

Appendices

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A-1: Survey

Orange County Transportation Authority Bicycle Survey

1. Why do you bike? (check all that apply)

- For exercise/ health reasons
- For pleasure
- For shopping/errands
- To get to work
- To get to school
- To get to transit
- I don't bike
- Other please specify) _____

* Please mail surveys to
453 S Spring St, Suite 804
Los Angeles CA 9003

Contact Jennifer Allen or Greg Nord at:
jenniferallen@altaplanning.com
gnord@octa.net

2. How many days per week do you ride?

- 0 1 2 3 4 5 6 7

3. What is your zip code? _____

4. What is the average distance of your rides (one-way)?

- Under 2 miles
- 3-5 miles
- 6-10 miles
- 11-24 miles
- 25 miles and above

5. Where are your favorite places or routes to bike? Please be specific.

6. What prevents you from biking more often? (Check all that apply)

- Destinations are too far away
- Too many cars / cars drive too fast
- Drivers don't share the road
- I travel with small children
- No bike paths, lanes or bike routes
- I have to carry things
- Not enough time
- Insufficient lighting
- Bikeways/roads in poor condition
- Weather
- Other (please specify)

7. Where are the most difficult places for you to bike and why? Where would you ride if you could and what prevents you from riding there?

8. Please rank your preference for bicycle facilities, on a scale of 1 to 4 (1 being most preferred and 4 being least preferred)

| | 1 Most preferred | 2 | 3 | 4 Least Preferred |
|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Off-street paved bike paths | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| On-street bike lanes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bike routes | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Unpaved trails or dirt paths | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

9. Would the following improvements influence you to bike more often? (Please rate each improvement by likelihood of influencing you to bike more often)

| | Very Likely | Likely | Somewhat Likely | Not Very Likely | Unlikely | No | Not Sure |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| More Bike Lanes (Separate Lanes for bikes) on Major Streets | <input type="checkbox"/> |
| More Bike Routes | <input type="checkbox"/> |
| More Paved (off-street) Bike Paths | <input type="checkbox"/> |
| Increased Maintenance (sweeping/repairs to bike lanes, routes, paths, and landscape trimming, etc.) | <input type="checkbox"/> |
| Widen Outside/Curb Lanes on Major Streets (easier to share lanes with cars) | <input type="checkbox"/> |
| More On-Road Bike Signage | <input type="checkbox"/> |
| More Bicycle Parking | <input type="checkbox"/> |
| Education or Promotional Programs for Drivers | <input type="checkbox"/> |
| Education or Promotional Programs for Cyclists | <input type="checkbox"/> |

Other (please specify)

A-2: Survey Results

Table A-1: Survey Question 1

Why do you bike? (check all that apply)

| Answer Options | Response Percent | Response Count |
|------------------------------|--------------------------|----------------|
| For exercise/ health reasons | 92% | 1007 |
| For pleasure | 84% | 918 |
| For shopping/errands | 38% | 421 |
| To get to work | 54% | 587 |
| To get to school | 11% | 115 |
| To get to transit | 15% | 165 |
| I don't bike | 1% | 9 |
| Other (please specify) | 6% | 66 |
| | <i>answered question</i> | 1094 |
| | <i>skipped question</i> | 3 |

Table A-2: Survey Question 2

How many days per week do you ride?

| Answer Options | Response Percent | Response Count |
|-----------------|--------------------------|----------------|
| 0 days per week | 1% | 14 |
| 1 day per week | 8% | 88 |
| 2 days per week | 14% | 153 |
| 3 days per week | 24% | 261 |
| 4 days per week | 20% | 214 |
| 5 days per week | 18% | 196 |
| 6 days per week | 7% | 74 |
| 7 days per week | 8% | 88 |
| | <i>answered question</i> | 1088 |
| | <i>skipped question</i> | 9 |

Table A-3: Survey Question 4

What is the average distance of your rides? (one-way)

| Answer Options | Response Percent | Response Count |
|--------------------|--------------------------|----------------|
| Under 2 miles | 6% | 67 |
| 3-5 miles | 15% | 165 |
| 6-10 miles | 27% | 294 |
| 11-24 miles | 34% | 366 |
| 25 miles and above | 18% | 195 |
| | <i>answered question</i> | 1087 |
| | <i>skipped question</i> | 10 |

Table A-4: Survey Question 6

What prevents you from biking more often? (check all that apply)

| Answer Options | Response Percent | Response Count |
|-------------------------------------|--------------------------|----------------|
| Destinations are too far away | 20% | 216 |
| Too many cars / cars drive too fast | 53% | 577 |
| Drivers don't share the road | 53% | 571 |
| I travel with small children | 5% | 58 |
| No bike paths, lanes or bike routes | 58% | 623 |
| I have to carry things | 16% | 170 |
| Not enough time | 26% | 283 |
| Insufficient lighting | 11% | 115 |
| Bikeways/roads in poor condition | 30% | 320 |
| Weather | 10% | 109 |
| Other (please specify) | 20% | 221 |
| | <i>answered question</i> | 1081 |
| | <i>skipped question</i> | 16 |

Table A-5: Survey Question 8

Please rank your preference for bicycle facilities, on a scale of 1 to 4 (1 being most preferred and 4 being least preferred)

| Answer Options | 1 Most Preferred | 2 | 3 | 4 Least Preferred | Response Count |
|------------------------------|------------------|-----|-----|--------------------------|----------------|
| Off-street paved bike paths | 69% | 20% | 8% | 3% | 1077 |
| On-street bike lanes | 32% | 41% | 16% | 10% | 1074 |
| Bike routes | 20% | 27% | 33% | 20% | 1066 |
| Unpaved trails or dirt paths | 21% | 19% | 17% | 43% | 1058 |
| | | | | <i>answered question</i> | 1084 |
| | | | | <i>skipped question</i> | 13 |

Table A-6: Survey Question 9

Would the following improvements influence you to bike more often? (Please rate each improvement by likelihood of influencing you to bike more often)

| Answer Options | Very Likely | Likely | Somewhat Likely | Not Very Likely | Unlikely | No | Not Sure | Response Count |
|---|-------------|--------|-----------------|-----------------|----------|----|--------------------------|----------------|
| More Bike Lanes (Separate Lanes for bikes) on Major Streets | 67% | 19% | 8% | 3% | 1% | 2% | 0% | 1071 |
| More Bike Routes | 46% | 22% | 18% | 8% | 3% | 3% | 1% | 1058 |
| More Paved (off-street) Bike Paths | 70% | 13% | 10% | 3% | 2% | 1% | 0% | 1062 |
| Increased Maintenance (sweeping/repairs to bike lanes, routes, paths, and landscape trimming, etc.) | 41% | 25% | 22% | 8% | 2% | 2% | 1% | 1055 |
| Widen Outside/Curb Lanes on Major Streets (easier to share lanes with cars) | 51% | 25% | 16% | 4% | 2% | 2% | 0% | 1056 |
| More On-Road Bike Signage | 29% | 18% | 23% | 17% | 8% | 4% | 1% | 1040 |
| More Bicycle Parking | 28% | 17% | 22% | 17% | 9% | 6% | 2% | 1023 |
| Education or Promotional Programs for Drivers | 36% | 18% | 18% | 13% | 8% | 5% | 2% | 1044 |
| Education or Promotional Programs for Cyclists | 27% | 19% | 19% | 18% | 10% | 6% | 2% | 1035 |
| | | | | | | | Other (please specify) | 191 |
| | | | | | | | <i>answered question</i> | 1080 |
| | | | | | | | <i>skipped question</i> | 17 |

A-3: User Estimation Method

This section explains the method for estimating the current and potential number of bicycle commuters in Orange County municipalities. Census data, in combination with national commuting statistics from the 2001 National Household Travel Survey (NHTS) and EPA estimates of standard emissions rates for cars, give a rough projection of future bicycle ridership within Orange County, along with trip reduction and air quality benefits.

Calculations for each city in Orange County are included in this Plan to meet Caltrans Bicycle Transportation Account requirements (a) to provide “the estimated number of existing bicycle commuters in the Plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the Plan.”

According to the National Household Travel Survey (NHTS), the average work commute time has remained close to 20 minutes since 1983. In 2001, averaging all modes, the commute time was 23 minutes. Assuming an average speed of 10 miles per hour, a cyclist traveling for 23 minutes covers approximately four miles, which would be equivalent to a 9-minute motor vehicle trip (traveling at about 30 mph).

Using this data as a baseline allows assumptions to be made about prospective and current bicycle ridership in Orange County. Estimates are provided in each municipality’s respective section in chapter 3 of this document.

A-4: Orange County Existing & Proposed Bikeway Maps

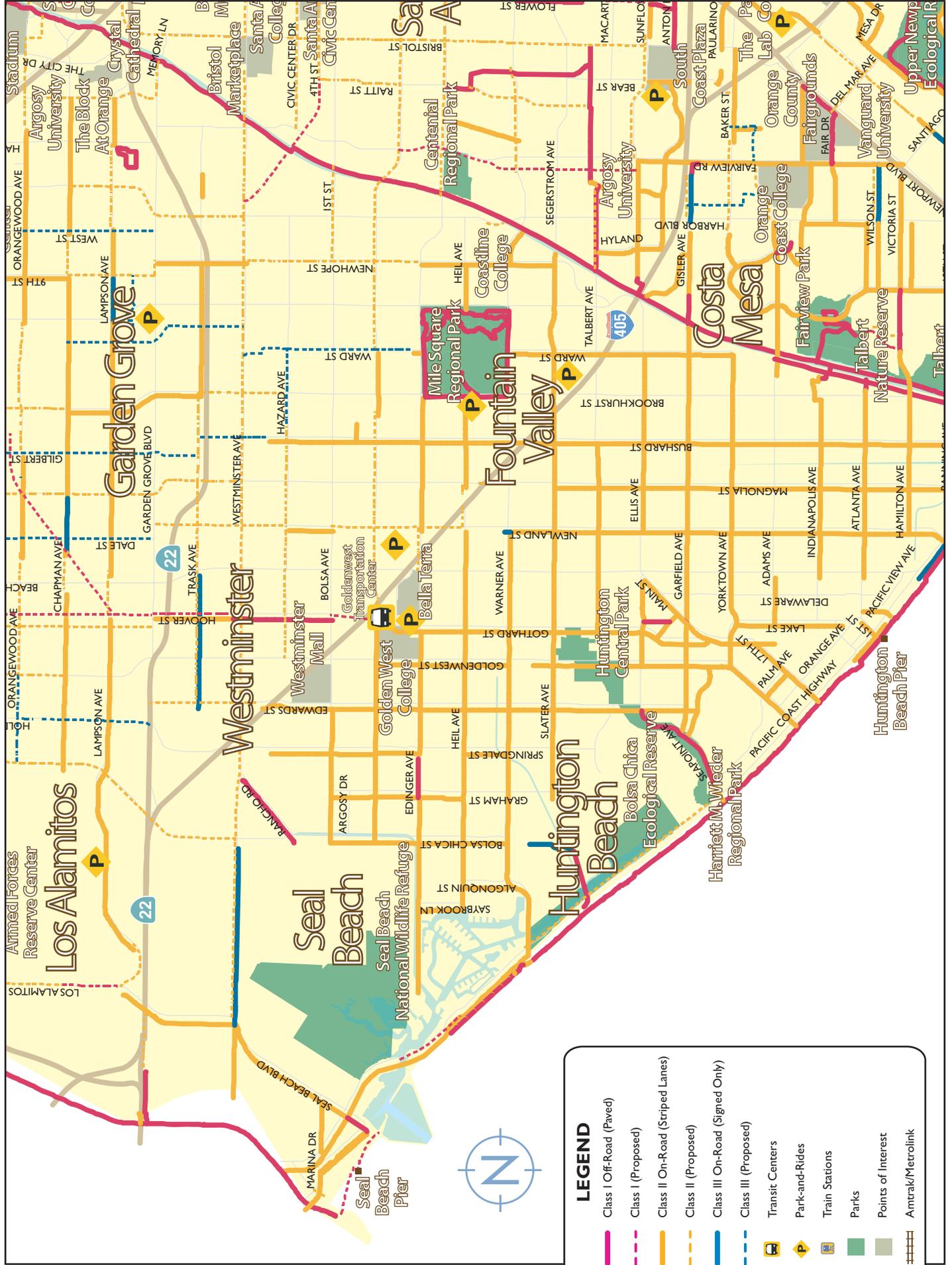
The proposed bikeways map reflects current, locally-adopted plans and programs and does not consider concurrent and future planning efforts. The City of Fullerton is currently in the process of updating General Plans and other policy programs that will influence future amendments in this Section.



Orange County Bikeways Map / Section 3

(to section 1)

(to section 4)



LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink

(to section 6)

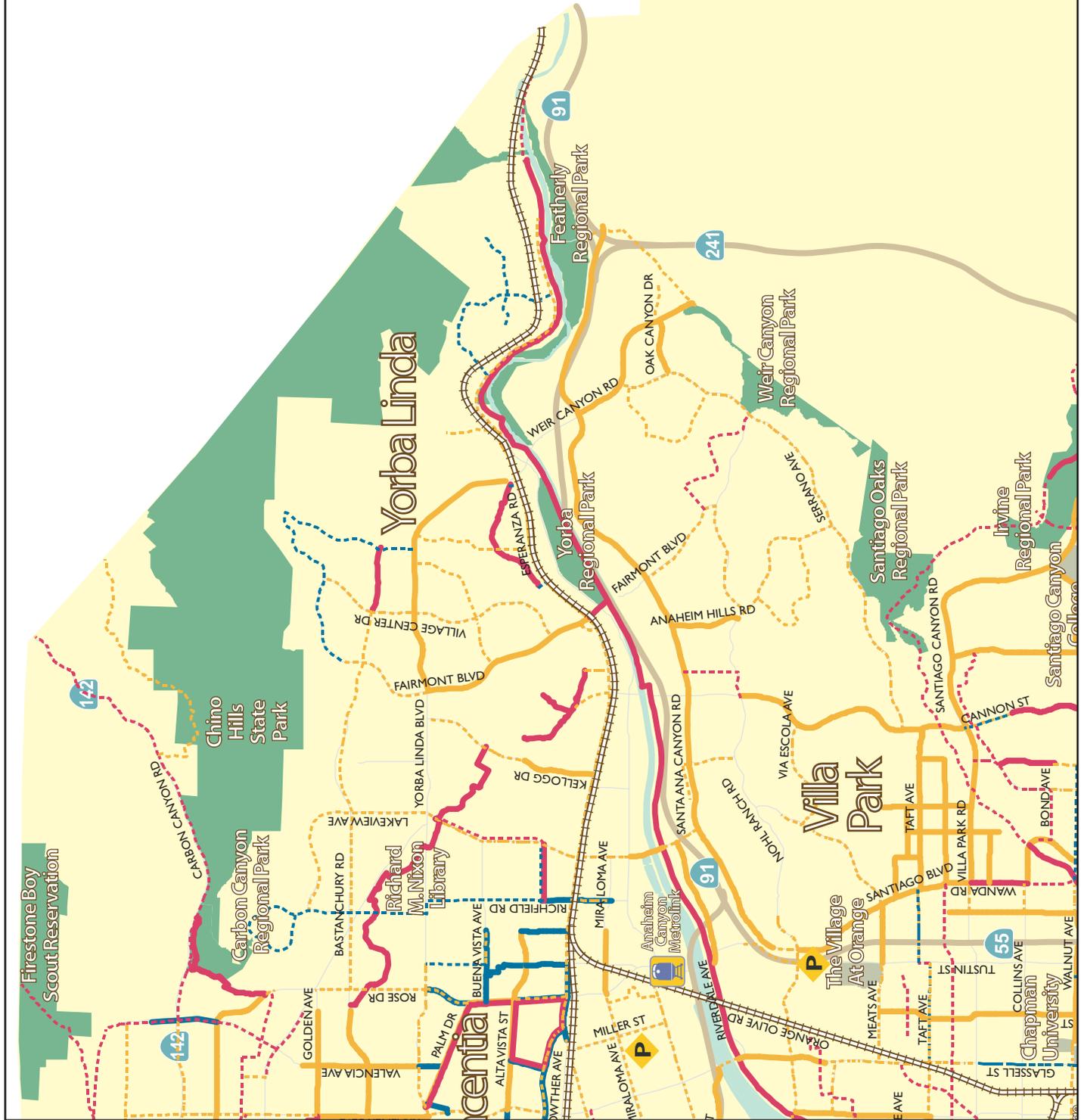


Orange County Bikeways Map / Section 2



LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink



(to section 1)

(to section 4 & 5)

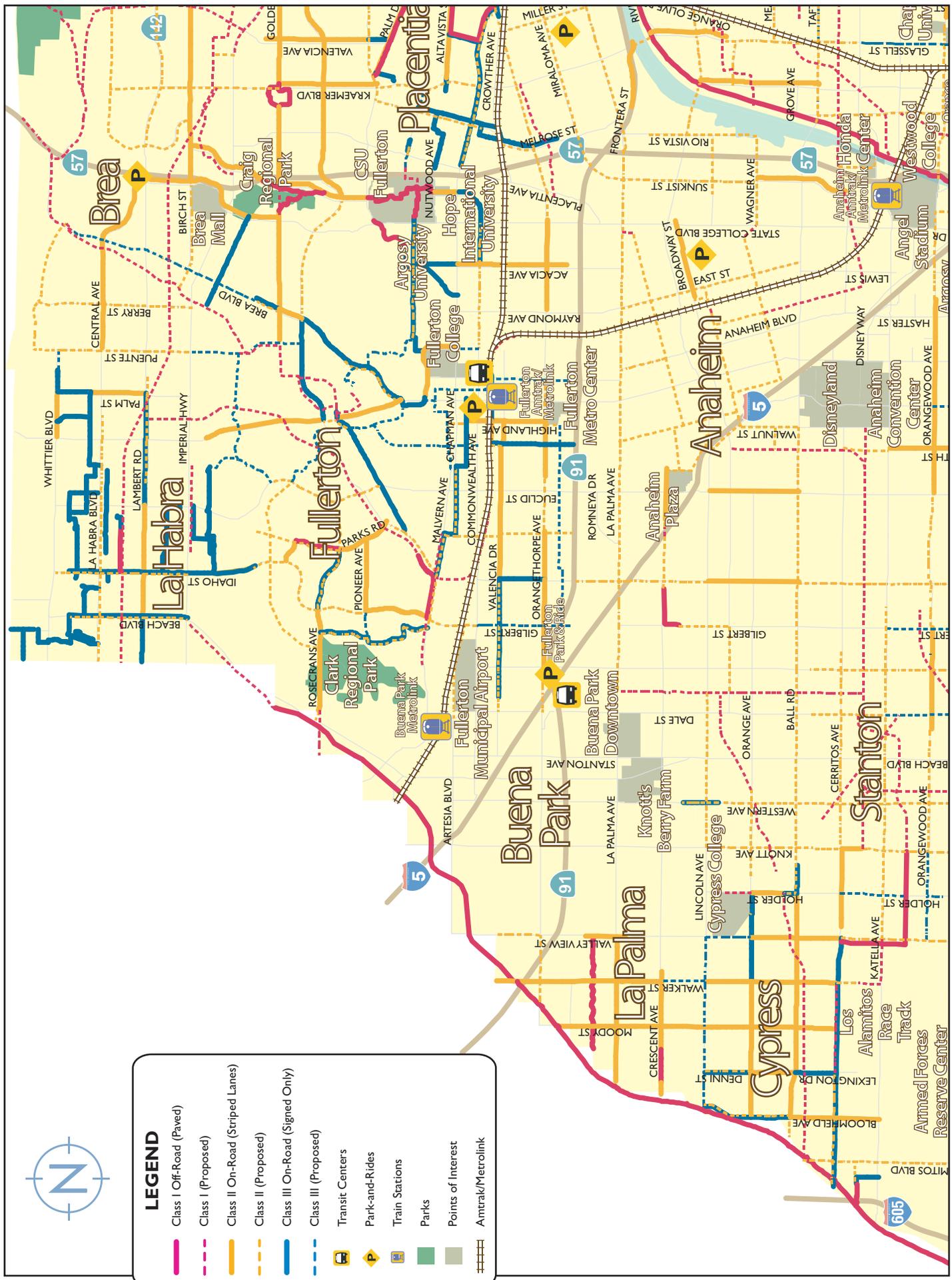


Orange County Bikeways Map / Section I



LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink



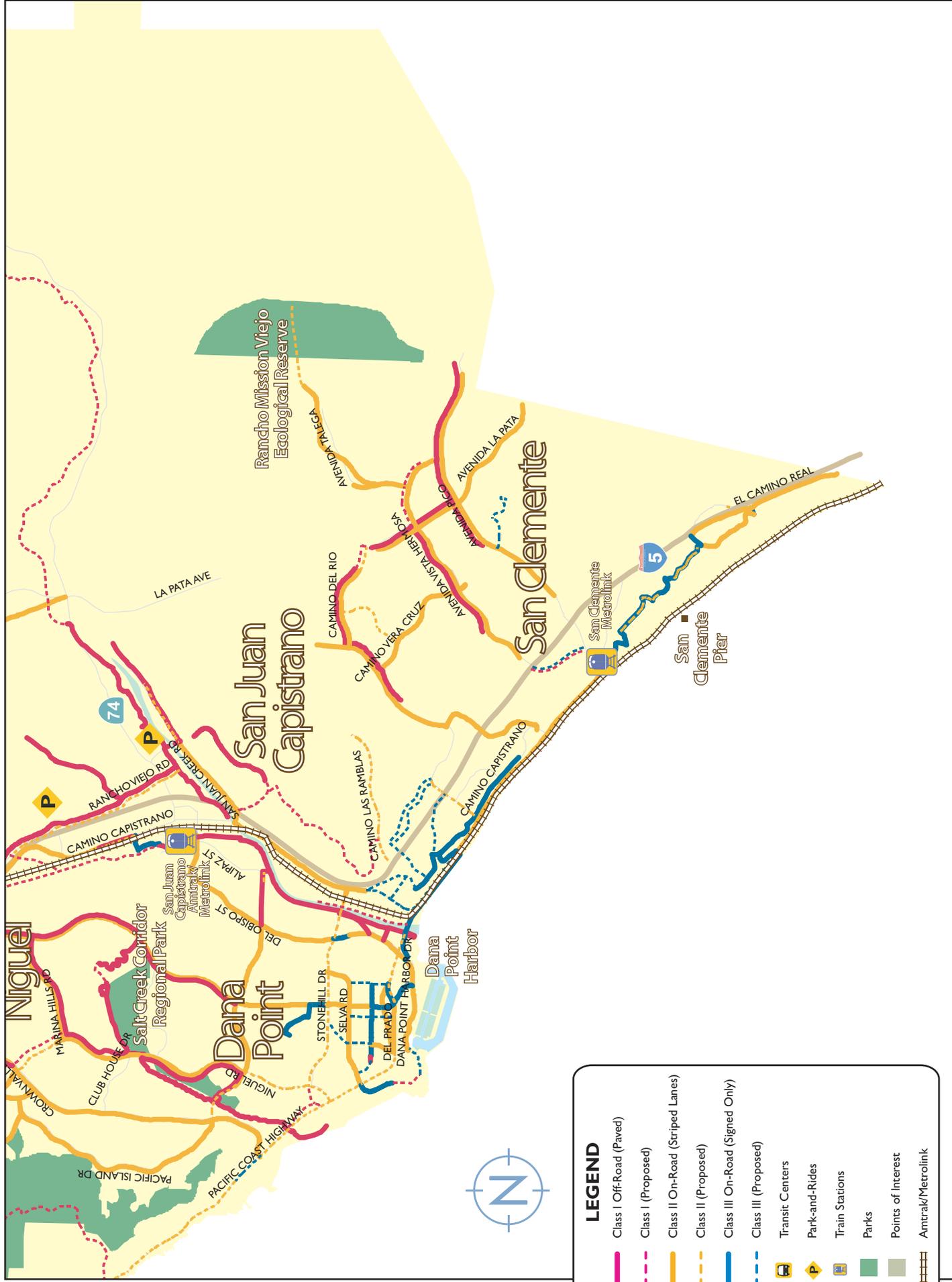
(to section 2)

(to section 3 & 4)



Orange County Bikeways Map / Section 8

(to section 7)



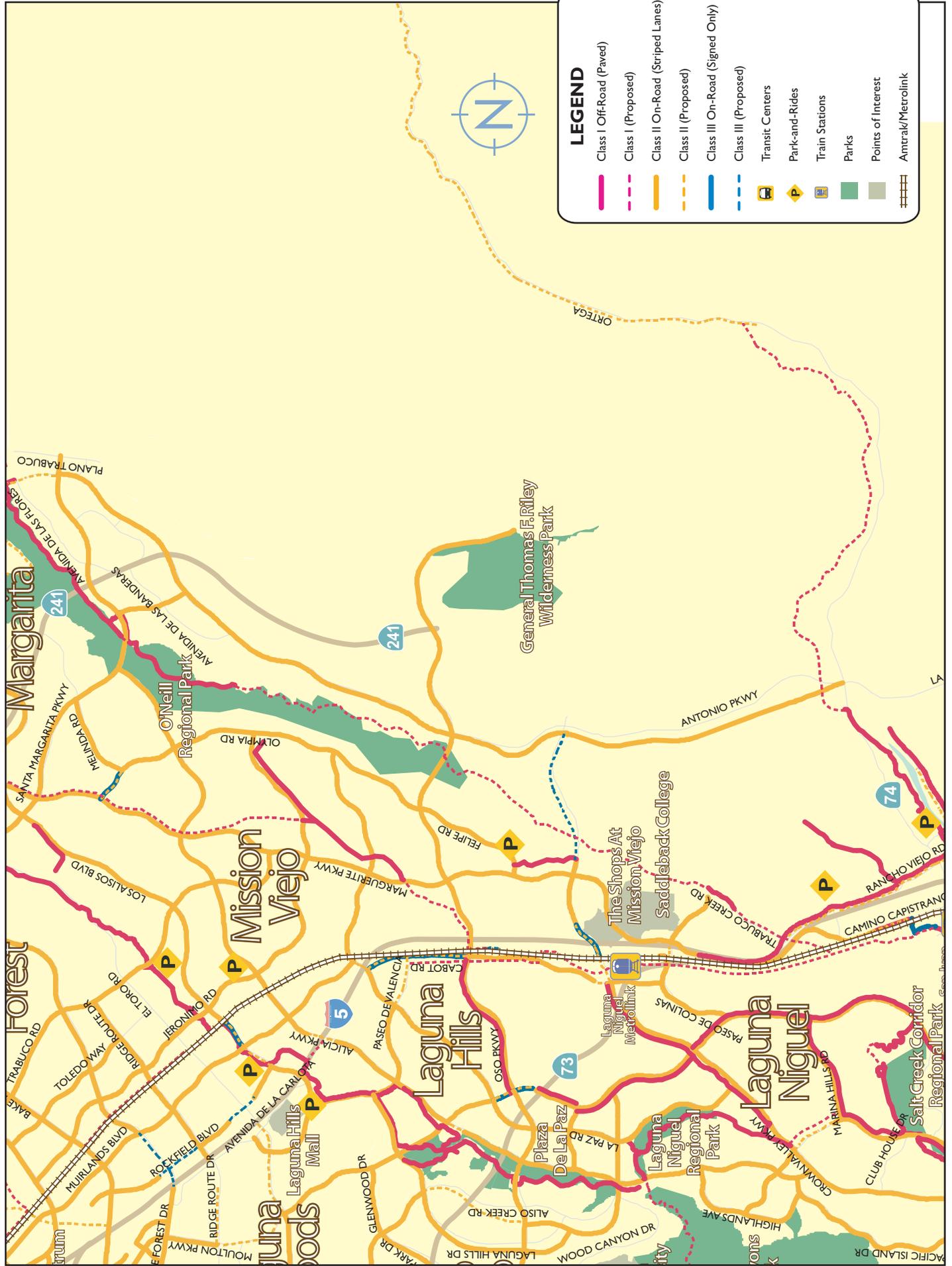
LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink



Orange County Bikeways Map / Section 7

(to section 5)



(to section 6)

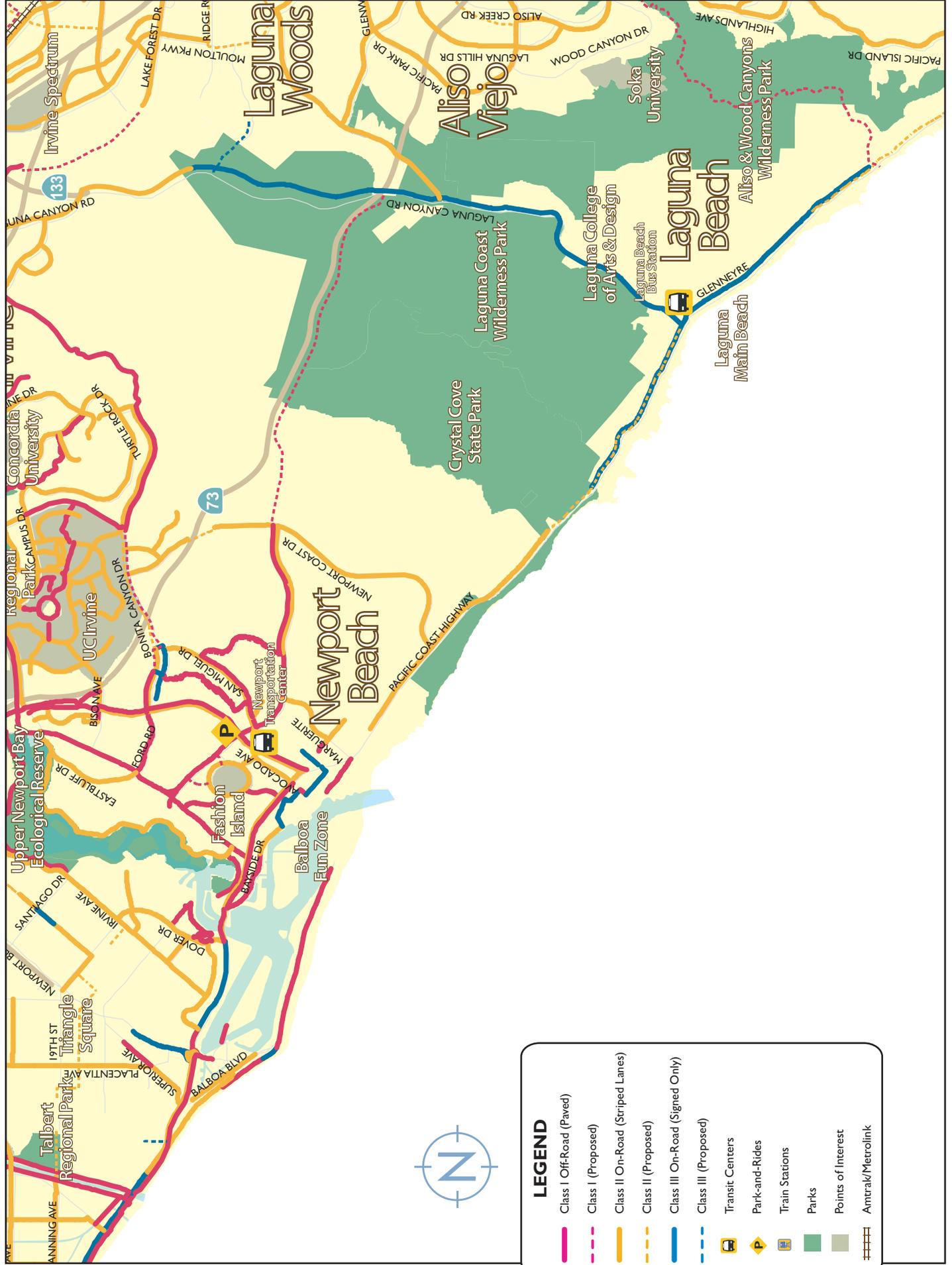
(to section 8)



Orange County Bikeways Map / Section 6

(to section 3 & 4)

(to section 7)



LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink



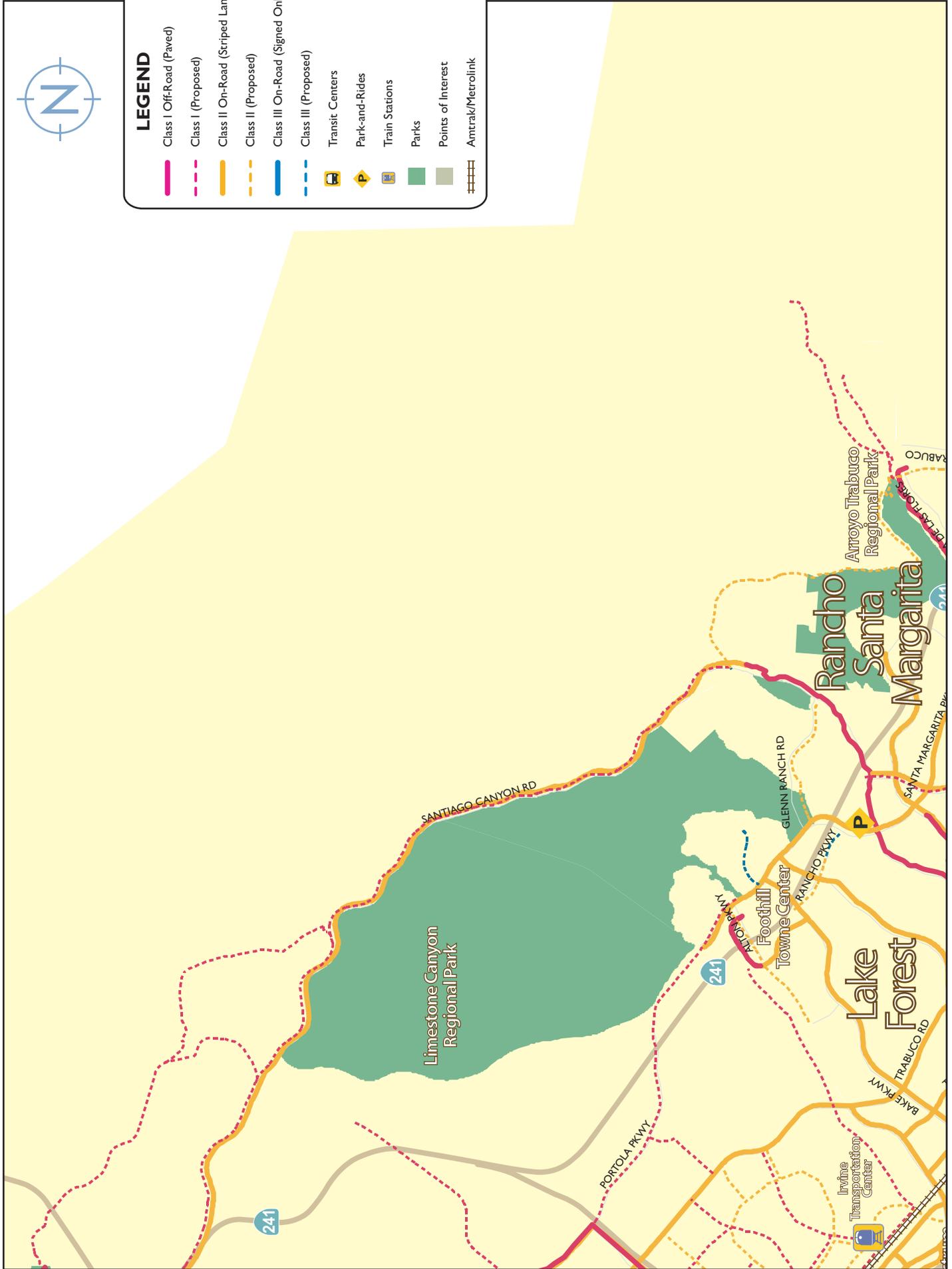
Orange County Bikeways Map / Section 5

(to section 2)



LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink



(to section 4)

(to section 7)

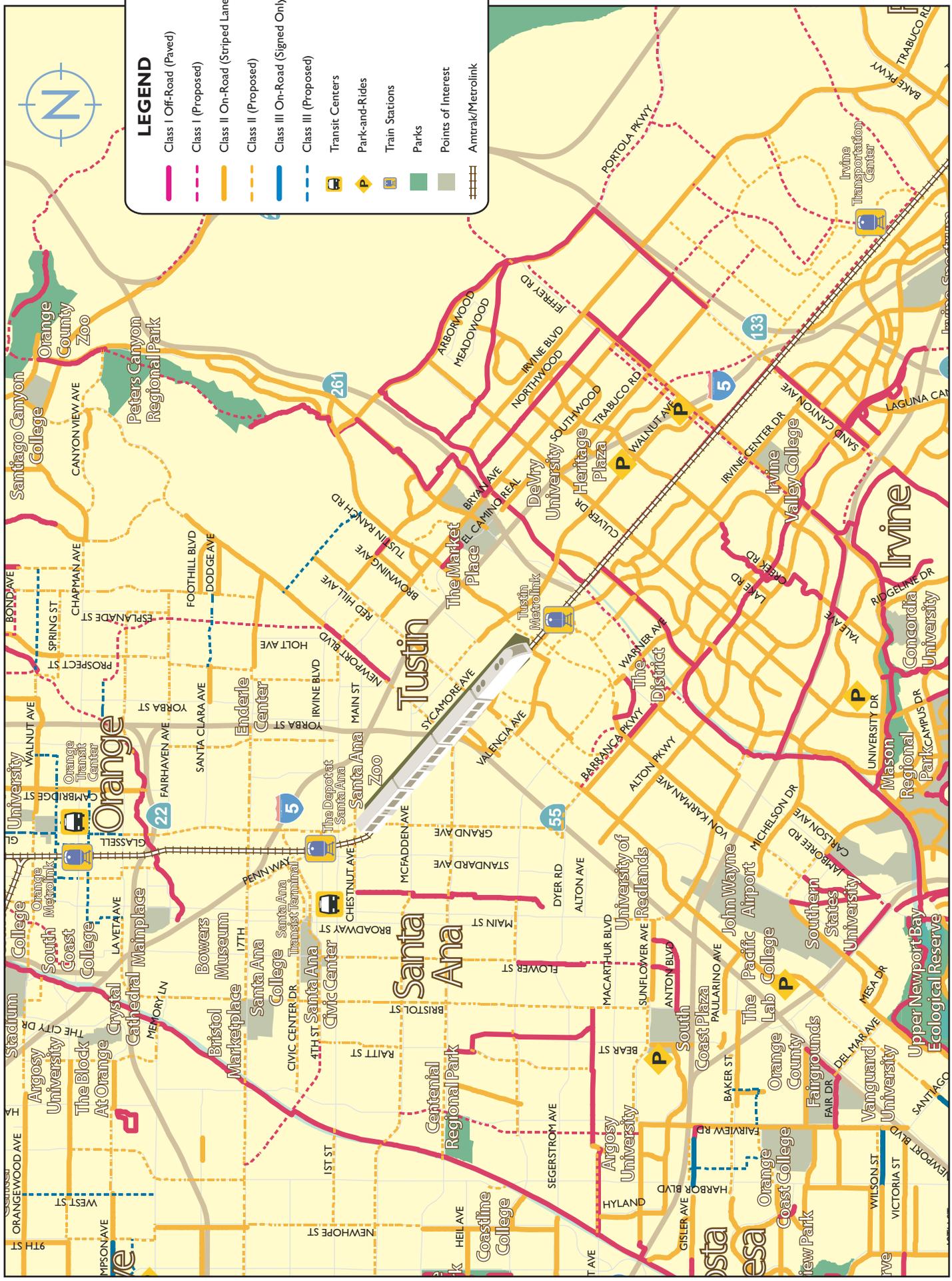


Orange County Bikeways Map / Section 4

(to section 1 & 2)

(to section 3)

(to section 6)



LEGEND

- Class I Off-Road (Paved)
- Class I (Proposed)
- Class II On-Road (Striped Lanes)
- Class II (Proposed)
- Class III On-Road (Signed Only)
- Class III (Proposed)
- Transit Centers
- Park-and-Rides
- Train Stations
- Parks
- Points of Interest
- Amtrak/Metrolink

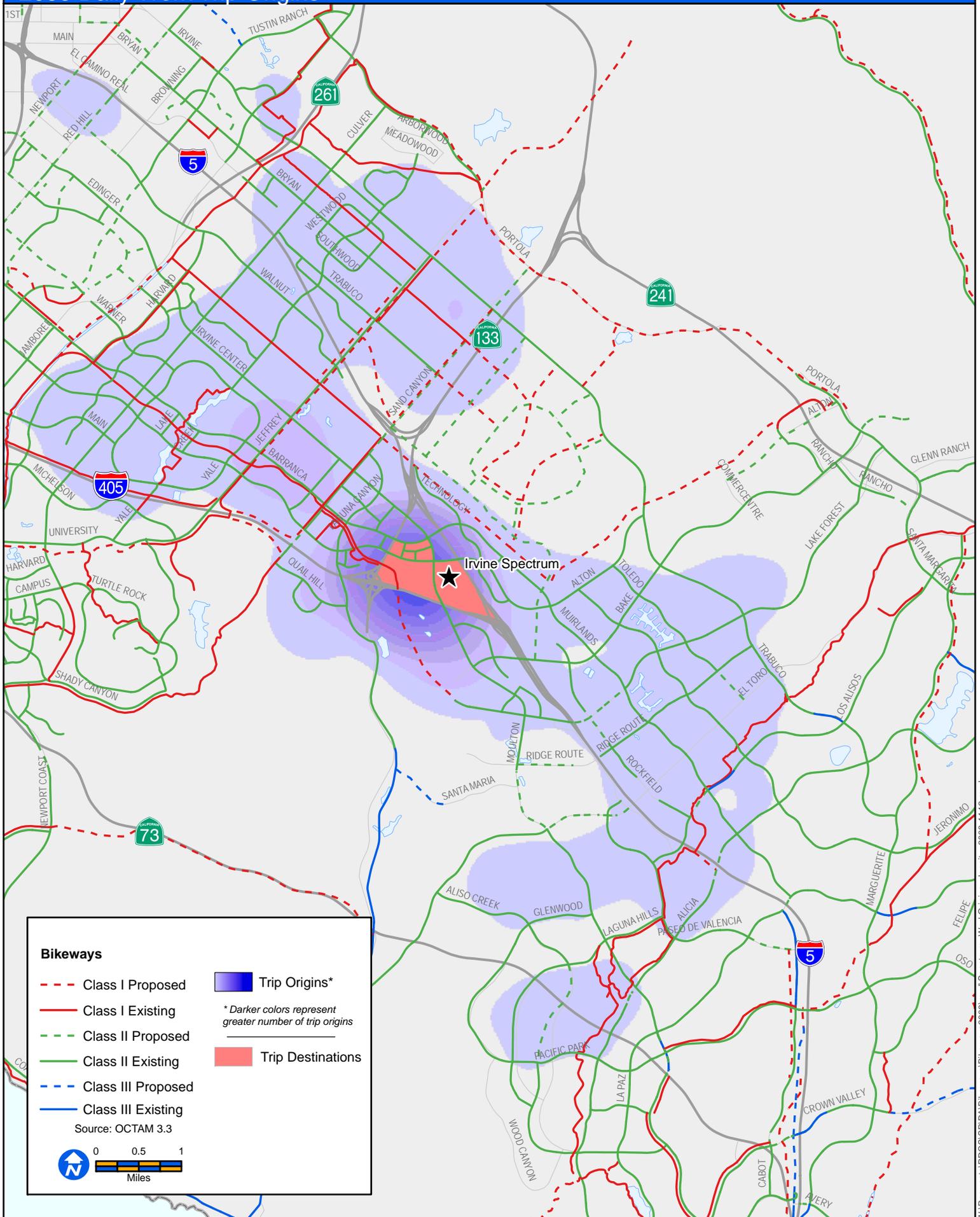


(to section 5)

A-5: Destination Demand Maps

Irvine Spectrum Area

2035 Daily Work Trip Origins



Bikeways

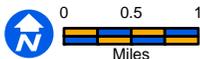
- - - Class I Proposed
- Class I Existing
- - - Class II Proposed
- Class II Existing
- - - Class III Proposed
- Class III Existing

Trip Origins*

* Darker colors represent greater number of trip origins

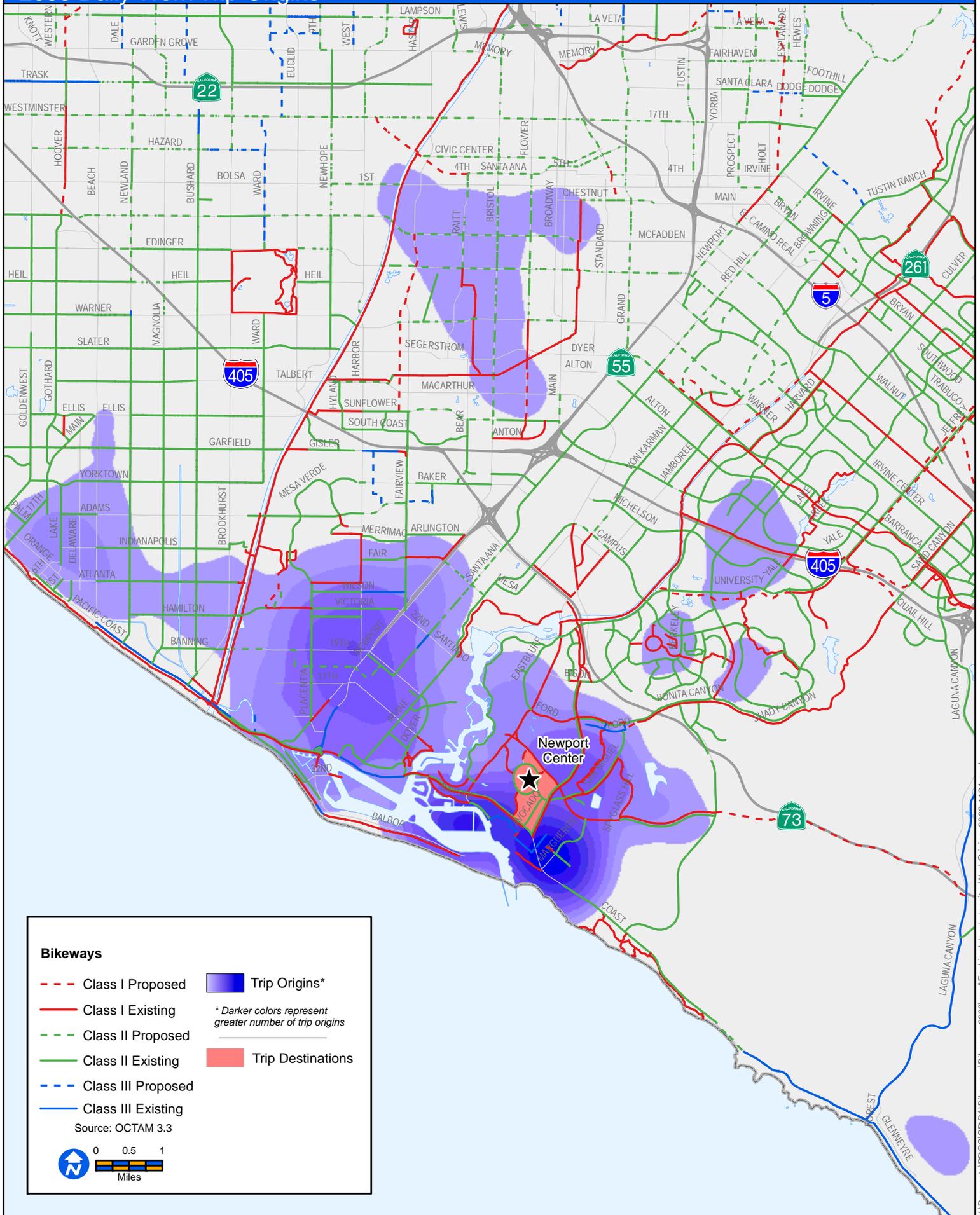
Trip Destinations

Source: OCTAM 3.3



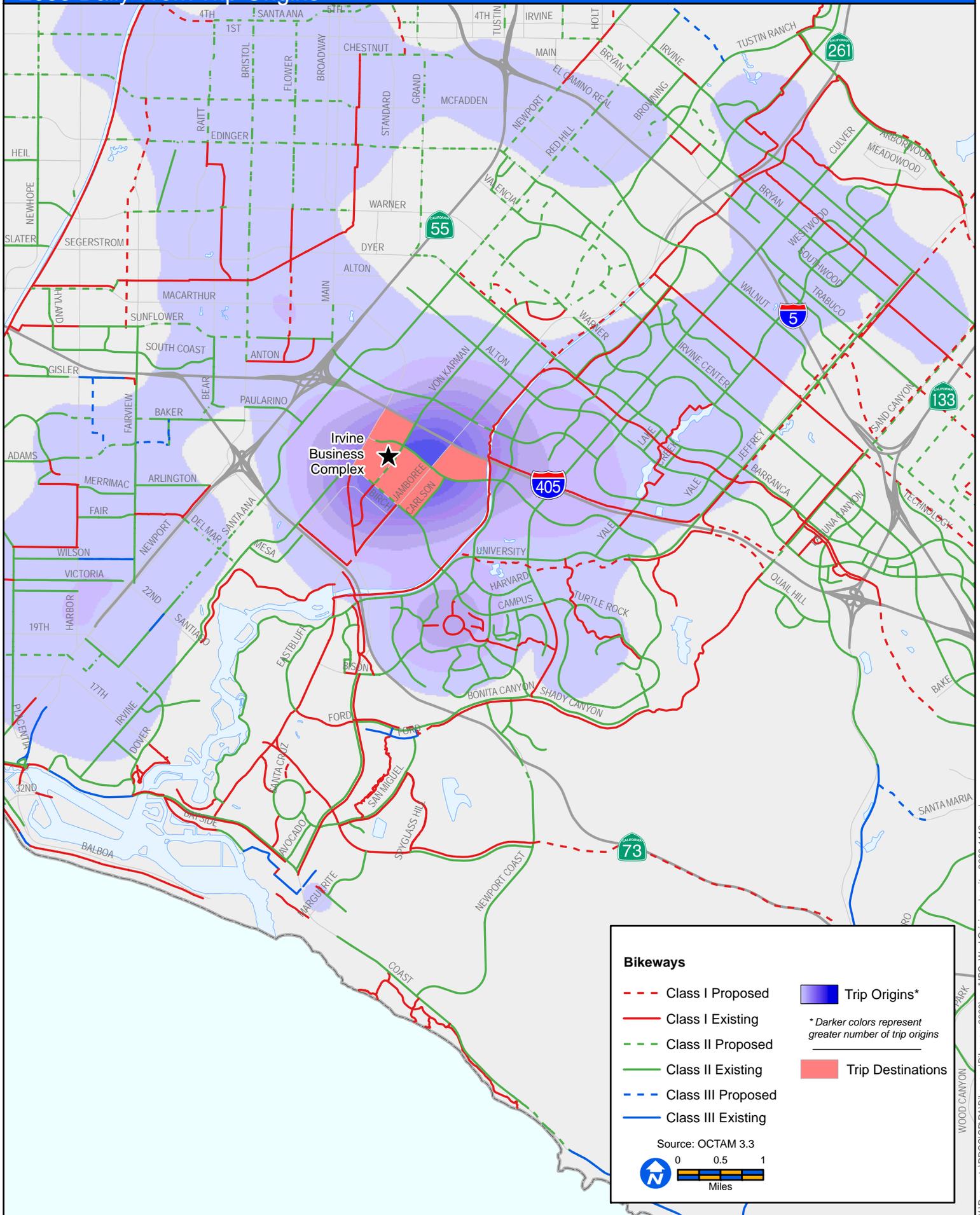
Newport Center

2035 Daily Work Trip Origins



Irvine Business Complex

2035 Daily Work Trip Origins



Bikeways

- - - Class I Proposed
- Class I Existing
- - - Class II Proposed
- Class II Existing
- - - Class III Proposed
- Class III Existing

Trip Origins*

** Darker colors represent greater number of trip origins*

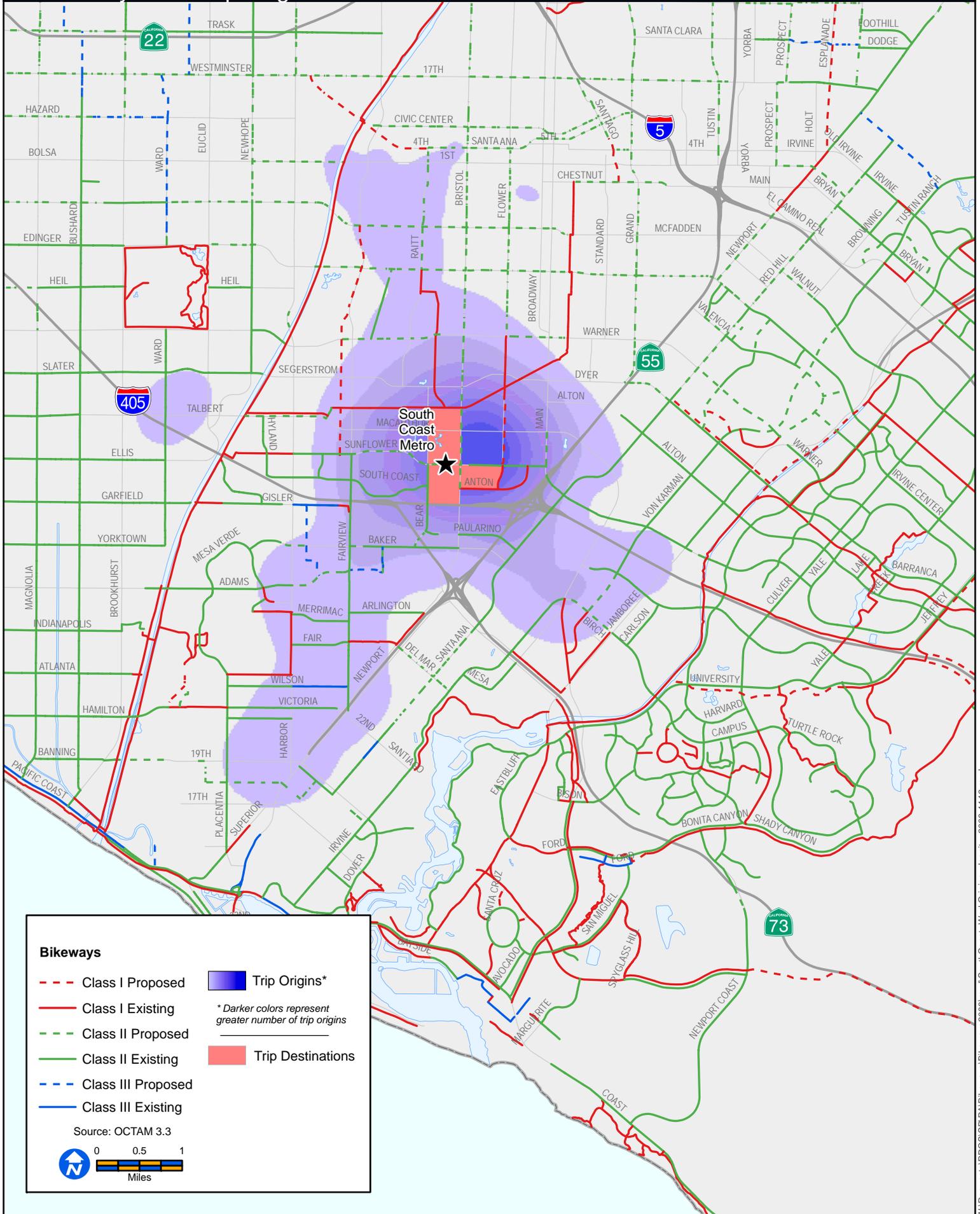
Trip Destinations

Source: OCTAM 3.3

0 0.5 1 Miles

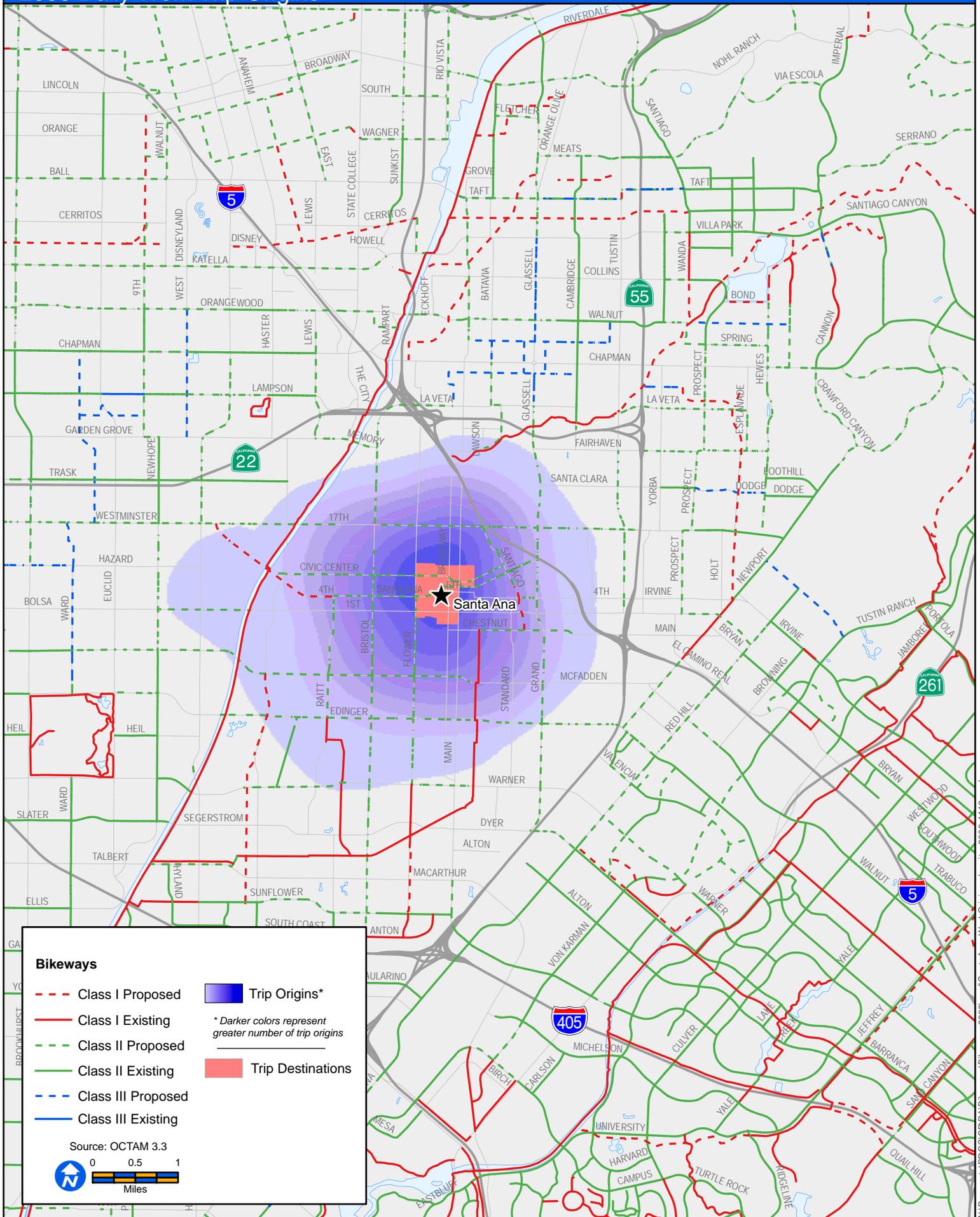
South Coast Metro Area

2035 Daily Work Trip Origins



Downtown Santa Ana

2035 Daily Work Trip Origins



Bikeways

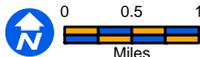
- - - Class I Proposed
- Class I Existing
- - - Class II Proposed
- Class II Existing
- - - Class III Proposed
- Class III Existing

 Trip Origins*

* Darker colors represent greater number of trip origins

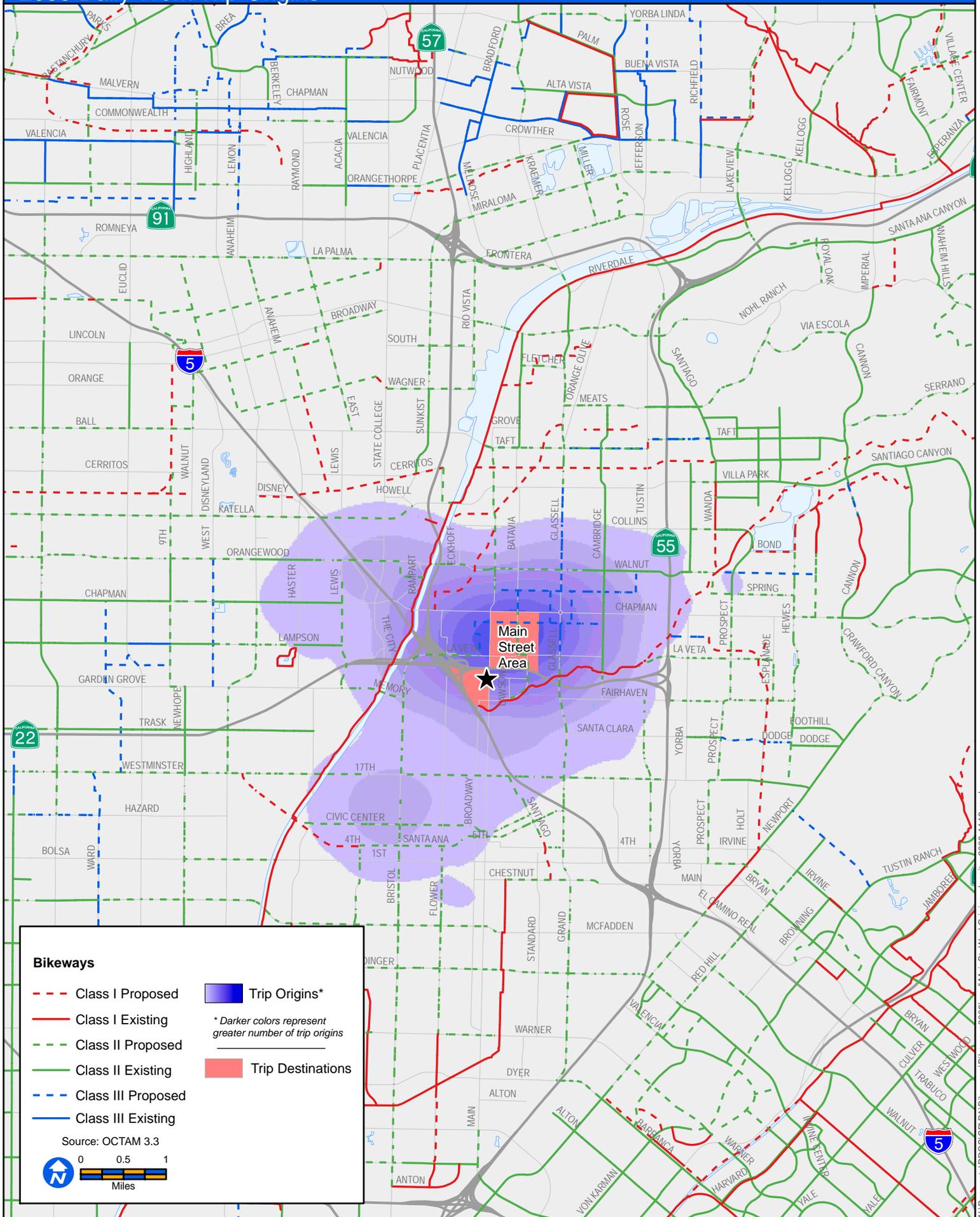
 Trip Destinations

Source: OCTAM 3.3



Main Street Area (Santa Ana / Orange)

2035 Daily Work Trip Origins



Bikeways

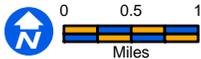
- - - Class I Proposed
- Class I Existing
- - - Class II Proposed
- Class II Existing
- - - Class III Proposed
- Class III Existing

Trip Origins*

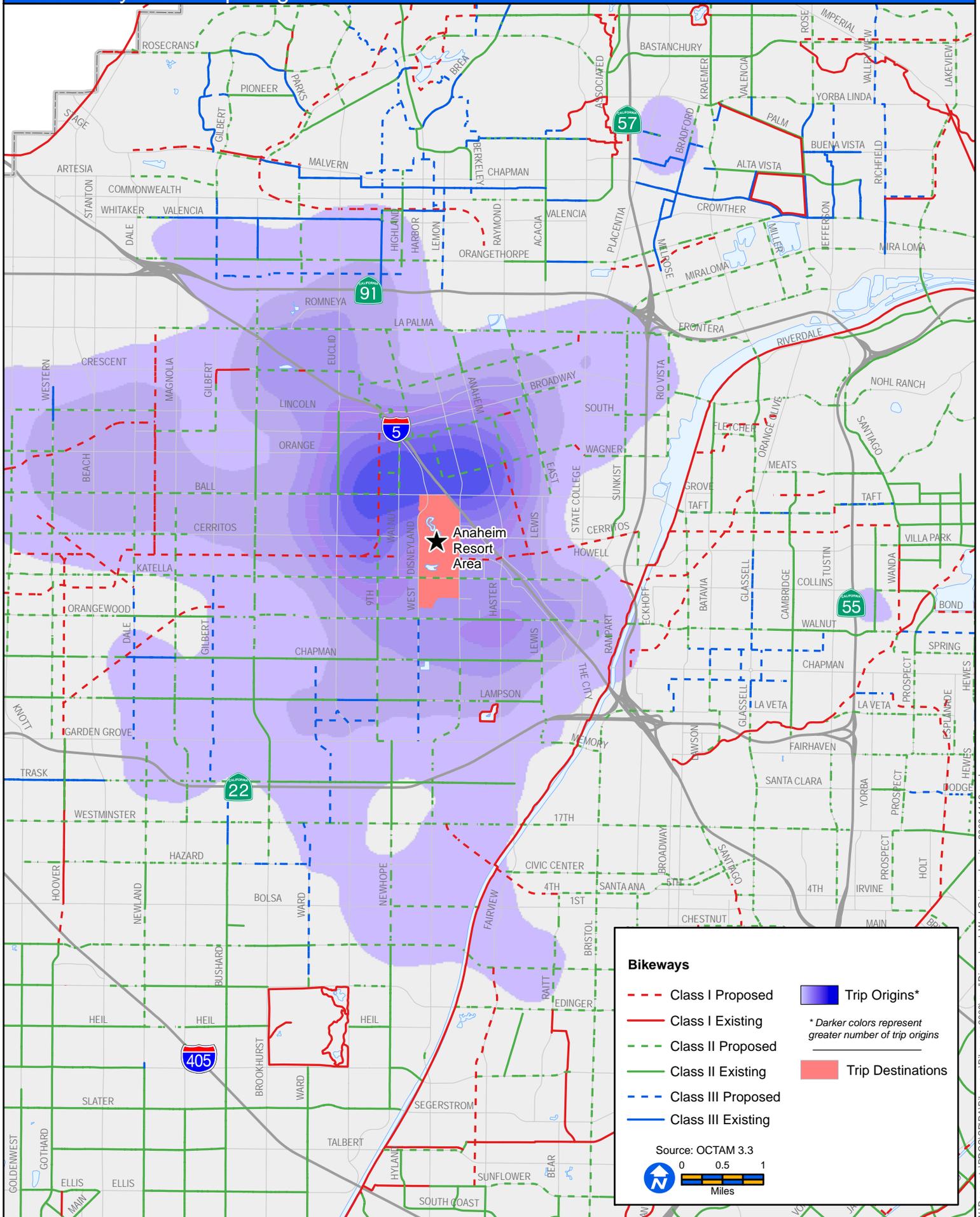
* Darker colors represent greater number of trip origins

Trip Destinations

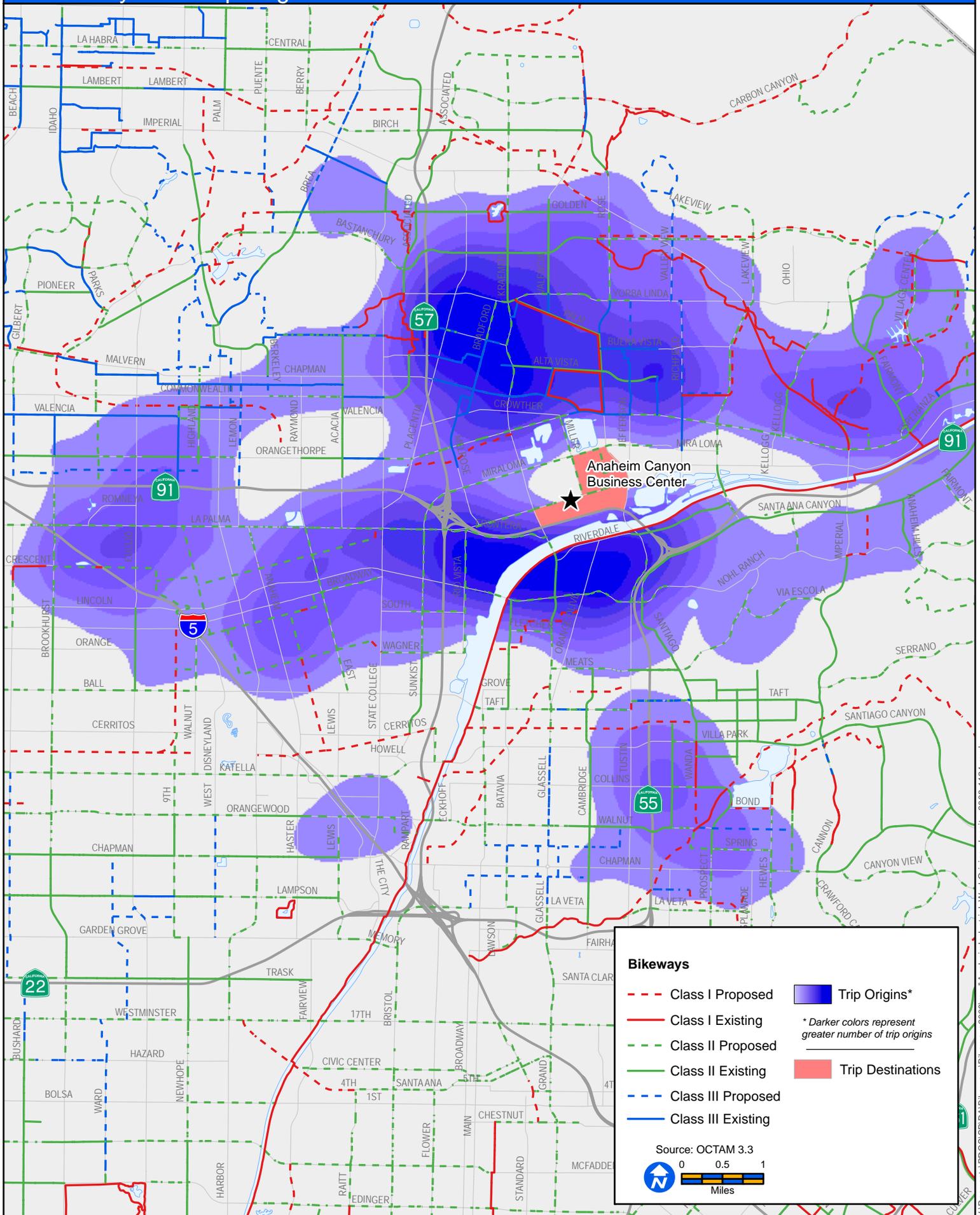
Source: OCTAM 3.3



Anaheim Resort Area 2035 Daily Work Trip Origins

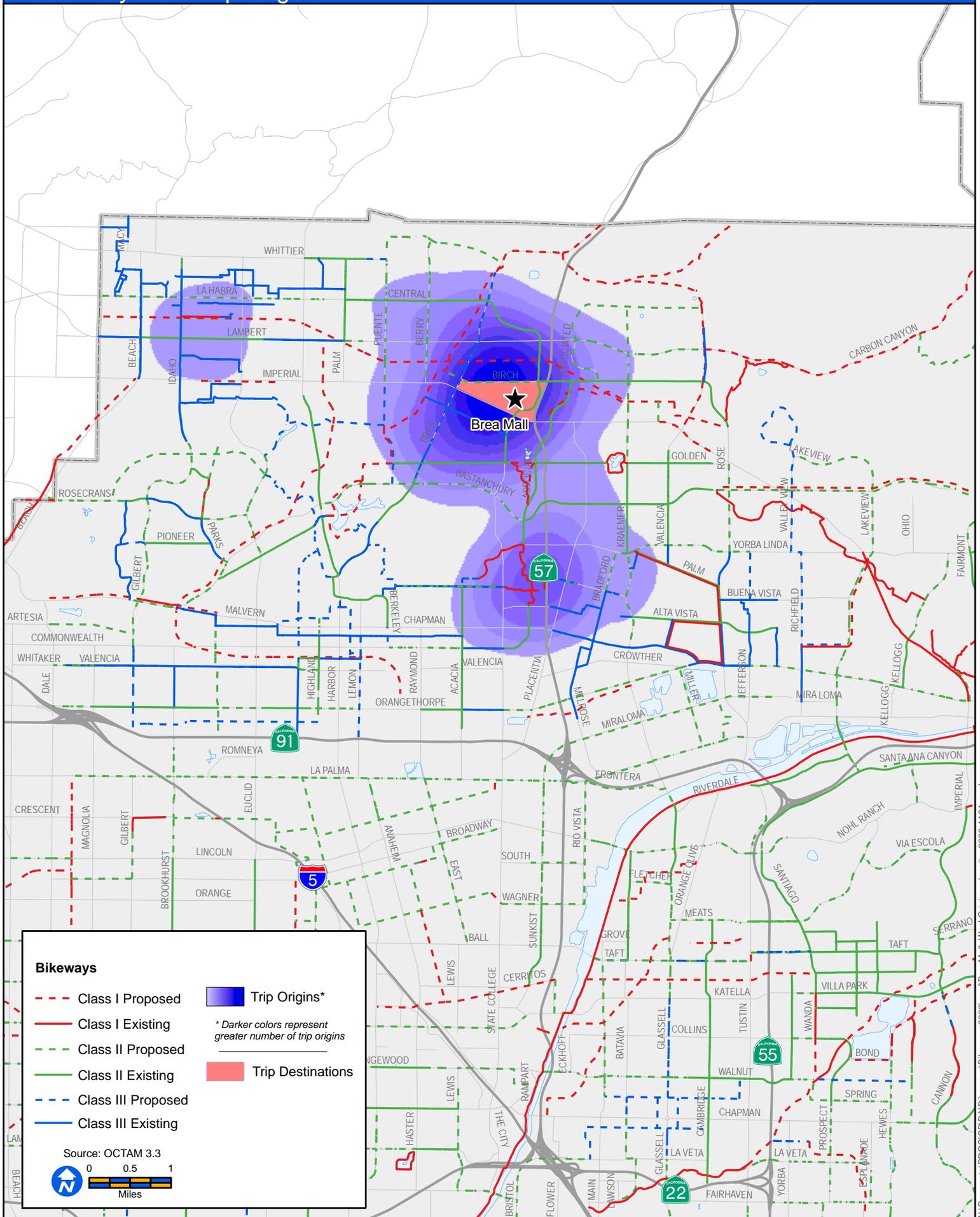


Anaheim Canyon Business Center 2035 Daily Work Trip Origins



Brea Mall

2035 Daily Work Trip Origins



A-6: Caltrans Deputy Directive 64

Deputy Directive

Number: DD-64-R1

*Refer to
Director's Policy:* DP-22
Context Sensitive
Solutions
DP-05
Multimodal Alternatives
DP-06
Caltrans Partnerships
DP-23-R1
Energy Efficiency,
Conservation and Climate
Change

Effective Date: October 2008

Supersedes: DD-64 (03-26-01)

TITLE Complete Streets - Integrating the Transportation System

POLICY

The California Department of Transportation (Department) provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State highway system. The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.

The Department develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian, and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations. Developing a network of "complete streets" requires collaboration among all Department functional units and stakeholders to establish effective partnerships.

DEFINITIONS/BACKGROUND

Complete Street – A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility.

The intent of this directive is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of “complete streets.”

State and federal laws require the Department and local agencies to promote and facilitate increased bicycling and walking. California Vehicle Code (CVC) (Sections 21200-21212), and Streets and Highways Code (Sections 890 – 894.2) identify the rights of bicyclists and pedestrians, and establish legislative intent that people of all ages using all types of mobility devices are able to travel on roads. Bicyclists, pedestrians, and nonmotorized traffic are permitted on all State facilities, unless prohibited (CVC, section 21960). Therefore, the Department and local agencies have the duty to provide for the safety and mobility needs of all who have legal access to the transportation system.

Department manuals and guidance outline statutory requirements, planning policy, and project delivery procedures to facilitate multimodal travel, which includes connectivity to public transit for bicyclists and pedestrians. In many instances, roads designed to Department standards provide basic access for bicycling and walking. This directive does not supersede existing laws. To ensure successful implementation of “complete streets,” manuals, guidance, and training will be updated and developed.

RESPONSIBILITIES

Chief Deputy Director:

- Establishes policy consistent with the Department’s objectives to develop a safe and efficient multimodal transportation system for all users.
- Ensures management staff is trained to provide for the needs of bicyclists, pedestrians, and transit users.

Deputy Directors, Planning and Modal Programs and Project Delivery:

- Include bicycle, pedestrian, and transit modes in statewide strategies for safety and mobility, and in system performance measures.
- Provide tools and establish processes to identify and address the needs of bicyclists, pedestrians, and transit users early and continuously throughout planning and project development activities.
- Ensure districts document decisions regarding bicycle, pedestrian, and transit modes in project initiation and scoping activities.
- Ensure Department manuals, guidance, standards, and procedures reflect this directive, and identify and explain the Department’s objectives for multimodal travel.
- Ensure an Implementation Plan for this directive is developed.

Deputy Director, Maintenance and Operations:

- Provides tools and establishes processes that ensure regular maintenance and operations activities meet the safety and mobility needs of bicyclists, pedestrians, and transit users in construction and maintenance work zones, encroachment permit work, and system operations.
- Ensures Department manuals, guidance, standards, and procedures reflect this directive and identifies and explains the Department's objectives for multimodal travel.

District Directors:

- Promote partnerships with local, regional, and State agencies to plan and fund facilities for integrated multimodal travel and to meet the needs of all travelers.
- Identify bicycle and pedestrian coordinator(s) to serve as advisor(s) and external liaison(s) on issues that involve the district, local agencies, and stakeholders.
- Ensure bicycle, pedestrian, and transit needs are identified in district system planning products; addressed during project initiation; and that projects are designed, constructed, operated, and maintained using current standards.
- Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams.
- Provide documentation to support decisions regarding bicycle, pedestrian, and transit modes in project initiation and scoping activities.

Deputy District Directors, Planning, Design, Construction, Maintenance, and Operations:

- Ensure bicycle, pedestrian, and transit user needs are addressed and deficiencies identified during system and corridor planning, project initiation, scoping, and programming.
- Collaborate with local and regional partners to plan, develop, and maintain effective bicycle, pedestrian, and transit networks.
- Consult locally adopted bicycle, pedestrian, and transit plans to ensure that State highway system plans are compatible.
- Ensure projects are planned, designed, constructed, operated, and maintained consistent with project type and funding program to provide for the safety and mobility needs of all users with legal access to a transportation facility.
- Implement current design standards that meet the needs of bicyclists, pedestrians, and transit users in design, construction and maintenance work zones, encroachment permit work, and in system operations.
- Provide information to staff, local agencies, and stakeholders on available funding programs addressing bicycle, pedestrian, and transit travel needs.

Chiefs, Divisions of Aeronautics, Local Assistance, Mass Transportation, Rail, Transportation Planning, Transportation System Information, Research and Innovation, and Transportation Programming:

- Ensure incorporation of bicycle, pedestrian, and transit travel elements in all Department transportation plans and studies.
- Support interdisciplinary participation within and between districts in the project development process to provide for the needs of all users.
- Encourage local agencies to include bicycle, pedestrian, and transit elements in regional and local planning documents, including general plans, transportation plans, and circulation elements.
- Promote land uses that encourage bicycle, pedestrian, and transit travel.
- Advocate, partner, and collaborate with stakeholders to address the needs of bicycle, pedestrian, and transit travelers in all program areas.
- Support the development of new technology to improve safety, mobility, and access for bicyclists, pedestrians, and transit users of all ages and abilities.
- Research, develop, and implement multimodal performance measures.
- Provide information to staff, local agencies, and stakeholders on available funding programs to address the needs of bicycle, pedestrian, and transit travelers.

Chiefs, Divisions of Traffic Operations, Maintenance, Environmental Analysis, Design, Construction, and Project Management:

- Provide guidance on project design, operation, and maintenance of work zones to safely accommodate bicyclists, pedestrians, and transit users.
- Ensure the transportation system and facilities are planned, constructed, operated, and maintained consistent with project type and funding program to maximize safety and mobility for all users with legal access.
- Promote and incorporate, on an ongoing basis, guidance, procedures, and product reviews that maximize bicycle, pedestrian, and transit safety and mobility.
- Support multidisciplinary district participation in the project development process to provide for the needs of all users.

Employees:

- Follow and recommend improvements to manuals, guidance, and procedures that maximize safety and mobility for all users in all transportation products and activities.
- Promote awareness of bicycle, pedestrian, and transit needs to develop an integrated, multimodal transportation system.
- Maximize bicycle, pedestrian, and transit safety and mobility through each project's life cycle.

APPLICABILITY

All departmental employees.

Randell H. Iwasaki

RANDELL H. IWASAKI
Chief Deputy Director

October 2, 2008

Date Signed

A-7: USDOT - Accommodating Bicycle and Pedestrian Travel

Accommodating Bicycle and Pedestrian Travel: A Recommended Approach, Policy of the US DOT; full document at <http://www.fhwa.dot.gov/environment/bikeped/design.htm>

Excerpts:

Purpose:

Accommodating Bicycle and Pedestrian Travel: A Recommended Approach is a policy statement adopted by the United States Department of Transportation. USDOT hopes that public agencies, professional associations, advocacy groups, and others adopt this approach as a way of committing themselves to integrating bicycling and walking into the transportation mainstream. The Design Guidance incorporates three key principles:

- a. a policy statement that **bicycling and walking facilities will be incorporated into all transportation projects** unless exceptional circumstances exist;
- b. an approach to achieving this policy that has already worked in State and local agencies; and
- c. a series of action items that a public agency, professional association, or advocacy group can take to achieve the overriding goal of improving conditions for bicycling and walking.

The Policy Statement was drafted by the U.S. Department of Transportation in response to Section 1202 (b) of the Transportation Equity Act for the 21st Century (TEA-21) with the input and assistance of public agencies, professional associations and advocacy groups.

Policy Statement

1. Bicycle and pedestrian ways shall be established in new construction and reconstruction projects in all urbanized areas unless one or more of three conditions are met:

- bicyclists and pedestrians are prohibited by law from using the roadway. In this instance, a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right of way or within the same transportation corridor.
- the cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Excessively disproportionate is defined as exceeding twenty percent of the cost of the larger transportation project.
- where sparsity of population or other factors indicate an absence of need. For example, the Portland Pedestrian Guide requires "all construction of new public streets" to include sidewalk improvements on both sides, unless the street is a cul-de-sac with four or fewer dwellings or the street has severe topographic or natural resource constraints.

2. In rural areas, paved shoulders should be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day, as in States such as Wisconsin. Paved shoulders have safety and operational advantages for all road users in addition to providing a place for bicyclists and pedestrians to operate.

Rumble strips are not recommended where shoulders are used by bicyclists unless there is a minimum clear path of four feet in which a bicycle may safely operate.

3. Sidewalks, shared use paths, street crossings (including over- and undercrossings), pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways shall be designed, constructed, operated and maintained so that all pedestrians, including people with disabilities, can travel safely and independently.

4. The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:

- planning projects for the long-term. Transportation facilities are long-term investments that remain in place for many years. The design and construction of new facilities that meet the criteria in item 1) above should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements. For example, a bridge that is likely to remain in place for 50 years, might be built with sufficient width for safe bicycle and pedestrian use in anticipation that facilities will be available at either end of the bridge even if that is not currently the case
- addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.
- getting exceptions approved at a senior level. Exceptions for the non-inclusion of bikeways and walkways shall be approved by a senior manager and be documented with supporting data that indicates the basis for the decision.
- designing facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used, such as the AASHTO *Guide for the Development of Bicycle Facilities*, AASHTO's *A Policy on Geometric Design of Highways and Streets*, and the ITE Recommended Practice "*Design and Safety of Pedestrian Facilities*".

A-8: OCTA Congestion Management Program

OCTA Congestion Management Program: Transportation Demand Management Requirements

Transportation Demand Management (TDM) strategies are geared toward increasing vehicle occupancy, promoting the use of alternative modes, reducing the number of automobile trips, and decreasing overall trip lengths. The adoption of a TDM ordinance was required of every local jurisdiction for Orange County's 1991 Congestion Management Program (CMP). The ordinances were based on a worksite standards approach contained in a model TDM ordinance prepared by the Orange County Transportation Authority (OCTA).

TDM Ordinances

The model TDM ordinance, prepared by OCTA, aims to promote carpools, vanpools, alternate work hours, park and ride facilities, telecommuting, and other traffic reduction strategies. OCTA updated the model ordinance in 2001 to reflect the adoption of Rule 2202 by the South Coast Air Quality Management District (SCAQMD), which requires employers with 250 or more employees at a worksite to develop an emission reduction program projected to meet an emission reduction target set by the SCAQMD. In 2002, OCTA reviewed jurisdictions' ordinances to ensure conformance with the Rule 2202.

Principal provisions of the TDM model ordinance are as follows:

- applies to non-residential public and private development proposals expected to generate more than 250 employees;
- contains a methodology for determining projected employment for specified land use proposals;
- includes mandatory facility-based development standards (conditions of approval) that apply to proposals that exceed the established employment threshold;
- presents optional provisions for implementing operational TDM programs and strategies that target the property owner or employer, and requires annual reporting on the effectiveness of programs and strategies proposed for facilities;
- contains implementation and monitoring provisions;
- includes enforcement and penalties provisions.

A-9: Local Fair Share Program for Street Maintenance and Improvements



Streets Programs

Local Fair Share Program for Street Maintenance and Improvements

The Local Fair Share Program will provide flexible funding to help cities and the county of Orange pay for the escalating cost of restoring the aging street system. In addition, cities can use these funds for other local transportation needs such as residential street projects, traffic and pedestrian safety near schools, signal priority for emergency vehicles, etc.

City Requirements to Receive Funds

This program is intended to augment, rather than replace, existing transportation expenditures and therefore cities must meet the following requirements to receive the funds:

1. Continue to invest general fund funds (or other local discretionary funds) for transportation and annually increase this commitment to keep pace with inflation
2. Agree to use M2 funds for transportation purposes only, subject to full repayment and a loss of funding eligibility for five years for any misuse
3. Agree to separate accounting for M2 funds and annual reporting on actual expenditures
4. Develop and maintain a pavement management program to ensure timely street maintenance and submit regular public reports on the condition of streets
5. Annually submit a six-year capital improvement program and commit to spend M2 funds within three years of receipt
6. Agree to assess traffic impacts of new development and require that new development pay a fair share of any necessary transportation improvements
7. Agree to plan, build and operate major streets consistent with the countywide Master Plan of Arterial Highways to ensure efficient traffic flow across city boundaries
8. Participate in traffic forums with neighboring jurisdictions to facilitate the implementation and maintenance of traffic signal synchronization programs and projects. This requires cities to balance local traffic policies with neighboring cities — for selected streets — to promote more efficient traffic circulation overall
9. Agree to consider land use planning strategies that are transit-friendly, including bike and pedestrian access and reduce reliance on the automobile

Distribution of Funds Based on Formula

The funds under this program are distributed to cities and the County of Orange by formula once the agencies have fulfilled the above requirements. The formula will account for population, street mileage and amount of sales tax collected in each jurisdiction.

Cost:

The estimated cost for this thirty-year program is \$2 billion.