

MTC Snapshot Analysis Map Book

**Metropolitan Transportation Commission
June 2010**

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Communities of Concern



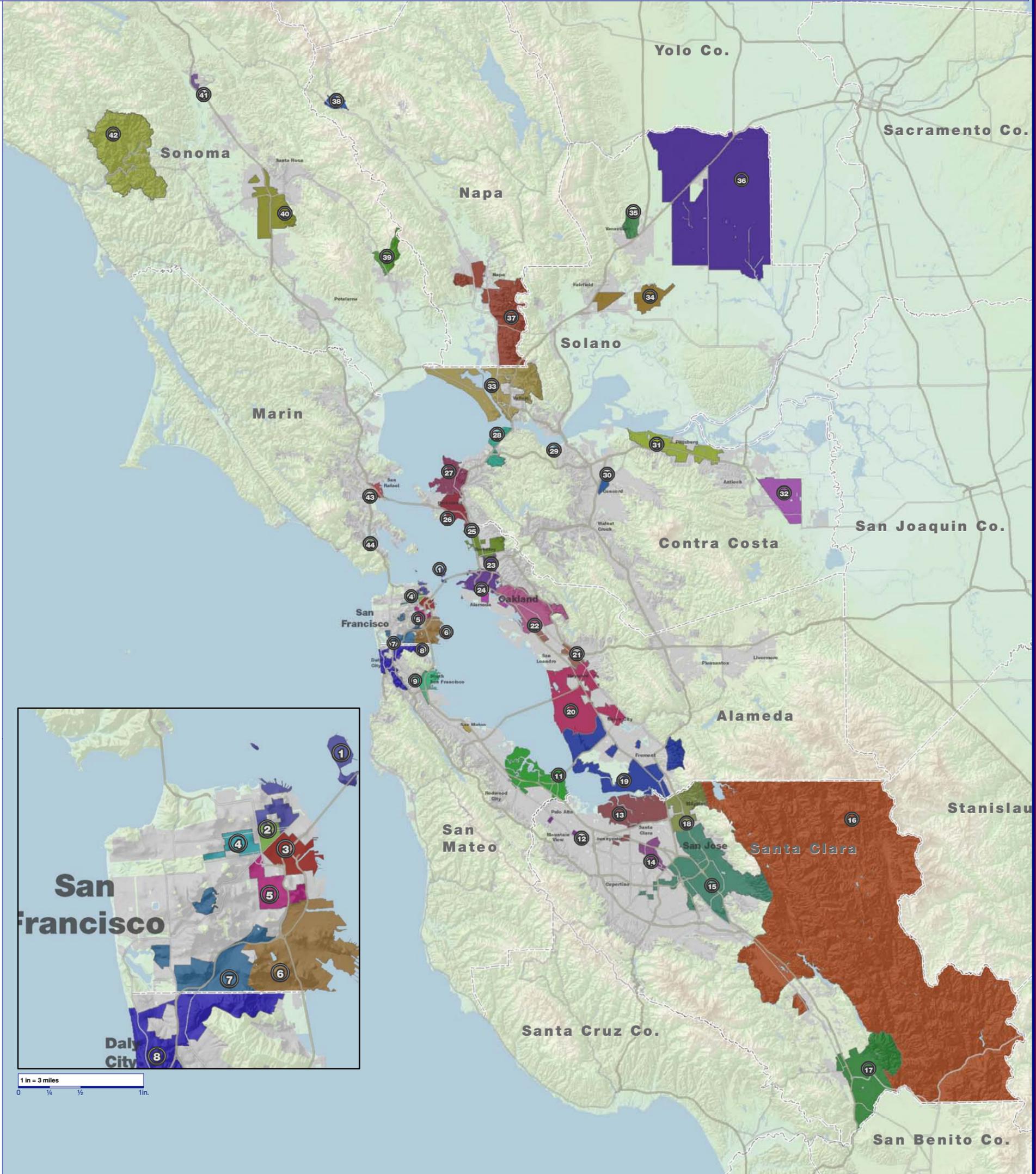
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Regional Snapshot Analysis

Map 0

Research and Demographic Unit

Geographic Information Systems Unit



1 in = 3 miles
 0 1/4 1/2 1in.

Source: MTC December 2008, TeleAtlas, NA
 Cartography: MTC GIS, September 2009
 Path: G:\section\Planning\Regional Mobility Snapshot EJ\Arcmap_pro\Presentation
 Maps\COC_Reference_Map_11_17.mxd

Scale:
 1 in = 11 miles
 0 1/4 1/2 1in.

- | | | |
|--|---------------------------------------|------------------------------|
| 1 Downtown / Chinatown / North Beach / Treasure Isl. | 17 Gilroy | 33 Vallejo |
| 2 Tenderloin / Civic Center | 18 Milpitas | 34 Fairfield / Suisun City |
| 3 South of Market | 19 Fremont / Newark | 35 Vacaville |
| 4 Western Addition / Haight-Fillmore | 20 Hayward / Union City | 36 Dixon |
| 5 Inner Mission / Potrero Hill | 21 Ashland / Cherryland / San Leandro | 37 Napa / American Canyon |
| 6 Bayview / Hunters Point / Bayshore | 22 Fruitvale / East Oakland | 38 Calistoga |
| 7 Outer Mission / Crocker-Amazon / OceanView | 23 West / North Oakland | 39 Central Sonoma Valley |
| 8 Daly City | 24 Alameda | 40 Santa Rosa |
| 9 South San Francisco / San Bruno | 25 Berkeley / Albany | 41 Healdsburg |
| 10 San Mateo | 26 Richmond | 42 Guerneville / Monte Rio |
| 11 East Palo Alto / North Fair Oaks | 27 San Pablo / North Richmond | 43 San Rafael Canal District |
| 12 Stanford / Mountain View | 28 Hercules / Rodeo / Crockett | 44 Marin City |
| 13 Alviso / Shoreline / Sunnyvale | 29 Martinez | |
| 14 Santa Clara | 30 Concord | |
| 15 Central San Jose | 31 Baypoint / Pittsburg / Antioch | |
| 16 South San Jose / Morgan Hill | 32 Brentwood | |

Transit Service Frequency



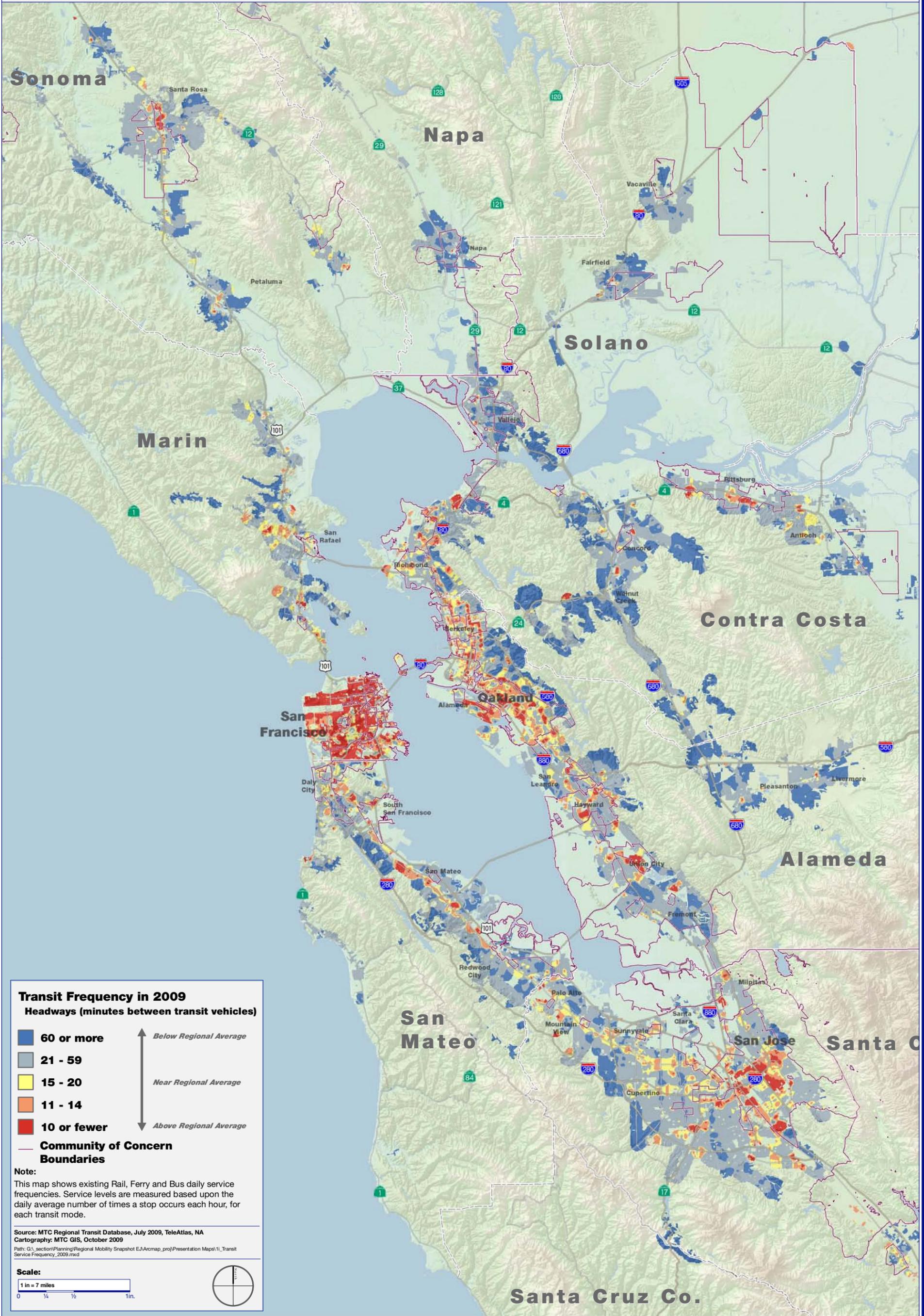
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Regional Snapshot Analysis

Map 1

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Transit Frequency in 2009
 Headways (minutes between transit vehicles)

60 or more	Below Regional Average
21 - 59	
15 - 20	Near Regional Average
11 - 14	
10 or fewer	Above Regional Average

— Community of Concern Boundaries

Note:
 This map shows existing Rail, Ferry and Bus daily service frequencies. Service levels are measured based upon the daily average number of times a stop occurs each hour, for each transit mode.

Source: MTC Regional Transit Database, July 2009, TeleAtlas, NA
 Cartography: MTC GIS, October 2009
 Path: G:_action\Planning\Regional Mobility Snapshot EJA\Arcmap_pro\Presentation Maps\11_Transit Service Frequency_2009.mxd

Scale:
 1 in = 7 miles
 0 1/4 1/2 1 in.

Change in Transit Service Frequency 2006 - 2009

Regional Snapshot Analysis

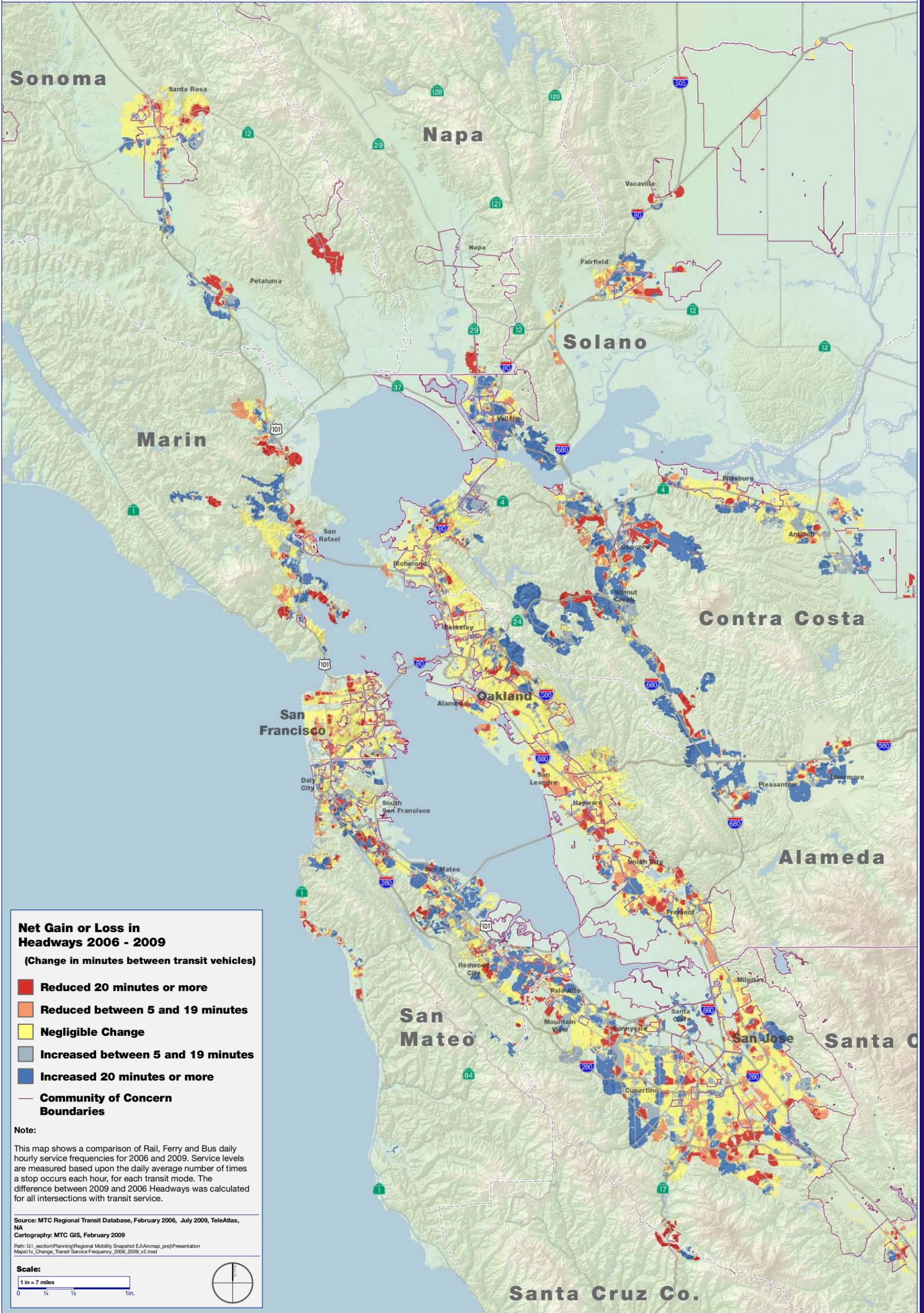


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Map 2

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Net Gain or Loss in Headways 2006 - 2009
 (Change in minutes between transit vehicles)

- Reduced 20 minutes or more
- Reduced between 5 and 19 minutes
- Negligible Change
- Increased between 5 and 19 minutes
- Increased 20 minutes or more
- Community of Concern Boundaries

Note:
 This map shows a comparison of Rail, Ferry and Bus daily hourly service frequencies for 2006 and 2009. Service levels are measured based upon the daily average number of times a stop occurs each hour, for each transit mode. The difference between 2009 and 2006 Headways was calculated for all intersections with transit service.

Source: MTC Regional Transit Database, February 2006, July 2009, TeleAtlas, NA
 Cartography: MTC GIS, February 2009

Path: G:\section\Planning\Regional Mobility Snapshot E3\Arcmap_pro\Presentation Maps\1c_Change_Transit Service Frequency_2006_2009_v2.mxd



SF Bay Area Walkability Index



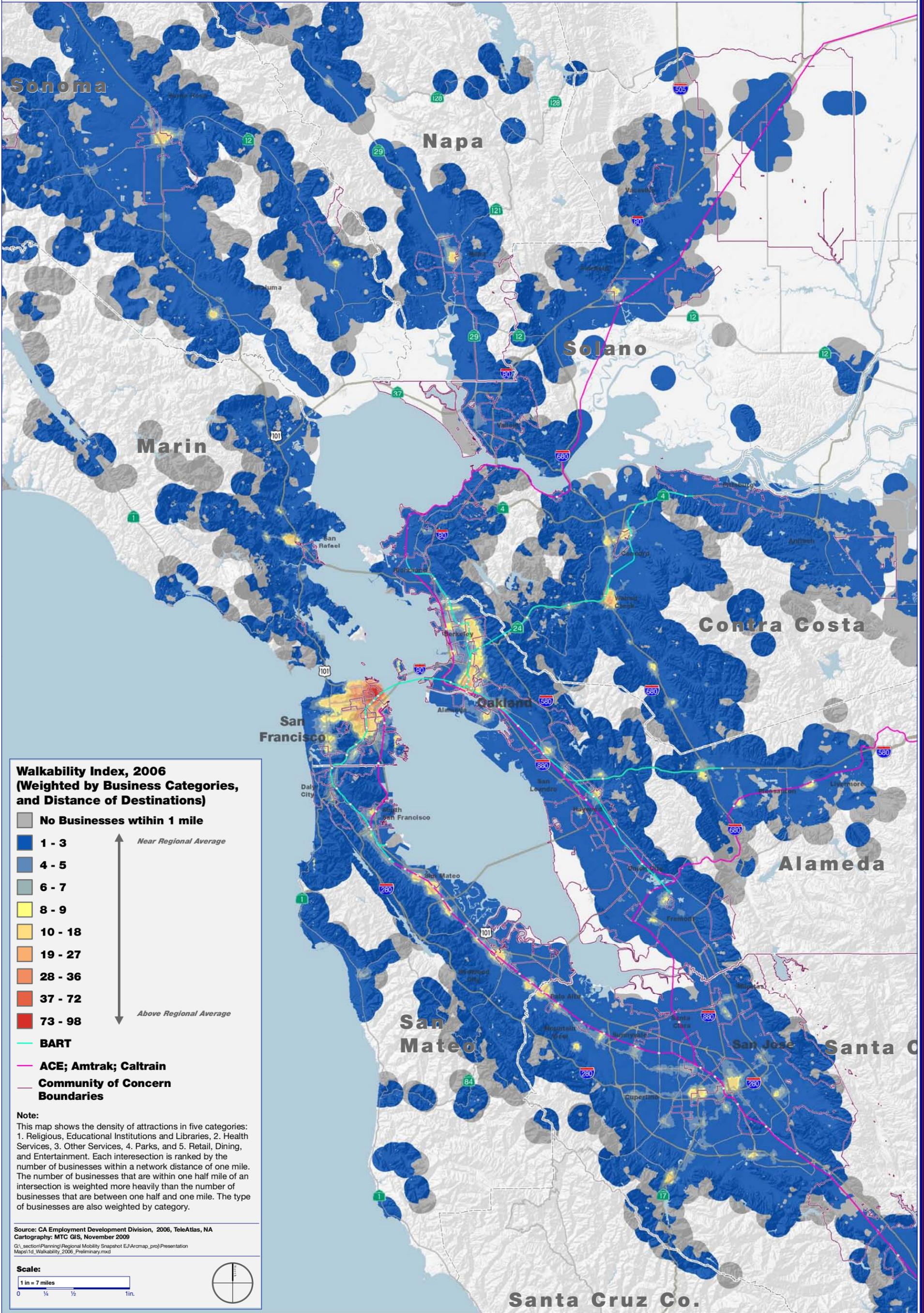
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Regional Snapshot Analysis

Map 3

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Walkability Index, 2006 (Weighted by Business Categories, and Distance of Destinations)

- No Businesses within 1 mile
 - 1 - 3
 - 4 - 5
 - 6 - 7
 - 8 - 9
 - 10 - 18
 - 19 - 27
 - 28 - 36
 - 37 - 72
 - 73 - 98
- ↑ Near Regional Average
 ↓ Above Regional Average
- BART
 - ACE; Amtrak; Caltrain
 - Community of Concern Boundaries

Note:
 This map shows the density of attractions in five categories: 1. Religious, Educational Institutions and Libraries, 2. Health Services, 3. Other Services, 4. Parks, and 5. Retail, Dining, and Entertainment. Each intersection is ranked by the number of businesses within a network distance of one mile. The number of businesses that are within one half mile of an intersection is weighted more heavily than the number of businesses that are between one half and one mile. The type of businesses are also weighted by category.

Source: CA Employment Development Division, 2006, TeleAtlas, NA
 Cartography: MTC GIS, November 2009
 G:\section\Planning\Regional Mobility Snapshot EJA\mapproj\Presentation
 Maps\1d_Walkability_2006_Preliminary.mxd



Auto Availability

Regional Snapshot Analysis

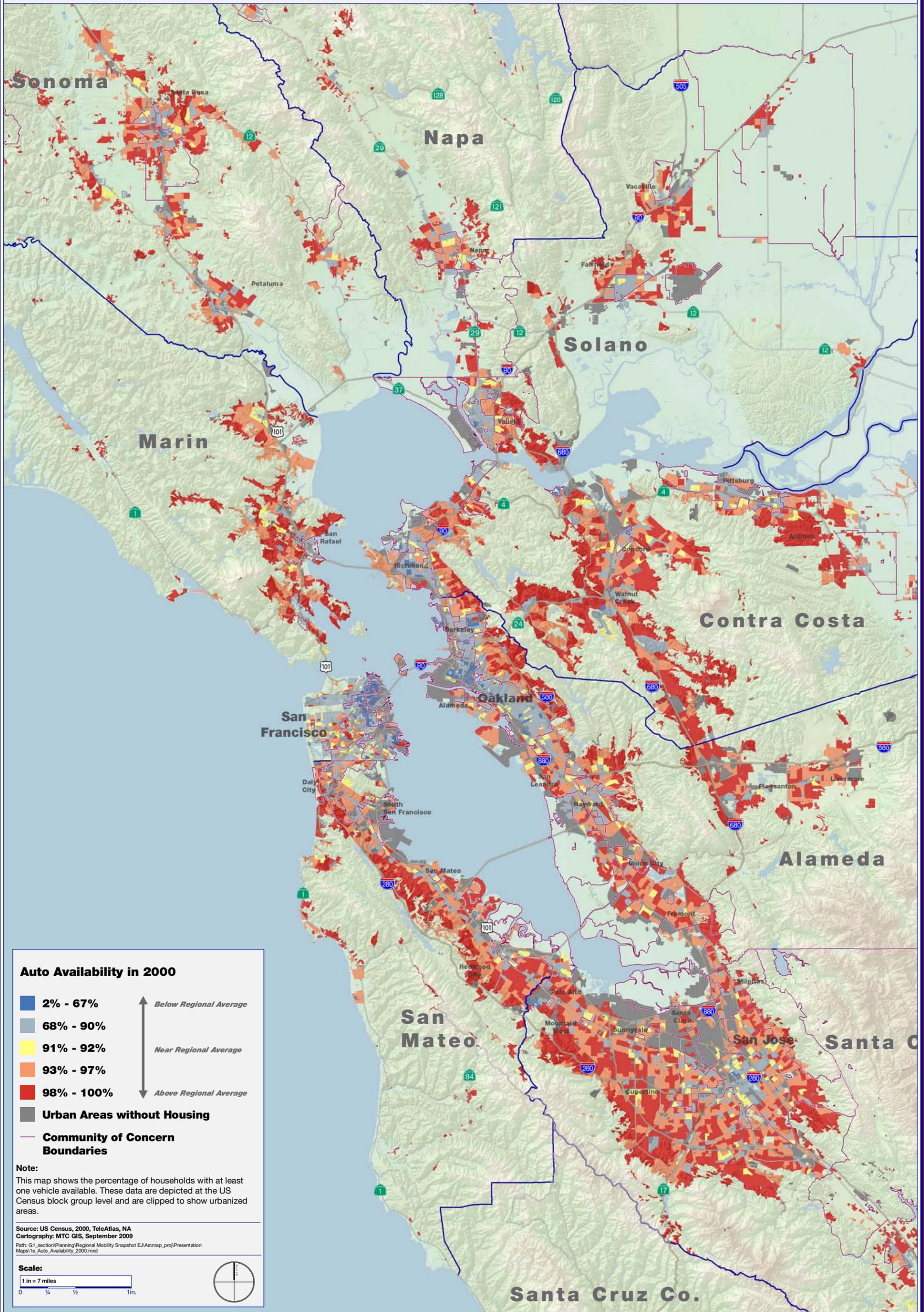


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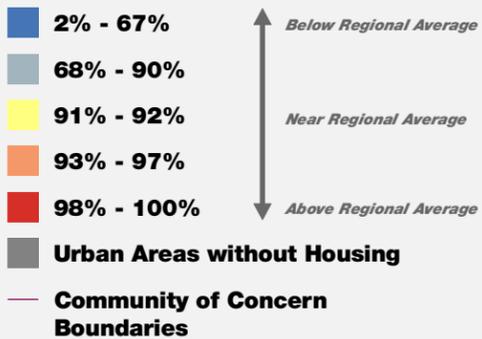
Map 4

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Geographic Information Systems Unit

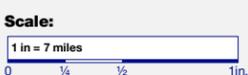


Auto Availability in 2000



Note:
This map shows the percentage of households with at least one vehicle available. These data are depicted at the US Census block group level and are clipped to show urbanized areas.

Source: US Census, 2000, TeleAtlas, NA
Cartography: MTC GIS, September 2009
Path: G:_action\Planning\Regional Mobility Snapshot EJA\Arcmap_pro\Presentation Maps\1e_Auto_Availability_2000.mxd



Transportation Availability Index

Regional Snapshot Analysis

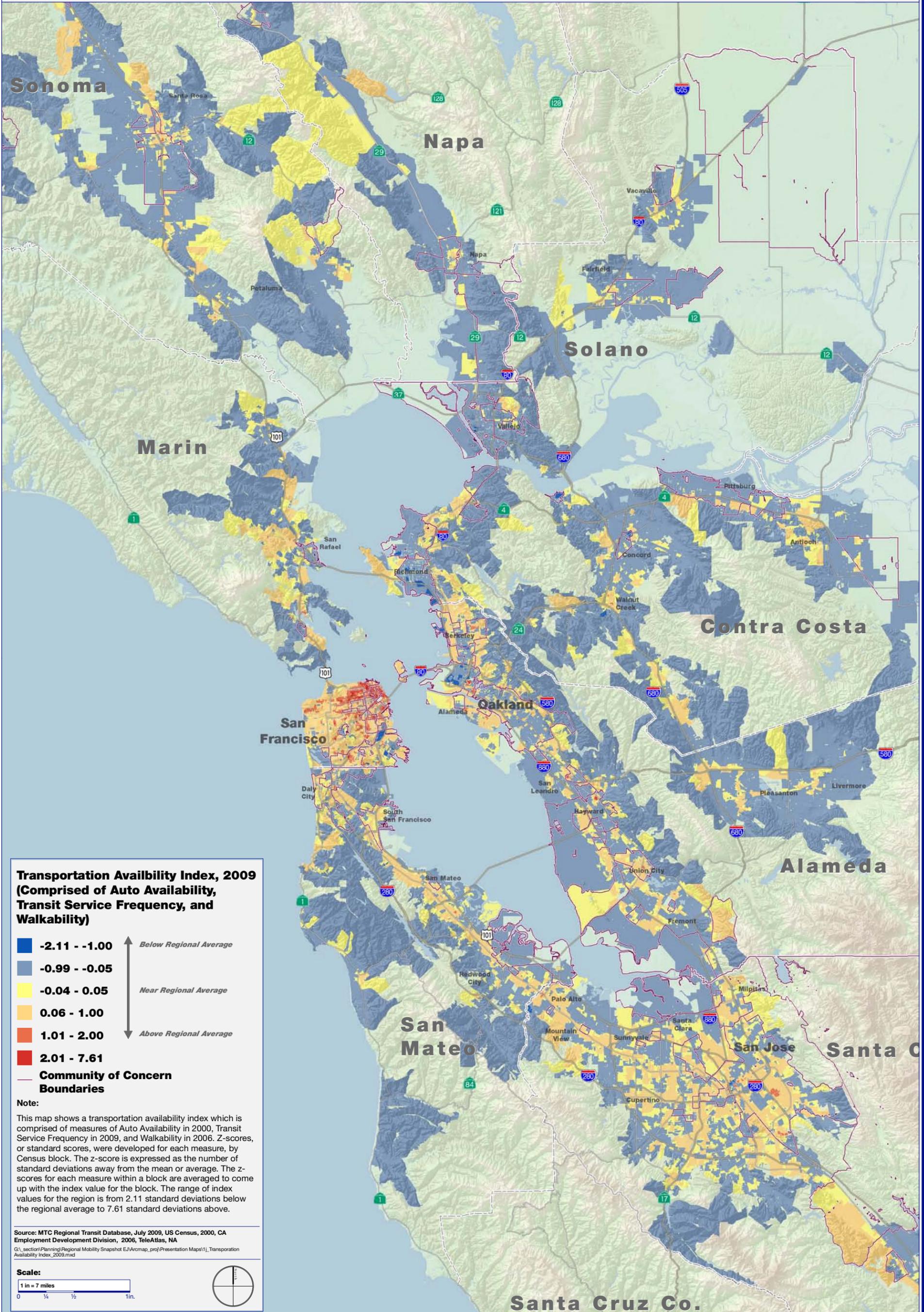


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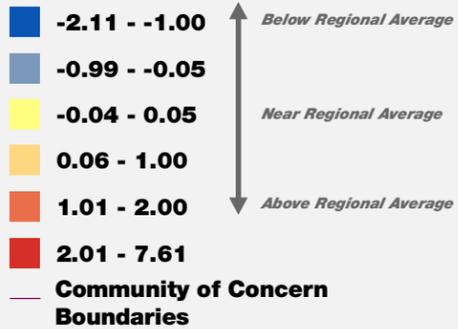
Map 5

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Transportation Availability Index, 2009 (Comprised of Auto Availability, Transit Service Frequency, and Walkability)



Note:
 This map shows a transportation availability index which is comprised of measures of Auto Availability in 2000, Transit Service Frequency in 2009, and Walkability in 2006. Z-scores, or standard scores, were developed for each measure, by Census block. The z-score is expressed as the number of standard deviations away from the mean or average. The z-scores for each measure within a block are averaged to come up with the index value for the block. The range of index values for the region is from 2.11 standard deviations below the regional average to 7.61 standard deviations above.

Source: MTC Regional Transit Database, July 2009, US Census, 2000, CA Employment Development Division, 2006, TeleAtlas, NA
 G:\section\Planning\Regional Mobility Snapshot EJ\Arcmap_proj\Presentation Maps\1_Transportation Availability Index_2009.mxd



Essential Destinations by Transit

Regional Snapshot Analysis

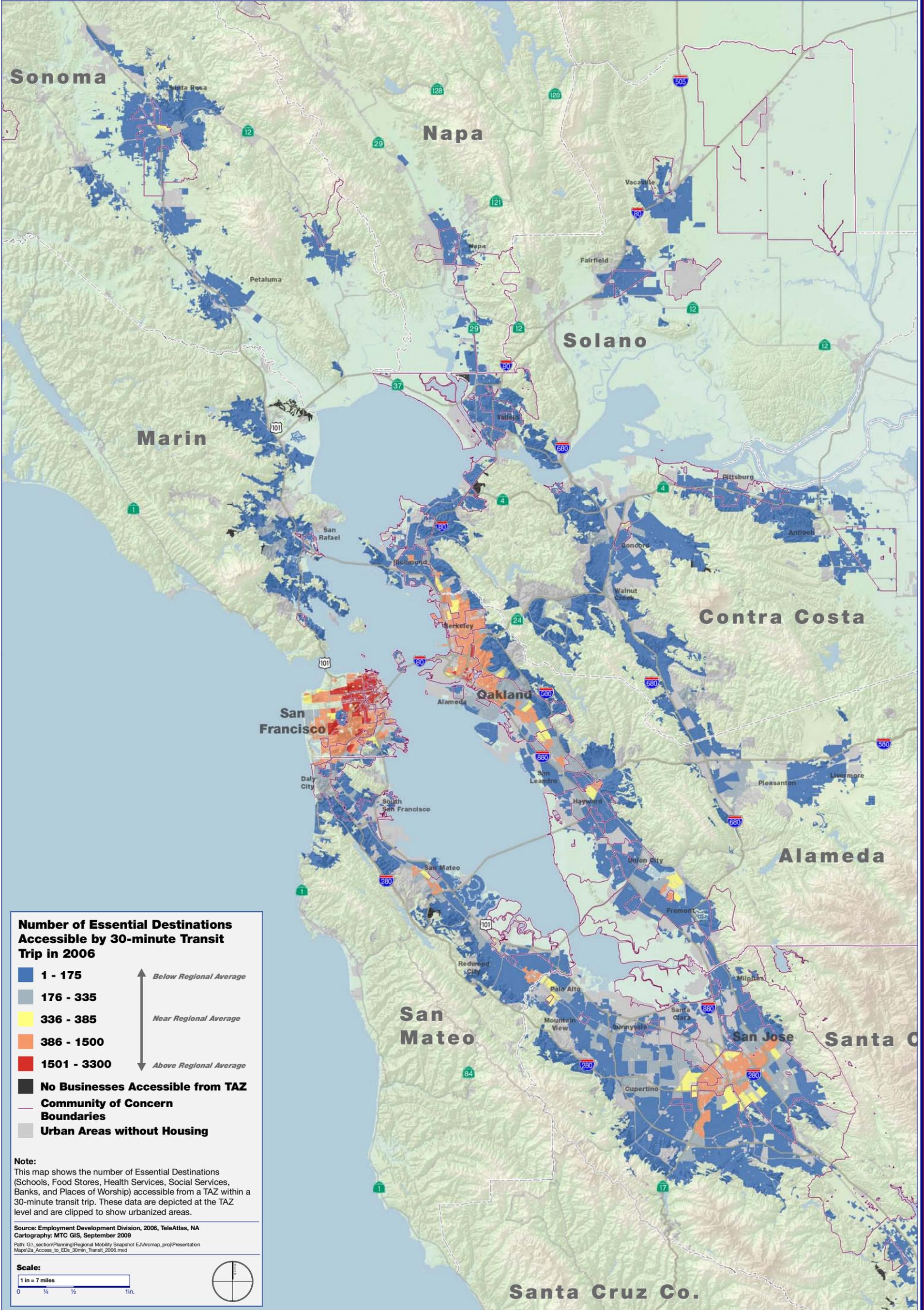


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Map 6

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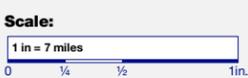


Number of Essential Destinations Accessible by 30-minute Transit Trip in 2006



Note:
This map shows the number of Essential Destinations (Schools, Food Stores, Health Services, Social Services, Banks, and Places of Worship) accessible from a TAZ within a 30-minute transit trip. These data are depicted at the TAZ level and are clipped to show urbanized areas.

Source: Employment Development Division, 2006, TeleAtlas, NA
Cartography: MTC GIS, September 2009
Path: G:_action\Planning\Regional Mobility Snapshot EJA\Arcmap_pro\Presentation
Maps\2a_Access_to_EDs_30min_Transit_2006.mxd



Essential Destinations by Auto

Regional Snapshot Analysis

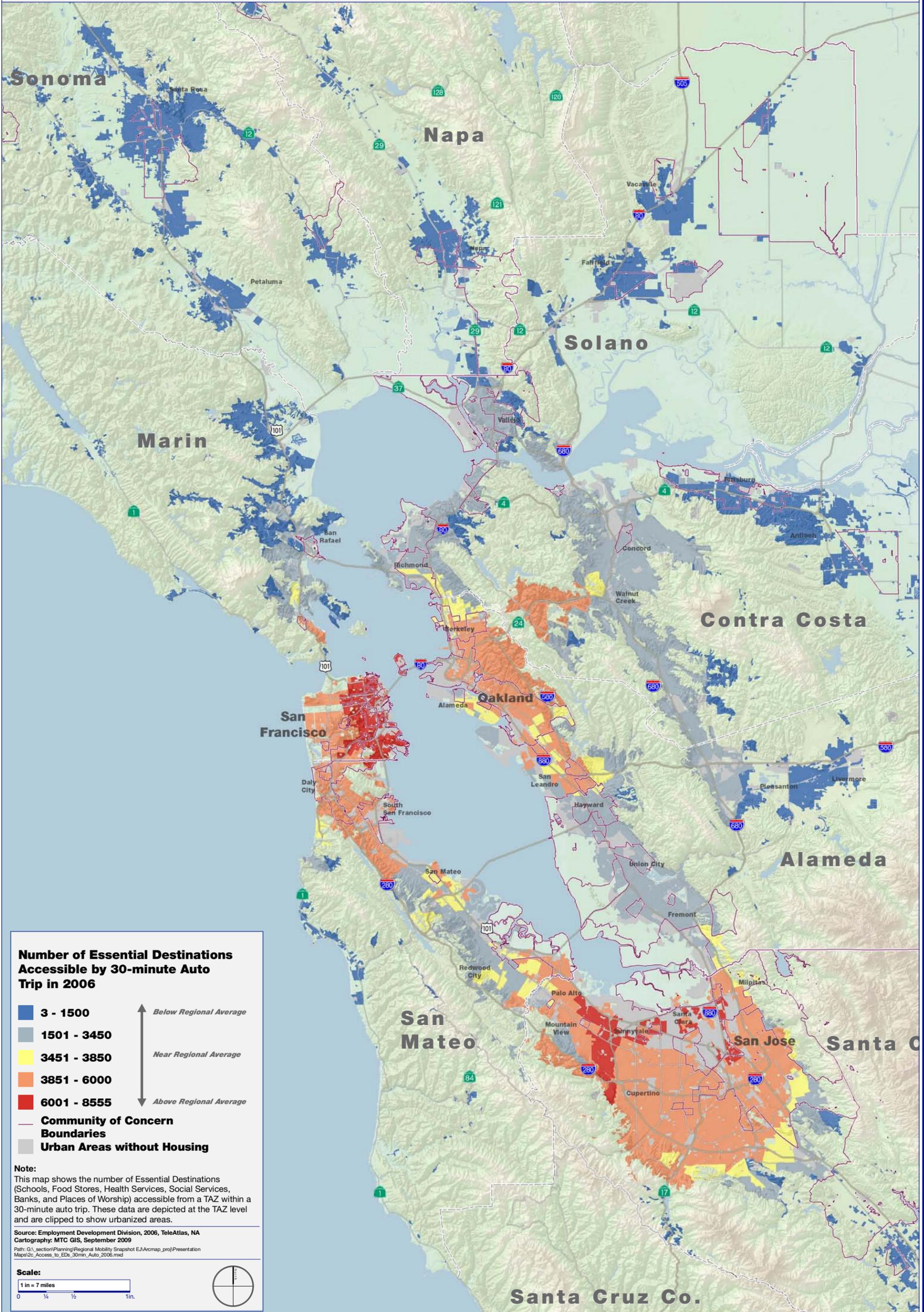


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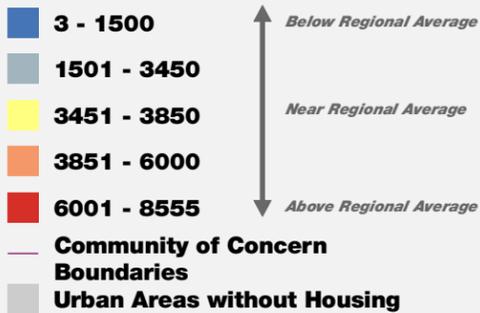
Map 7

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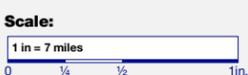


Number of Essential Destinations Accessible by 30-minute Auto Trip in 2006



Note:
This map shows the number of Essential Destinations (Schools, Food Stores, Health Services, Social Services, Banks, and Places of Worship) accessible from a TAZ within a 30-minute auto trip. These data are depicted at the TAZ level and are clipped to show urbanized areas.

Source: Employment Development Division, 2006, TeleAtlas, NA
Cartography: MTC GIS, September 2009
Path: G:_action\Planning\Regional Mobility Snapshot EJA\Arcmap_pro\Presentation Maps\2c_Access_to_EDs_30min_Auto_2006.mxd



Santa Cruz Co.

Transportation Affordability



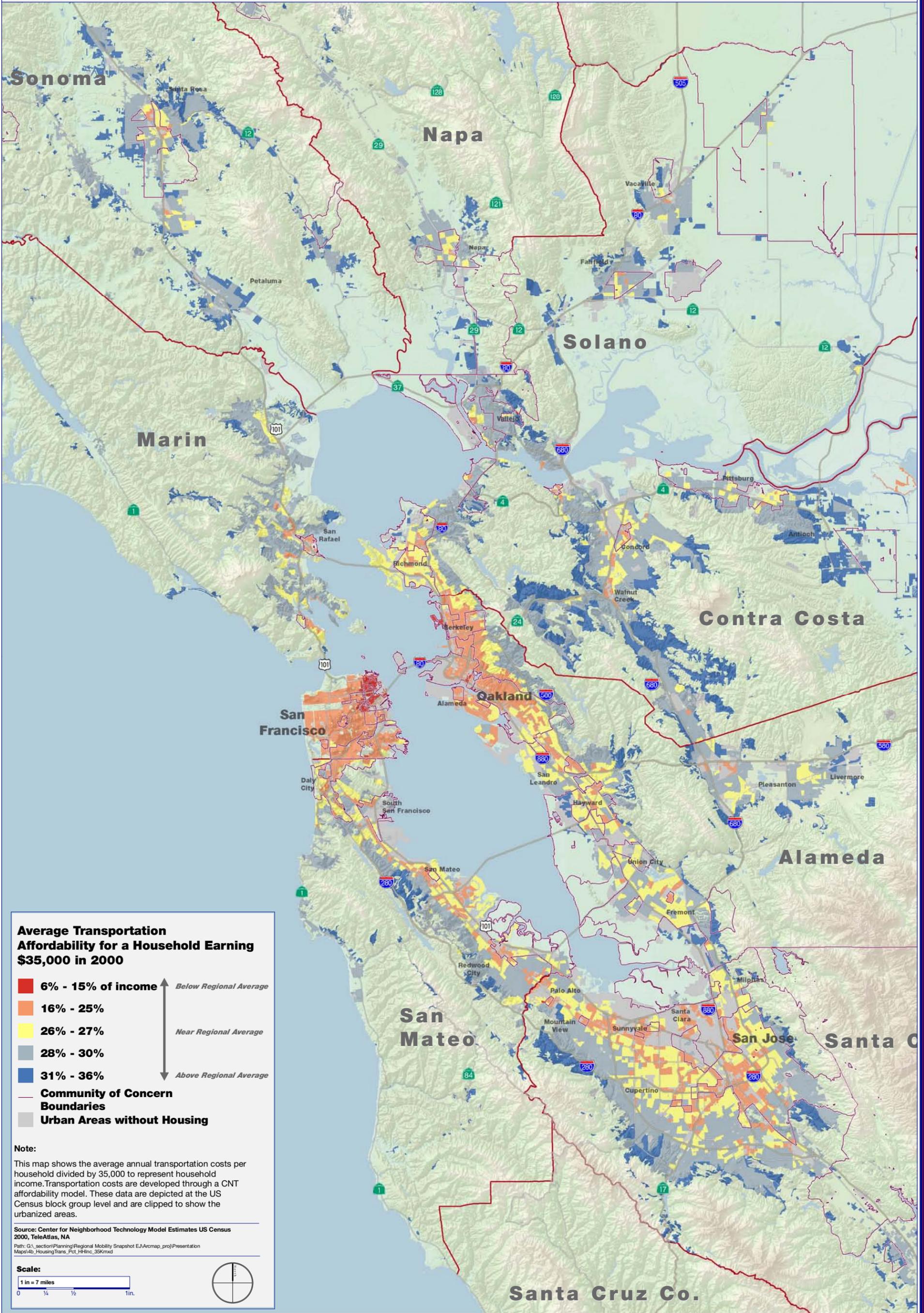
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Regional Snapshot Analysis

Map 8

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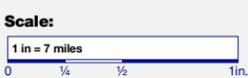
Average Transportation Affordability for a Household Earning \$35,000 in 2000

- 6% - 15% of income *Below Regional Average*
- 16% - 25%
- 26% - 27% *Near Regional Average*
- 28% - 30%
- 31% - 36% *Above Regional Average*
- Community of Concern Boundaries
- Urban Areas without Housing

Note:

This map shows the average annual transportation costs per household divided by 35,000 to represent household income. Transportation costs are developed through a CNT affordability model. These data are depicted at the US Census block group level and are clipped to show the urbanized areas.

Source: Center for Neighborhood Technology Model Estimates US Census 2000, TeleAtlas, NA
 Path: G:\section\Planning\Regional Mobility Snapshot EJA\Arcmap_proj\Presentation Maps\4b_HousingTrans_Pct_HHInc_35K.mxd



Housing and Transportation Affordability

Regional Snapshot Analysis

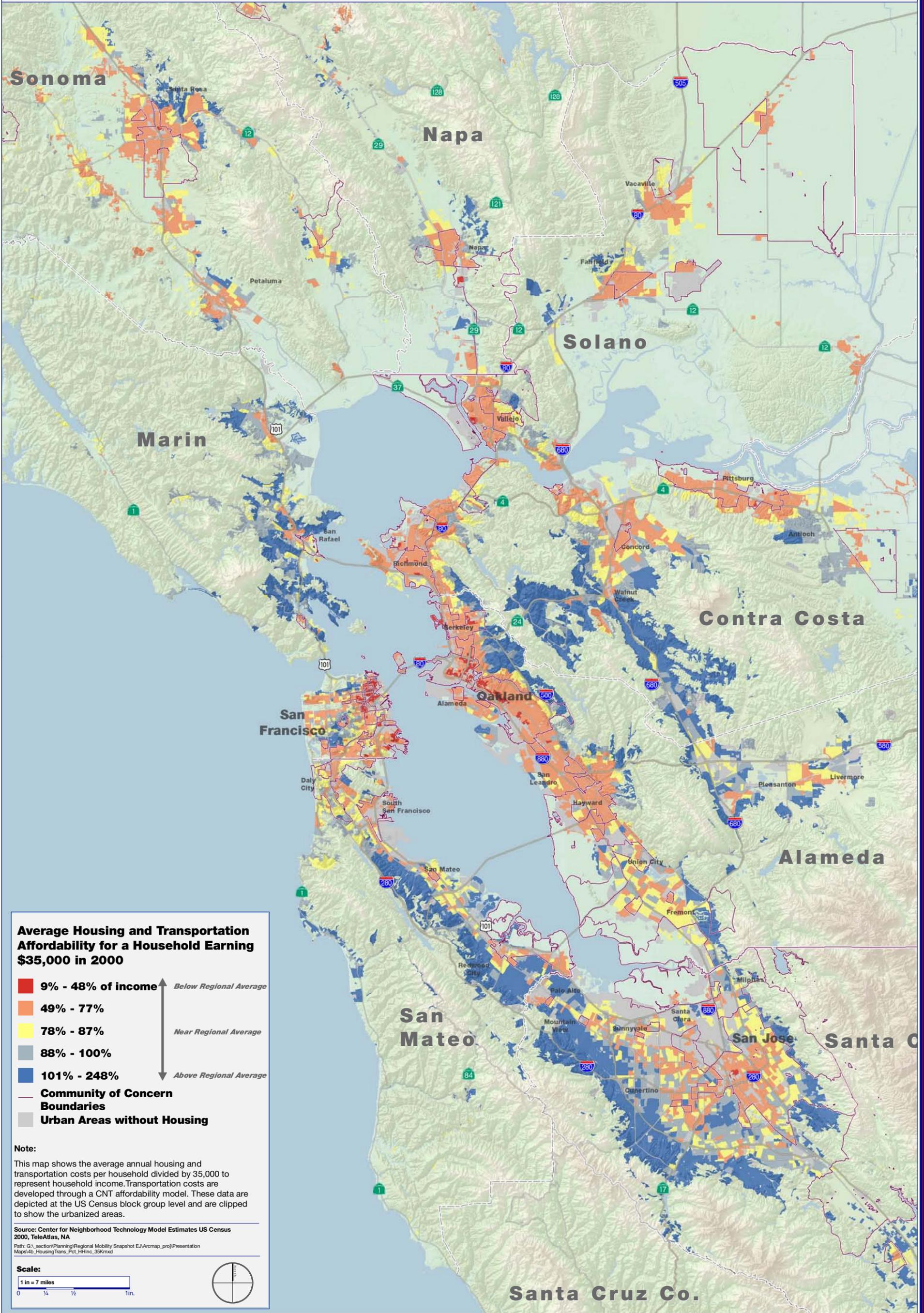


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Map 9

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Bicycle Collisions

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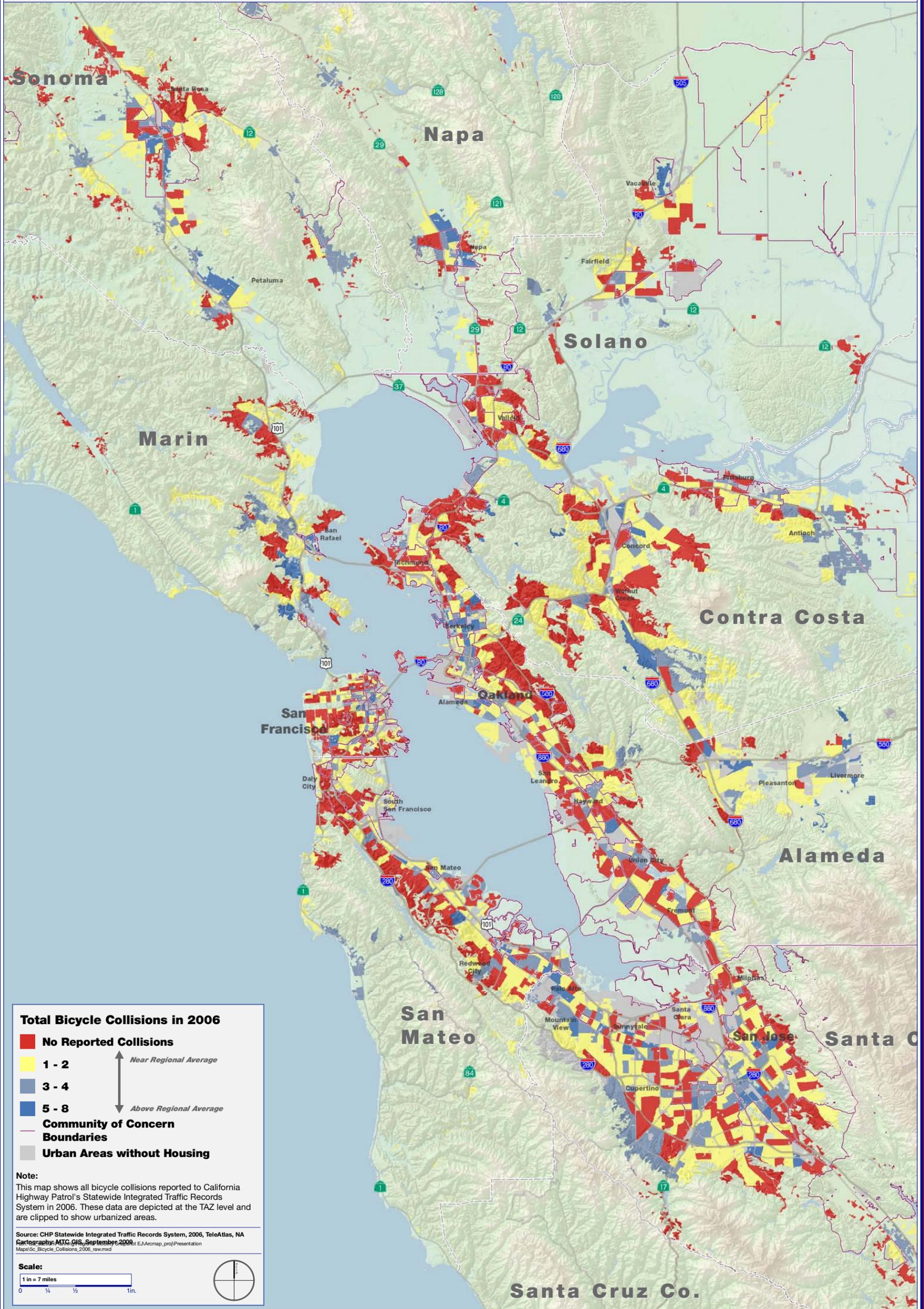


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Map 10

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Pedestrian Collisions

Regional Snapshot Analysis

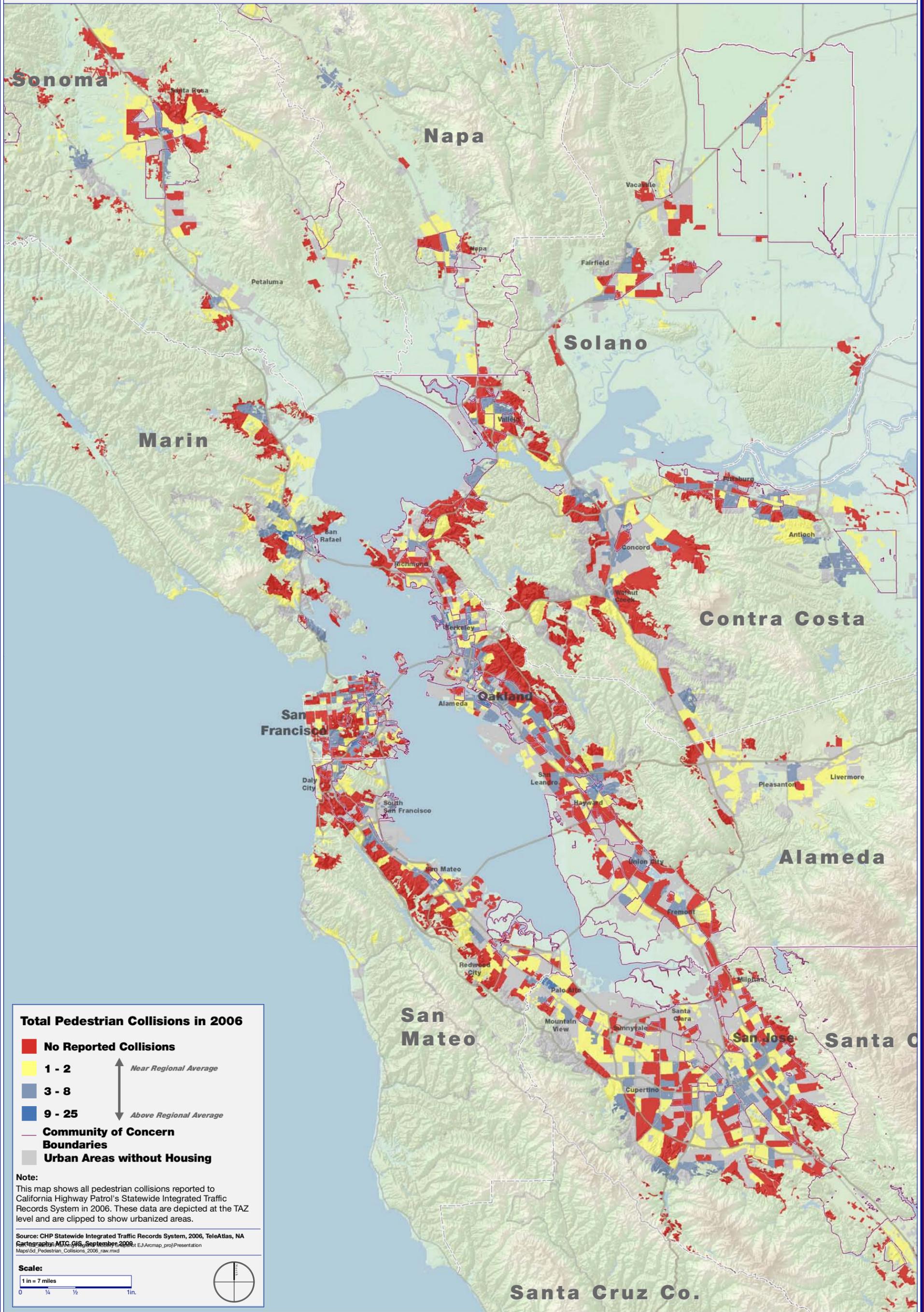


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Map 11

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Total Pedestrian Collisions in 2006

- No Reported Collisions
- 1 - 2 ↑ Near Regional Average
- 3 - 8 ↕
- 9 - 25 ↓ Above Regional Average
- Community of Concern Boundaries
- Urban Areas without Housing

Note:
 This map shows all pedestrian collisions reported to California Highway Patrol's Statewide Integrated Traffic Records System in 2006. These data are depicted at the TAZ level and are clipped to show urbanized areas.

Source: CHP Statewide Integrated Traffic Records System, 2006, TeleAtlas, NA
 Cartography: MTC GIS, September 2009
Map95d_Pedestrian_Collisions_2006_raw.mxd

Scale:
 1 in = 7 miles
 0 ¼ ½ 1 in.



Diesel Particulate Matter 2.5 Emitted from On-Road Sources

Regional Snapshot Analysis

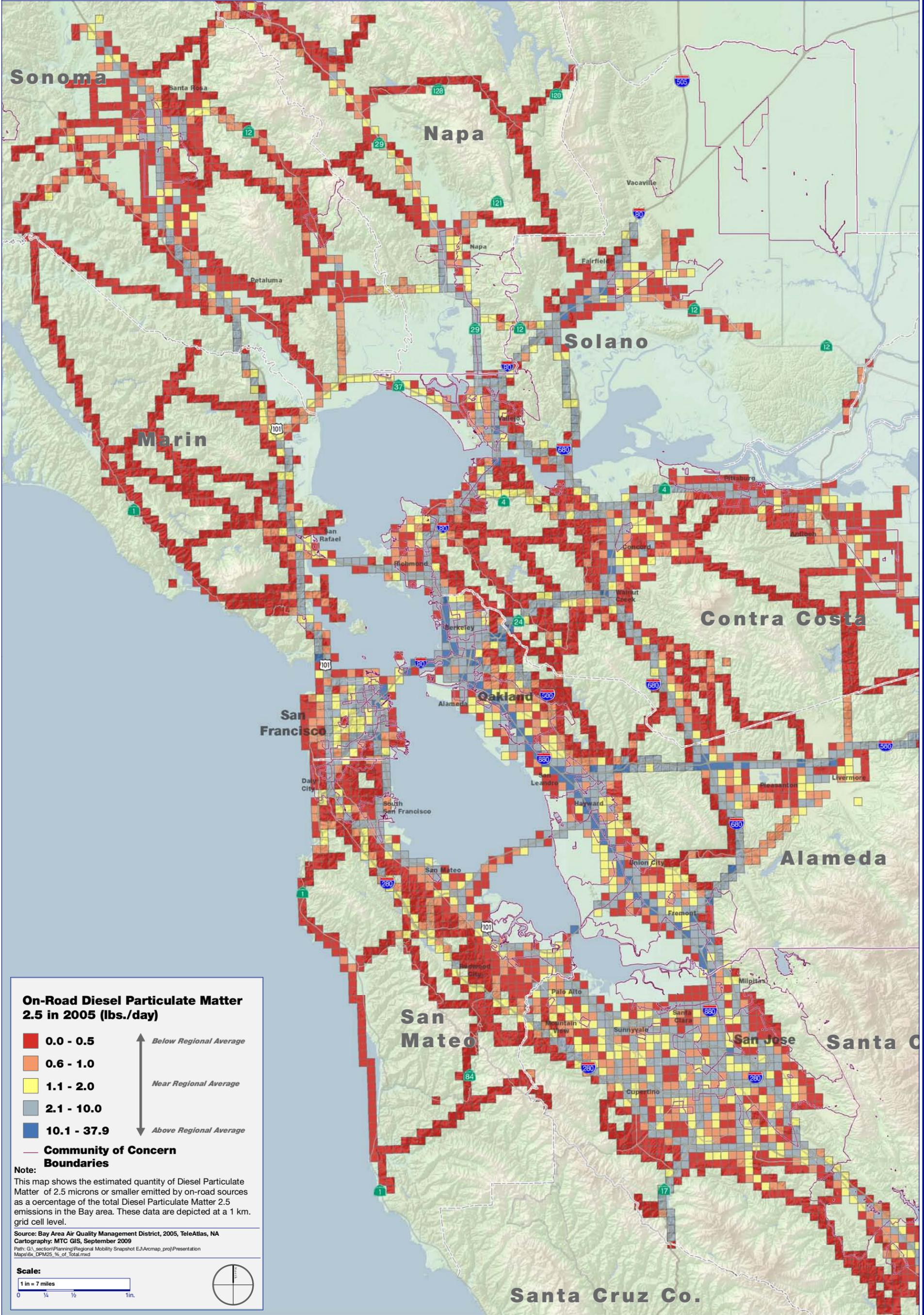


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Map 12

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Percentage of Total DPM 2.5 Emitted from On-Road Sources

Regional Snapshot Analysis

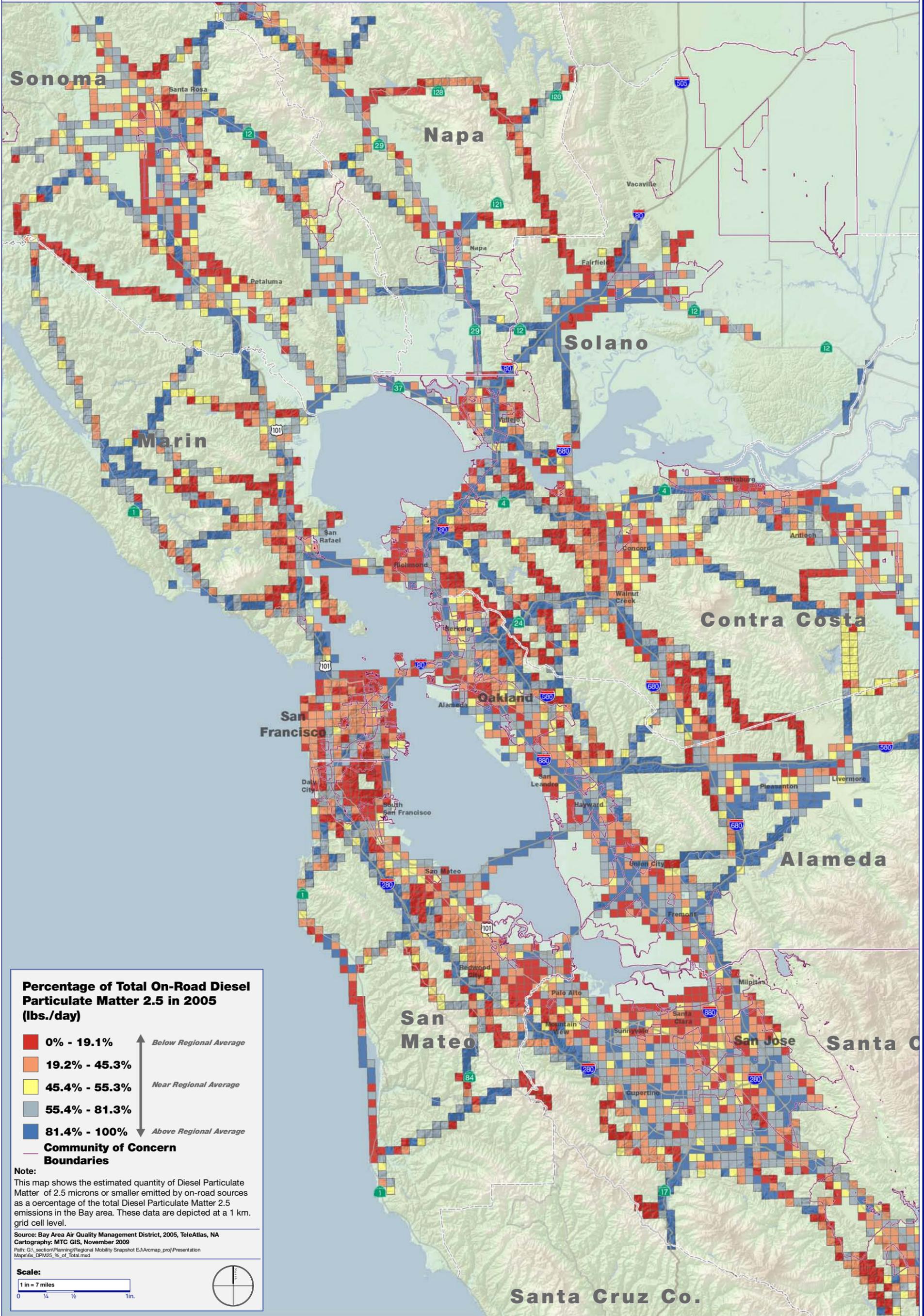


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Map 13

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Bus Transit Service Frequency



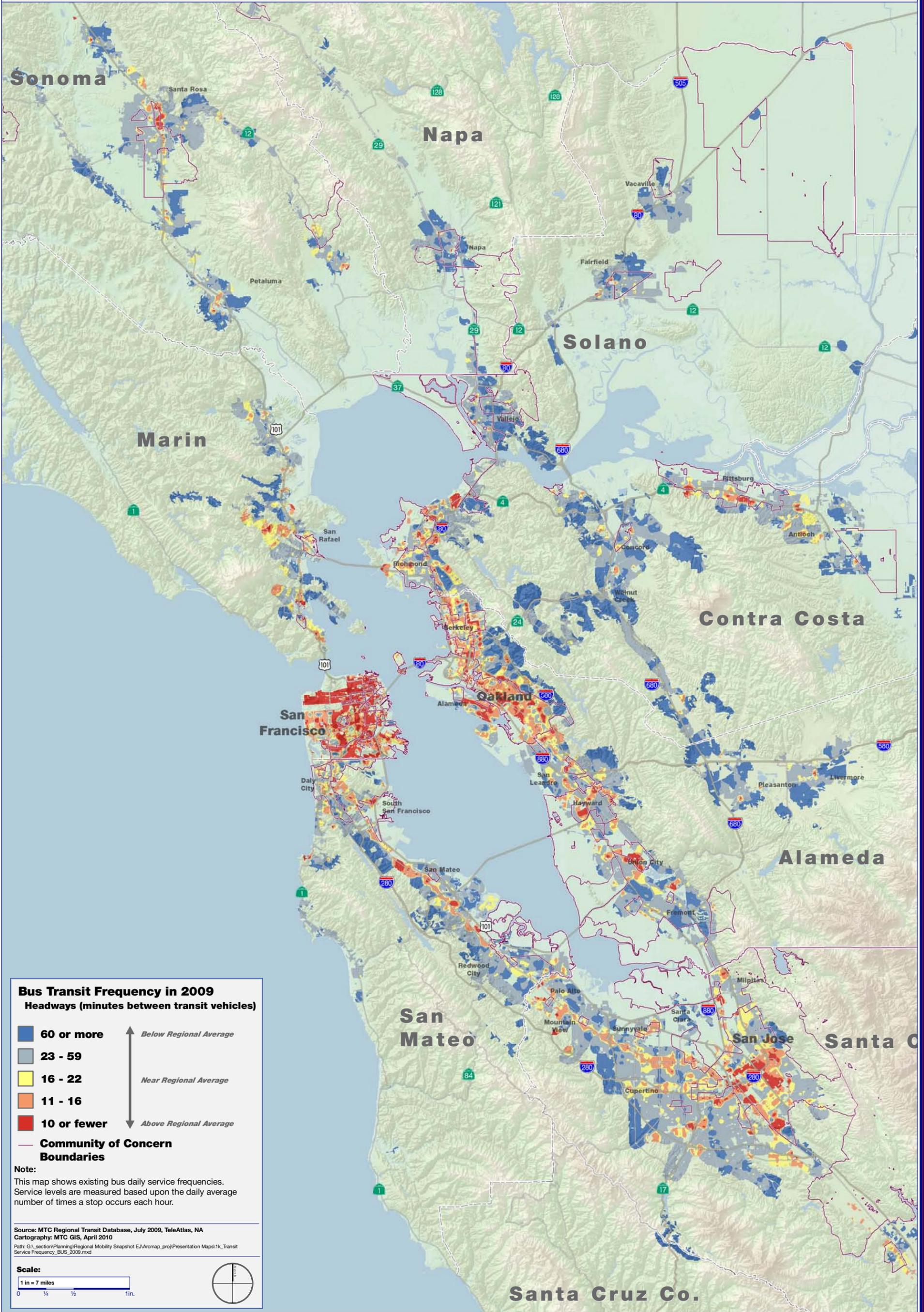
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Regional Snapshot Analysis

Map 1A

Research and Demographic Unit

Geographic Information Systems Unit



Bus Transit Frequency in 2009
 Headways (minutes between transit vehicles)

<ul style="list-style-type: none"> 60 or more 23 - 59 16 - 22 11 - 16 10 or fewer 	<p>↑ <i>Below Regional Average</i></p> <p><i>Near Regional Average</i></p> <p>↓ <i>Above Regional Average</i></p>
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— Community of Concern Boundaries

Note:
 This map shows existing bus daily service frequencies. Service levels are measured based upon the daily average number of times a stop occurs each hour.

Source: MTC Regional Transit Database, July 2009, TeleAtlas, NA
 Cartography: MTC GIS, April 2010
 Path: G:_section\Planning\Regional Mobility Snapshot EJArcmap_proj\Presentation Maps\1k_Transit Service Frequency_BUS_2009.mxd

Scale:
 1 in = 7 miles
 0 1/4 1/2 1 in.

Rail and Ferry Transit Service Frequency

Regional Snapshot Analysis

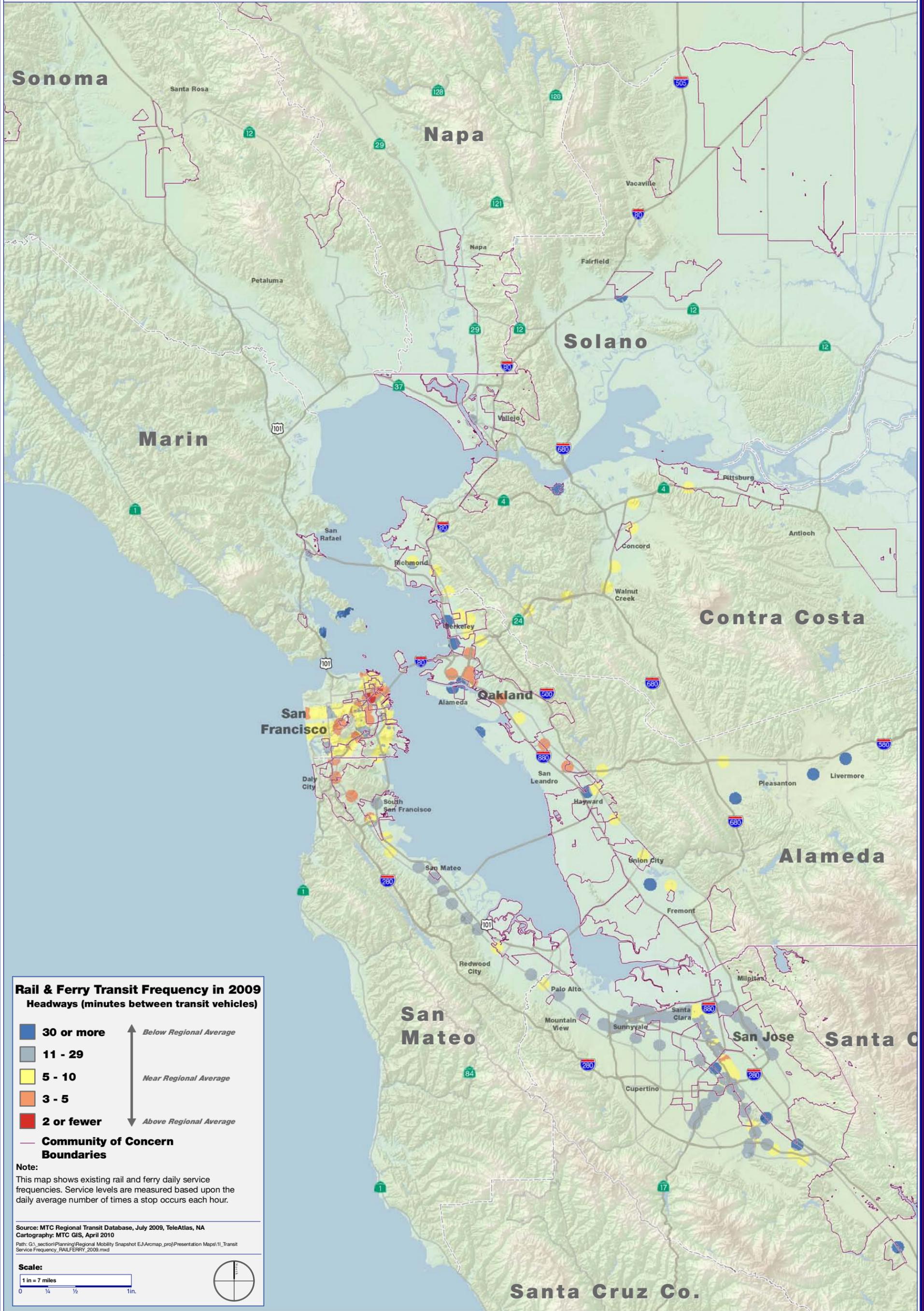


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Map 1B

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Weekend Transit Service Frequency

Regional Snapshot Analysis

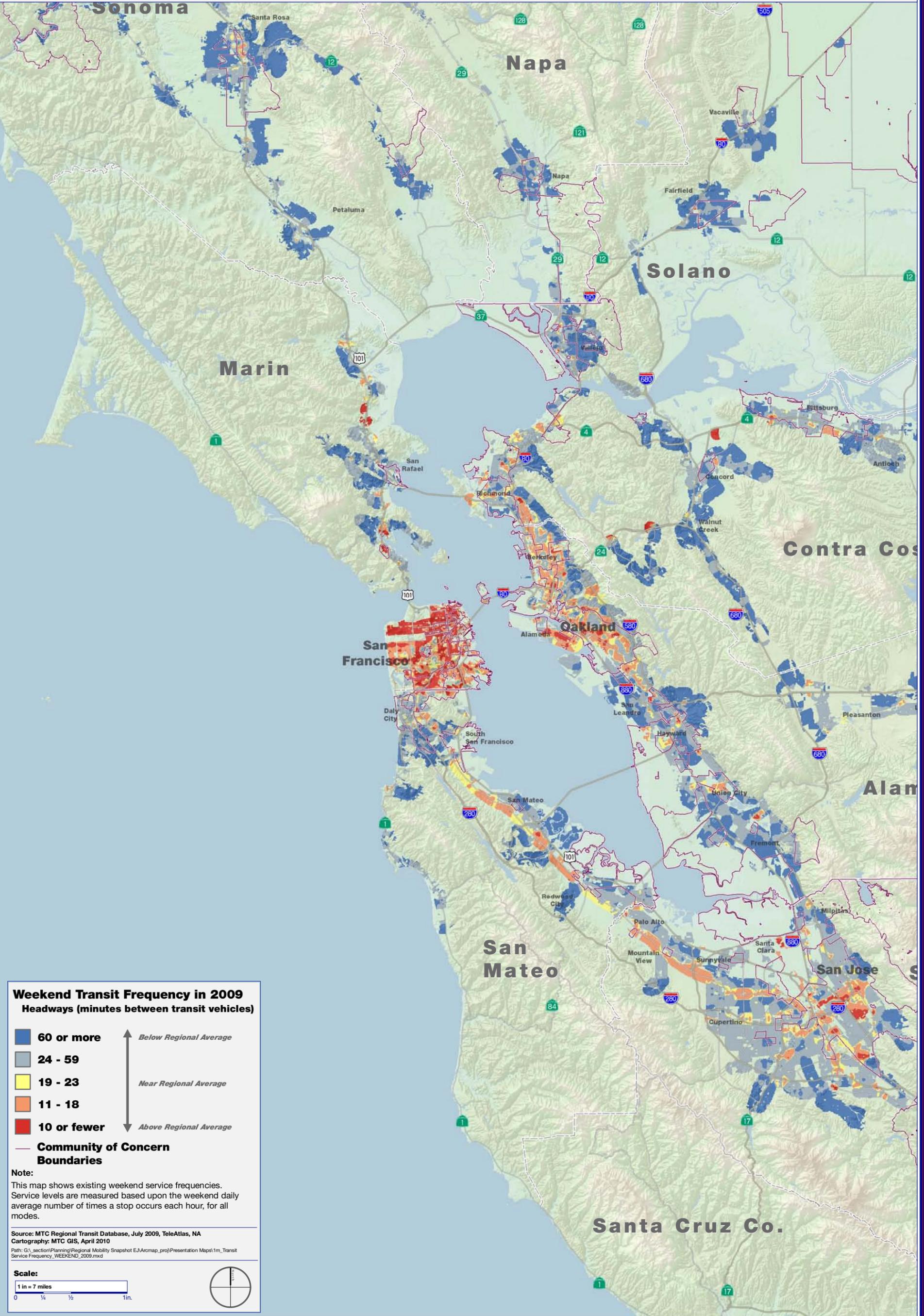


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Map 1C

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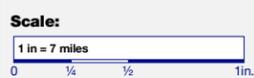


Weekend Transit Frequency in 2009 Headways (minutes between transit vehicles)

- 60 or more ↑ Below Regional Average
 - 24 - 59
 - 19 - 23 Near Regional Average
 - 11 - 18 ↓ Above Regional Average
 - 10 or fewer
- Community of Concern Boundaries

Note:
 This map shows existing weekend service frequencies. Service levels are measured based upon the weekend daily average number of times a stop occurs each hour, for all modes.

Source: MTC Regional Transit Database, July 2009, TeleAtlas, NA
 Cartography: MTC GIS, April 2010
 Path: G:\section\Planning\Regional Mobility Snapshot EJ\Arcmap_proj\Presentation Maps\1m_Transit Service Frequency_WEEKEND_2009.mxd



Evening Transit Service Frequency

Regional Snapshot Analysis

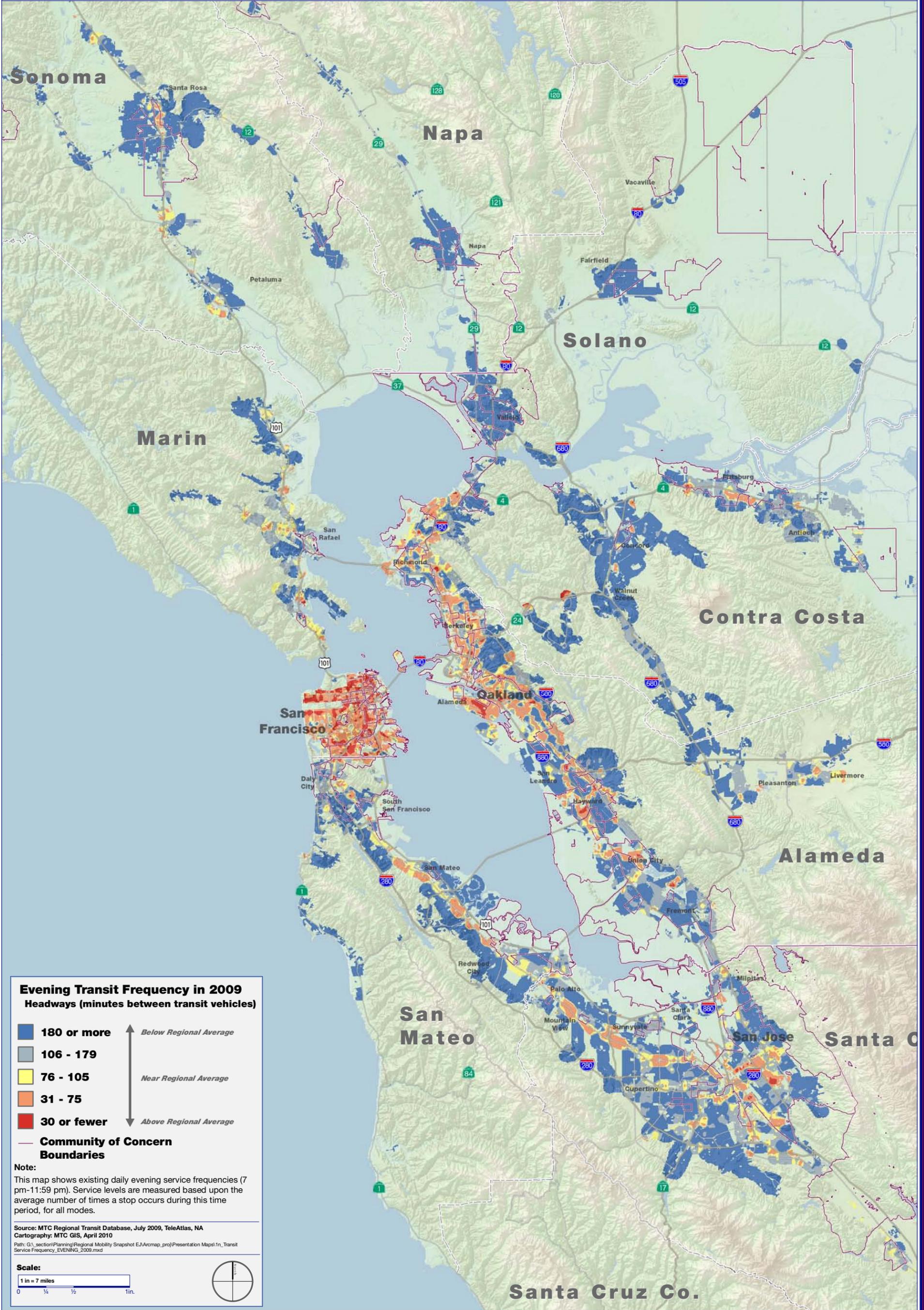


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Map 1D

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Geographic Information Systems Unit



Evening Transit Frequency in 2009

Headways (minutes between transit vehicles)

- 180 or more ↑ Below Regional Average
 - 106 - 179
 - 76 - 105 ↕ Near Regional Average
 - 31 - 75 ↓ Above Regional Average
 - 30 or fewer
- Community of Concern Boundaries

Note:
 This map shows existing daily evening service frequencies (7 pm-11:59 pm). Service levels are measured based upon the average number of times a stop occurs during this time period, for all modes.

Source: MTC Regional Transit Database, July 2009, TeleAtlas, NA
 Cartography: MTC GIS, April 2010
 Path: G:_section\Planning\Regional Mobility Snapshot EJA\Arcmap_proj\Presentation Maps\1n_Transit Service Frequency_EVENING_2009.mxd

Scale:
 1 in = 7 miles

Change in Bus Service Frequency 2006 - 2009

Regional Snapshot Analysis

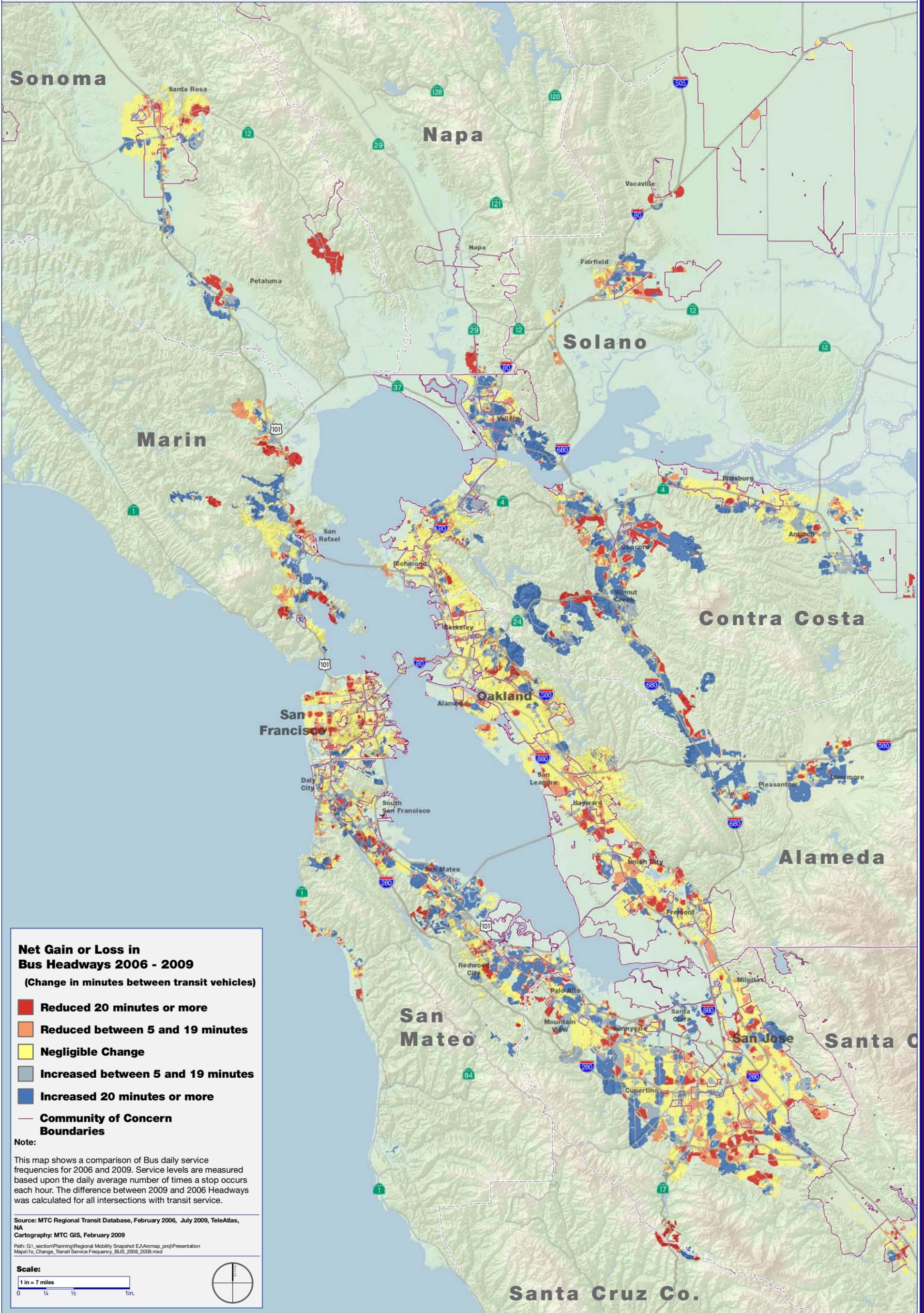


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Map 2A

Research and Demographic Unit

Geographic Information Systems Unit



Net Gain or Loss in Bus Headways 2006 - 2009

(Change in minutes between transit vehicles)

- Reduced 20 minutes or more
- Reduced between 5 and 19 minutes
- Negligible Change
- Increased between 5 and 19 minutes
- Increased 20 minutes or more
- Community of Concern Boundaries

Note:
 This map shows a comparison of Bus daily service frequencies for 2006 and 2009. Service levels are measured based upon the daily average number of times a stop occurs each hour. The difference between 2009 and 2006 Headways was calculated for all intersections with transit service.

Source: MTC Regional Transit Database, February 2006, July 2009, TeleAtlas, NA
 Cartography: MTC GIS, February 2009

Path: G:\section\Planning\Regional Mobility Snapshot EJA\Arcmap_pro\Presentation Maps\1a_Change_Transit Service Frequency_BUS_2006_2009.mxd



