Riverside
RECONNECTS
STREETCAR STUDY

Riverside Reconnects: Streetcar Feasibility Analysis
Summary Existing Conditions Report

DRAFT

bae urban economics

IBI GROUP

Table of Contents

Table of Figures

Introduction

Purpose of this Report

This report, the *Summary Existing Conditions Report*, is the first in a series of deliverables that will be prepared for the Riverside Reconnects Streetcar Transit Corridor Feasibility Study (Study). The purpose of this first deliverable is to summarize existing trends in Riverside's population, economy, land use and development, growth projections, as well as describing the existing transportation network and transit service. It aims to provide baseline information for consideration of potential alternative alignments for a streetcar route (or other transit) that could accommodate growth, maximize mobility, advance economic development, and overall enhance the future quality of life in Riverside.

This report begins with a description of the Study Area identified for the Study, including subareas based on how the character of the potential 12 mile streetcar corridor changes along its route from UC Riverside to the southwestern edge of the City. The first part of the report is focused on demographics, economics and land use, and covers population and household trends; the plans of universities in the City; jobs and industries; commute patterns; building permit trends; employment centers; and current projections for future population and employment growth.

The second part of this report is focused on transportation considerations, and describes the City's current transportation network, the potential streetcar corridor; traffic volumes; and existing RTA bus service.

Relationship to Future Work

Future deliverables for the Study, yet to be prepared, will include items that address preliminary alignment alternatives and cost-benefit assessment; recommendations for a preferred alignment; funding alternatives; real estate development potential; economic and fiscal impacts and community benefits; financing strategies, including value capture; and a recommended implementation strategy. The final Study will identify whether a streetcar would be feasible, or if other types of bus-based transit would be more advantageous.

This report and future deliverables will be reviewed and refined through work with a diverse Steering Committee whose membership seeks to represent the full range of stakeholders in a potential streetcar route, including neighborhood representatives.

Streetcar Study Area

Study Area

The Streetcar Study Area is an "L-shaped" corridor that includes the properties within approximately ¼-mile of either side of Magnolia Avenue from the City's southwest limits, to Market Street Downtown, and then east along University Avenue to the University of California, Riverside (UCR). The Study Area is approximately 12 miles long and is sized to allow for a variety of potential alternative streetcar alignments.

Four distinct subareas have been identified to allow for more detailed analysis of the sections of a potential streetcar route. These subareas have the potential to accommodate alternative alignments for a streetcar route. The subarea boundaries, as shown at the end of this section, have been defined to correspond to the City's existing planning documents; this means that they are larger than just the ¼-mile on either side of a potential streetcar route. However, it is expected that most of the benefits and impacts of a streetcar route would occur within ¼-mile on either side of the route.

Subareas

University/East Side

The University/East Side subarea contains the University and East Side neighborhoods. It is bound on the east by UCR and the City boundary, and by Highway 91 on the west. The University/East Side Area includes UCR, the Riverside Amtrak station, and University Village.

Downtown

The Downtown subarea contains downtown Riverside. It is bounded on the east by Highway 91, on the west by the City limits, by Highway 60 on the north, and by 14th Street and Terracina Drive to the south. The Downtown Area includes downtown Riverside with its museums and cultural attractions, the Convention Center, Fairmont Park, Mt Rubidoux Park, the Riverside Community Hospital, and a portion of Riverside Community College (RCC).

Wood Streets/Magnolia/Ramona

The Wood Streets/Magnolia/Ramona subarea includes the Wood Streets, Magnolia, and Ramona neighborhoods. It is bound on the northwest by the Downtown Area, on the southeast by Highway 91, and on the west by Jackson Street. Its northern boundary jogs from Arlington Avenue on the west up Streeter Avenue to Dewey Avenue, making its way up Arch Way and Tower Road to Bandini Avenue. The final stretch extends up Palm Avenue from Bandini Road until it meets the Downtown Area boundary at 14th Street. The Area includes Riverside Plaza, Brockton Arcade, Hardman Center, California Square, Parkview Hospital, and California Baptist University (CBU).

Arlington/La Sierra

The Arlington/La Sierra subarea includes the Arlington and La Sierra neighborhoods. It is bound on the south and west by the City boundary, on the east by Jackson Street and Highway 91, and on the north by Gramercy Place, Wells Avenue, California Avenue, and Colorado Avenue. It includes La Sierra University, Kaiser Permanente Riverside Medical Center, the Riverside-La Sierra Metrolink Station, Galleria at Tyler, and Arlington Village.

Figure 1: Streetcar Corridor Study Area

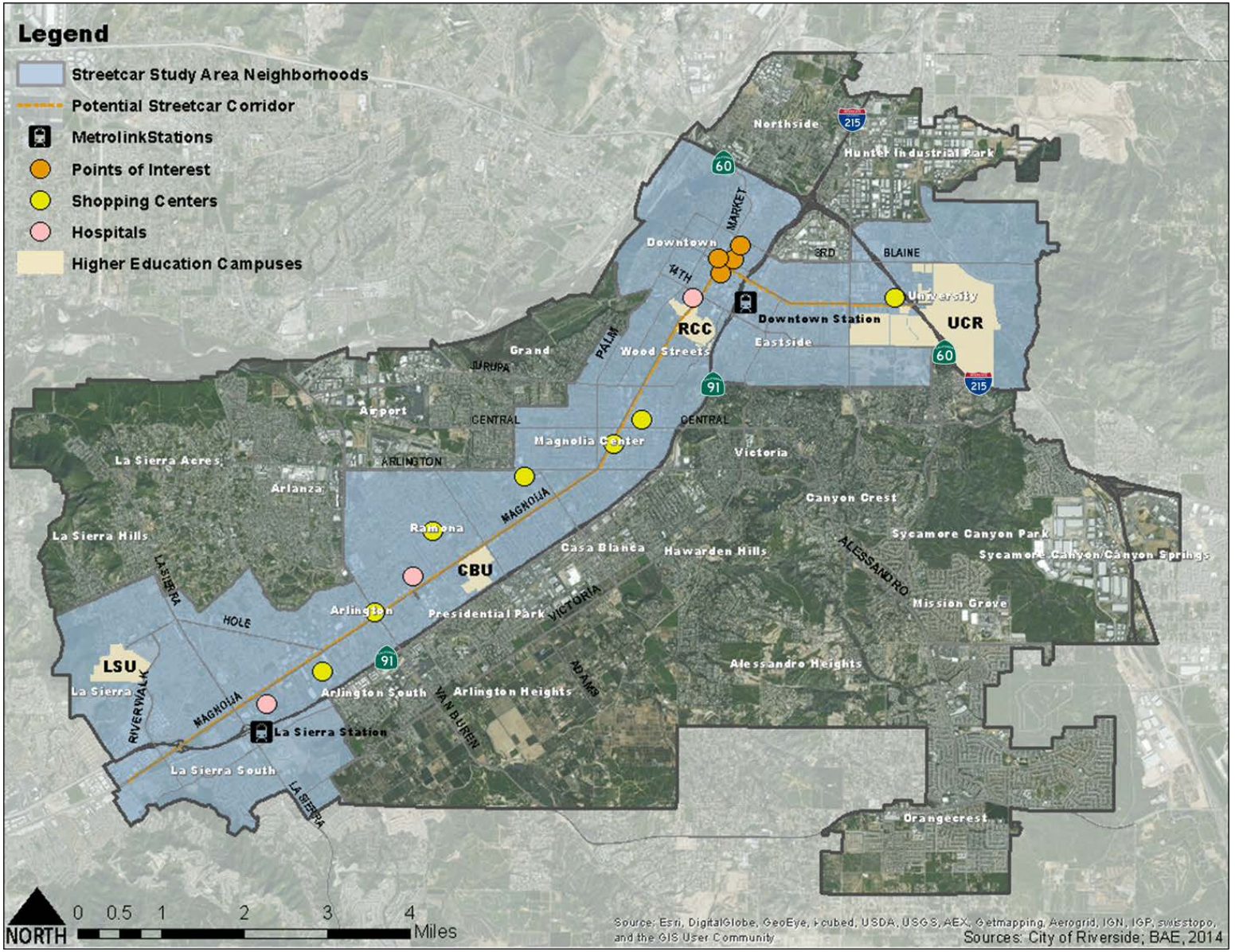


Figure 2: University/East Side Area

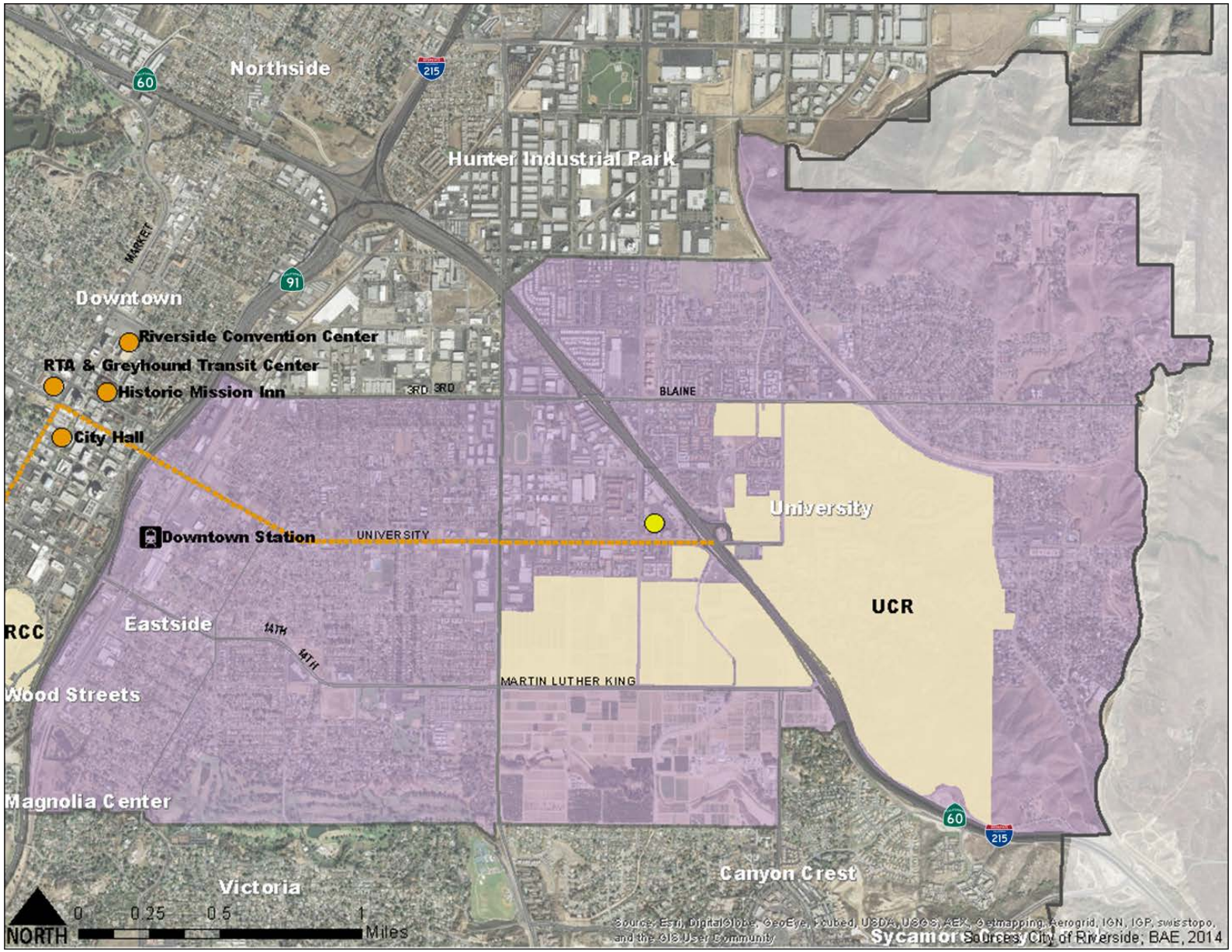


Figure 3: Downtown Area

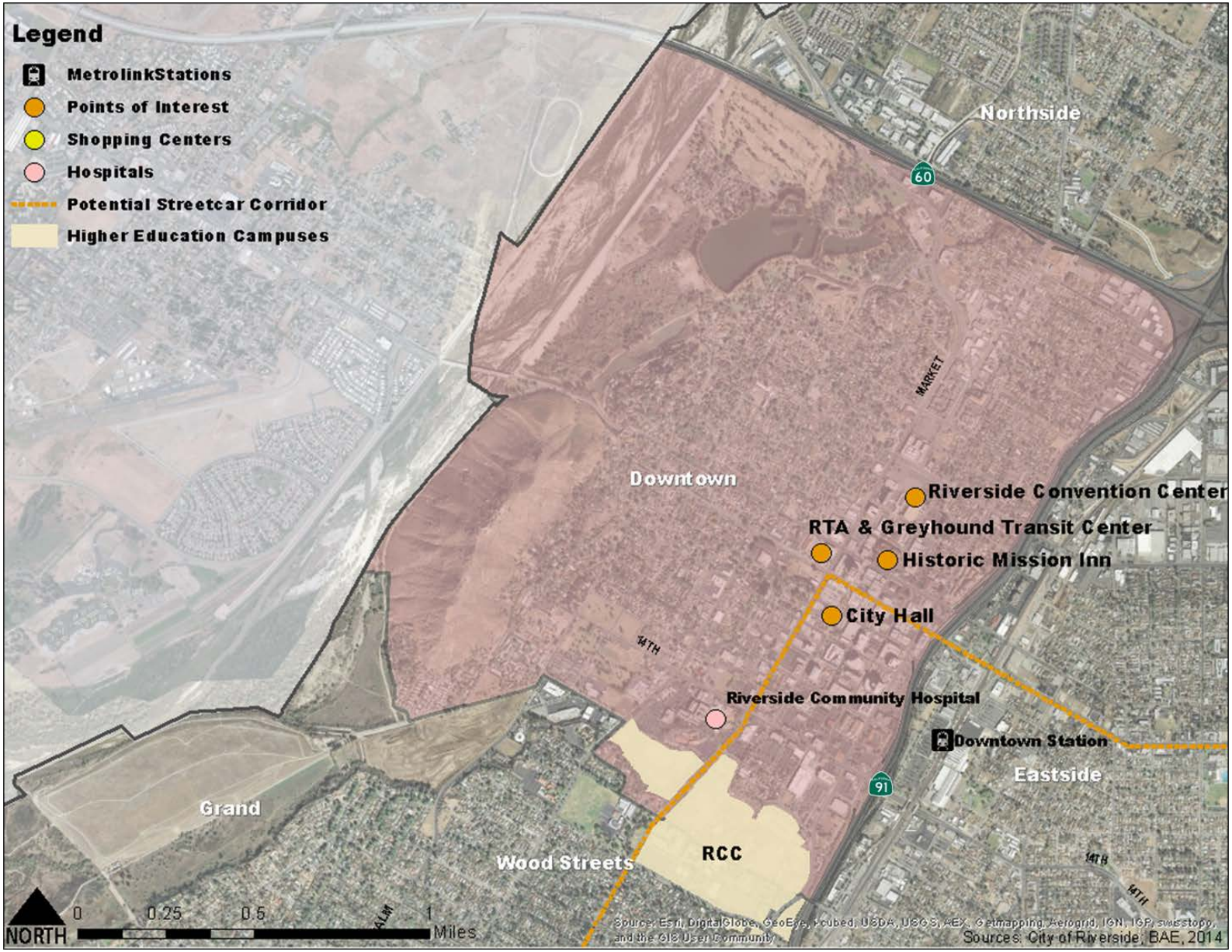


Figure 4: Wood Streets/Magnolia/Ramona Area

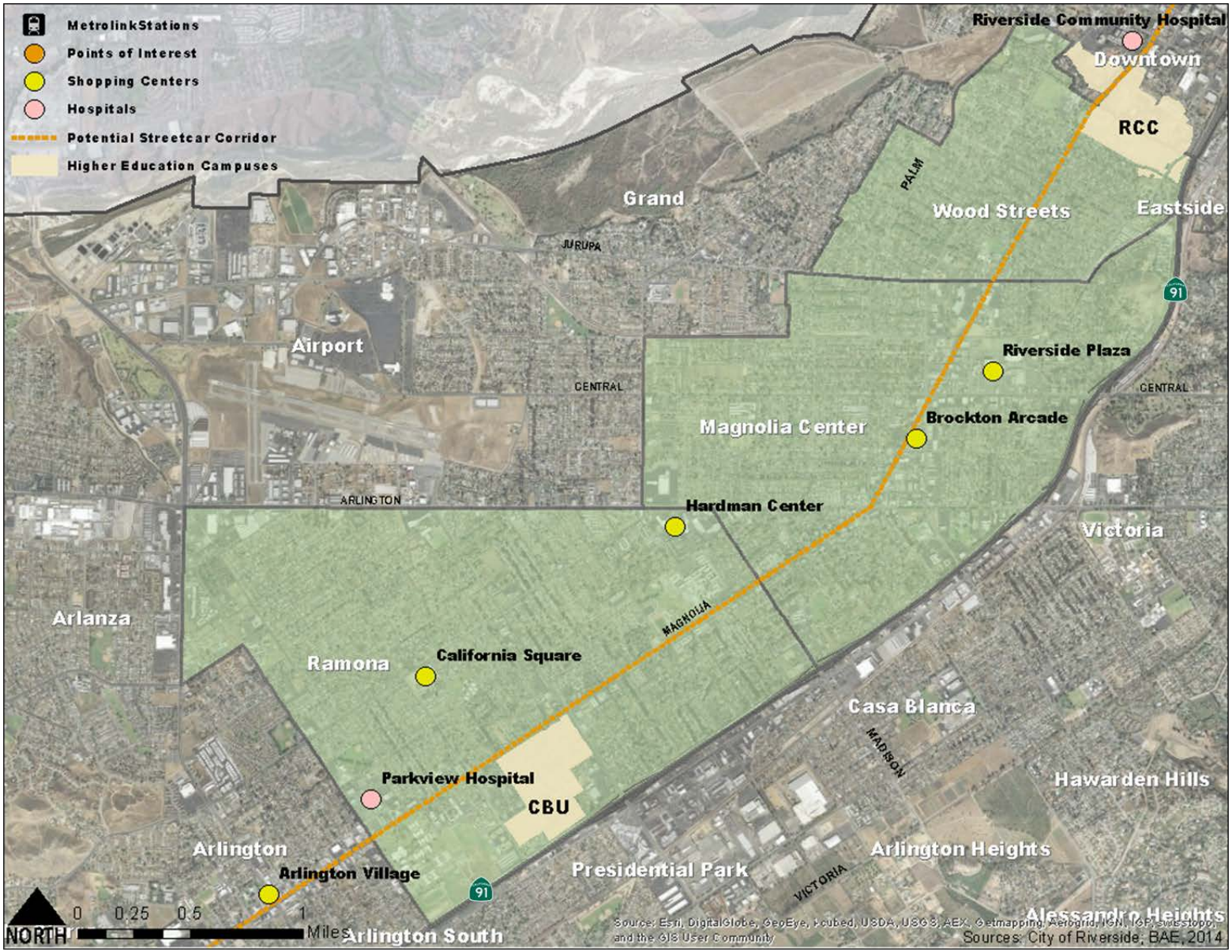
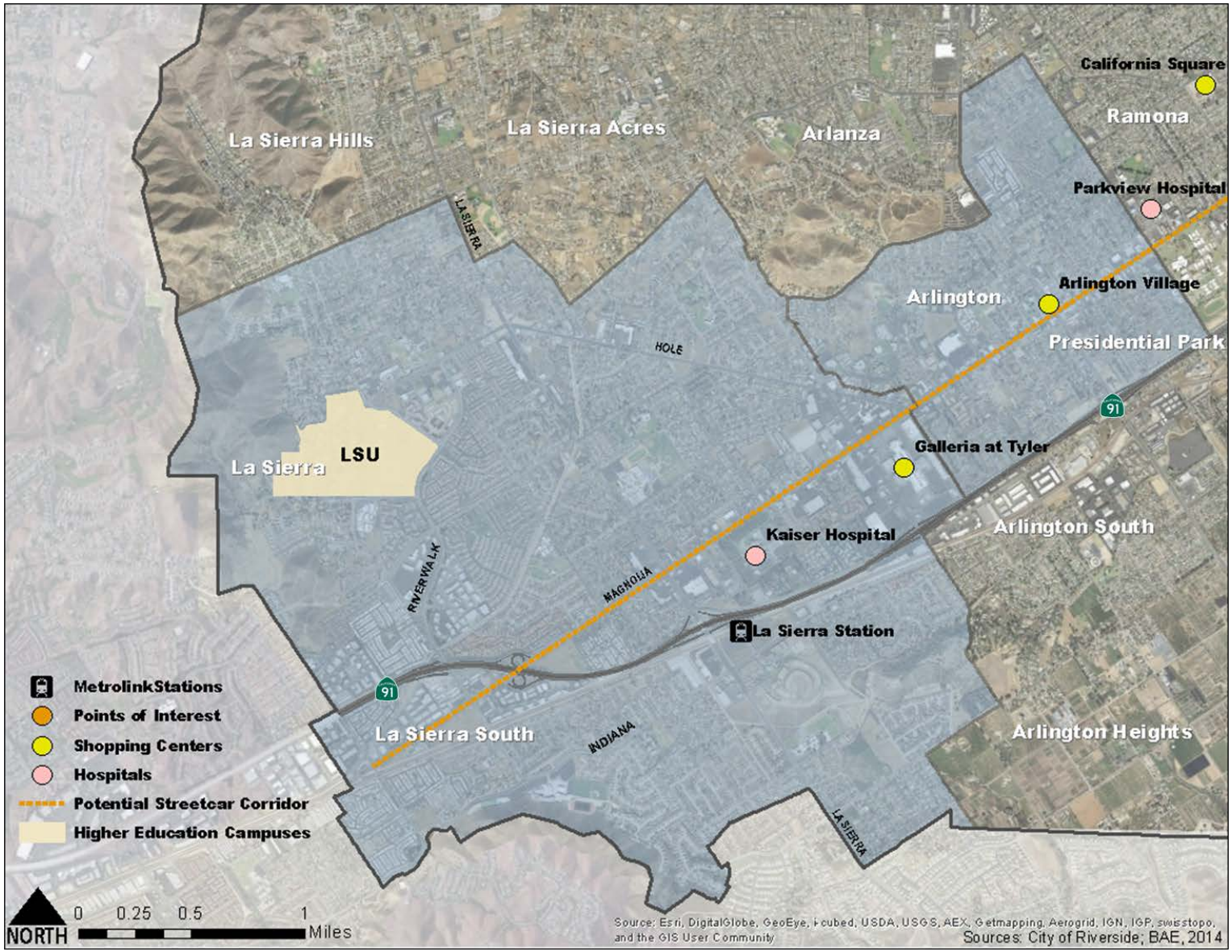


Figure 5: Arlington/La Sierra Area

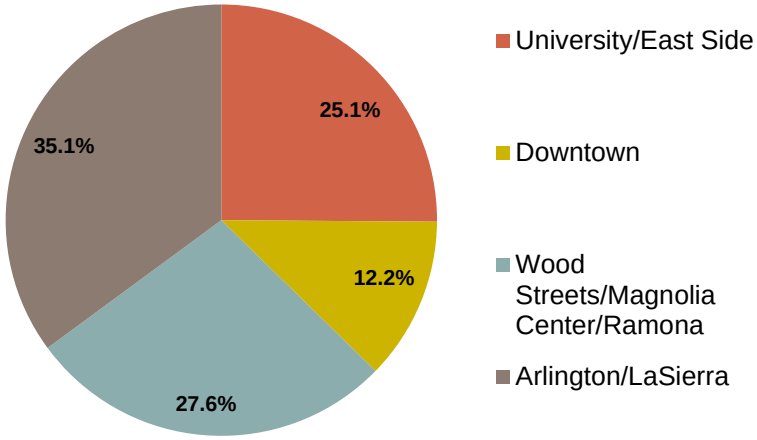


Demographic Trends

Population and Household Trends

- In 2014, the Study Area had 162,538 residents in 49,340 households, which represents more than half of the City's population and households.
- Between 2010 and 2014, the City of Riverside grew faster than the Study Area overall with 22 percent growth, compared to 16.8 percent growth in the Study Area. The City's average household size (3.18 persons/household) was also higher than the Study Area's average household size (3.07 persons/household), due in part to relatively small households in the Downtown and Wood Streets/Magnolia Center/Ramona subareas.
- On average, Study Area residents are younger than in the City as a whole, as well as the Los Angeles-Long Beach CSA. The median Study Area resident is 29.5 years of age, compared to 31.3 in the City, and 35.5 in the CSA. University/Eastside residents had the lowest subarea median age (23.8), while Wood Streets/Magnolia Center/Ramona had the highest subarea median age (33.1).

Figure 6: Subarea Populations as a Share of Study Area Population, 2014

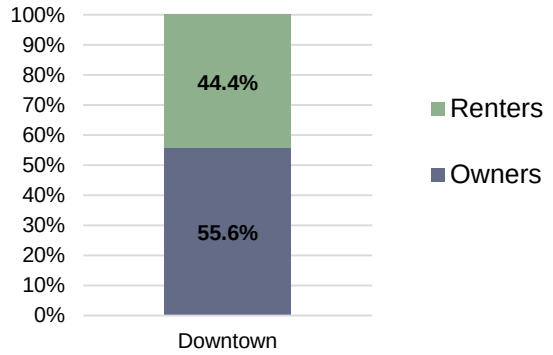


Sources: Nielsen; BAE 2014.

Family Households and Tenure

- The Study Area also has a smaller share of family households (66.2 percent) than the City overall (71.3 percent).
- More than 75 percent of households in the Arlington/LaSierra subarea are families.[1]
- The University/Eastside subarea has the fewest share of family households (56 percent).
- Study Area households are also less likely to own their homes than City households. In 2014, 56 percent of Riverside households owned their homes, compared to 44 percent in the Study Area. University/Eastside had the lowest subarea homeownership rate (29 percent), while Arlington/LaSierra had the highest homeownership rate (50 percent).
- Between 2000 and 2014, the growth in Downtown homeownership rates (18 percent) outpaced homeownership growth rates in the overall Study Area (six percent), Riverside (13 percent), and the Los Angeles-Long Beach CSA (11 percent), illustrating the increasing interest in Downtown Riverside as a place to live and own a home.

Figure 7: Tenure Rates, 2014



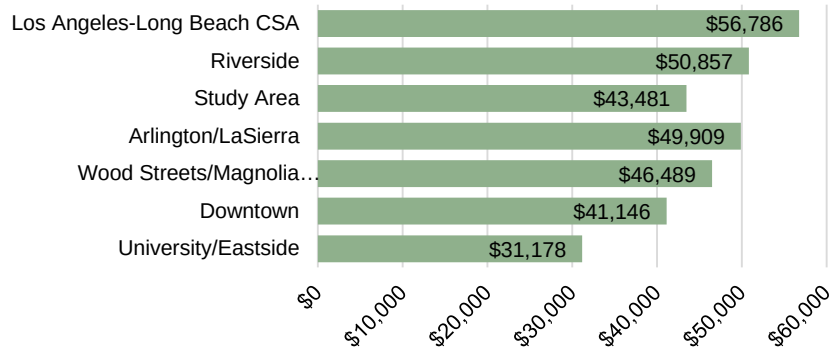
Sources: Nielsen; BAE, 2014.

[1] The US Census defines a family household as containing "a householder and one or more other people related to the householder by birth, marriage, or adoption."

Education and Income

- With the exception of the University/Eastside area, Study Area residents have lower educational levels than Riverside residents overall. In 2014, 17 percent of Study Area residents over the age of 25 years had a bachelor's degree or higher level of educational attainment, compared to 21 percent of Riverside residents and 28 percent of Los Angeles-Long Beach CSA residents.
- 22 percent of University/Eastside residents over the age of 25 had a bachelor's degree or higher level of educational attainment, with more than 12 percent having a Graduate/Professional degree.
- Household incomes in the Study Area do not necessarily track to educational attainment. The Arlington/LaSierra subarea has the highest 2014 median income of all subareas ($49,909).

Figure 8: Median Household Income, 2014



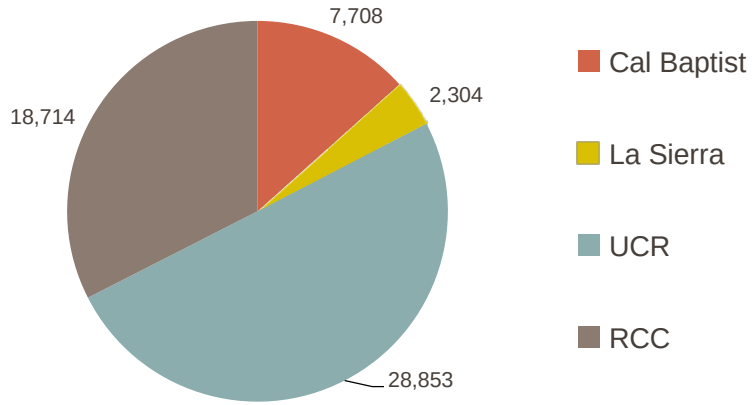
Sources: Nielsen; BAE 2014.

Colleges and Universities

Population

- The City of Riverside includes four higher education institutions: University of California, Riverside (UCR), California Baptist University, Riverside Community College (RCC), and La Sierra University.
- In 2013, these institutions accounted for 48,439 students, and 9,140 faculty and staff.[2]
- UC Riverside has the largest campus population, accounting for half of Riverside's higher education population.

Figure 9: Share of Student and Faculty Population in Riverside, 2013



Sources: UCR, RCC, California Baptist University, 2013; La Sierra University, 2011; BAE 2014.

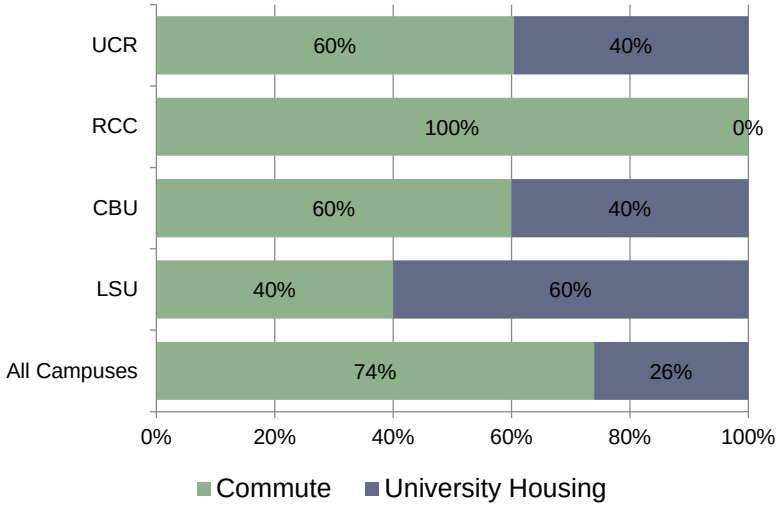
[2] Data from La Sierra University is from 2011.

Student Housing

- Students overwhelmingly commute to the college and universities in Riverside, with the exception of La Sierra students.
- La Sierra houses 60 percent of its students, compared to 40 percent at both UCR and Cal Baptist.
- 100 percent of RCC students commute to campus.
- These numbers suggest that as the colleges grow, they may look to off campus residential units to provide a significant portion of student housing.

Appendix A contains the detailed Demographics Trends tables for Riverside and the Study Area.

Figure 10: Student Housing, 2013



Sources: UCR, RCC, California Baptist University, 2013; La Sierra University, 2011; BAE 2014.

Economic Trends

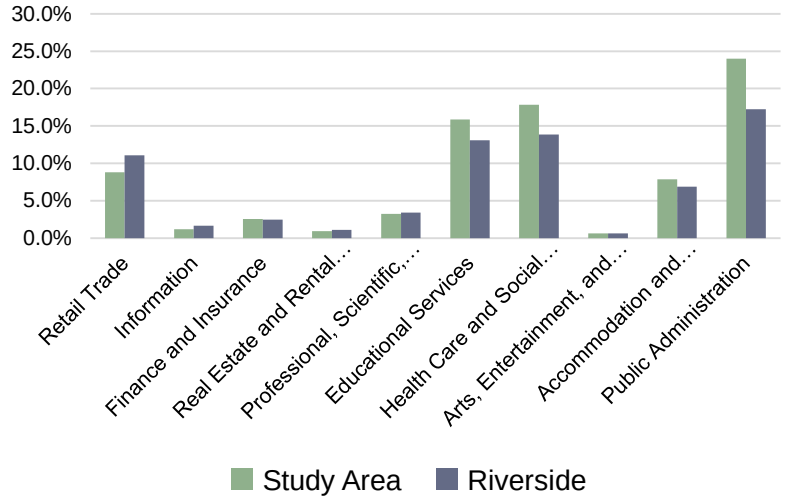
Jobs by Industry

- In 2011, the 79,780 jobs in the Study Area represented 62.2 percent of the City of Riverside's 128,236 jobs.
- The Study Area has a higher concentration of jobs in the Educational Services, Healthcare and Social Services, Accommodations and Food Services, and Public Administration sectors than the City.
- Although the Study Area includes Downtown with its entertainment venues, Arts, Entertainment, and Recreation jobs are spread throughout the City and not concentrated in the Study Area.
- Sectors representing private users of office space (non-government) are spread throughout the City and not concentrated in the Study Area.

Largest Employers

- The public sectors, including local government and public school districts, are the largest employers in Riverside, with Top 25 employers accounting for 28,816 jobs.
- Higher Education has the next largest number of jobs provided by Top 25 employers, accounting for 9,140 jobs, followed by Healthcare, with 7,136 jobs.

Figure 11: Share of 2011 Jobs by Industry, Study Area and City



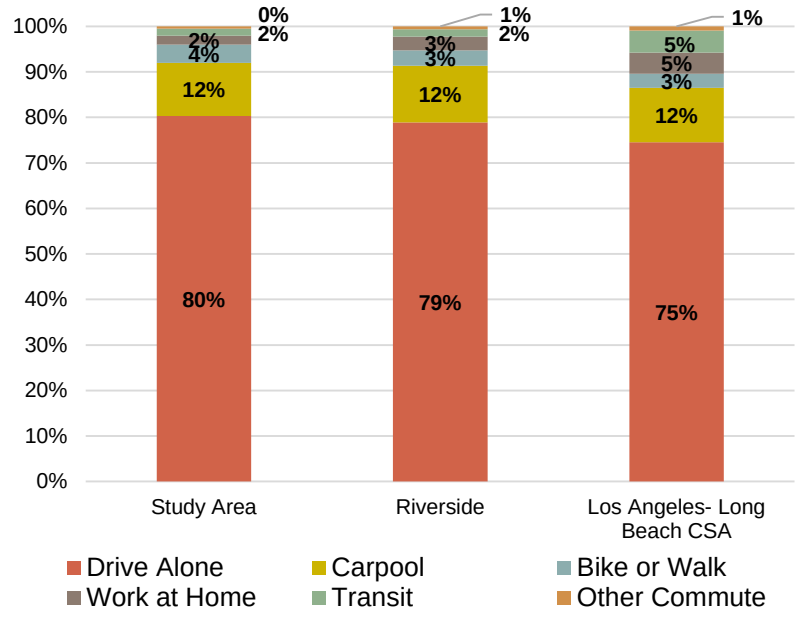
Sources: US Census, 2011; BAE, 2014.

Commute Patterns

Mode of Transportation

- Study Area workers and Riverside workers have similar commute patterns, with more than 79 percent driving alone to work.
- Only two percent of citywide and Study Area workers take transit to work, compared to five percent of Los Angeles-Long Beach CSA workers.
- As Riverside grows, relying on single-occupancy vehicles as the main mode of transportation will increase vehicle miles travelled (VMT) and its corresponding congestion, air quality issues, and greenhouse gas (GHG) emissions.

Figure 12: Commute Patterns



Sources: Census Transportation Planning Package, 2006-2010; BAE, 2014.

Commute Flows

- In 2011, 99,680 workers commuted to jobs in Riverside, while 70,559 residents commuted to jobs outside of Riverside.
- Approximately 28,556 Riverside residents commuted to jobs within the City.
- 20.3 percent of working Study Area residents also work in the Study Area, compared to 28.8 percent of working Riverside residents who also work in the City.
- Only 10.9 percent of Study Area workers live in the Study Area, compared to 22.3 percent of Riverside workers who also live in Riverside, suggesting that housing could be a desirable use in the Study Area to help reduce commute times, particularly as the City grows and congestion increases.

Appendix A contains the detailed Economic Trends tables for Riverside and the Study Area.

Figure 13: 2011 Commute Flows

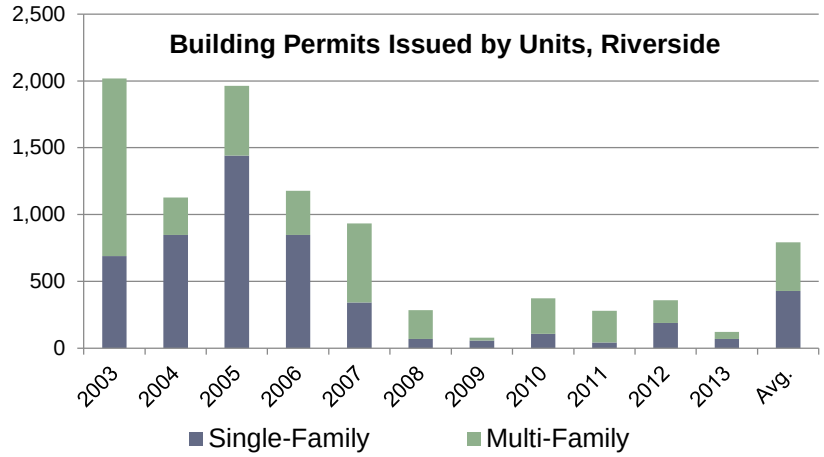
Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2nd Quarter of 2011; BAE, 2014.

Development Trends

Residential Building Permits

- On average, between 2003 and 2013, the City issued 46,300 residential building permits per year.
- At the height of the recession in 2009, the City issued 14,000 new residential building permits.
- The most building permits (89,900) were issued in 2004.
- In 2013, the City issued 35,600 residential building permits, of which 59 percent were for multifamily units.
- Since 2011, more permits were issued for multifamily units than single-family units, which represents a change from prior years, but follows statewide development feasibility trends, where multifamily rental rates are high enough to support development, compared to condominium and single-family home prices, which have not yet returned to levels that support new development.
- Building permit trends show that the City of Riverside housing market has not yet fully recovered from the Great Recession.

Figure 14: City of Riverside Building Permit Trends, 2003-2013



Sources: US Census Building Permit Trends, 2003-2013; BAE, 2014.

Retail

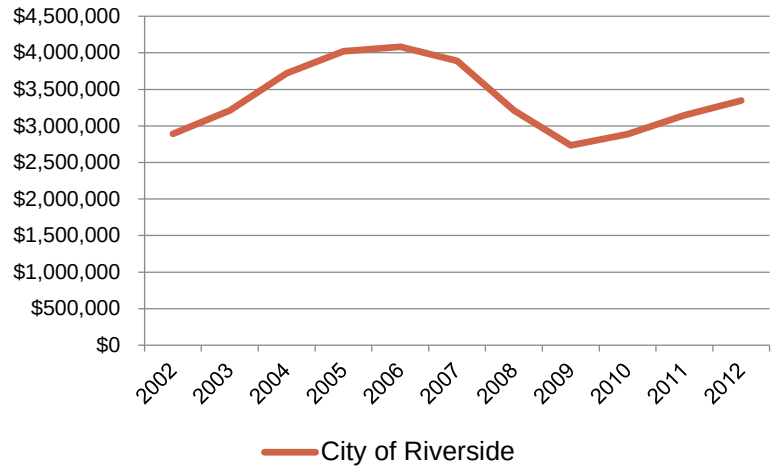
Shopping Destinations

- There are 15 major shopping destinations within the City of Riverside, most of which are located within the Study Area.
- There are five additional shopping destinations outside of the City that attract city residents, including the Moreno Valley Mall, Eastvale Gateway Center, Ontario Mills, Victoria Gardens, and the Shops at Dos Lagos. Figure 16 provides a map of regional retail destinations.

Sales Tax Revenues

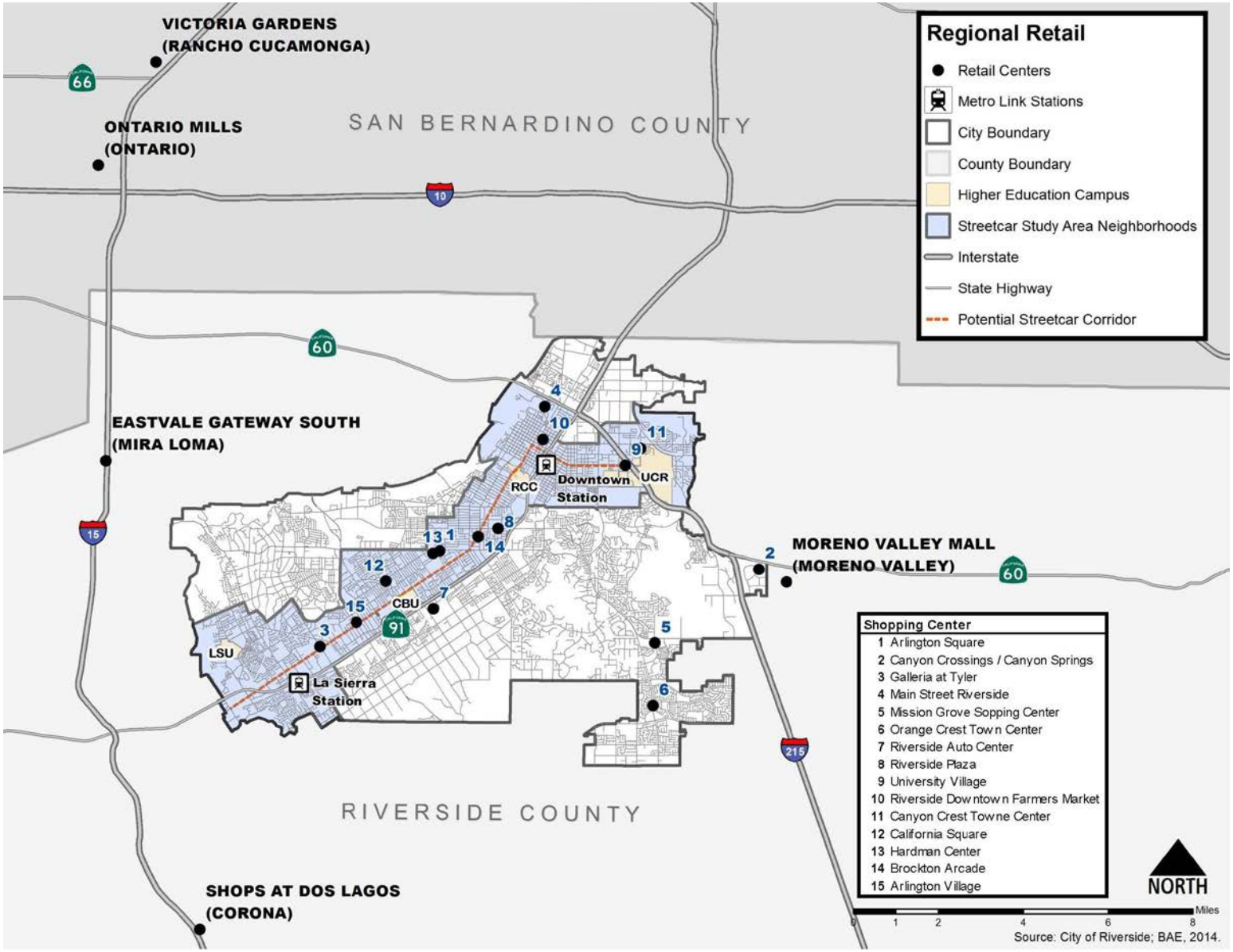
- Riverside's total taxable sales have not yet fully recovered to their pre-recession high of $4.1 million in 2006.
- The City of Riverside's taxable sales account for 8.4 percent of total Riverside and San Bernardino Counties' total taxable sales.
- The motor vehicles, gas stations, and general merchandise retail sectors contribute the most money to the City's taxable sales.
- Riverside restaurants and bars generate more taxable sales per capita than its general merchandise establishments.

Figure 15: City of Riverside Taxable Sales, 2002-2012



Sources: 2000 & 2010 U.S. Census; State Dept. of Finance; State Board of Equalization; CA Dept. of Industrial Relations; U.S. Bureau of Labor Statistics; BAE, 2014.

Figure 16: Regional Retail Destinations

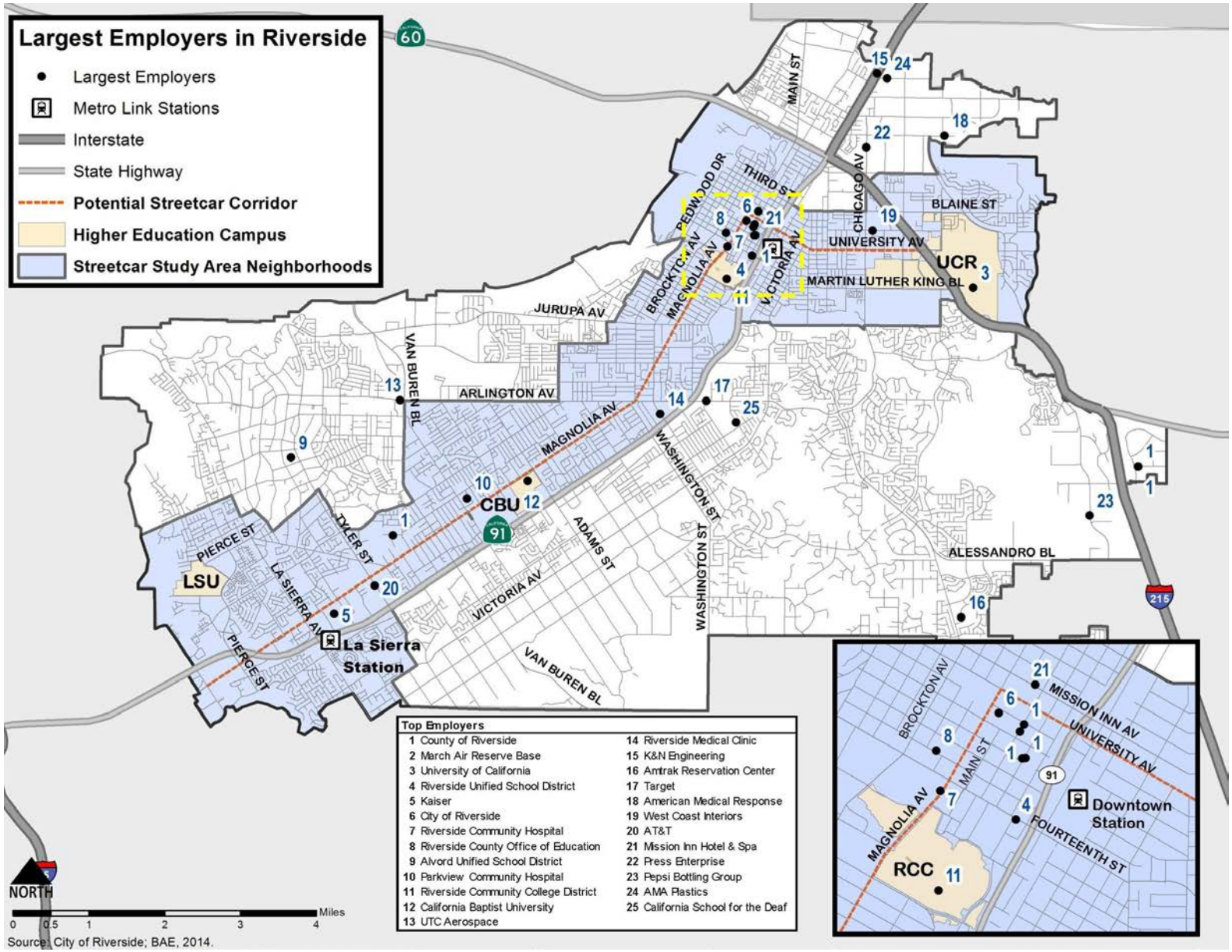


Employment Centers

- The majority of Riverside's employment centers are located in the Study Area, including government, higher education, and medical facilities.

Appendix A contains the detailed Development Trends maps and tables. Figure 17 on the next page provides a map of the largest employers for the City of Riverside.

Figure 17: Employment Centers

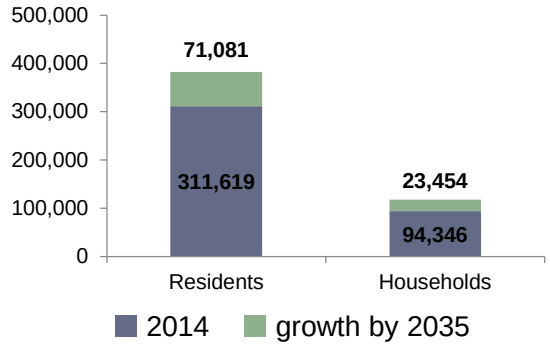


Projections

Population and Households

- The City of Riverside is expected to gain more than 71,000 new residents in 23,500 new households by 2035.
- This will represent a 24 percent increase over the City's 2014 population and household counts.
- Currently, SCAG projects 61.5 percent of total population and household growth to occur within the Study Area.
- Concentrated growth will increase demand for more dense housing, and transit options to minimize congestion impacts of growth.

Figure 18: Population and Household Growth, 2014-2035

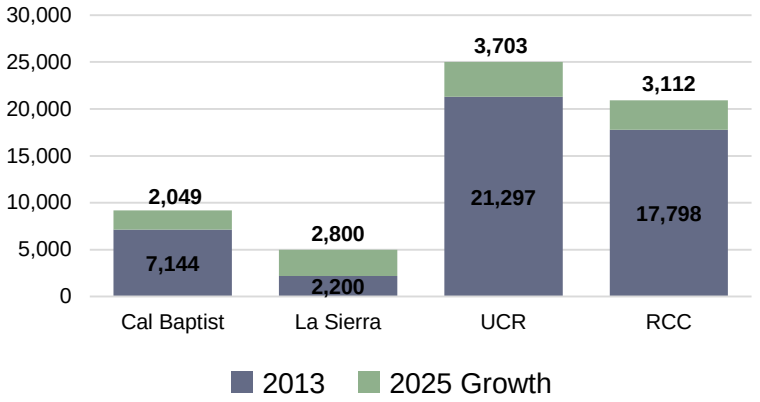


Sources: SCAG, 2012; BAE, 2014.

Colleges and Universities

- Of the projected growth, the four colleges and universities are projected to enroll more than 11,600 new students between 2013 and 2025. Total enrollment will exceed 60,100.
- Some portion of these students will advocate for off-campus housing that could be located along a streetcar line to provide easy access to classes.

Figure 19: Student Enrollment Growth, 2013-2025

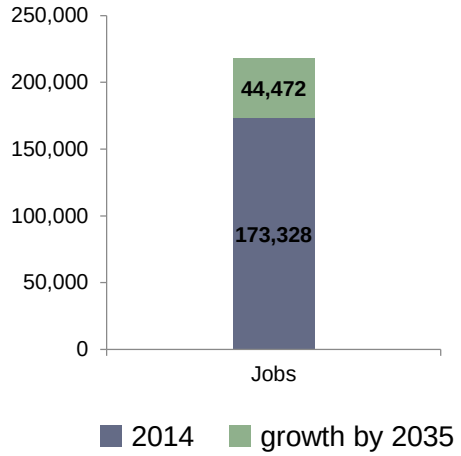


Sources: UCR, RCC, California Baptist University, 2013; La Sierra University, 2011; BAE 2014.

Employment Growth

- The City of Riverside is expected to grow approximately 44,500 new jobs between 2014 and 2035.
- Approximately 51.5 percent of this growth is expected to occur within the Study Area.
- The City will need to be proactive to insure that new commuters do not increase congestion.

Figure 20: Employment Growth, 2014-2035



Sources: SCAG, 2012; BAE, 2014.

Colleges and Universities

- Of the projected growth, the four colleges and universities are projected to add nearly 9,400 jobs to Riverside. Total faculty and affiliates will exceed 18,500 jobs.
- More than 8,800 of the new jobs will occur as a result of UCR's expansion.
- New affiliates could demand office space located near campus.

Appendix A contained the detailed Projections tables.

This page intentionally left blank.

Transportation Network

Roads and Streets

1. **University Avenue** – The major arterial connecting downtown Riverside to the campus. There are numerous commercial developments along the corridor which could benefit from the streetcar. The street is also well connected to the local bus routes and has easy access to the Downtown Riverside Metrolink station, increasing the access to the City through public transit. Potential challenges include the freeway underpasses and rail under crossings along this corridor.

2. **Blaine Street/3rd Avenue** – This roadway is included as a possible alternative to University Avenue. This route has a number of employment centers and multi-family housing units that would benefit from streetcar access, including the Riverside Convention Center. This corridor has fewer bus routes assigned to it, and more intersections than University Avenue, but still serves as a viable alternative.

3. **14th Street/Martin Luther King Boulevard** – This roadway is also included as a possible alternative to University Avenue. It connects to the Downtown Riverside Metrolink station and several RTA bus routes.

4. **Orange Street** –This roadway could be considered for a possible downtown loop of the streetcar line. The roadway runs one-way southbound within downtown and operates as a couplet with Lemon Street to the east.

5. **Lemon Street** –Lemon Street is one-way northbound within the downtown, forming a couplet with Orange Street. The corridor is served by several RTA bus routes and provides connections to the Riverside County Administrative Offices.

6. **Lime Street/Olivewood Avenue** – This roadway is included as another possible route for inclusion in a downtown loop. The street provides for two way traffic and serves as the primary connection to several on and off-ramps for the westbound SR-91 freeway.

7. **Brockton Avenue** – This street is included as a possible alternative to Magnolia Avenue and Market Street. Brockton is well connected to public transit, provides access to local hospitals and medical centers, and provides access to several schools and shopping centers.

8. **Magnolia Avenue** – Measured from Market Street to the southern end of the city, this is the main corridor in consideration for the transit line south of downtown. Provides access to hospitals and medical offices, Riverside College, and California Baptist University.

9. **Market Street** – Magnolia Avenue transitions to Market Street within the downtown, and serves as the primary two-way corridor for traffic on the west side of downtown.

10. **Riverwalk Parkway/Pierce Street** – This street is the primary connection between Magnolia Avenue and La Sierra University, a target site identified by the City. This route has some higher density housing and scattered retail uses.

11. **La Sierra Avenue** – Measured from Indiana Avenue to Pierce Street, it was included as an alternative to Riverwalk Parkway. This avenue provides access to schools and low density retail. It is only connected to one existing bus route. This street provides access to schools and low density retail. There is a single existing bus route on La Sierra. The roadway crosses over SR-91, avoiding potential vertical clearance issues.

12. **Indiana Avenue** – Measured from Tyler Street to Pierce Street, it was included as an alternative route to access the La Sierra Metrolink Station.

13. **Tyler Street** – Measured from Magnolia Avenue to Indiana Avenue, this street was included as part of alternative route to provide access to the La Sierra Metrolink Station. The existing SR-91 overpass may have vertical clearance constraints for this roadway.

Figure 21 on the next page is a map of the existing street network, highlighting the contemplated streetcar corridor.

Figure 21: Existing Street Network with Contemplated Streetcar Corridor

Bus Routes

RTA is the primary regional transit provider within the City of Riverside. RTA operates a range of local, regional, and express bus routes throughout the city. Key routes that operate along or across the potential streetcar corridors are identified below.

1. **UCR to W. Corona Metrolink Station** – This route serves University Avenue and Magnolia Avenue and is the highest ridership route within RTA's system, with about 7,580 boardings per weekday.

10. **Big Springs & Watkins to Galleria at Tyler** – This route connects UC Riverside to Magnolia Avenue.

12. **La Cadena & Stephens to Merced & Magnolia** – This route is an important downtown route, and it connects the downtown to the Magnolia Avenue corridor.

13. **Spruce & Atlanta to Galleria at Tyler – Riverside** – This route connects Magnolia Avenue with the downtown and the area surrounding UC Riverside.

14. **Galleria at Tyler to Loma Linda VA Hospital** – This route includes a section of Indiana Avenue, as well as downtown Riverside, including Brockton Avenue, and the area around UC Riverside.

15. **Riverside Downtown Terminal to Merced & Magnolia** – This route includes La Sierra Avenue, as well as Magnolia Avenue towards the downtown.

16. **Riverside Downtown Terminal to Moreno Valley Mall** – This route includes University Avenue and connects to Moreno Valley to the East.

Trolley Routes

50. **Jury Trolley** – The trolley service runs on a short route in downtown Riverside from Ramona Street to 10th Street, running every 30 minutes or so, costing $0.25, with service Monday through Thursday. It is designed to serve the community using the civic buildings in downtown Riverside, including the courthouse and City Hall.

51. **Crest Cruiser** – This trolley serves the UC Riverside community by running on a short loop from Chicago Avenue to Canyon Crest Drive. It only runs on weekdays and UCR academic days, so there are gaps in the service provided. This trolley runs about every 40 minutes from 7:00 am to 7:30 pm.

Private Shuttles

UC Riverside is the only university or college in Riverside to provide a shuttle service, with a point-to-point shuttle that takes students from campus to locations within a designated service area. At one point in time there was a full-time shuttle service, the Highlander Hauler, which was discontinued for financial reasons. It remains unclear if the University intends to reinstate this service in the future.

Appendix B contains the detailed Transportation Network maps and tables.

Corridor Analysis

Criteria

The selected travel corridors were analyzed with a set list of criteria, including:

1. **Length** – measured in miles.

2. **Number of lanes** – an indication of how well the road would accommodate a streetcar and its infrastructure.

3. **Number of intersections** – an indication of the possible constraints that a road would place on the project from an engineering standpoint.

4. **Rail crossings** - an indication of the possible constraints that a road would place on the project from an engineering standpoint.

5. **Overhead bridges** – an indication of the possible constraints that a road would place on the project from an engineering standpoint.

6. **Bridge crossings** – an indication of the possible constraints that a road would place on the project from an engineering standpoint.

7. **Traffic volumes** – this is calculated based on a specifically-selected intersection and traffic flow counted at up to three peak times for each day, morning, noon, and 4:00-6:00 p.m.

8. **Population density** – census data incorporated into transportation analysis zones (TAZ) is used to estimate population along a specific travel corridor.

9. **Employment density** – the same census data used to estimate population also incorporate employment data that indicates how many people are employed in a specific zone.

10. **Proximity to schools (including High School/ College/ University)** – an indication of potential benefits from a more efficient public transit system, including a look at who would travel via the streetcar and where they are going.

11. **Proximity to hospitals and other health care institutions** – an indication of potential benefits from a more efficient public transit system, including a look at who would travel via the streetcar and where they are going.

12. **Retail centers** – an indication of potential benefits from a more efficient public transit system, including a look at who would travel via the streetcar and where they are going.

13. **Smart Growth opportunities** – a brief description of the urban material to provide a better understanding of the surrounding land use patterns.

14. **Local & Regional Transit Connectivity** – indicates the potential effect of the streetcar on broadening the use of the existing public transit system.

15. **Existing local/express bus service** – indicates the potential effect of the streetcar on broadening the use of the existing public transit system.

16. **Headway** – applied to the bus route analysis, it presents the time between buses on the same route and at the same transit stop.

17. **Ridership** – provides a count of who boards the buses.

18. **Daily miles traveled** – this measure helps to establish transit patterns, demonstrating how long people are traveling on a particular route.

19. **Average daily miles traveled** – a helpful statistic showing how far the average passenger is riding along a specific route.

Target Sites and Destinations

- **University of California, Riverside (UCR)** – The most regionally significant educational institution in Riverside and an important economic and social development site for the region. Located at the eastern end of University Avenue, east of downtown and I-215.

- **Riverside City College (RCC)** – A two-year junior college located close to the downtown and several commercial developments. The college campus is located east of Magnolia Avenue and west of SR-91.

- **Riverside Convention Center** – Located on 5th Street west of Orange Street, the convention center offers 65,000 square feet of meeting and event space.

- **Downtown Riverside Metrolink** – Serves both the Downtown and the neighborhoods in the northern portions of the city. Provides connections to the Riverside Line, the Inland Empire-Orange County Line, and the 91 Line. Located east of SR-91 between University Avenue and 14th Street.

- **Downtown Mall** – The Main Street Downtown Mall is a pedestrian mall linking offices, retail uses, and restaurants along the Main Street corridor between 10th Street and 6th Street.

- **Civic Center** – The civic center area in downtown includes Riverside City Hall, the County Administrative offices, the County of Riverside Superior Court, and federal courts and administrative offices. Civic uses are generally located south of 9th Street, east of Market Street, north of 13th Street, and west of Lime Street.

- **Riverside Community Hospital** – Located southwest of the intersection of Magnolia Avenue and 14th Street. This hospital is the primary community hospital in the city, with 373 beds, and a Level II Trauma Center emergency room.

- **Kaiser Permanente Riverside Medical Center** – The Kaiser medical center facility is located southwest of downtown on Magnolia Avenue between La Sierra Avenue and Tyler Street. This is one of two Kaiser medical center facilities in Riverside County.

- **Riverside Plaza Shopping Center** – An economic center that would benefit from greater access to the community. Located on Central Avenue, west of SR-91.

- **California Baptist University (CBU)** – A private university located southwest of Downtown Riverside. Enrollment in 2013 exceeded 7,100 students. Located along Magnolia Avenue between Monroe Street and Adams Street.

- **Galleria at Tyler** – A large regional mall located north of the Tyler Street/SR-91 interchange. This is another important commercial development that could benefit from greater transit access.

- **Parkview Community Hospital** – A non-profit hospital offering treatment for a variety of medical needs. Additionally, community classes are held there on a variety of topics. Located north of the intersection of Magnolia Avenue and Jackson Street.

- **Arlington Village** – One of the most historic and iconic neighborhoods in Riverside. A recent beautification project has improved the streetscape.

- **La Sierra University (LSU)** – One of Riverside's newer higher education institutions. Located in the southern portion of the city, north of SR-91 along Riverwalk Parkway.

- **The Riverwalk** – An emerging area of development at the southern end of the city that would benefit from greater connections to the established commercial and residential areas towards the downtown.

- **La Sierra Metrolink** – This Metrolink station serves southern Riverside and provides connections to the Inland Empire-Orange County Line and the 91 Line. Located south of SR-91 on La Sierra Avenue.

Table 1: Target Sites and Their Proximity to Contemplated Transit Corridors

Transit Corridor	UC Riverside	Riverside City College	Convention Center	Downtown Metrolink	Downtown Mall	Civic Center	Riverside Community Hospital	Kaiser Medical Center	Riverside Plaza Shopping Center	California Baptist University	Galleria at Tyler	Parkview Community Hospital	Arlington Village	La Sierra University	Riverwalk	La Sierra Metrolink
North to South																
Brockton Avenue		X							X							
Magnolia Avenue		X					X	X	X	X	X	X	X			
Market Street			X		X	X										
East to West towards UC Riverside																
University Avenue	X			X	X	X										
Blaine St./ 3rd Ave.	X		X		X											
14th St./Martin Luther King Blvd.	X	X		X		X	X									
Downtown Riverside																
Orange St.			X		X	X										
Lemon St.						X										
Lime St. / Olivew ood Ave.		X				X										
East to West towards La Sierra University and La Sierra Metrolink Station																
Riverw alk Parkw ay/Pierce St.														X	X	
La Sierra Ave.								X						X	X	X
Indiana Ave.																X
Tyler St.											X	X				

Street and Road Analysis

Primary Potential Travel Corridors

- **University Avenue**: The main route to and from and UC Riverside. It features the highest employment density of the contemplated routes, and ranks second in population density by just over 1,000 residents. It connects to the Riverside Downtown Metrolink Station, as well as seven RTA bus routes. A significant challenge with this route is the number of bridges and rail crossings, which could complicate the design and engineering.

- **Magnolia Avenue**: Provides access south of downtown, including access to schools, medical centers and offices, retail centers, and has high population and employment density. The existing street right-of-way width allows for the potential accommodation of a streetcar service. It also features strong connections to existing bus routes, increasing the effectiveness of a public transit system by increasing access to the number of existing routes.

- **Market Street**: This report separates Market Street from Magnolia Avenue to better explore alternative routes through downtown Riverside. Market Street mainly consists of downtown retail and office buildings. It offers better access to downtown Riverside than Brockton Avenue does, and would likely function well either on its own as part of the connecting line to UC Riverside, or as part of a downtown loop.

- **Riverwalk Parkway**: Riverwalk Parkway would connect La Sierra University to the community at large, allowing for more interaction between the university constituents and the surrounding area. One of the main challenges is connecting the La Sierra Metrolink Station to the rest of the line, which is addressed by some of the contemplated alternative routes.

Potential Alternative Routes

East to West towards UC Riverside

- **Blaine Street/3rd Avenue**: This is the primary alternative to University Avenue between downtown and UC Riverside. It has the highest population density of the three contemplated routes because it has more high density housing. It also has several employment centers and a few retail centers. The challenges with this route are the lack of access to the Riverside-Downtown Metrolink Station and at-grade crossings of the freight rail corridor.

- **Martin Luther King Blvd./14th Street**: This alternative route is included due to its connection to the Riverside-Downtown Metrolink Station. It has lower population and employment densities. A large portion of the route consists of the UC Riverside orchards, so there is limited opportunity for new development.

Downtown Riverside

- Orange Street/Lemon Street: These roadways are included as a possible downtown route. Provides direct connections to the County Administrative Offices.

- Lime Street/Olivewood Avenue: Lime Street is a third alternative downtown corridor. Olivewood Avenue is included as a potential alternative to Magnolia Avenue. This street provides access to many of the same sites, like Riverside City College, while also providing access to higher density housing. However, this route does not access Riverside Community Hospital, as does Magnolia Avenue.

North to South

- Brockton Avenue: Included as an alternative to Magnolia Avenue, Brockton is more a residential corridor than commercial, with a much higher population density than employment density. It is well connected to the bus routes and has access to a few medical offices associated with Riverside Community Hospital.

East to West towards La Sierra University and La Sierra Metrolink Station

- La Sierra Avenue: This route is included as an alternative to Riverwalk Parkway, providing access to the La Sierra Metrolink Station while presenting a viable option for reaching La Sierra University. It has a lower population density than Riverwalk Parkway and employs fewer people as well.

- Indiana Avenue: An alternative to the most south-westerly section of Magnolia Avenue and to La Sierra Ave, a streetcar line on Indiana Avenue will provide access to the La Sierra Metrolink Station. The contemplated section of Indiana Avenue is mostly residential, however, and would not connect to some of the shopping centers and the Kaiser Medical Center as would Magnolia Avenue.

- Tyler Street: This small stretch of Tyler Street is included as a possible alternative route connecting Magnolia Avenue and Indiana Avenue. The positives of this route choice include an increased emphasis and connection to the Galleria at Tyler, a major shopping center. The freeway and rail crossing are potential constraints.

Table 2: Existing Conditions by Travel Corridor

Transit Corridor	Limits	Length (mi.)													
											0	0	2	0	Bus Route 14

**N/A indicates that data for this section was unavailable.*

This page intentionally left blank.

Traffic Volumes

Traffic data is typically measured using two methods. The first is through intersection counts at peak periods throughout the day: morning, noon, and evening. This method of measurement presents specific data that can be used to understand the pattern of traffic flow from intersection to intersection. The second is called Average Daily Traffic counts, which is the number of vehicles passing a specific point in a 24 hour period.

Peak Hour Intersection Data

The data collected by the peak hour intersection observations have been compiled into tables according to the potential alignment corridors. The data for turning movements has been aggregated by approach and split into eastbound and westbound traffic flows, separated into morning, mid-day, and evening counts. Traffic count information was provided by the City of Riverside, through counts conducted by the city during the previous one to two years. All counts were conducted during non-summer months in order to include school traffic.

Traffic Volume for Magnolia Avenue

The intersection data seems to show a pattern of higher traffic volume westbound than eastbound, but only by a few thousand vehicles. The number of eastbound vehicles peaks at the intersections with Bandini Avenue, Central Avenue, Van Buren Boulevard, and Tyler Street. The westbound traffic peaks at Pierce Street, Tyler Street, La Sierra Avenue, and Bandini Avenue. The traffic lulls from Arlington Street to Jurupa Avenue. The morning traffic is more frequently eastbound than westbound, with about 2,500 more eastbound cars. The mid-day traffic is balanced, with almost equal numbers of car traveling each direction. The evening traffic flows more westbound than eastbound, but only by about 500 cars.

Traffic Volume for Market Street

The only data available for Market Street is from its intersection with University Avenue. This intersection follows the same pattern as Magnolia Avenue, with a higher volume of traffic flowing southbound than northbound, especially in the morning.

Traffic Volume for University Avenue

University Avenue experiences much higher traffic volumes during the evening than the morning or the mid-day. The eastbound traffic increases from morning to evening, while the westbound traffic is more balanced until it increases in the evening. The SR-91 draws more traffic, with volumes peaking near the Lime Street and SR-91 on-ramps. The eastbound traffic is also higher than the westbound traffic near UC Riverside.

Table 3: Intersection Flow Data for Magnolia Avenue, University Avenue, and Market Street

Magnolia Avenue	Eastbound				Westbound			
Intersection	Morning	Mid Day	Evening	Total	Morning	Mid Day	Evening	Total
14th St.	1,456	1,333	1,658	4,447	1,176	1,183	2,400	**4,759**
Bandini Ave.	2,267	2,099	2,267	6,633	2,103	2,053	2,103	**6,259**
Jurupa Ave.	1,552	1,303	1,755	4,610	851	1,127	1,861	**3,839**
Central Ave.	1,772	1,723	2,046	5,541	798	1,182	1,775	**3,755**
Arlington St.	774	690	733	2,197	465	831	1,074	**2,370**
Madison St.	1,646	1,560	1,474	4,680	1,066	1,368	1,670	**4,104**
Jefferson St.	1,152	1,378	1,604	4,134	1,477	1,598	1,719	**4,794**
Adams St.	1,314	1,482	1,650	4,446	1,031	1,548	2,064	**4,643**
Monroe St.	1,352	1,684	2,015	5,051	1,248	1,530	1,811	**4,589**
Jackson St.	1,026	1,474	1,922	4,422	1,148	1,409	1,669	**4,226**
Van Buren Blvd.	1,187	1,894	2,601	5,682	1,086	1,381	1,675	**4,142**
Tyler St.	1,125	1,994	2,286	5,405	976	2,079	2,057	**5,112**
La Sierra Ave.	1,205	1,189	1,718	4,112	1,139	1,922	2,446	**5,507**
Pierce St.	1,421	1,033	2,073	4,527	2,099	1,409	1,962	**5,470**

Market Street	Northbound				Southbound			
Intersection	Morning	Mid Day	Evening	Total	Morning	Mid Day	Evening	Total
University Ave.	1,022	1,570	2,119	4,711	2,014	2,321	2,629	**6,964**

University Avenue	Eastbound				Westbound			
Intersection	Morning	Mid Day	Evening	Total	Morning	Mid Day	Evening	Total
Brockton Ave.	408	278	438	1,124	185	274	393	**852**
Market St.	584	749	882	2,215	622	749	909	**2,280**
Lime St.	651	952	1,880	3,483	1670	1,142	1,942	**4,754**
I/91	710	1,184	2,220	4,114	1091	1,176	1,297	**3,564**
Park Ave.	704	692	2100	3,496	1011	693	1,300	**3,004**
Chicago Ave.	714	947	2,234	3,895	558	786	1,310	**2,654**
Iow a Ave.	623	730	1,852	3,205	569	673	1,040	**2,282**

Average Daily Traffic Counts

ADT data measures the number of vehicles passing a specific location, and is collected over the period of 24 hours. This type of data is used in a level of service calculation to better understand traffic congestion and the overall pattern of travel along the route. Table 5 below contains the data collected for Magnolia Avenue between Pierce Street and Central Avenue. The data shows there is a higher concentration of traffic towards the southern end of Magnolia Avenue than towards the northern end.

Table 4, on page 40, is a map of Average Daily Traffic Counts, broken into Eastbound and Westbound categories.

Table 4: Traffic Volume Information for Magnolia Avenue

Magnolia Ave.	Between Pierce St. and La Sierra Ave.	Between La Sierra Ave. and Tyler St.	Between Tyler St. and Van Buren Blvd.	Between Van Buren Blvd. and Jackson St.	Between Jackson St. and Monroe St.	Between Monroe St. and Adams St.	Between Adams St. and Jefferson St.	Between Jefferson St. and Madison St.	Between Madison St. and Arlington St.	Between Arlington St. and Central Ave.
Eastbound	17,293	13,777	14,794	11,003	10,138	10,171	10,905	10,137	9,201	8,708
Westbound	16,413	13,741	13,638	10,738	10,115	10,113	9,060	8,965	8,459	8,289
Total	33,706	27,518	28,432	21,741	20,253	20,284	19,965	19,102	17,660	16,997

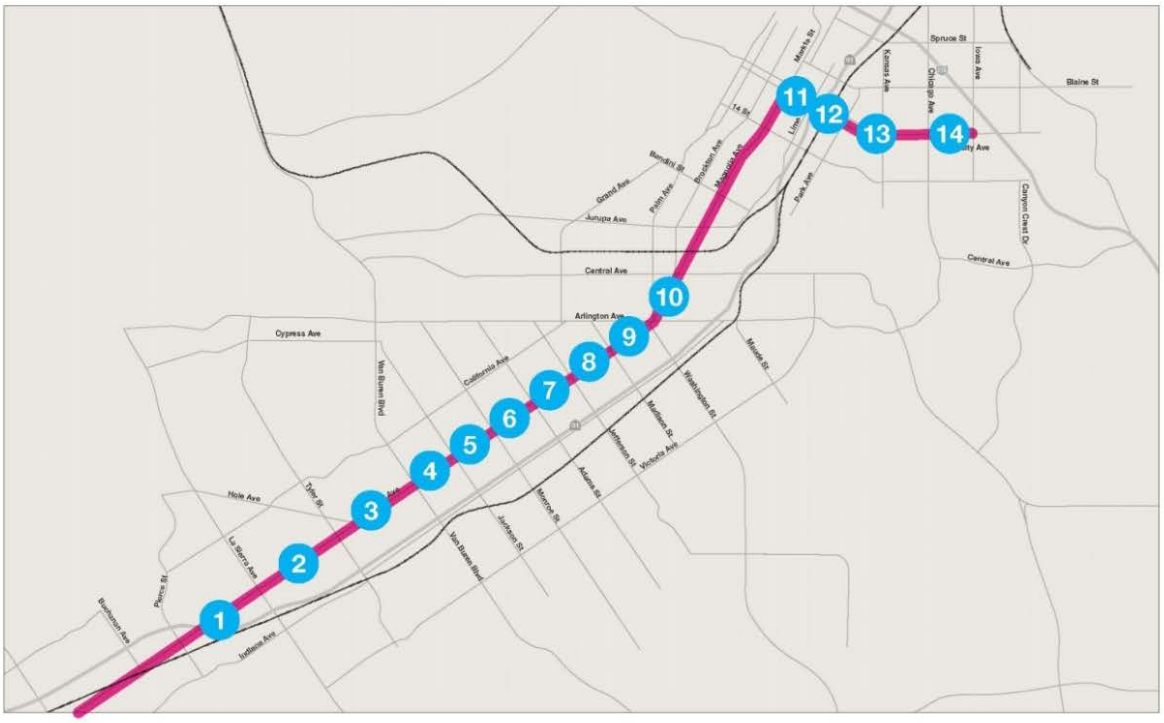
Table 6 to the right contains the data for University Avenue. The pattern is similar to the intersection data, where the traffic is concentrated around Chicago Avenue and Iowa Avenue. On either side of the intersection with Chicago Avenue the amount of westbound vehicles is nearly double that of the amount of eastbound vehicles.

Table 5: Traffic Volume Information for University Avenue

University Ave.	Between Market St. and Lime St.	Between I-91 and Park Ave.	Between Park Ave. and Chicago Ave.	Between Chicago Ave. and Iowa Ave.
Eastbound	7,449	10,418	12,552	11,831
Westbound	7,637	10,418	22,289	21,210
Total	15,086	20,836	34,841	33,041

Table 6: Average Daily Traffic Counts

Riverside
RECONNECTS
STREETCAR STUDY



Magnolia Avenue

Intersection	Eastbound	Westbound	Total
1 Between Pierce St. and La Sierra Ave.	17,293	16,413	33,706
2 Between La Sierra Ave. and Tyler St.	13,777	13,741	27,518
3 Between Tyler St. and Van Buren Blvd.	14,794	13,638	28,432
4 Between Van Buren Blvd. and Jackson St.	11,003	10,738	21,741
5 Between Jackson St. and Monroe St.	10,138	10,115	20,253
6 Between Monroe St. and Adams St.	10,171	10,110	20,284
7 Between Adams St. and Jefferson St.	10,905	9,060	19,965
8 Between Jefferson St. and Madison St.	10,137	8,965	19,102
9 Between Madison St. and Arlington St.	9,201	8,459	17,660
10 Between Arlington St. and Central Ave.	8,708	8,289	16,997

University Ave.

Intersection	Eastbound	Westbound	Total
11 Between Market St. and Lime St.	7,449	7,637	15,086
12 Between I-91 and Park Ave.	10,418	10,418	20,836
13 Between Park Ave. and Chicago Ave.	12,552	22,289	34,841
14 Between Chicago Ave. and Iowa Ave.	11,831	21,210	33,041

Level of Service

Where traffic volumes are a quantitative measure of transportation, level of service is a qualitative measure that relates speed, density, and traffic flows. Table 7 below contains information on the level of service for both Magnolia Avenue and University Avenue.

Table 7: Level of Service for Magnolia Avenue and University Avenue

Street	Limits	No. of Lanes	Type	Capacity	2014 Volume	V/C	Level of Service
Magnolia Ave	Van Buren Blvd to 14th St	4	Urban Arterial	35,900	19,429	1	A
Magnolia Ave	Pierce St to Van Buren Blvd	6	Urban Arterial	53,900	29,885	1	A
University Avenue	Market St to Park Ave	4	Urban Arterial	35,900	17,961	1	A
University Avenue	Park Ave to Iowa Ave	4	Urban Arterial	35,900	33941	1	E

The “A” classification means that traffic flows freely at or about the posted speed. The first three sections identified in the table above may be classified as LOS “A”.

The section of University Avenue between Park Avenue and Iowa Avenue falls into classification “E”, meaning the flow of traffic is unstable, operating at near capacity. Speeds may decrease, freedom to maneuver is restricted, and the spacing between vehicles is shortened.

Appendix B shows the detailed Traffic Volume tables.

This page intentionally left blank.

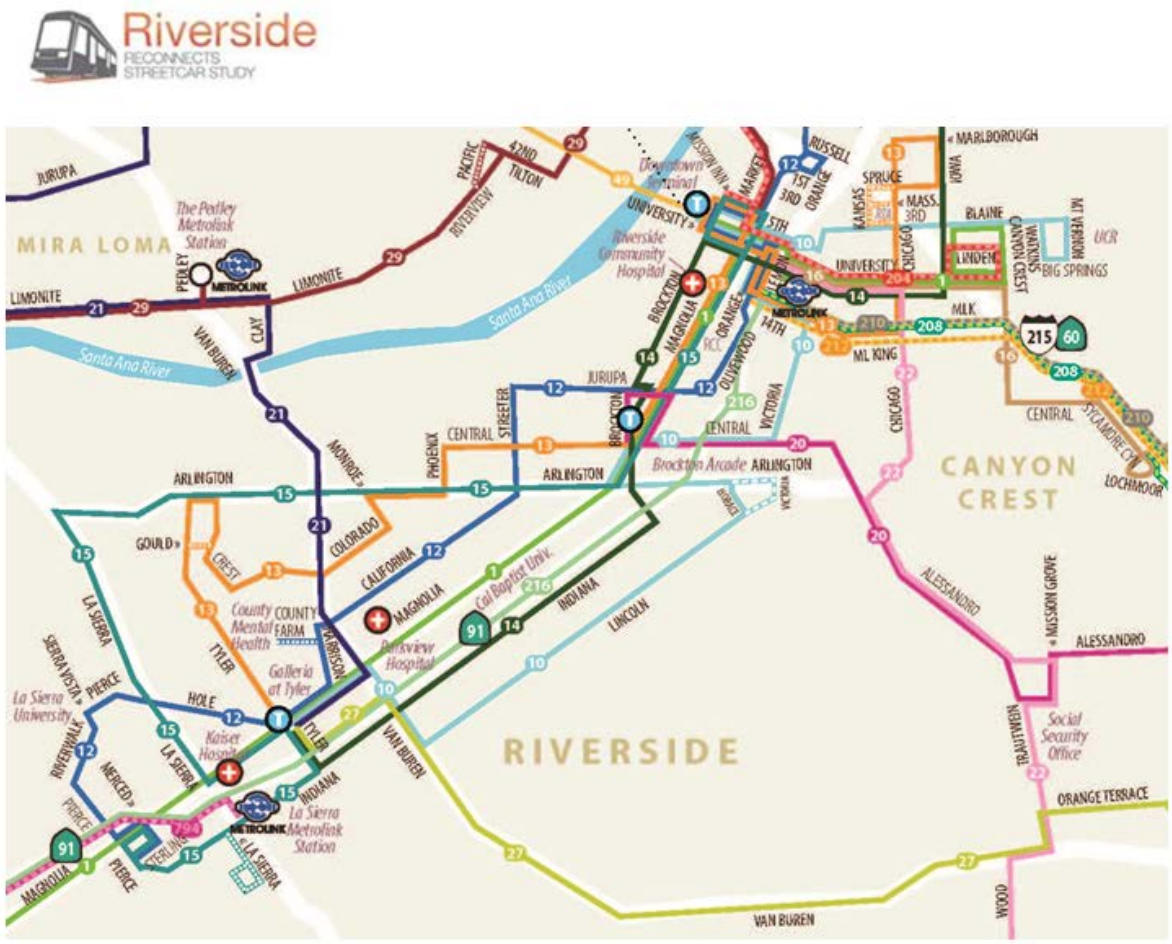
Existing Bus Routes

Seven RTA bus routes were analyzed for this report, including routes 1, 10, 12, 13, 14, 15, and 16, as well as Trolley Routes 50 and 51. These routes were chosen for their proximity to the transit corridors, thereby representing Riverside citizens' use of existing public transit along those lines. The tables are broken down into "Weekday", "Saturday", and "Sunday" to give a complete picture of how many people are using the lines and when they are using it.

"Headway" refers to the time between stops by buses at the same stop and on the same route, or the frequency between busses at the same stop. The average daily miles traveled is provided to compliment the next column, which is the average daily miles traveled per each passenger. These statistics present a picture of how long the average passenger rides the public transit system. Generally, the bus routes are taking passengers about five miles from start to finish, showing that the buses are typically a short-range means of accessing the city. Figure 2 shows the RTA bus network within the city.

Figure 22 on page 44 shows the existing bus routes, followed by a table containing ridership information for the bus routes along the contemplated travel corridors.

Figure 22: Existing Bus Routes



Weekday

For most of these bus routes the weekday ridership is significantly higher than the weekend ridership, in most cases nearly double, and in some cases triple. On most lines it would appear that the passengers are traveling the same distance whether it a weekday or weekend, with most of them being short range trips of 5 miles or less. As this table shows, existing headways are limited to buses on the same route at the same stop. Future changes to these routes include proposed frequency improvements for:

Route 1 –

- Weekday: every 20 minutes to every 10 minutes
- Saturday and Sunday: 30 minutes, approved for implementation in 2016;

Route 15 –

- Weekday: every 45 minutes to every 30 minutes,
- Saturday: 50 minutes
- Sunday: 55 minutes, funded; and the date for implementation will be determined;

Route 16 –

- Weekday: every 25 minutes to every 15 minutes
- Saturday and Sunday: 40 minutes, funded; and the date for implementation will be determined.

Table 8: Ridership Information for Weekday RTA Transit Bus Routes

Route-by-Route Analysis

Route	Weekday Service Hours	Weekday Peak Headway	Average Daily Weekday Ridership	Average Total Daily Miles Traveled	Average Daily Miles Per Passenger
1 - UCR to W. Corona Metrolink Station	3:45 a.m. to 11:22 p.m.	20 minutes	7,586	34,445	5
10 - Big Springs & Watkins to Galleria at Tyler	5:25 a.m. to 9:58 p.m.	72 minutes	937	4,296	5
12 - La Cadena & Stephens to Merced & Magnolia	6:03 a.m. to 9:30 p.m.	74 minutes	977	3,891	4
13 - Spruce & Atlanta to Galleria at Tyler - Riverside	4:38 a.m. to 8:30 p.m.	68 minutes	1,129	5,298	5
14 - Galleria at Tyler to Loma Linda VA Hospital	5:20 a.m. to 8:26 p.m.	73 minutes	859	6,037	7
15 - Riverside Downtown Terminal to Merced & Magnolia	4:15 a.m. to 10:26 p.m.	45 minutes	1,776	7,904	4
16 -Riverside Downtown to Moreno Valley Mall	4:13 a.m to 11:15 p.m	25 mintues	2,447	13,832	6

Local Routes

1 Traveling along Magnolia Avenue and University Avenue, this route has one of the most frequent headways of all routes, and provides service to just over 7,500 people daily. This travel corridor has significant ridership.

10 This route briefly travels along Magnolia Avenue, passes through downtown and heads towards UC Riverside on Blaine Avenue. Demand for this line shows the importance of Magnolia Avenue and University Avenue as transit corridors. Where Route 1 has high demand and frequent headways, this route has longer headways and about 1/7 of the ridership because it travels on secondary streets.

12 This route tells a similar story to Route 10. Traveling on the northern end of Magnolia, and then following Jurupa Avenue and Olivewood Avenue, this line has similar headways and ridership to Route 10. Both are significantly lower than the Route 1 along Magnolia Avenue.

13 This route serves the residential neighborhoods of the southwestern half of Riverside, and then continues briefly on Martin Luther King Blvd. before heading to UC Riverside. This route has similar headways and ridership to both Routes 10 and 12.

14 This route comprises part of Brockton Avenue and University Avenue, as well as connections to Loma Linda and Grand Terrace. This route experiences relatively low ridership demand, with longer headways.

15 This route includes La Sierra Avenue, as well as sections of Magnolia Avenue and downtown Riverside. This route experiences a medium level of demand with a mid-range headway compared against other bus routes in the local system.

16 This last route connects downtown Riverside to Moreno Valley Mall, via University Avenue. This route provides frequent headways and about 2,500 daily passengers.

Trolley Routes

50 This route connects the downtown area to the civil facilities located along Market Street and 10th Street. This route has connections to bus routes 1, 13, and 15.

54 This is a trolley close to the UC Riverside, running on a loop from Central Avenue to Spruce Street This is a trolley service designed to serve the UC Riverside community, as it operates on UCR academic days only.

Saturday

The changes from the weekday ridership to Saturday ridership occur mostly in the number of passengers. The bus schedules start later and end earlier. However, there is little change in average miles traveled per passenger or the headway between buses. This consistency between the miles traveled for both weekdays and weekends indicates that the bus service, without shortening the headways, has likely established itself at this level of service.

Table 9: Ridership Information for Saturday RTA Transit Bus Routes

Route	Saturday Service Hours	Saturday Peak Headway	Average Daily Saturday Ridership	Average Total Daily Miles Traveled	Average Daily Miles Per Passenger
1 - UCR to W. Corona Metrolink Station	5:35 a.m. to 9:22 p.m.	30 minutes	3,535	16,401	5
10 - Big Springs & Watkins to Galleria at Tyler	8:09 a.m. to 7:20 p.m.	86 minutes	316	1,569	5
12 - La Cadena & Stephens to Merced & Magnolia	6:40 a.m. to 7:25 p.m.	55 minutes	638	2,359	4
13 - Spruce & Atlanta to Galleria at Tyler - Riverside	7:01 a.m. to 6:35 p.m.	61 minutes	458	2,224	5
14 - Galleria at Tyler to Loma Linda VA Hospital	6:54 a.m. to 7:44 p.m.	71 minutes	451	2,380	5
15 - Riverside Downtown Terminal to Merced & Magnolia	6:55 a.m. to 7:42 p.m.	50 minutes	724	3,046	4
16 -Riverside Downtown to Moreno Valley Mall	6:26 a.m. to 9:08 p.m.	40 minutes	1,263	7,716	6

Sunday

Data and ridership patterns for Sunday are similar to those for Saturday. The headways and average miles traveled are also similar.

Table 10: Ridership Information for Sunday RTA Transit Bus Routes

Route	Sunday Service Hours	Sunday Peak Headway	Average Daily Sunday Ridership	Average Total Daily Miles Traveled	Average Daily Miles Per Passenger
1 - UCR to W. Corona Metrolink Station	6:11 a.m. to 8:38 p.m.	30 minutes	2,783	12,550	5
10 - Big Springs & Watkins to Galleria at Tyler	8:31 a.m. to 7:02 p.m.	80 minutes	263	1,606	6
12 - La Cadena & Stephens to Merced & Magnolia	6:55 a.m. to 7:26 p.m.	55 minutes	565	2,252	4
13 - Spruce & Atlanta to Galleria at Tyler - Riverside	7:01 a.m. to 6:35 p.m.	61 minutes	438	2,190	5
14 - Galleria at Tyler to Loma Linda VA Hospital	6:54 a.m. to 7:44 p.m.	71 minutes	245	1,269	5
15 - Riverside Downtown Terminal to Merced & Magnolia	6:55 a.m. to 7:48 p.m.	55 minutes	620	2,844	5
16 -Riverside Downtown to Moreno Valley Mall	6:26 a.m. to 9:08 p.m.	40 minutes	875	5,468	6

Transit Service Observations

The analysis of the existing bus service indicates the importance of both Magnolia Avenue and University Avenue for transit service and ridership. Route 1, which travels both of those roads, has by far the most ridership among the transit routes surveyed for this report. The importance of University Avenue is also indicated by Route 16, which has the second highest ridership and headways.

Some of the contemplated alternative routes have bus routes that have low ridership and decreased demand. It is difficult to say whether the low ridership statistics are related to the long headways, or if the long headways indicate a lack of ridership demand.

Conclusion

The analysis in this report highlights the important roles played by Magnolia Avenue, University Avenue and streets in the downtown area as travel and transit corridors. The ridership information provided for the bus routes along these corridors confirms this trend, with these routes experiencing above average numbers in ridership with shorter headways and increased demand when compared to parallel routes.

Appendix A: Demographic and Economic Tables

Demographic Trends Tables

Table A-1 Population and Household Trends, 2000-2014

Area	2000	2014	Change 2000-2014	Percent Change 2000-2014
Study Area				
Total Population	**139,122**	**162,538**	**23,416**	**16.8%**
in Households	132,206	151,716	19,510	14.8%
in Group Quarters	6,916	10,822	3,906	56.5%
Number of Households	45,443	49,340	3,897	8.6%
Average Household Size	2.91	3.07		
City of Riverside				
Total Population	**255,166**	**311,619**	**56,453**	**22.1%**
in Households	247,368	300,102	52,734	21.3%
in Group Quarters	7,798	11,517	3,719	47.7%
Number of Households	82,005	94,346	12,341	15.0%
Average Household Size	3.02	3.18		
Los Angeles-Long Beach CSA				
Total Population	**16,373,645**	**18,464,771**	**2,091,126**	**12.8%**
in Households	16,063,431	18,163,292	2,099,861	13.1%
in Group Quarters	310,214	301,479	-8,735	-2.8%
Number of Households	5,347,107	5,977,986	630,879	11.8%
Average Household Size	3.00	3.04		

Sources: US Census, 2000; Nielsen; BAE, 2014.

Table A-2: Household Composition, 2000-2010

Household Type (#)	Study Area		City of Riverside		Los Angeles-Long Beach CSA (a)	
	2000	2014	2000	2014	2000	2014
Non-Family						
Single Person	11,286	11,331	17,615	18,942	1,217,474	1,333,995
2+ Persons	4,134	5,329	6,235	8,104	365,067	442,198
Non-Family Households	**15,420**	**16,660**	**23,850**	**27,046**	**1,582,541**	**1,776,193**
Family						
Married Couple	19,578	20,887	24,254	46,569	1,563,628	2,959,378
Other Family	10,445	11,793	33,901	20,731	2,200,938	1,242,415
Family Households	**30,023**	32,680	**58,155**	**67,300**	**3,764,566**	**4,201,793**
Households with Children Under 18	**19,367**	**20,034**	**36,466**	**39,883**	**2,255,057**	**2,347,984**
Household Type (%)						
Non-Family						
Single Person	24.8%	23.0%	21.5%	20.1%	22.8%	22.3%
2+ Persons	9.1%	10.8%	7.6%	8.6%	6.8%	7.4%
Non-Family Households	**33.9%**	**33.8%**	**29.1%**	**28.7%**	**29.6%**	**29.7%**
Family						
Married Couple	43.1%	42.3%	29.6%	49.4%	29.2%	49.5%
Other Family	23.0%	23.9%	41.3%	22.0%	41.2%	20.8%
Family Households	**66.1%**	**66.2%**	**70.9%**	**71.3%**	**70.4%**	**70.3%**
Households with Children Under 18	**42.6%**	**40.6%**	**44.5%**	**42.3%**	**42.2%**	**39.3%**

Notes:
(e) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: US Census, 2000; Nielsen; BAE, 2014.

Table A-3: Household Tenure, 2000-2010

	Study Area		City of Riverside		Los Angeles-Long Beach CSA	
Tenure (#)	**2000**	**2014**	**2000**	**2014**	**2000**	**2014**
Owners	20,593	21,775	46,455	52,462	2,928,045	3,245,029
Renters	24,850	27,565	35,550	41,884	2,419,062	2,732,957
Total	**45,443**	**49,340**	**82,005**	**94,346**	**5,347,107**	**5,977,986**
Tenure (%)						
Owners	45.3%	44.1%	56.6%	55.6%	54.8%	54.3%
Renters	54.7%	55.9%	43.4%	44.4%	45.2%	45.7%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
% Change, 2000-2012						
Owners		**5.7%**		**12.9%**		**10.8%**
Renters		**10.9%**		**17.8%**		**13.0%**

Notes:
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: US Census, 2000, 2010; BAE, 2014.

Tbale A-4: Educational Attainment, 2000-2014

Educational Attainment (#)	Study Area		City of Riverside		Los Angeles-Long Beach CSA	
	2000	2014	2000	2014	2000	2014
Less than 9th Grade	9,415	11,822	15,623	20,526	1,397,512	1,430,716
9th to 12th Grade, No Diploma	12,661	12,487	21,076	21,651	1,327,370	1,167,652
High School Graduate (incl. Equivalency)	18,546	24,774	33,662	45,463	1,995,604	2,569,215
Some College, No Degree	19,865	21,965	37,133	45,385	2,221,757	2,574,323
Associate Degree	5,307	6,230	10,799	13,290	684,689	870,337
Bachelor's Degree	7,174	9,150	16,317	22,347	1,600,827	2,216,880
Graduate/Professional Degree	4,779	6,563	11,579	17,080	859,698	1,183,844
Total	**77,747**	**92,991**	**146,189**	**185,742**	**10,087,457**	**12,012,967**
Population 25+ with Bachelor's Degree or Higher	**11,953**	**15,713**	**27,896**	**39,427**	**2,460,525**	**3,400,724**
Less than 9th Grade	12.1%	12.7%	10.7%	11.1%	13.9%	11.9%
9th to 12th Grade, No Diploma	16.3%	13.4%	14.4%	11.7%	13.2%	9.7%
High School Graduate (incl. Equivalency)	23.9%	26.6%	23.0%	24.5%	19.8%	21.4%
Some College, No Degree	25.6%	23.6%	25.4%	24.4%	22.0%	21.4%
Associate Degree	6.8%	6.7%	7.4%	7.2%	6.8%	7.2%
Bachelor's Degree	9.2%	9.8%	11.2%	12.0%	15.9%	18.5%
Graduate/Professional Degree	6.1%	7.1%	7.9%	9.2%	8.5%	9.9%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Population 25+ with Bachelor's Degree or Higher	**15.4%**	**16.9%**	**19.1%**	**21.2%**	**24.4%**	**28.3%**

Notes:
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: US Census 2000 SF3 Data; Nielsen; BAE, 2014.

Table A-5: Household Income, 2014

Income Category	Study Area	City of Riverside	Los Angeles-Long Beach CSA
Less than $15,000	7,929	12,088	716,337
$15,000-$24,999	6,550	10,496	632,423
$25,000-$34,999	5,591	9,893	579,372
$35,000-$49,999	8,136	14,082	780,794
$50,000-$74,999	9,552	17,915	1,031,742
$75,000-$99,999	5,425	11,766	726,389
$100,000-$149,999	4,328	7,360	515,685
$150,000-$199,999	1,198	4,144	307,849
$200,000 or more	631	3,851	340,249
Total	**49,340**	**91,595**	**5,630,840**
Median HH Income (a)	**$43,481**	**$50,857**	**$56,786**
Less than $15,000	16.1%	13.2%	12.7%
$15,000-$24,999	13.3%	11.5%	11.2%
$25,000-$34,999	11.3%	10.8%	10.3%
$35,000-$49,999	16.5%	15.4%	13.9%
$50,000-$74,999	19.4%	19.6%	18.3%
$75,000-$99,999	11.0%	12.8%	12.9%
$100,000-$149,999	8.8%	8.0%	9.2%
$150,000-$199,999	2.4%	4.5%	5.5%
$200,000 or more	1.3%	4.2%	6.0%
Total	**100.0%**	**100.0%**	**100.0%**

Notes: All incomes adjusted to 2014 dollars.
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: Nielsen; BAE, 2014.

Table A-6: Age Distribution, 2000-2010

Age Cohort	Study Area		City of Riverside		Los Angeles-Long Beach CSA	
	2000	2014	2000	2014	2000	2014
Under 18	40,650	41,458	76,704	80,534	4,671,377	4,530,875
18-24	21,124	28,089	33,030	45,343	1,634,549	1,920,929
25-34	21,584	26,054	37,324	47,380	2,599,463	2,657,577
35-44	20,220	20,155	39,140	39,034	2,636,550	2,527,266
45-54	14,366	18,505	29,565	39,323	1,991,790	2,548,663
55-64	8,172	14,153	16,349	31,219	1,213,253	2,079,083
65-74	6,255	7,623	11,811	16,384	866,177	1,247,483
75-84	4,773	4,321	8,420	8,525	571,622	661,519
85 or older	1,978	2,180	2,823	3,877	188,864	291,376
Total	**139,122**	**162,538**	**255,166**	**311,619**	**16,373,645**	**18,464,771**
Under 18	29.2%	25.5%	30.1%	25.8%	28.5%	24.5%
18-24	15.2%	17.3%	12.9%	14.6%	10.0%	10.4%
25-34	15.5%	16.0%	14.6%	15.2%	15.9%	14.4%
35-44	14.5%	12.4%	15.3%	12.5%	16.1%	13.7%
45-54	10.3%	11.4%	11.6%	12.6%	12.2%	13.8%
55-64	5.9%	8.7%	6.4%	10.0%	7.4%	11.3%
65-74	4.5%	4.7%	4.6%	5.3%	5.3%	6.8%
75-84	3.4%	2.7%	3.3%	2.7%	3.5%	3.6%
85 or older	1.4%	1.3%	1.1%	1.2%	1.2%	1.6%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Median Age	**28.6**	**29.5**	**29.8**	**31.3**	**32.2**	**35.5**

Notes:
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: US Census, 2000; Nielsen; BAE, 2014.

Table A-7: Housing Units by Type, 2000-2014

Housing Type	Study Area 2000	Study Area 2014	City of Riverside 2000	City of Riverside 2014	Los Angeles-Long Beach CSA 2000	Los Angeles-Long Beach CSA 2014
Single Family Detached	25,574	26,911	54,528	65,247	3,016,754	3,567,119
Single Family Attached	2,486	2,472	4,188	3,909	462,636	474,718
Multifamily 2 to 4 Units	4,441	4,441	5,748	6,174	461,666	479,231
Multifamily 5+Units	14,131	15,621	19,197	23,569	1,511,155	1,715,186
Mobile Home	1,275	1,112	2,383	2,336	225,937	230,078
Total	**47,907**	**50,557**	**86,044**	**101,235**	**5,678,148**	**6,466,332**
Single Family Detached	53.4%	53.2%	63.4%	64.5%	53.1%	55.2%
Single Family Attached	5.2%	4.9%	4.9%	3.9%	8.1%	7.3%
Multifamily 2 to 4 Units	9.3%	8.8%	6.7%	6.1%	8.1%	7.4%
Multifamily 5+Units	29.5%	30.9%	22.3%	23.3%	26.6%	26.5%
Mobile Home	2.7%	2.2%	2.8%	2.3%	4.0%	3.6%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Percent Multifamily	**38.8%**	**39.7%**	**29.0%**	**29.4%**	**34.7%**	**33.9%**

Notes:
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: Nielsen; BAE, 2014.

Table A-8: Higher Education Campus Populations, 2014

	Students				
	Student Housing (a)	Commuters (b)	Total Enrollment	% Commuters	Faculty & Staff
University of California, Riverside	8,449	12,848	21,297	60.3%	7,556
Riverside City College	-	17,798	17,798	100.0%	916
California Baptist University	2,858	4,286	7,144	60.0%	565
La Sierra University	1,319	880	2,199	40.0%	104
Total	**12,626**	**35,812**	**48,438**	**73.9%**	**9,141**

Notes: Data reflects latest available for each university;
(a) Includes all students living in institution-affiliated housing
(b) Commuters defined as a student not living in University-affiliated housing
Sources: University of California, Riverside, Common Data Set 2013-2014; University of California, Office of the President, 2013; La Sierra University Fact Book, 2012; California Community Colleges Chancellor's Office, Management Information Systems Data Mart, 2014; California Baptist University, Common Data Set 2013-2014; BAE 2014.

Economic Trends Tables

Table A-9: Employment by Industry by Place of Work, 2011

	Study Area		City of Riverside		Los Angeles-Long Beach CSA (a)	
Industry	Number	Percent	Number	Percent	Number	Percent
Agriculture, Forestry, Fishing and Hunting	12	0.0%	798	0.6%	48,566	0.8%
Mining, Quarrying, and Oil and Gas Extraction	2	0.0%	27	0.0%	6,607	0.1%
Utilities	722	0.9%	959	0.7%	49,739	0.8%
Construction	1,460	1.8%	5,050	3.9%	226,100	3.5%
Manufacturing	1,496	1.9%	6,034	4.7%	627,175	9.8%
Wholesale Trade	845	1.1%	4,456	3.5%	371,082	5.8%
Retail Trade	7,036	8.8%	14,210	11.1%	702,965	11.0%
Transportation and Warehousing	224	0.3%	4,240	3.3%	241,159	3.8%
Information	940	1.2%	2,141	1.7%	242,007	3.8%
Finance and Insurance	2,032	2.5%	3,161	2.5%	271,526	4.2%
Real Estate and Rental and Leasing	739	0.9%	1,388	1.1%	120,972	1.9%
Professional, Scientific, and Technical Services	2,597	3.3%	4,372	3.4%	429,243	6.7%
Management of Companies and Enterprises	791	1.0%	1,356	1.1%	98,205	1.5%
Administration & Support, Waste Management and Remediatio	5,720	7.2%	9,453	7.4%	414,483	6.5%
Educational Services	12,653	15.9%	16,790	13.1%	583,661	9.1%
Health Care and Social Assistance	14,217	17.8%	17,745	13.8%	717,713	11.2%
Arts, Entertainment, and Recreation	507	0.6%	799	0.6%	136,894	2.1%
Accommodation and Food Services	6,279	7.9%	8,816	6.9%	521,146	8.1%
Other Services (excluding Public Administration)	2,357	3.0%	4,339	3.4%	329,795	5.1%
Public Administration	19,151	24.0%	22,102	17.2%	274,975	4.3%
Total	**79,780**	**73.0%**	**128,236**	**79.4%**	**6,414,013**	**100.0%**

Notes:
Sub Areas defined by neighborhoods from the City of Riverside General Plan 2025.
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2011); BAE 2014

Table A-10: Commute Flow, 2002-2011

Working Residents in Study Area

	2002		2011	
Place of Work	**Number**	**% Total**	**Number**	**% Total**
In Transit Corridor	13,311	25.4%	10,148	20.3%
All Other Locations	39,014	74.6%	39,759	79.7%
Total	**52,325**	**100.0%**	**49,907**	**100.0%**

Workers in Study Area

	2002		2011	
Place of Residence	**Number**	**% Total**	**Number**	**% Total**
In Transit Corridor	13,311	15.4%	10,148	10.9%
All Other Locations	73,369	84.6%	82,842	89.1%
	86,680	**100.0%**	**92,990**	**100.0%**

Working Residents in City of Riverside

	2002		2011	
Place of Work	**Number**	**% Total**	**Number**	**% Total**
In City of Riverside	34,368	33.6%	28,556	28.8%
All Other Locations	67,844	66.4%	70,559	71.2%
Total	**102,212**	**100.0%**	**99,115**	**100.0%**

Workers in City of Riverside

	2002		2011	
Place of Residence	**Number**	**% Total**	**Number**	**% Total**
In City of Riverside	34,368	28.9%	28,556	22.3%
All Other Locations	84,491	71.1%	99,680	77.7%
Total	**118,859**	**100.0%**	**128,236**	**100.0%**

Working Residents in Los Angeles-Long Beach CSA (a)

	2002		2011	
Place of Work	**Number**	**% Total**	**Number**	**% Total**
In SCAG Region	5,745,403	95.4%	5,944,221	93.2%
All Other Locations	276,520	4.6%	430,439	6.8%
Total	**6,021,923**	**100.0%**	**6,374,660**	**100.0%**

Workers in Los Angeles-Long Beach CSA

	2002		2011	
Place of Residence	**Number**	**% Total**	**Number**	**% Total**
In SCAG Region	5,745,403	95.4%	5,944,221	92.7%
All Other Locations	279,010	4.6%	469,792	7.3%
Total	**6,024,413**	**100.0%**	**6,414,013**	**100.0%**

Notes:
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2011); BAE 2014

Table A-11: Means of Transportation to Work by Workplace Geography

	Study Area		City of Riverside		Los Angeles-Long Beach CSA	
	#	%	#	%	#	%
Drove Alone (incl. Motorcycle)	79,255	80.3%	116,120	78.9%	5,814,315	74.5%
Carpooled	11,534	11.7%	18,310	12.4%	931,765	11.9%
Bus or Trolley Bus	1,495	1.5%	2,260	1.5%	341,720	4.4%
Streetcar or trolley car	50	0.1%	70	0.0%	3,145	0.0%
Other Public Transportation	0	0.0%	55	0.0%	38,540	0.5%
Bicycle	935	0.9%	1,115	0.8%	52,725	0.7%
Walked	3,030	3.1%	3,795	2.6%	190,665	2.4%
Other Means	480	0.5%	920	0.6%	70,355	0.9%
Worked at Home	1,923	1.9%	4,505	3.1%	358,430	4.6%
Total	98,702	100.0%	147,150	100.0%	7,801,660	100.0%

Notes:
(a) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Soruces: Census Transportation Transit Package 2006-2010; BAE 2014

Development Trends Tables

Table A-12: Building Permits Issued by Total Units

City of Riverside

Type (#)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Avg.
Single-Family	689	847	1,441	848	342	69	56	107	43	190	70	4,702	427
Multi-Family	1,329	280	521	329	592	216	23	266	236	168	51	4,011	365
Total	**2,018**	**1,127**	**1,962**	**1,177**	**934**	**285**	**79**	**373**	**279**	**358**	**121**	**8,713**	**792**
Type (%)													
Single-Family	34%	75%	73%	72%	37%	24%	71%	29%	15%	53%	58%	54%	
Multi-Family	66%	25%	27%	28%	63%	76%	29%	71%	85%	47%	42%	46%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	
% Change													
Single-Family		**22.9%**	**70.1%**	**-41.2%**	**-59.7%**	**-79.8%**	**-18.8%**	**91.1%**	**-59.8%**	**341.9%**	**-63.2%**		
Multi-Family		**-78.9%**	**86.1%**	**-36.9%**	**79.9%**	**-63.5%**	**-89.4%**	**1056.5%**	**-11.3%**	**-28.8%**	**-69.6%**		

Los Angeles-Long Beach CSA

Type (#)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Avg.
Single-Family	54,677	62,452	64,784	48,610	26,262	10,749	8,700	9,504	7,756	9,712	14,411	317,617	28,874
Multi-Family	21,293	27,413	21,376	25,228	22,035	14,135	5,268	7,816	11,795	14,250	21,136	191,745	17,431
Total	**75,970**	**89,865**	**86,160**	**73,838**	**48,297**	**24,884**	**13,968**	**17,320**	**19,551**	**23,962**	**35,547**	**509,362**	**46,306**
Type (%)													
Single-Family	72%	69%	75%	66%	54%	43%	62%	55%	40%	41%	41%	62%	
Multi-Family	28%	31%	25%	34%	46%	57%	38%	45%	60%	59%	59%	38%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	
% Change													
Single-Family		**14%**	**4%**	**-25%**	**-46%**	**-59%**	**-19%**	**9%**	**-18%**	**25%**	**48%**		
Multi-Family		**29%**	**-22%**	**18%**	**-13%**	**-36%**	**-63%**	**48%**	**51%**	**21%**	**48%**		

Sources: U.S. Census Bureau, Building Permit Trends, 2000-2013; BAE, 2014.

Table A-13: Riverside Taxable Retail Sales Trends, 2002-2008

Sales in $000 (a) (b) (c)	2002	2003	2004	2005	2006	2007	2008
Motor Vehicles and Parts	$864,486	$987,372	$1,172,792	$1,245,340	$1,219,784	$1,170,184	$855,915
Home Furnishings and Appliances	$81,844	$93,977	$102,243	$108,873	$119,217	$107,072	$116,053
Building Materials	$346,277	$395,175	$517,865	$584,760	$573,736	$334,342	$215,303
Food Stores	$136,076	$145,308	$154,562	$168,015	$176,052	$180,993	$172,072
Service Stations	$192,914	$222,575	$266,658	$306,008	$342,810	$402,574	$416,205
Apparel Stores	$105,476	$124,223	$145,023	$160,138	$174,662	$171,743	$179,703
General Merchandise Stores	$510,038	$536,795	$597,030	$625,500	$606,351	$568,120	$480,859
Eating and Drinking Places	$257,711	$276,757	$300,858	$330,249	$350,911	$374,528	$375,559
Other Retail Stores	$396,808	$427,978	$461,968	$491,080	$519,454	$578,695	$397,415
Retail Stores Total	**$2,891,630**	**$3,210,160**	**$3,718,999**	**$4,019,963**	**$4,082,977**	**$3,888,251**	**$3,209,083**

Sales per Capita in $ (d)	2002	2003	2004	2005	2006	2007	2008
Motor Vehicles and Parts	$3,205	$3,579	$4,191	$4,374	$4,254	$4,040	$2,911
Home Furnishings and Appliances	$303	$341	$365	$382	$416	$370	$395
Building Materials	$1,284	$1,432	$1,851	$2,054	$2,001	$1,154	$732
Food Stores	$504	$527	$552	$590	$614	$625	$585
Service Stations	$715	$807	$953	$1,075	$1,196	$1,390	$1,416
Apparel Stores	$391	$450	$518	$562	$609	$593	$611
General Merchandise Stores	$1,891	$1,946	$2,134	$2,197	$2,115	$1,961	$1,636
Eating and Drinking Places	$955	$1,003	$1,075	$1,160	$1,224	$1,293	$1,277
Other Retail Stores	$1,471	$1,551	$1,651	$1,725	$1,812	$1,998	$1,352
Retail Stores Total	**$10,720**	**$11,637**	**$13,290**	**$14,119**	**$14,240**	**$13,423**	**$10,916**

Population	269,746	275,867	279,829	284,715	286,720	289,674	293,988

(a) At the beginning of 2007, SBOE made some minor changes to their classification system, thus year-to-year comparisons with previous years should be made with caution. 2009-2012 data presented in a separate table due to major change in categorization scheme, such that data are not fully comparable with earlier years.
(b) Analysis excludes all non-retail outlets (business and personal services) reporting taxable sales.
(c) A "#" sign indicates data unavailability for the category due to SBOE confidentiality rules that suppress data when there are four or fewer outlets or sales in a category dominated by one store. Suppressed sales have been combined with Other Retail Stores.
(d) Per capita sales calculated based on sales divided by population. 2000 and 2010 population from U.S. Census; estimates for other years from CA State Dept. of Finance.

Sources: 2000 & 2010 U.S. Census; State Dept. of Finance; State Board of Equalization; CA Dept. of Industrial Relations; U.S. Bureau of Labor Statistics; BAE, 2014

Table A-14: Riverside Taxable Retail Sales Trends, 2009-2012

Sales in $000 (a) (b) (c)	2009	2010	2011	2012
Motor Vehicle and Parts Dealers	$708,510	$776,979	$887,001	$1,011,302
Home Furnishings and Appliance Stores	$124,993	$134,997	$137,320	$138,107
Bldg. Matrl. and Garden Equip. & Supplies	$197,685	$198,360	$214,677	$216,846
Food and Beverage Stores	$181,051	$181,870	$188,834	$194,322
Gasoline Stations	$300,220	$343,767	$414,819	$431,748
Clothing & Clothing Accessories Stores	$213,798	$223,198	$228,574	$239,812
General Merchandise Stores	$382,455	$387,519	$400,316	$408,856
Food Services and Drinking Places	$357,186	$365,803	$386,135	$413,652
Other Retail Group	$268,652	$276,797	$286,862	$293,575
Retail Stores Total	**$2,734,550**	**$2,889,292**	**$3,144,537**	**$3,348,220**

Sales per Capita in $ (d)	2009	2010	2011	2012
Motor Vehicle and Parts Dealers	$2,372	$2,557	$2,898	$3,268
Home Furnishings and Appliance Stores	$418	$444	$449	$446
Bldg. Matrl. and Garden Equip. & Supplies	$662	$653	$701	$701
Food and Beverage Stores	$606	$599	$617	$628
Gasoline Stations	$1,005	$1,131	$1,355	$1,395
Clothing & Clothing Accessories Stores	$716	$735	$747	$775
General Merchandise Stores	$1,280	$1,275	$1,308	$1,321
Food Services and Drinking Places	$1,196	$1,204	$1,262	$1,337
Other Retail Group	$899	$911	$937	$949
Retail Stores Total	**$9,154**	**$9,508**	**$10,274**	**$10,821**
	298,721	303,871	306,069	309,409

(a) At the beginning of 2007, SBOE made some minor changes to their classification system, thus year-to-year comparisons with previous years should be made with caution. 2009-2012 data presented in a separate table due to major change in categorization scheme, such that data are not fully comparable with earlier years.
(b) Analysis excludes all non-retail outlets (business and personal services) reporting taxable sales.
(c) A "#" sign indicates data unavailability for the category due to SBOE confidentiality rules that suppress data when there are four or fewer outlets or sales in a category dominated by one store. Suppressed sales have been combined with Other Retail Stores.
(d) Per capita sales calculated based on sales divided by population. 2000 and 2010 population from U.S. Census; estimates for other years from CA State Dept. of Finance.

Sources: 2000 & 2010 U.S. Census; State Dept. of Finance; State Board of Equalization; CA Dept. of Industrial Relations; U.S. Bureau of Labor Statistics; BAE, 2014.

Projections Tables

Table A-15: Projected Population Growth, 2008-2035

Population	2008	2020	2035	# Change 2008-2035	% Change 2008-2035
Study Area (a)	144,110	165,447	197,710	53,600	37.2%
City of Riverside	295,500	339,000	382,700	87,200	29.5%
Los Angeles-Long Beach CSA (b)	17,724,000	19,419,000	21,802,000	4,078,000	23.0%
Employment					
Study Area (a)	81,167	103,653	115,334	34,167	42.1%
City of Riverside	151,500	198,300	217,800	66,300	43.8%
Los Angeles-Long Beach CSA (b)	7,738,000	8,414,000	9,319,000	1,581,000	20.4%
Households					
Study Area (a)	45,960	52,217	62,200	16,240	35.3%
City of Riverside	91,400	104,000	117,800	26,400	28.9%
Los Angeles-Long Beach CSA (b)	5,766,000	6,386,000	7,234,000	1,468,000	25.5%

Notes:
(a) Study Area subareas include those Transportation Analysis Zones (TAZ) within the corresponding neighborhoods as identified in the City of Riverside's General Plan 2025
(b) Los Angeles-Long Beach CSA includes the Counties of Riverside, Orange, San Bernardino, Los Angeles, and Ventura
Sources: Southern California Association of Governments, 2012; BAE, 2014.