network

The roadway system must be detailed enough to identify significant impacts, yet be manageable for administration. The advantage of designating a relatively detailed CMP roadway system is that it may be easier to establish a link between proposed development projects and their impact on the CMP network. However, too large of a CMP network could become difficult and expensive to monitor. In light of technology advances, the cost for monitoring additional mileage has decreased, but additional staff resources are required to manage performance analysis of a larger network. The following criteria attempt to strike this balance. Alameda CTC will periodically review the effectiveness of these criteria and the CMP network to determine if changes are warranted.

#### Tier 1 network criteria

The statutes require designation of all state highways and principal arterials as part of the CMP network but do not provide guidance for determining the principal arterials to include. After evaluating several possible methods, an approach was adopted in 1991 for the CMP that provided for the systematic selection of principal arterials to include in the CMP network. The selected approach, which met MTC's expectations for a "reasonable" CMP network designation method, relies on a concept central to the CMP legislation—identifying a system that carries a majority of the vehicle trips countywide.

Using the countywide travel model, an average daily traffic volume was identified that would produce a system of roadways carrying at least 70 percent of the VMT countywide. This approach yielded an average daily traffic of roughly 30,000 vehicles per day as a minimum threshold. Additional criteria were included to refine the definition as described below.

#### All state highways:

- Must have a minimum threshold of 30,000 vehicles per day.
- Will be evaluated according to the principal arterial criteria, if a route is relocated or removed from the State Highway System, to determine whether it should remain in the CMP network.

#### Principal arterials must meet all four criteria:

- Must carry 30,000 vehicles per day (average daily traffic) for at least one mile;
- Must be a roadway with four or more lanes;
- Must be a major cross-town connector, traversing from one side of town to the opposite side; and
- Must connect at both ends to another CMP route, unless the route terminates at a major activity center.

#### Tier 2 network criteria

In 2011, the Commission added 89 miles of roadways (arterials and major collectors) to the CMP network as Tier 2 roadways based on a set of qualitative criteria as follows.

**Roadways** must meet at least two of the following three criteria to be added to the Tier 2 network. Roadways must be:

- Major thoroughfares, not on the existing CMP network, whose primary function is to link districts within an Alameda County jurisdiction and to distribute traffic from and to the freeways;
- Routes of jurisdiction-wide significance not on the existing CMP network; and
- Streets that experience significant conflicts between auto traffic and transit/other modes.

In 2017, based on the completed countywide modal plans and in coordination with the Alameda County Technical Advisory Committee (ACTAC) and transit agencies, Alameda CTC added four additional criteria for identifying new Tier 2 network roadway segments.

**Roadways** must meet one of the following criteria:

- Higher order facilities (throughways or county connectors<sup>7</sup>) as identified in the Multimodal Arterial Plan.
- Facilities that are AC Transit and LAVTA major corridors as identified in the Multimodal Arterial Plan and consistent with AC Transit's Major Corridor Study and LAVTA's updated Rapid service routes.
- Significant or Tier 2 goods movement routes<sup>8</sup> as identified in the Goods Movement Plan and Multimodal Arterial Plan.
- Rural roadways in East County that have greater than 7,500 annual daily traffic (ADT) according to the Multimodal Arterial Plan.

### Transit monitoring network criteria

In 2017, Alameda CTC worked with transit agencies to develop a new network of 146 miles for monitoring transit vehicle performance. To be a part of the transit monitoring network, roadways must meet the following criteria:

- Facilities that carry AC Transit and LAVTA major corridors as identified in the Multimodal Arterial Plan and consistent with AC Transit's Major Corridor Study and LAVTA's updated Rapid service routes.

As previously described, application of the 2017 CMP Tier 2 criteria resulted in the addition of approximately 220 new Tier 2 miles and 146 miles of a new transit monitoring network. The transit monitoring network is a subset of the overall CMP. The new Tier 2 segments will be monitored for auto LOS starting in the 2018 LOS monitoring cycle. Note that only Tier 2 segments for which commercial speed data is available will be monitored. Transit vehicle performance will also be monitored on the transit monitoring network for the first time as part of the 2018 LOS monitoring cycle.

## Process for Adding Potential Roadways

To identify potential roadways to add to the Tier 1 or Tier 2 network, Alameda CTC applies the aforementioned criteria and proposes an updated network for jurisdictions' review.

For the 2017 CMP update, Alameda CTC identified only new Tier 2 roadway segments to be monitored for informational purpose only. These identified new segments were reviewed by the jurisdictions and partner agencies, and their input was incorporated in the updated Tier 2 network. The addition of roadways to the CMP network not identified by Alameda CTC is voluntary for local jurisdictions, particularly for the Tier 1 network in view of the conformity requirements and related funding implications.

Regarding the Tier 1 network criteria, no new roadways have been added since the initial adoption of the CMP network in 1991 and 1992, with the exception of any changes or additions to the state highways (e.g., the SR 84 new alignment in the East County) or freeways that are by default added to the Tier 1 network of the Designated Roadway System, as mandated by state law.

For potential roadways to be added to the Tier 2 network, interested jurisdictions or transit operators could propose a roadway if it meets the Tier 2 criteria. In the 2017 CMP update, Alameda CTC requested and incorporated additions to the Tier 2 network from local jurisdictions and partner agencies. For potential roadways to be added to the transit monitoring network, interested jurisdictions or transit operators could propose a roadway if it meets the transit monitoring network criteria.

<sup>7</sup> As defined in the Multimodal Arterial Plan, throughways carry at least 10,000 ADT and have a majority of volume traveling over 8 miles along the roadway. County connectors carry at least 10,000 ADT and have 45-50 percent of volume traveling over 6 miles along the roadway.

<sup>8</sup> Tier 2 Goods movement corridors are arterials that were first identified in the Countywide Goods Movement Plan as providing intra-county and intercity connectivity and last-mile connection to the Port of Oakland and the Oakland International Airport. The network was subsequently adopted in the Multimodal Arterial Plan and is also reflected in the 2017 CMP network.



Alameda CTC staff performs a review of the proposed roadway additions to the CMP and transit monitoring networks with reference to the adopted criteria and submits a recommendation to the Commission for final approval. In reviewing the proposed addition of new roadways that may meet the criteria, the previously mentioned general approach to defining the CMP network is also considered (i.e., the roadway system must be detailed enough to identify significant impacts, yet be manageable for administration, as too large a network is difficult to manage and expensive to monitor). In addition, traffic data required to perform such a review may be requested from the local jurisdictions or transit agencies, as necessary. In this regard, any traffic counts should be 24-hour traffic counts collected from Tuesday through Thursday of a typical week when schools are in session.

## Changes to the CMP Network Since 1991

The following changes were made to the CMP network after its initial adoption in 1991.

**Tier 1 network changes:** In 2005 and 2007 the following network changes were made:

- In 2003, Caltrans realigned State Route 84 (SR 84) in Livermore from 1st Street to Isabel Avenue-Airway Boulevard. Consequently, the new alignment was added to the CMP network in 2005. The former SR 84 alignment along 1st Street in Livermore was evaluated to see whether it met the principal arterial criteria for retention on the CMP network. Based on the results of the analysis, the 2.2-mile segment between Inman Street and I-580 was retained on the CMP network.
- In 2007, the City of Oakland conducted 24-hour traffic counts on Hegenberger Road between I-880 and Doolittle Drive. The traffic counts collected and other characteristics of the roadway met all the

principal arterial criteria for inclusion in the CMP network. Accordingly, a 1.7 mile segment of Hegenberger Road between I-880 and Doolittle Drive was added to the CMP network.

**Addition of Tier 2 network:** Based on the new criteria approved by the Commission in 2011 for the Tier 2 CMP network, 89 miles of roadways were added during the 2011 CMP update. Additionally, with the expanded Tier 2 criteria and inputs from jurisdictions and partner agencies, Alameda CTC added approximately 220 miles of Tier 2 roadway segments as part of the 2017 CMP update. Alameda CTC will monitor the Tier 2 network only for informational purposes, and it will not be subject to conformity requirements.

**Addition of the transit monitoring network:** As part of the 2017 CMP Update, Alameda CTC developed 146 miles of arterial roadways that are AC Transit and LAVTA major corridors for the purpose of expanding future CMP monitoring to include transit vehicle performance. These roadways were selected based on their designation as major transit corridors in the countywide modal plans and input from transit agency partners. These roadways are a subset of the Tier 1 and Tier 2 network.

## CMP Network Tier 1 Roadways

Table 2.1 lists the designated Tier 1 CMP network, including all freeways, all state highways, and principal arterials that satisfy the Tier 1 criteria.

During the 2011 CMP update, applying the aforementioned qualitative criteria resulted in the Tier 2 network. The Commission recommended that the criteria for adding roadways to the CMP network be reviewed periodically. Accordingly, Alameda CTC will review the criteria for adding roadways to Tiers 1 and 2 during every other CMP update year. The next review will be in 2019.

**Table 2.1—CMP-Designated System, Tier 1 Roadway List****Table 2.1.1—Cities of Albany and Berkeley**

Route	From	To	Criteria
SR-123 (San Pablo)	Contra Costa County line	Emeryville city limit	State Route
University Avenue	I-80	Milvia Street	Satisfies criteria
University Avenue	Milvia Street	Shattuck Avenue	Connectivity
Shattuck Avenue	University Avenue	Haste Street	Connectivity
Shattuck Avenue	Haste Street	Derby Street	Satisfies criteria
Adeline Street	Derby Street	MLK Jr. Way	Satisfies criteria
MLK Jr. Way	Adeline Street	Oakland city limit	Satisfies criteria
SR-13 (Ashby Avenue)	I-80	Tunnel Road	State Route
SR-13 (Tunnel Road)	Ashby Avenue	Oakland city limit	State Route
I-80/I-580	University Avenue	Central	State Route

**Table 2.1.2—City of Alameda**

Route	From	To	Criteria
SR-61 (Doolittle Drive)	Oakland city limit	Fernside Boulevard	State Route
SR-61 (Otis Drive)	Fernside Boulevard	SR-61 (Broadway)	State Route
SR-61 (Broadway)	Otis Drive	SR-61 (Encinal Avenue)	State Route
SR-61 (Encinal Avenue)	SR-61 (Broadway)	Sherman Street	State Route
SR-61 (Central Avenue)	Sherman Street	SR-260 (Webster Street)	State Route
SR-260 (Webster Street)	SR-61 (Central Avenue)	Posey/Webster tubes	State Route
SR-260 (Posey/Webster tubes)	SR-260 (Webster Street)	Oakland city limit	State Route
Atlantic Avenue	SR-260 (Webster Street)	Poggi Street	Satisfies criteria
Atlantic Avenue	Poggi Street	Main Street	Connectivity
Park Street	Oakland city limit	Central Avenue	Satisfies criteria
Park Street	Central Avenue	SR-61 (Encinal Avenue)	Connectivity

Table 2.1.3—City of Hayward

Route	From	To	Criteria
SR-185 (Mission Boulevard)	Ashland (unincorporated)	SR-92 (Jackson Street)	State Route
SR-92 (Jackson Street)	I-880	SR-185 (Mission Boulevard)	State Route
SR-238 (Foothill Boulevard)	Ashland (unincorporated)	SR-185 (Mission Boulevard)	State Route
SR-238 (Mission Boulevard)	SR-92 (Jackson Street)	Union City city limit	State Route
A Street	I-880	SR-238 (Foothill Boulevard)	Satisfies criteria
Hesperian Boulevard	San Lorenzo (unincorporated)	Tennyson Road	Satisfies criteria
Tennyson Road	Hesperian Boulevard	SR-238 (Mission Boulevard)	Satisfies criteria
SR-92	San Mateo County line	I-880	State Route
I-880	A Street	Alvarado-Niles	State Route

Table 2.1.4—Cities of Emeryville, Oakland, and Piedmont

Route	From	To	Criteria
MLK Jr. Way	Berkeley city limit	SR-24	Satisfies criteria
SR-123 (San Pablo)	Berkeley city limit	35th Street	State Route
SR-13 (Tunnel Road)	Berkeley city limit	SR-24	State Route
SR-260 (Posey/Webster tubes)	Alameda city limit	I-880	Satisfies criteria
23rd/29th Avenue	Alameda city limit	I-880	Satisfies criteria
SR-77 (42nd Avenue)	I-880	SR-185 (E. 14th Street)	State Route
SR-185 (E. 14th Street)	SR-77 (42nd Avenue)	San Leandro city limit	State Route
Hegenberger Road	I-880	Doolittle Drive	Satisfies criteria
Hegenberger Road	I-880	Hawley Street	Connectivity
Hegenberger Road	Hawley Street	SR-185 (E. 14th Street)	Satisfies criteria
SR-61 (Doolittle Drive)	Alameda city limit	San Leandro city limit	State Route
SR-13	SR-24	I-580	State Route
SR-24	I-980	Contra Costa County line	State Route
I-80	SF County Line	University Avenue	State Route
I-580	I-80	MacArthur Boulevard	State Route
I-880	I-980	Hegenberger Road	State Route
I-980	I-880	SR-24	State Route

Table 2.1.5—City of San Leandro

Route	From	To	Criteria
SR-61 (Doolittle Drive)	Oakland city limit	SR-61/112 (Davis Street)	State Route
SR-61/112 (Davis Street)	SR-61 (Doolittle Drive)	SR-185 (E. 14th Street)	State Route
SR-61 (Broadway)	Otis Drive	SR-61 (Encinal Avenue)	State Route
SR-185 (E. 14th Street)	Oakland city limit	Ashland (unincorporated)	State Route
150th Avenue	Hesperian Boulevard	I-580	Satisfies criteria
Hesperian Boulevard	SR-185 (E. 14th Street)	San Lorenzo (unincorporated)	Satisfies criteria
I-880	Hegenberger Avenue	I-238	State Route
I-580	MacArthur Boulevard	I-238	State Route

Table 2.1.6—San Lorenzo, Castro Valley, and Ashland (unincorporated areas)

Route	From	To	Criteria
SR-185 (Mission Boulevard)	San Leandro city limit	Hayward city limit	State Route
Hesperian Boulevard	San Leandro city limit	Hayward city limit	Satisfies criteria
SR-238 (Foothill Boulevard)	I-238	Hayward city limit	State Route
I-880	I-238	A Street	State Route
I-238	I-880	I-580	State Route
I-580	I-238	I-680	State Route



Table 2.1.7—Cities of Union City, Fremont, and Newark

Route	From	To	Criteria
SR-238 (Mission Boulevard)	Hayward city limit	I-680	State Route
Decoto Road	I-880	SR-238 (Mission Boulevard)	Satisfies criteria
Mowry Avenue	I-880	SR-84 (Peralta Boulevard)	Satisfies criteria
SR-262 (Mission Boulevard)	I-880	I-680	State Route
SR-84 (Thornton Avenue)	I-880	Fremont Boulevard	State Route
SR-84 (Fremont Boulevard)	SR-84 (Thornton Avenue)	SR-84 (Peralta Boulevard)	State Route
SR-84 (Peralta Boulevard)	SR-84 (Fremont Boulevard)	SR-84 (Mowry Avenue)	State Route
SR-84 (Mowry Avenue)	SR-84 (Peralta Boulevard)	SR-238 (Mission Boulevard)	State Route
SR-84 (Niles Canyon)	SR-238 (Mission Boulevard)	I-680	State Route
SR-84	San Mateo County line	I-880	State Route
I-880	Alvarado-Niles	Dixon Landing	State Route
I-680	Scott Creek	SR-238	State Route

Table 2.1.8—Cities of Pleasanton, Dublin, Livermore, and Unincorporated Areas

Route	From	To	Criteria
SR-84 (Vallecitos Road)	I-680	SR-84 (Isabel Avenue)	State Route
SR-84 (Isabel Avenue)	SR-84 (Vallecitos Road)	SR-84 (Kitty Hawk Road)	State Route
SR-84 (Kitty Hawk Road)	SR-84 (Isabel Avenue)	SR-84 (Airway Boulevard)	State Route
SR-84 (Airway Boulevard)	SR-84 (Kitty Hawk Road)	I-580	State Route
1st Street	Inman Street	I-580	Satisfies criteria
I-580	I-680	I-205	State Route
I-680	SR-238	Alcosta Boulevard	State Route

## CMP Network Tier 2 Roadways

Table 2.2 lists the designated Tier 2 roadways identified using the adopted qualitative criteria from the 2011 CMP update and the new criteria proposed for the 2017 CMP update. Distances and the total mileage added to the network will be confirmed in the 2018 LOS Monitoring Report.

**Table 2.2—CMP-Designated System, Tier 2 Roadway List**

**Table 2.2.1—Cities of Alameda, Albany, Berkeley, Emeryville, and Oakland**

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Buchanan Street-Marín Avenue	I-80	Arlington/Del Norte	Albany	4	2.1
Solano Avenue	San Pablo Boulevard	Sutter Street	Albany/Berkeley	5	1.5
W. Grand Avenue to Grand Avenue	I-80	I-580	Oakland	1,2	3.1
12th Street-Lakeshore Avenue	I-980	I-580	Oakland	1,2,3	2.4
Telegraph Avenue	Broadway	Bancroft Way	Oakland, Berkeley	2,3,5	4.4
Broadway	I-880	College Avenue	Oakland	2,3	3.1
College Avenue	Broadway	Bancroft Way	Oakland, Berkeley	1,2,3	2.4
51st Street	Broadway	SR-24	Oakland	1,2	0.8
Shattuck Avenue	Adeline Street	51st Street	Oakland, Berkeley	1,2,3	1.5
Shattuck Avenue	University Avenue	Marín Avenue	Berkeley	5	1.3

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Bancroft Way	College Avenue	Shattuck	Berkeley	2,3	0.7
Durant Avenue	Shattuck Avenue	College Avenue	Berkeley	4	0.7
Gilman Street	I-80	San Pablo Boulevard	Berkeley	4	0.6
Martin Luther King Jr Way	Marin Avenue	Adeline Street	Berkeley	4	2.7
Claremont Avenue	Telegraph Avenue	Ashby Avenue	Berkeley	4	1.6
Powell Street-Stanford Avenue	I-80	Martin Luther King Jr. Way/ Adeline Street	Emeryville, Berkeley	1,2	2.2
40th Street-Shellmound Avenue	Broadway	Powell Street	Emeryville, Oakland	1,2,3,5	2.8
Broadway	College Avenue	SR-24	Oakland	6	0.9
Bush Street	San Pablo Avenue	7th Street	Oakland	4	0.9
Castro Street	7th Street	San Pablo Avenue	Oakland	4	0.8
Foothill Boulevard	1st Avenue	73rd Avenue	Oakland	2,3	5.3

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Fruitvale Avenue	Tilden Way	MacArthur Boulevard	Oakland	5	2.4
Harrison Street-Oakland Avenue	MacArthur Boulevard	20th Street	Oakland	4	1.4
High Street	I-580	MacArthur Boulevard	Oakland	7	0.1
International Boulevard	1st Avenue	42nd Avenue	Oakland	1,2,3	2.9
MacArthur Boulevard	San Pablo Avenue	Estudillo Avenue	Oakland, Emeryville, San Leandro	4,5,6	13.8
Market Street	55th Street	Stanford Avenue	Oakland	5	0.4
Martin Luther King Jr. Way	San Pablo Avenue	47th Street	Oakland	5	1.8
Park Boulevard	E. 18th Street	SR-13	Oakland	5	3.7
San Leandro Street	Fruitvale Avenue	Oakland/ San Leandro border	Oakland	5,6	4.3
San Pablo Avenue	I-580	16th Street	Oakland	5	1.1
Seminary Avenue	MacArthur Boulevard	I-580	Oakland	5	0.7
5th Street	Adeline Street	Oak Street	Oakland	4	1.3
6th Street	Adeline Street	Oak Street	Oakland	4	1.3
7th Street-E. 8th Street	I-880	14th Avenue	Oakland	5,6	3.5
8th Street	Harrison Street	Broadway	Oakland	5	0.2
E. 12th Street	Lake Merritt Boulevard	High Street	Oakland	4,5,6	4.1
14th Street-Lake Merritt Boulevard	Bush Street	12th Street	Oakland	5	1.1
E. 15th Street	1st Avenue	14th Avenue	Oakland	2,3	1.0
E. 18th Street	Lakeshore Avenue	Park Boulevard	Oakland	5	0.2
20th Street	San Pablo Avenue	Harrison Street	Oakland	5	0.5
52nd Street	Telegraph Avenue	Shattuck Avenue	Oakland	4	0.1
55th Street	Market Street	Shattuck Avenue	Oakland	5	0.5

Route	From	To	Jurisdiction	Criteria	Distance (miles)
14th Avenue	E. 8th Street	Foothill Boulevard	Oakland	5	0.3
23rd Avenue	E. 12th Street	23rd Ave NB/ SB split	Oakland	4	0.3
29th Avenue	Ford Street	International/ E. 14th Street	Oakland	4,5	0.5
42nd Avenue-Courtland	International Boulevard	High Street	Oakland	4	0.4
73rd Avenue	International Boulevard	I-580	Oakland	1,2,7	1.9
98th Avenue	I-580	Airport Access Road	Oakland	4,6	3.2
Airport Access Road	Hegenberger Road	Doolittle Drive	Oakland	4	0.3
High Street	Otis Drive	I-580	Alameda, Oakland	1,2	3.5
Broadway	Encinal Avenue	Tilden Way	Alameda	5	0.6
Constitution Way-8th Street	Webster Street	Central Avenue	Alameda	4	0.9
Fernside Boulevard	High Street	Otis- Doolittle Drive	Alameda	4	1.1
Otis Drive	Park Street	Broadway	Alameda	7	0.2
Park Street	Otis Drive	Encinal Avenue	Alameda	5	0.4
Santa Clara Avenue	Webster Street	Broadway	Alameda	5	2.3
Tilden Way	Fruitvale Avenue	Park Street	Alameda	5	0.8

Table 2.2.2—Alameda County and Cities of Hayward and Union City

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Crow Canyon Road	I-580	County Line	Alameda County	1,2	7.0
Castro Valley Boulevard-Mattox	Mission Boulevard	Crow Canyon Road	Alameda County	7	2.7
Lewelling Boulevard	Wicks Boulevard	Mission Boulevard	Alameda County, San Leandro	4	2.9
Redwood Road	I-580	Castro Valley Boulevard	Alameda County	4	0.4
Winton Avenue-D Street	Clawiter Road	Foothill Boulevard	Hayward	1,2,4	2.4
A Street	Foothill Boulevard	I-580	Hayward, Alameda County	1,2	1.2
B Street	Mission Boulevard	Foothill Boulevard	Hayward	5	0.2
C Street	Mission Boulevard	Foothill Boulevard	Hayward	5	0.2
Carlos Bee Boulevard-Hayward Boulevard	Campus Drive	Mission Boulevard	Hayward	4	1.0
Clawiter Road	Winton Avenue	SR-92	Hayward	7	1.7
Grove Way	A Street/Redwood Road	I-580	Hayward, Alameda County	1,2	1.0
Hesperian Boulevard-Union City Boulevard	Tennyson Road	Alvarado Boulevard	Hayward, Union City	1,2	2.9
Industrial Parkway Southwest	Whipple Road	Industrial Parkway West	Hayward	4	1.0



Route	From	To	Jurisdiction	Criteria	Distance (miles)
Industrial Boulevard-Parkway West	Clawiter Road	Mission Boulevard	Hayward	4,5	5.2
Tennyson Road	Industrial Boulevard	Hesperian Boulevard	Hayward	4	0.6
Whipple Road	Union City Boulevard	Mission Boulevard	Hayward, Union City	4	3.4
Estudillo Avenue	E. 14th Street	MacArthur Boulevard	San Leandro	4	1.0
Marina Boulevard	Doolittle Drive	Washington Avenue	San Leandro	4	1.2
San Leandro Boulevard	E. 14th Street	San Leandro/Oakland border	San Leandro	6	2.2
Washington Avenue	Juana Avenue	Lewelling Boulevard	San Leandro	4	2.9
Wicks Boulevard-Merced Street	Marina Boulevard	Lewelling Boulevard	San Leandro	7	2.2

Table 2.2.3—Cities of Fremont, Newark, and Union City

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Alvarado Boulevard	Union City Boulevard	I-880	Union City	1,2	2.2
Fremont Boulevard	I-880 @ Alvarado Boulevard/Fremont Boulevard	Santa Clara County line	Fremont	1,2,7	11.8
Auto Mall Parkway	Cherry Street	I-680	Fremont	1,2,4,5	2.4

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Cherry-Boyce-Cushing	Thornton Avenue	I-880	Fremont	7	5.7
Dyer Street	Whipple Road	Alvarado Boulevard	Union City	4,5	1.2
Alvarado-Niles/Smith/ Niles Boulevard	Union City Boulevard	Mission Boulevard	Fremont, Union City	4,5	6.4
Grimmer Boulevard	Paseo Padre Parkway	Mission Boulevard	Fremont	5	5.1
Mission Boulevard	I-680	I-680	Fremont	7	3.0
Osgood Road- Warm Springs Boulevard	Fremont Boulevard/ Washington Boulevard	Santa Clara County line	Fremont	4,5	5.5
Paseo Padre Parkway	Peralta Boulevard	Grimmer Boulevard	Fremont	7	2.3
Paseo Padre Parkway	SR-84	Ardenwood Boulevard	Fremont	4	1.5
Stevenson Boulevard	Cherry Street	Mission Boulevard	Fremont	6	4.0
Union City Boulevard- Ardenwood- Newark Boulevard	Hesperian Boulevard	Central Avenue	Union City, Fremont, Newark	4	6.0
Walnut Avenue	Fremont Boulevard	Mission Boulevard	Fremont	5	1.8
Warren Avenue	Warm Springs Boulevard	Fremont Boulevard	Fremont	4	1.0
Washington Boulevard	Fremont Boulevard	Mission Boulevard	Fremont	4	2.2
Central Avenue	I-880	Cherry Street	Newark	7	0.8
Mowry Avenue	Cherry Street	I-880	Newark	6	0.8
Thornton Avenue	SR-84	I-880	Newark	4,6	3.7

Table 2.2.4—Alameda County and Cities of Dublin, Livermore, and Pleasanton

Route	From	To	Jurisdiction	Criteria	Distance (miles)
North Front Road-Altamont Pass Road-Grant Line	Vasco Road	County line	Alameda County, Livermore	7	11.1
Tesla Road	Livermore Avenue	County line	Alameda County	7	11.9
Patterson Pass Road	Vasco Road	County line	Alameda County, Livermore	7	10.1
Dublin Boulevard	San Ramon Road	Fallon Road	Dublin	1,2,4,5	6.4
Dougherty Road	I-580	County line	Dublin	1,2	1.9
Fallon Road	I-580	Tassajara Road	Dublin	4	2.8
San Ramon Road	I-580	County line	Dublin	1,2	1.7
Tassajara Road	I-580	County line	Dublin	1,2	2.8
Village Parkway	Dublin Boulevard	County line	Dublin	4	1.5
E. Stanley Boulevard-Railroad Avenue-1st Street	Isabel Avenue	Inman Street (connecting I-580)	Livermore	1,2,3	4.2
East Avenue	Livermore Avenue	Vasco Road	Livermore	5	2.3
First Street	Stanley Boulevard	Railroad Avenue	Livermore	5	2.7
Isabel Avenue	Portola Avenue	Airway Boulevard	Livermore	4	0.9
Livermore Avenue	I-580	Tesla Road	Livermore	4,5	5.1
North Canyons Parkway-Portola	Airway Boulevard	1st Street	Livermore	4,5	4.4
Vallecitos Road	SR-84	1st Street	Livermore	4	3.3
Vasco Road	County line	Tesla Road	Livermore	1,2,4	8.8

Route	From	To	Jurisdiction	Criteria	Distance (miles)
Bernal Avenue	I-680	Sunol Boulevard/ First Street	Pleasanton	4	1.4
El Charro Road	I-580	Stoneridge Drive	Pleasanton	7	0.3
Foothill Road	Stoneridge Drive	I-580	Pleasanton	4	0.7
Stoneridge Drive	I-680	Santa Rita Road	Pleasanton	1,2	2.5
Main Street-Santa Rita Road	Bernal Avenue	I-580	Pleasanton	1,2,4,5	3.5
Neal Street	Santa Rita Road	Sunol Boulevard	Pleasanton	5	0.1
Owens Drive	Willow Road	W. Los Positas Boulevard	Pleasanton	5	1.3
Stoneridge Drive- Jack London Boulevard	Foothill Road	Isabel Avenue	Pleasanton	7	4.9
W. Los Positas Boulevard	Owens Drive	Santa Rita Road	Pleasanton	5	1.3
Sunol Boulevard-1st Street- Stanley Boulevard	I-680	Isabel Avenue	Alameda County, Pleasanton	1,2	5.6

## CMP and MTS Roadway Networks and MTS Transit Corridors

The entire CMP-designated system (Tiers 1 and 2) is illustrated in Figure 1, and detailed maps for each area within the county are shown in Figures 2-5. The Metropolitan Transportation System designated by MTC appears in Figures 1-5. The MTS transit corridors appear in Figures 6-7. The system includes the entire CMP-designated roadway network, as well as major arterials, transit routes, rail, maritime ports, airports, and transfer hubs critical to the region's movement of people and freight. Figure 8 represents the 2017 CMP transit monitoring network.

The following operators provide transit services in Alameda County:

- Altamont Corridor Express Commuter Rail
- AC Transit
- Capitol Corridor
- Livermore Amador Valley Transit Authority
- San Francisco Bay Area Rapid Transit District
- San Francisco Bay Area Water Emergency Transportation Authority (Alameda Harbor Bay service and service between Alameda and Oakland)
- Union City Transit

## Next Steps

During the 2017 CMP update, the following next steps were identified for the update of the Designated CMP Roadway Network:

- In view of the anticipated legislative changes (SB 743) that would impact the CMP, specifically the transportation impact analysis and the likely need to realign the monitoring element, review and update the CMP network criteria in the 2019 CMP update as necessary and consider using the CMP network instead of the MTS for the Land Use Analysis Program.
- Evaluate the effectiveness of the MTS network and MTS transit corridors for the purposes of multimodal monitoring and application in the Land Use Analysis Program, given that MTC's CTP guidance no longer includes a reference for MTS and that the CMP network is much larger and includes important transit corridors for the county and, therefore, will be appropriate for use in all CMP elements.

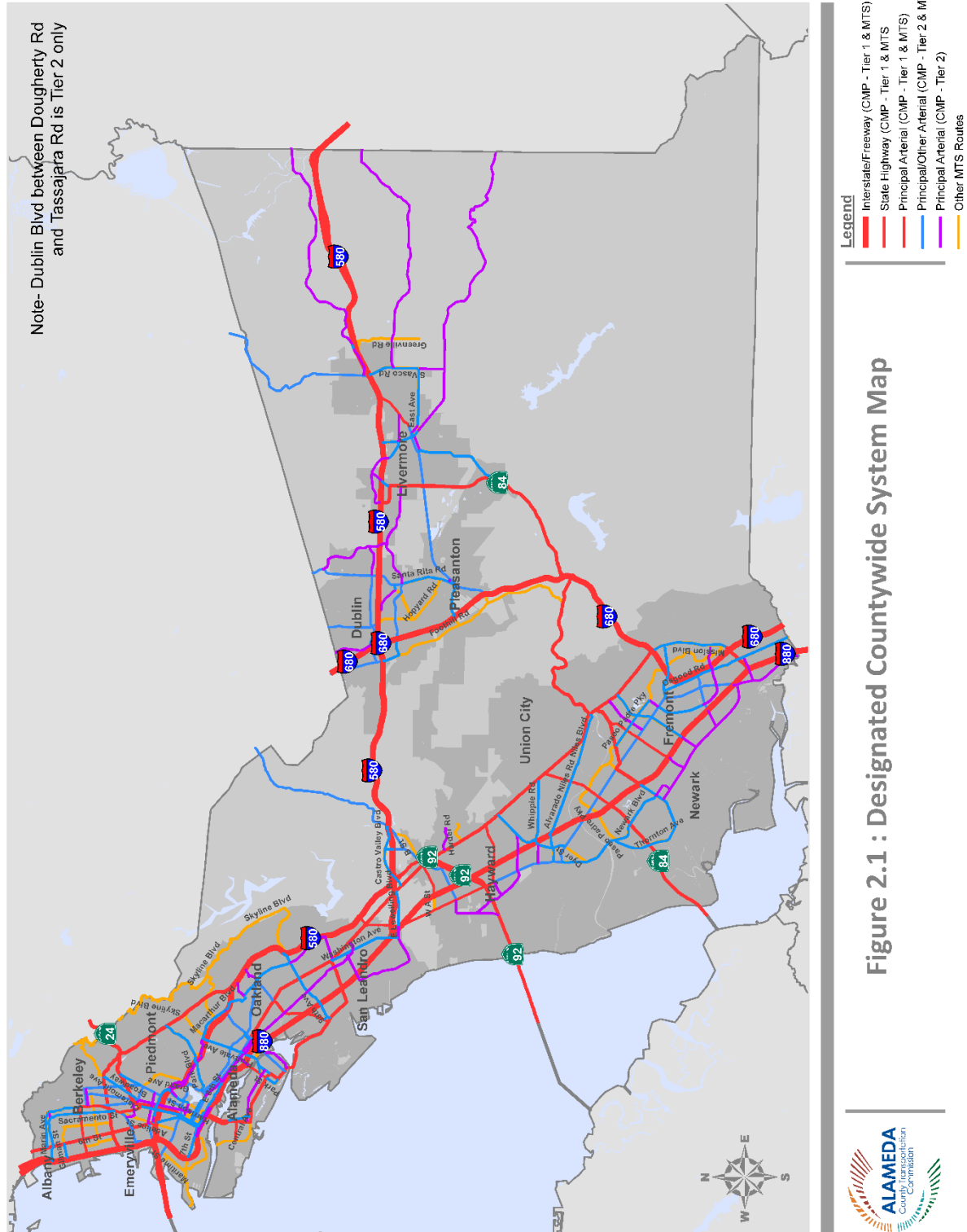
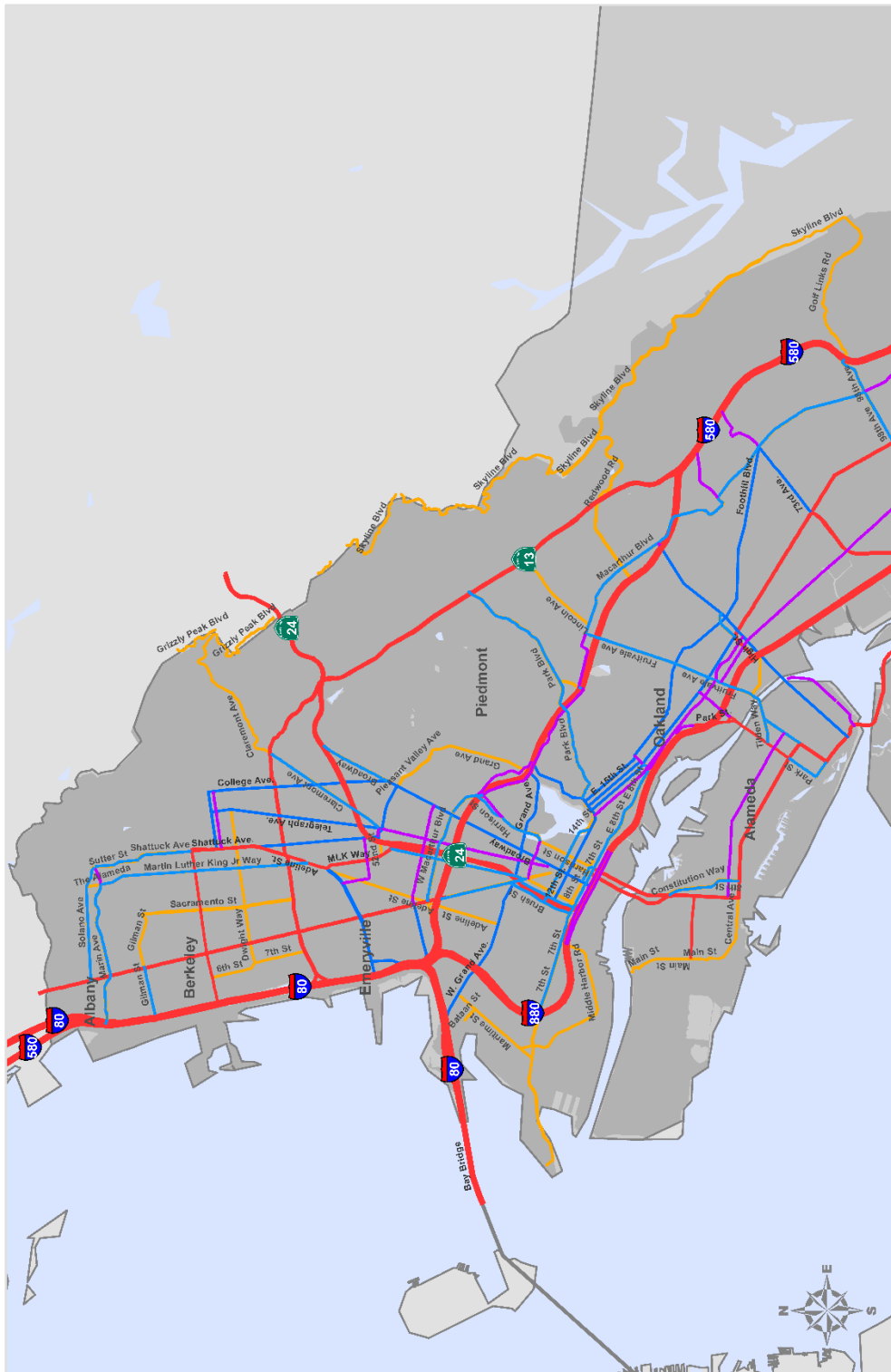


Figure 2.1 : Designated Countywide System Map



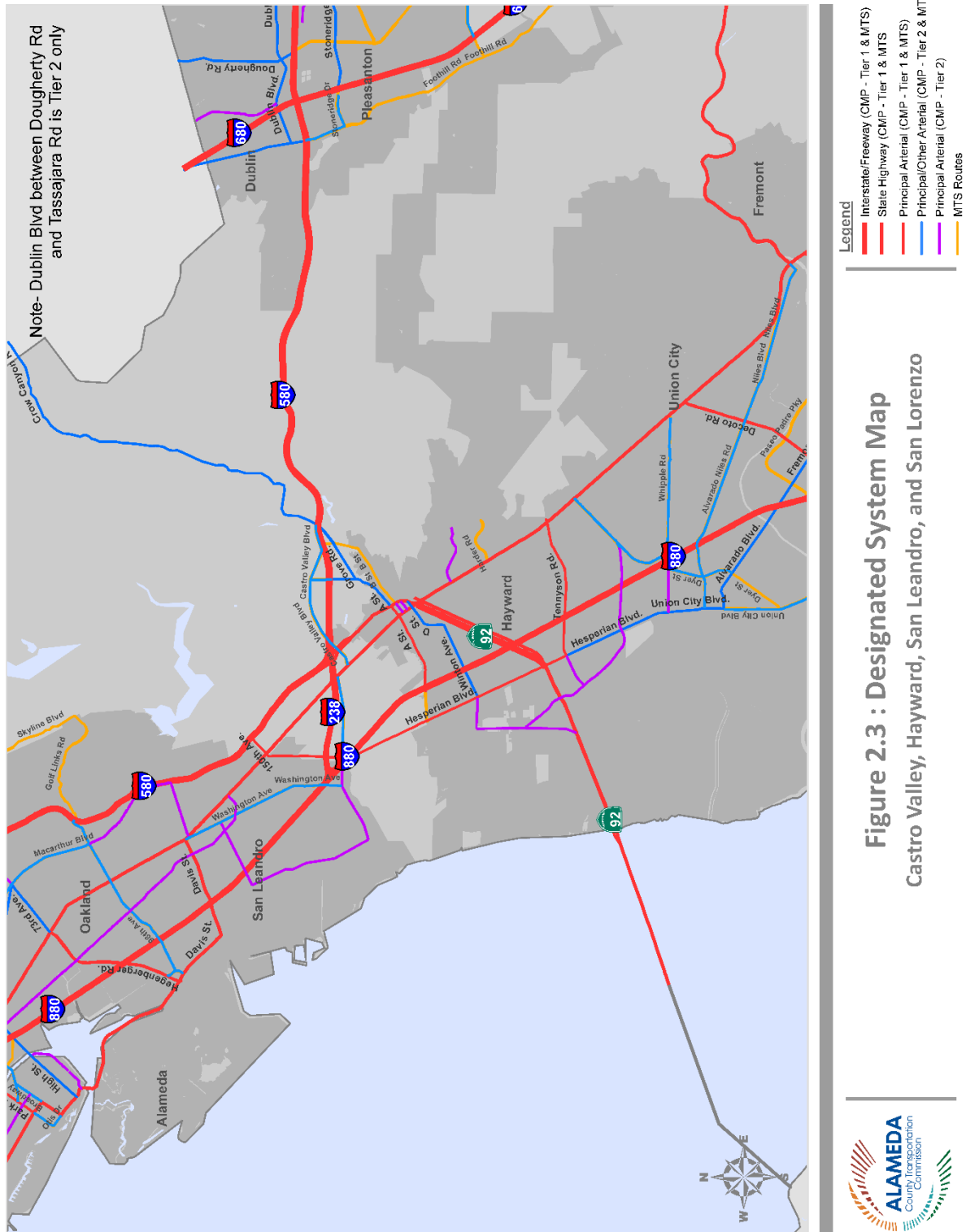




- Legend**
- Interstate/Freeway (CMP - Tier 1 & MTS)
  - State Highway (CMP - Tier 1 & MTS) Principal
  - Arterial (CMP - Tier 1 & MTS)
  - Principal/Other Arterial (CMP - Tier 2 & MTS)
  - Principal Arterial (CMP - Tier 2)
  - Other MTS Routes

**Figure 2.2 : Designated System Map**  
Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont

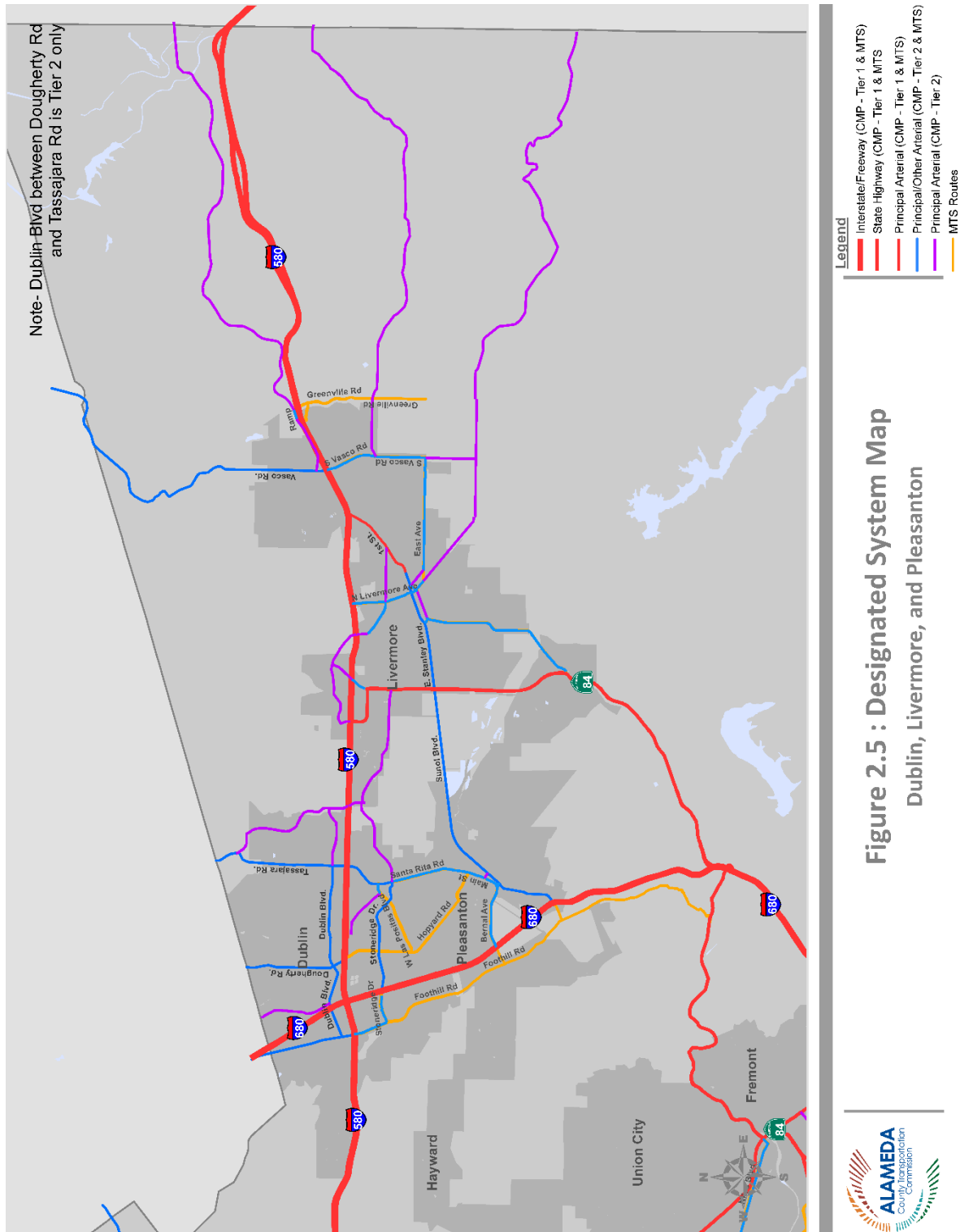




**Figure 2.3 : Designated System Map**  
Castro Valley, Hayward, San Leandro, and San Lorenzo

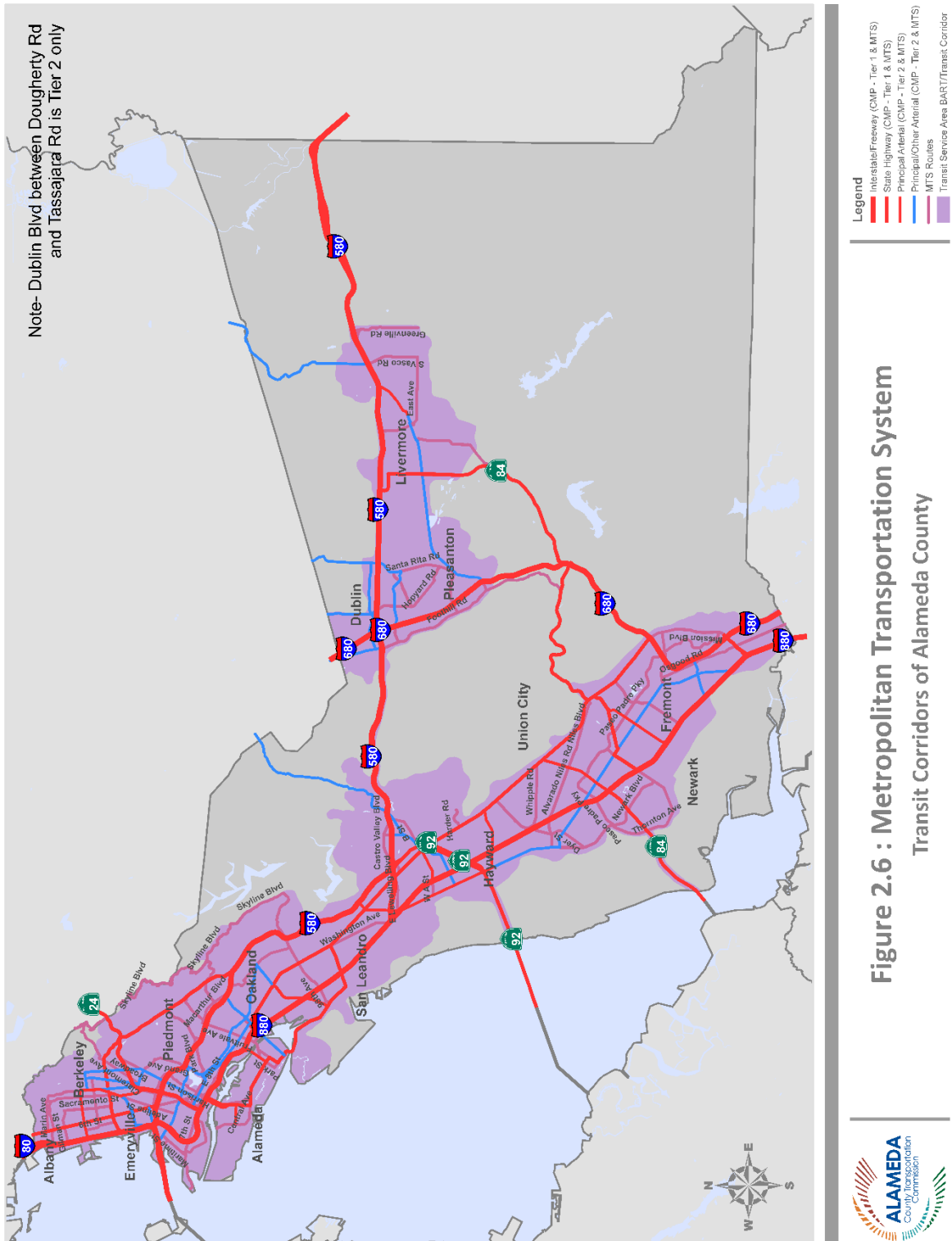


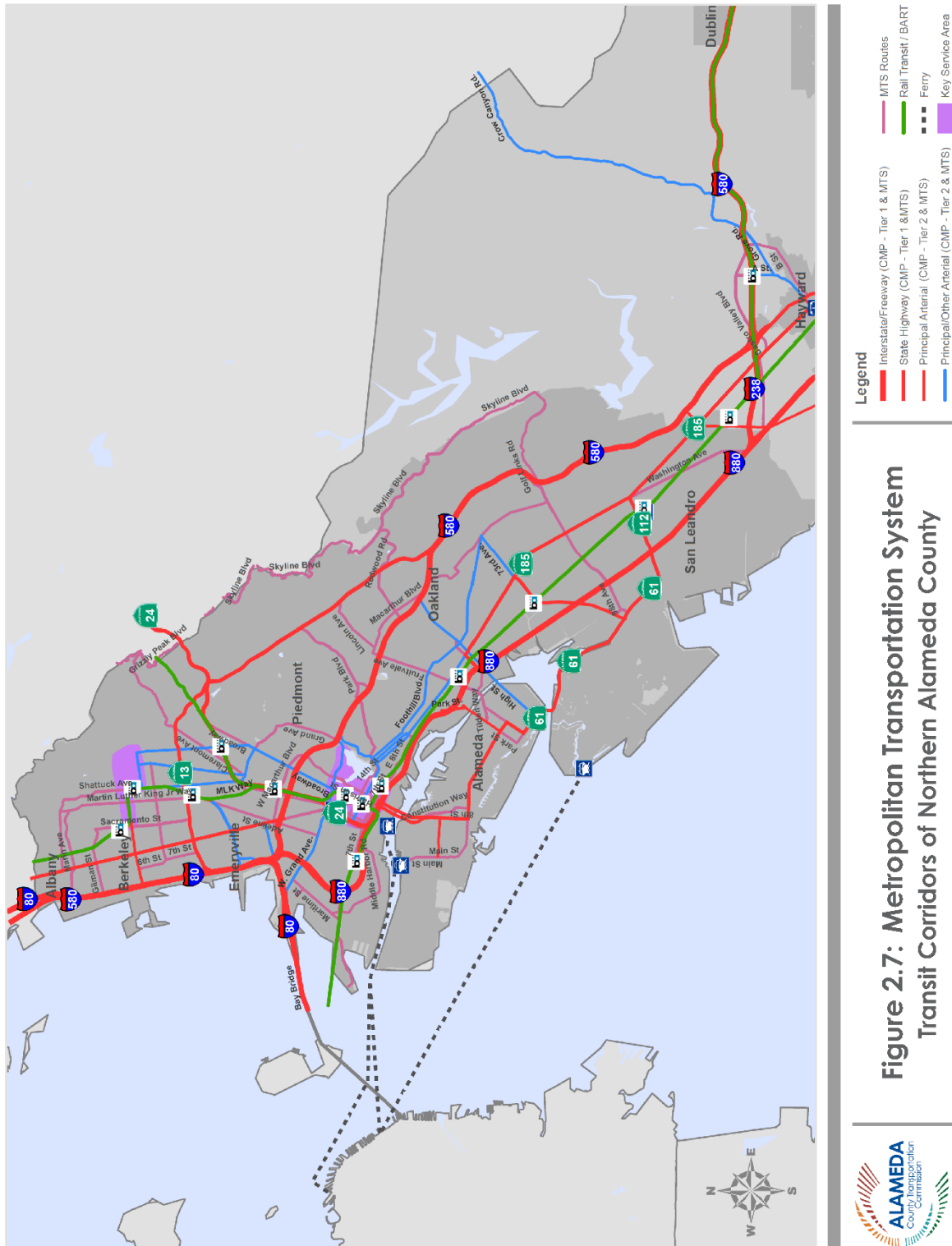




**Figure 2.5 : Designated System Map**  
Dublin, Livermore, and Pleasanton







**Figure 2.7: Metropolitan Transportation System  
Transit Corridors of Northern Alameda County**





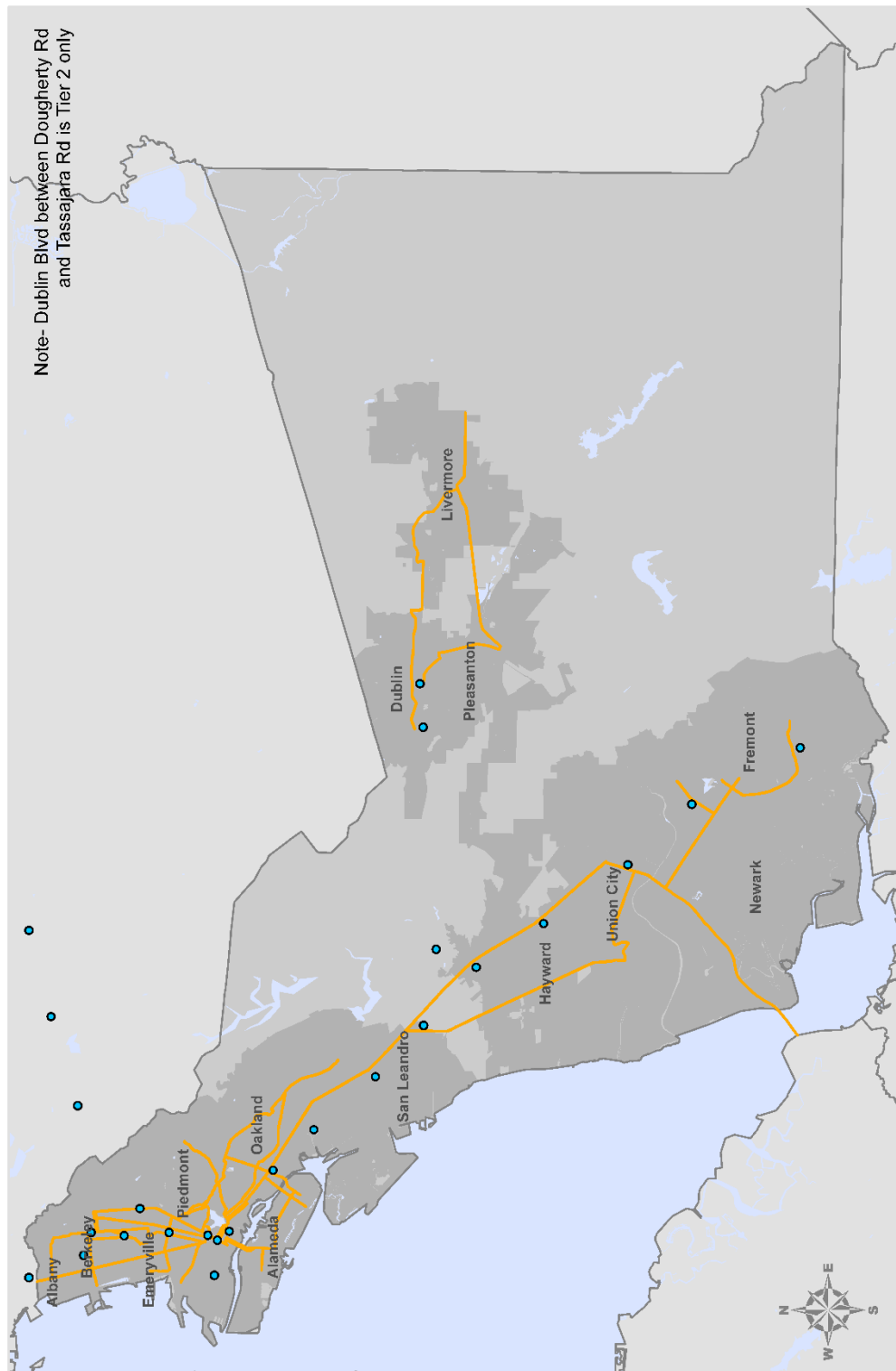


Figure 2.8 : Transit Monitoring Network Map



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