



HIGH QUALITY TRANSIT AREA ANALYSIS PROGRAM

Final Report

SOUTHERN CALIFORNIA ASSOCIATION OF
GOVERNMENTS

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Overview and Purpose



PILOT PROGRAM OVERVIEW

The High Quality Transit Area (HQTA) Analysis program was created by the Southern California Association of Governments (SCAG) in 2017 to help implement the goals and objectives of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The 2016 RTP/SCS, the 30-year plan for the Southern California Region, forecasts that 46% of future household growth will be located in HQTAs, which comprise just 3% of the land area within the SCAG region. HQTAs are areas within easy walking distance to current or anticipated transit service with 15-minute or better service.

To assist communities with the implementation of the RTP, SCAG launched the first round of the HQTA Pilot Program in 2017. The Pilot Program offered planning services to station areas that have a high potential for transit-supportive development patterns and future growth. Following the completion of station area vision plans for the HQTAs, SCAG will continue to work with Pilot Project jurisdictions to track progress towards meeting a variety of regional objectives, such as lower greenhouse gas emissions and increased transit ridership.

SCAG staff and the Project Team worked with six Pilot Project communities to develop HQTA vision plans, setting the stage for transit-oriented development and active transportation investments. The three main goals of the HQTA Analysis program are as follows:

- Implement the RTP/SCS for future job and housing near high quality transit through actionable transit-oriented development (TOD) projects
- Promote development and active transportation within HQTAs
- Reduce Greenhouse Gases (GHG) and Vehicle Miles Traveled (VMT) by 21% over 2005 levels

Benefits of Transit-Oriented Development

Transit-Oriented Development (TOD) is a vibrant, mixed-use form of urban development that clusters a variety of housing types, employment opportunities, and community amenities at or near major transit stations. Integrated clusters of TODs establish a multi-modal network of public and private realm improvements that allow residents to walk, bike, or take transit to major attractions, which results in several environmental, economic, and social benefits:

Environment

- Increased transit ridership
- Reduced VMT
- Improved air quality through reduced GHG emissions
- Conservation of land and open space

Social

- Increased housing and employment choices
- Greater mobility choices
- Health benefits
- Enhanced sense of community
- Enhanced public safety
- Increased quality of life

Economic

- Catalyst for economic development
- Redevelopment of vacant and underutilized properties
- Increased property value
- Decreased infrastructure costs
- Revenue for transit systems
- Reduced household spending on transportation
- Increase in housing opportunities

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Pilot Project Selection Process



The SCAG region includes hundreds of communities with HQTAs. To determine which communities would receive vision plans as part of this Pilot Program, the Project Team developed a focused selection process supplemented with regional and local datasets provided by SCAG and local communities.

The selection process methodology was designed to prioritize Pilot Projects that have the greatest potential to realize the goals of the RTP/SCS. These goals include (key themes are in **bold**):

1. Align the plan investments and policies with **improving regional economic development** and competitiveness.
2. **Maximize mobility and accessibility** for all people and goods in the region.
3. Ensure **travel safety and reliability** for all people and goods in the region.
4. Preserve and ensure a **sustainable regional transportation system**.
5. Maximize the productivity of our transportation system.
6. Protect the environment and health of our residents by **improving air quality and encouraging active transportation** (e.g., bicycling and walking).
7. Actively encourage and create incentives for **energy efficiency**, where possible.
8. Encourage land use and growth patterns that facilitate transit and active transportation.
9. Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

SELECTION CRITERIA AND SUPPORTING DATA

Through discussions with SCAG staff and research drawn from a number of sources, the Project Team developed a series of criteria to guide the selection of HQTA Pilot Program candidates. The criteria were divided into the following two categories, based on the source of the information:

- **Category 1:** Data/Information from off-the-shelf sources available at the regional level. This includes Census data, SCAG data, or other datasets that include information standardized across all five SCAG counties with eligible HQTAs.
- **Category 2:** Data/Information provided by the applicant.

A) Place Types

Goal: Select Pilot Projects with a variety of transit-oriented place types

A part of the 2016 RTP, SCAG used a set of place types to establish the desired growth patterns of communities throughout the region. There are 35 place types, which were developed by Calthorpe Associates in partnership with SCAG. The place types are grouped into the following five categories:

- Mixed use urban centers and corridors
- Employment areas
- Suburban commercial/mixed use
- Suburban residential/mixed use

- Rural
- Institutional

The place types were created through an evaluation of growth trends, existing building stock and development patterns, transportation features, and land use in communities in California and other US cities. These baseline characteristics were layered onto a 150m² grid and used to generate scenarios as part of the RTP. Once the growth forecasts were developed, SCAG used the place types to allocate growth using a variety of assumptions. These assumptions include:

- Land use mix, as defined by the desired proportions of residential, employment, mixed use, and open space/civic use
- Built environment characteristics, including intersections per mile, # of floors, and floor-area-ratio (FAR)
- Household and employment densities
- Residential mix, including large/small lot development, townhomes, and multifamily housing types
- Employment mix, including office, retail, and industrial

Each of these characteristics are used to develop the 35 place types. During development of the RTP, SCAG worked with communities throughout the region to balance regional needs with local growth and land use outcomes, and ultimately selected “Scenario 3” as the regional vision for growth in the SCAG region. The Project Team used the place types to evaluate both the percentage of TOD place types within the HQTA Pilot Project area and the mix of TOD place types. The definition and use of each criterion is described below:

Criterion A-1: TOD Place Types

Of the 35 place types, the following 17 place types were prioritized for this Pilot Program:

- Urban Mixed Use
- Urban Residential
- Urban Commercial
- City Mixed Use
- City Residential
- City Commercial

- Town Mixed Use
- Town Residential
- Town Commercial
- Village Mixed Use
- Village Residential
- Village Commercial
- Office Focus
- High Intensity Activity Center
- Industrial/Office/Residential Mixed High
- Suburban Multifamily
- Campus/University

These place types were selected due to their densities and intensities, and a mix of land uses and densities that are generally supportive of transit-oriented development. These are referred to as transit-oriented place types (TOD place types). If the vision for growth is realized, these areas are more likely to contribute to the reduction of greenhouse gas emissions, as they are planned to have more residents and workers within easy walking distance to high-quality transit options.

Criterion A-2: Mix of TOD Place Types

Once a list of HQTA Pilot Program candidates was developed and sorted by % of TOD place types, the mix of place types within each was analyzed. The top 3 place types within each candidate site were identified by both the number and percentage. This analysis allowed SCAG to select from a variety of transit-oriented communities throughout the region.

B) Transportation Modes

Goal: Select from a variety of transportation modes

Transit-oriented communities and HQTAs in the SCAG region are formed around a variety of transportation modes. Eligible HQTAs include the existing or planned modes of transportation identified in Figure 1. As per the HQTA definition, these transit lines will have 15 minute (or better) service during peak times by 2040. However, not all modes will offer 15 minute service throughout the day. As a result, some HQTA transit lines, including LRT and BRT, offer higher quality service and are more likely to support higher intensity transit-oriented development.

Criterion B-1: Transportation Modes

The Project Team identified 3 tiers of transportation based on the following characteristics:

- Service orientation: regional, interregional, local
- Duration of 15m service: all-day vs. peak only

Figure 1: Transportation Modes by Tier

Mode	Service Orientation	Duration of 15m Service	Tier	Points
LRT	Regional	All day	I	3
BRT	Regional	All day		
Metrolink/ Commuter Rail	Regional	Peak	II	2
HSR	Inter-regional	Peak		
Transitway Bus	Inter-city	Varies		
Rapid Bus	Inter-city	All day	III	1
Streetcar	Local	Varies		
Local Bus	Local	Varies		
Express Bus	Regional	Peak		

The number of points jurisdictions received for this criterion were additive up to the maximum number of points (3) since there are multiple transportation modes within a HQTA.

C) Current Population / Growth and Development Potential

Goal: Prioritize HQTAs that have high population and job totals, densities, and/or the potential for high growth and development opportunities

The Project Team prioritized HQTAs that have the greatest potential to reduce greenhouse gas emissions. This goal was accomplished by identifying areas that are (1) most likely to develop in a sustainable, compact, and transit-supportive manner, and (2) have the most potential for growth and economic development, or already have high population totals and density. The first criterion is addressed by the place type prioritization process outlined previously. The second criterion was evaluated using data from SCAG and through information submitted through the Pilot Program application process. The application of these criteria are described below:

Criterion C-1: Regional Growth Forecasts

The Project Team used SCAG’s regional growth forecasts for housing and employment to prioritize HQTAs that are expected to grow at a faster rate than the SCAG region. All candidate sites were assigned a location quotient (LQ) and corresponding score, which is a simple ratio of the local and average regional growth rates. For example, the candidate site job and residential forecasts for the 2040 RTP are $x_1\%$ and $y_1\%$ respectively. If the regional job and residential growth is $x_2\%$ and $y_2\%$, the job and residential LQs would be (x_2/x_1) and (y_2/y_1) . In other words, this candidate site would have $x.x$ times the amount of growth in jobs and households as compared to the SCAG region. Once generated, the Project Team calculated composite scores by adding the job and residential LQs [$LQ_{comp} = ((x_2/x_1)) + ((y_2/y_1))$].

Corresponding points were awarded per the following categories outlined in Figure 2:

Figure 2: Point Totals by Growth Forecast Location Quotients

LQcomp	Growth	Points
>2.0	High	2
0.5-1.9	Medium	1
<0.5	Low	0

Criterion C-2: Total Residential and Job Population

Using regional forecast data provided by SCAG, The Project Team mapped the population and employment forecasts for each Transportation Analysis Zone (TAZ), where a majority of the TAZ is within the HQTA. Total residential and employment populations for the forecasted

year were combined to establish a range of total residential and job populations for all the submitted HQTAs. Total populations were divided into four quartiles and will be awarded points based on which quartile the HQTA falls into, shown in Figure 3.

Figure 3: Point Totals by Total Population and Population Density

Quartile	Range	Points
Q4	Max – 75%	3
Q3	75% - 50%	2
Q2	50% - 25%	1
Q1	25% - Min	0

Criterion C-3: Residential and Job Population Density

The Project Team utilized the same growth forecast data for Criterion C-1 and C-2 to determine the residential and job population density for each HQTA. Just like total residential and job population, population densities for each HQTA were divided into four quartiles based on the full range of HQTA population densities. Points awarded for population density used the same quartile system as C-2, shown in Figure 3.

D) Vision and Potential

The Project Team supplemented the LQ analysis with information provided through the Pilot Program application by each applicant jurisdiction. Requested information included:

- Intensification of redevelopment sites: number of sites, acreage of redevelopment, and TOD vision as defined through a mix of land uses and higher intensities in close proximity to transit
- Planned and/or partially-implemented active transportation plans and improvements
- Transit-oriented development projects that are (1) in the pipeline, or (2) have been completed

With this information, the Team sorted Pilot Program applicants into a Readiness/Vision matrix. The Team took note of communities that (1) have short, medium, and long-term development potential and (2) have completed some transit-oriented planning or none at all. Based on an evaluated of applicant responses, point totals were assigned as follows:

Criterion D-1: Development Potential

- High: 4
- Medium: 3
- Low: 0

Criterion D-2: Status of TOD Vision

- Complete: 0
- Partially Complete: 2
- Non-Existent: 3

A sample matrix of four hypothetical Pilot Projects is provided in Figure 4. Point totals from each category were combined to form an Economic Potential Score (EPS).

Figure 4: Economic Potential Score

	Development Potential	Status of TOD Vision	EPS
Pilot Project 1	High	Complete	4
Pilot Project 2	Low	Non-existent	3
Pilot Project 3	High	Non-existent	7
Pilot Project 4	Medium	Partially Complete	5

E) Commuting Patterns

Goal: Prioritize Pilot Projects that have the greatest potential to reduce greenhouse gas emissions.

Through the development of the Vision Plans, the Project Team generated estimates of potential vehicle miles traveled (VMT) and resulting greenhouse gas (GHG) emissions. As a proxy for estimating the potential GHG reduction, the Project Team evaluated current commuting patterns, as evidenced by VMT. As part of the US Census, the Census Bureau collects information on VMT. Generally, areas with high VMTs (20+ miles/day), are more sprawling and suburban. In their current condition, these communities may not be conducive to higher density TOD.

However, if there is high TOD growth potential within the HQTAs of these communities, there could be significant reductions in VMTs and GHGs. In order to consider these communities alongside more traditionally transit-supportive communities, the Project Team evaluated both the current VMTs and potential for economic growth, as defined through the LQcomp scores. A system of points can be awarded per the matrix in Figure 5.

Figure 5: Commuting Patterns Matrix

		LQcomp		
		High	Medium	Low
Current VMTs	High	9	3	0
	Medium	6	2	0
	Low	9	3	0

F) Disadvantaged Community

Goal: Prioritize Pilot Projects that provide greatest potential to improve environmental features that define disadvantaged communities.

The Project Team utilized CalEnviroScreen data to map disadvantaged community percentile by census tract within the SCAG region. For HQTAs comprised of multiple census tracts with different percentile for disadvantaged community, the disadvantaged community percentile was averaged by the ratio of each percentile within the HQTA. Point values for each disadvantaged community percentile are shown in Figure 6.

Figure 6: Point Totals by Total Population and Population Density

Quartile	Range	Points
Q4	100% – 75%	3
Q3	75% - 50%	2
Q2	50% - 25%	1
Q1	25% - 0%	0

G) Regional Distribution

Goal: Ensure that the final set of Pilot Projects is fairly distributed throughout the region

As a final step, the Project Team worked with SCAG to consider the regional balance of selected Pilot Project sites. For example, not all projects should be located in a single city or county, regardless of each project's suitability for the HQTA project.

Applicants that were unsuccessful during the first round of the HQTA project are encouraged to apply for the subsequent rounds. SCAG should make limited adjustments to the application process and retain the information submitted for future evaluation. SCAG reserves the right to waive the solicitation process for future rounds if there is high interest from eligible jurisdictions.

SELECTED PILOT PROJECT AREAS

The HQTA Analysis Pilot Program selected a total of 6 HQTAs in two rounds: five areas in the first round and a sixth area in a streamlined second round with lessons learned from the first.

First Round

Application Submittal

SCAG and the Project Team hosted a jurisdictional workshop in September 2017 to explain the HQTA Pilot Program goals, selection criteria, and vision plan process, and answer questions from interested jurisdictions. Jurisdictions participated in person and by webinar. The Project Team also held a follow-up conference call to answer questions from applicants.

The initial application deadline was September 29th, 2017, but was extended to October 13th, 2017 to allow jurisdictions sufficient time to prepare applications.

Three-Step Review Process

Thirteen complete applications were submitted to SCAG. The process included a three-step review of applications.

Step One

During the first step, the Project Team processed the applications and reviewed them for completeness. Incomplete or missing applications were set aside for further review and requests for additional information were sent to the appropriate jurisdictions.

Pilot Project sites were filtered by the presence of one of the 17 TOD place types (Criterion A-1). Candidate sites without one or more of the TOD place types did not continue through the evaluation process. With this list, the Project Team created a table and sorted the remaining projects by dominant place type.

Step Two

Points were awarded during Step Two based on the four criteria described above. These categories and associated point totals are listed in Figure 7.

Figure 7: Summary of Selection Criteria

Category	Criterion	Points Possible
Place Type	A-1 Place Type	Pass/Fail
Transportation Mode	B Transportation Tier	1 – 3
Population and Growth	C-1 Growth Forecast (LQ)	0 – 2
	C-2 Total Population	0 – 3
	C-3 Population Density	0 – 3
Economic Potential	D-1 Development Potential	0 – 4
	D-2 Status of TOD Vision	0 – 3
Commute Pattern	E Commute/LQ	0 – 9
Disadvantaged Community	F CES3 Percentile	0 – 3
Place Type	A-2 Regional Distribution	Based on SCAG Direction
Regional Distribution	G Regional Distribution	Based on SCAG Direction

Step Three

The final step involved a review of applications in the categories of Development Potential/ Status of TOD Planning, HQTA Model, and Partnerships and Readiness. The Step Three application review process was guided by the following principles:

- **Regional balance:** ensure that projects are distributed throughout the region
- **Place type diversity:** select projects with a variety of densities, development patterns, and transit modes
- **VMT/GHG Reduction:** prioritize projects that have the greatest opportunity for VMT/GHG reduction, as evidenced by the potential for growth, commitment by jurisdictions to higher densities/intensities and investment in active transportation projects, and near/mid-term development opportunities.
- **Establish a HQTA pipeline:** Set-aside applications for projects that could be competitive for potential future rounds of the HQTA Pilot Program. Some jurisdictions may want to consider applying for subsequent rounds of Sustainability Grant funding.

Points awarded from Step Two were converted to a 100 point scale. This was done for two reasons: to allow SCAG to provide any weighting for specific categories, and to provide an easy scoring system for municipalities to understand how their submitted projects scored. To convert to the 100 point scale from 30 point scale, the percentage of each points received in Step Two were multiplied by the number of points for each category in Step Three. For example, Growth Projection and Population makes up 20 out of 100 points. In Step Two, Project 1 received a combined 4 out of 8 points from criterion C-1, C-2, and C-3 (50%). Project 1 would receive 10 points in step three: $(4/8) * 20 = 10$. A potential 100 point scale is shown in Figure 8.

Figure 8: 100 Point Scale

Category	Possible Points
Growth Projection / Population	20
Commute Pattern	10
Economic Potential	25
Transportation Mode	15
HQTA Model	20
Disadvantaged Community	5
Partnership Readiness	5

During discussions among SCAG staff and the Project Team, the remaining points were assigned to each jurisdiction and sorted to yield the final score out of 100 possible points.

Pilot Project Selection

The following five sites were selected for the first round of the HQTA Pilot Program using the selection process described above:

Pilot Project	County	Jurisdiction	Total Points Awarded
Riverside Metrolink Station	Riverside	Riverside	86
Carousel Mall	San Bernardino	San Bernardino	83.5
El Monte Metrolink and Bus Station	Los Angeles	El Monte	78
Oxnard Metrolink Station	Ventura	Oxnard	75.5
Santa Clarita Metrolink Station	Los Angeles	Santa Clarita	73

Second Round

The vision plans for the first round of the Pilot Program were completed in 2019. In 2020, SCAG selected the San Clemente Metrolink Station as a 6th study area to receive a vision plan. SCAG, the City of San Clemente, and the Consultant Team worked together to complete the vision plan that contained all the same key information, insights, and metrics as those presented in the first 5 plans, but in a more streamlined package using lessons learned from the first round.

HQTA Toolkit Overview



PURPOSE OF THE TOOLKIT

Generally, the HQTA Toolkit is a tool for guiding the development of Station Area Vision Plans and their implementation. It includes strategies and investments for people who walk, bike, and take public transportation, while balancing considerations for drivers and other modes. Specifically, the document provides a range of physical investments and strategies to construct, and measure the impacts of well-designed TODs.

The HQTA Toolkit is meant to be used as a resource for SCAG, municipalities, and individual developers to build quality TOD within the region's HQTAs in order to address a number of regional issues and achieve a number of regional goals and objectives. The HQTA Toolkit is a "living document" and is designed to be regularly updated with additional TOD amenity precedents over time.

TOOLKIT COMPONENTS

The Toolkit includes contemporary best practices for TODs, open space, and complete street projects that are tailored to the desired place types for a HQTA. Those toolkit options are organized as follows:

- Complete Streets
- Open Space / Placemaking
- Building Types & Precedents

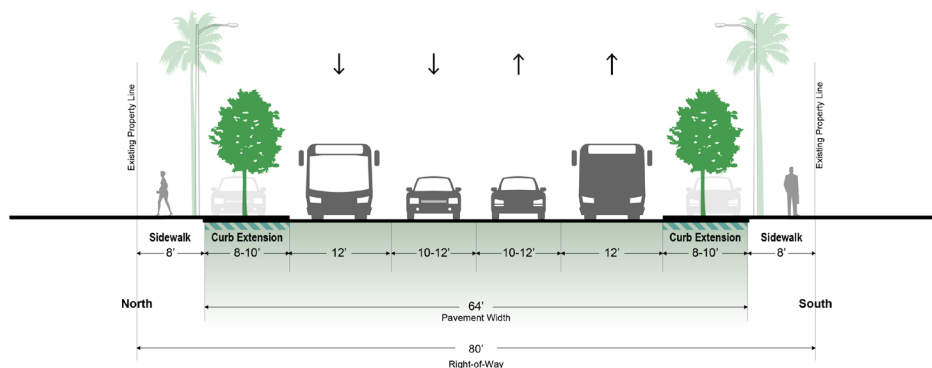
Complete Streets

Complete streets are designed and constructed to serve all users of streets regardless of age or ability or whether they are driving, walking, bicycling, or taking transit. In many areas of the SCAG region, vehicular travel lanes have been given priority within the public right-of-way over other forms of transportation leaving little space for sidewalks, bicycle paths, and transit. In HQTAs within the constrained street right-of-way, the challenge is to create a network of complete streets where tree-lined walkways, bicycle paths, pedestrian/bicycle amenities and transit connections are balanced with the requirements of automobiles.

Each Vision Plan includes illustrative diagrams, maps, and street sections which highlight how the various complete street components featured in the Toolkit may be placed throughout the HQTA to improve bicycle, pedestrian, transit, and vehicular connectivity.

Benefits of Complete Streets

- Safety – Designing streets that consider safe travel for all modes can reduce occurrences and severity of vehicular collisions with pedestrian and bicycles.
- Health – Promotes a healthy lifestyle by encouraging physical activity.
- Greenhouse Gas Emission reduction – Developing an integrated land use and transportation pattern in a HQTA can reduce VMT and greenhouse gas emissions.
- Economic Development – Multi-modal transportation networks can improve economic activity of local business and attract new economic development.



Illustrative example of a street section using Toolkit Components

Complete Streets Toolkit Components

Street Design
Street Reconstruction to achieve transit lanes or protected bike lanes, new curbs, wider sidewalks, new street/pedestrian lighting, street trees, street furniture, storm water management
Transit Lanes (re-striping only, no new curb, no color)
Bicycle Lanes (re-striping only, no new curb)
Sidewalks (new paving)
Bus Bulbs (at intersection)
Speed Table
Intersections
Raised Crosswalk
Traffic Circle
Diverter
Median Refuge Island
Curb Extension (each corner)
Curb Extension: Mid-block
Protected Bicycle Intersection
Enhanced Crosswalk
High-intensity Activated Crosswalk (HAWK) Beacon
Scramble Crosswalk
Curb Ramp
Infrastructure
Chicane
Street Trees: General
Street Trees: Palms
Treelet
Greenway Planter / Bioswale
Permeable Paving
Lighting: Street (30' tall)
Lighting: Pedestrian (15' tall)
Amenities
Wayfinding Signage (excludes monument signage)
Street Furniture: Benches
Street Furniture: Waste Receptacle
Street Furniture: Bicycle Racks
Street Furniture: Bicycle Fix-it Station
Transit Shelter (new custom)
Demonstration Projects: Bollards
Demonstration Projects: Planters

Open Space / Placemaking

A key ingredient in creating a dynamic, urban TOD environment which is connected by transit and active transportation is to create attractive and functional places that people want to be. Placemaking includes providing public gathering and open spaces which are linked to transit and transit supportive housing, educational, institutional, and commercial uses. These open spaces vary in size and function, some are programmed for events to activate an area, some may be adjacent to a transit station or civic building and others may be entirely for recreation. The illustrations show some of the types of open space appropriate for a HQTA area.

Each Vision Plan includes an illustrative land use buildout strategy with one or more of the open space typologies featured in the Toolkit interspaced in the under-parked areas of the HQTA. Larger, more central open spaces (such as transit plazas around the primary transit station) received illustrative designs modeled in 3D or other diagrams, while smaller infill parks were illustrated through precedent imagery.

Open Space / Placemaking Toolkit Components

- Paseo
- Parkway / Linear Park
- Reclaimed Street / Pedestrian Mall
- Neighborhood Park
- Plazas / Town Square



Illustrative example of an open space using Toolkit Components

Building Types & Precedents

Meeting residential and job density targets that support transit ridership and walkable communities can be achieved through a wide variety of building types. The HQTA Toolkit recognizes the diversity of building stock throughout Southern California by organizing building types into the typologies listed to the right. The typologies were informed by the following considerations: primary means of access to units and habitable spaces; orientation to street, internal open spaces; construction type; and parking configuration. The Toolkit includes the following reference materials:

Building Typologies

- A profile of four categories of building typologies: Detached Residence, Attached Residence, Multiplex, and Mid/Hi-Rise Tower. Each profile includes the general density/intensity range, mix of land uses, parking and circulation assumptions, and key design considerations
- Specific building types for each category with precedent imagery and diagrams

Transit-Oriented Development Precedents

- Profiles of built TOD projects from throughout California and the United States

Each Vision Plan includes a draft Regulating Concept Plan that generally maps where typologies from the Toolkit may be appropriate. As the HQTAs are developed, building types from each typology can be selected, allowing for a great degree of architectural flexibility while enabling cities to meet the density/intensity targets set forth in each Vision Plan.

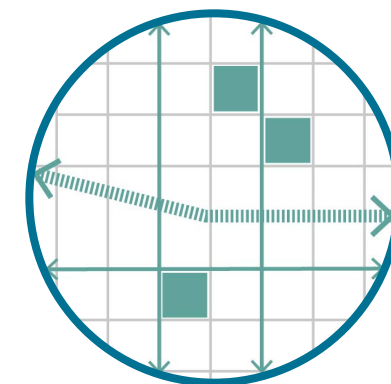


Illustrative example of a development using Toolkit building typologies

Building Type Toolkit Components

Detached Residence	Accessory Dwelling Unit (ADU)
	Shopfront House
	Bungalow Courtyard
	Rosewalk
Attached Residence	Attached Townhouse
	Hybrid Courtyard
	Duplex
	Live/Work Lofts
Multiplex	Small Lot Subdivision
	Triplex/Fourplex
	Stacked Flats
	Flex Apartment/Mixed Use
Mid/Hi-Rise	Liner Structure
	Mid-Rise Tower
	Hi-Rise Tower

Pilot Project Vision Plans



WHAT IS A VISION PLAN?

The Vision Plan for each HQTA Pilot Project is an illustrative tool that provides city staff, elected officials, and community stakeholders with a high-level analysis of the HQTA's existing conditions, TOD opportunity sites, and potential public realm improvements that could catalyze future development activity. The plans include a long-term buildout scenario and a phasing and financial strategy for identified priority projects. HQTA Vision Plans are not regulatory documents and do not need to be adopted. Pilot Project Jurisdictions will use the Vision Plans to start discussions with SCAG and community stakeholders in future efforts to update adopted general and specific plans.

Recognizing that transit-oriented communities are often built iteratively over several years, and can face numerous economic, infrastructure, and political headwinds, SCAG and the Project Team developed each Vision Plan through the following core principles:

- **Allow for Flexibility:** Market conditions and political priorities may change dramatically during the 30-year period covered by each Vision Plan. Each Vision Plan has been structured as a “menu of options” for cities to pursue. While not all projects and development projections may be realized, the plan proposes a variety of housing types to meet overall density targets, and multiple strategies for active transportation projects.
- **Develop a Clear, Bold Vision:** The graphically-rich imagery, including 3D models, precedents, and easy-to-understand infographics make complex information accessible to the general public and inspirational for community leaders, jurisdictional staff, and the development community.
- **Propose Practical, Implementable Solutions:** The existing conditions analysis prepared

for each Vision Plan is based on previous planning efforts, community engagement, and staff consultation. By understanding each community's unique conditions, SCAG and the Project Team proposed development strategies and priority projects that can be most easily implemented in the short-term, with tailored funding sources, cost estimates, and a preliminary concept plan to assist with grant applications.

- **Educate Stakeholders:** Accompanying each Vision Plan is a HQTA Toolkit (Toolkit), which profiles active transportation projects, building types and precedents from California and the US, and a compelling description of SCAG's goals and components and benefits of a transit-oriented community.

Originality and Innovation

In recent years, many transit-supportive specific plans, toolkits, and other resources have been developed to educate the public about and build transit-oriented communities. However, each Vision Plan is a unique hybrid that includes some of the specificity offered by a specific plan through priority projects, development forecasts, and a TOD vision, but recognizes that there are a variety of ways to implement the goals and achieve the air quality and congestion targets set forth in each plan. For example, the “regulating concept plan” may identify building categories such as flex/hybrid, podium mid-rise, or townhomes, with a range density and massing assumptions built into each. These categories, however, are linked directly to the HQTA Toolkit, which includes a wide variety of building types that can achieve the overall goals of the plan. The overall goal of this approach is to foster innovation and alternative approaches to implementing TOD by the development community, and give local planners a tool to both educate and communicate the city's vision to key stakeholders.

Implementation

As the overarching goal of the HQTA Pilot Program is to implement the air quality, growth, congestion, and economic development goals of the SCAG region, Vision Plans were carefully crafted with a clear vision, engagement strategies, tools, and resources that will enable planners to implement transit-oriented communities. As each Pilot Project area develops, planners can use the conceptual plans to build community support for the project. In addition, with cost estimates and tailored financial strategies developed for each priority project, cities will have the tools to seek grant funding as the plan is implemented.

Integration

SCAG and the Consultant Team were careful to build upon recent public engagement and planning work completed by city staff and elected leadership. In the City of Oxnard, for example, the City was working with another consultant to prepare a downtown plan, which largely overlapped with the HQTA study area. The Team worked closely with City staff and other consultants to refine the scope of the HQTA Vision Plan so that is (1) in complete alignment with the downtown plan, and (2) offers additional detail on active transportation and streetscape projects not part of the scope of the downtown plan. Ultimately, each plan reinforces the other, and together, offer a clear and unified vision for the transit-oriented future of Downtown Oxnard. Other Pilot Project jurisdictions intend to use Vision Plans as a basis for preparing a TOD Specific Plan and support other planning efforts.

Engagement

SCAG and the Project Team tailored engagement strategies to each community, as some jurisdictions have engaged the public extensively through previous planning, while others have just started the conversation and required more in-depth methods of engagement such as design workshops. In Riverside, the Team facilitated a design workshop that included a presentation of the draft vision, an innovative lego-toolkit to develop land use and density preferences, and visual preference exhibits to gauge the public’s knowledge and receptiveness to a transit-supportive vision. For other jurisdictions, the Team facilitated interviews and discussions with local developers, brokers, community organizations, and other key stakeholders to gain important insights for the Vision Plan and build momentum and support for the Regional and local goals expressed in each plan.

TYPICAL VISION PLAN OUTLINE

Station Area Profile
The Station Area Profile describes the current planning, urban design, socioeconomic, and transportation context within the HQTA Study Area. The Profile also includes a summary of previous planning efforts.
Opportunities & Constraints Analysis
This analysis includes a summary of urban design, land use, and mobility constraints and identifies potential investments that will support walking, biking, and the use of transit.
Outreach
A summary of the outreach efforts conducted for the Pilot Project area, which typically included a public meeting and reoccurring correspondence with City staff.
Vision
The Vision presents a 30-year vision for a transit-supportive HQTA. It includes a redevelopment strategy, specific infrastructure investments, active transportation projects, and placemaking amenities that will help to make the area more livable, walkable, and accessible to transit. The development strategy and priority projects outlined in the Vision Plan use components referenced in the HQTA Toolkit.
Implementation Plan
An overview of policies, programs, initiatives, and partnerships that will be key to the success of the plan. In addition, a customized financial strategy is included that targets funding streams to specific projects outlined in the Vision Plan. This section also establishes a baseline and long-term targets for jobs, housing, the modal shift to non-motorized forms of transportation, and other key metrics that will be tracked by SCAG and the City over the next several years.
Appendix
An Existing Conditions Inventory and the HQTA Toolkit were included in the Appendix for each Vision Plan.

It was determined during the visioning process for the San Bernardino HQTA that necessary planning for the complex and not-yet finalized plans for nearby development was beyond the scope of this Pilot Program. As a result, a “Briefing Book” was prepared instead of a full Vision Plan which included the Station Area Profile, Outreach, and Opportunities and Constraints sections but not the Vision or Implementation Plan.

RIVERSIDE HQTA VISION PLAN SUMMARY

- The Pilot Project Area's proximity to the Downtown Riverside Metrolink Station and to Downtown Riverside make the area accessible to major job and activity centers.
- Vacant lots and surface parking lots along major roadways have the potential for redevelopment to TOD projects and a mobility hub adjacent to the Metrolink station.
- Abandoned rail spurs could be re-imagined as a public promenade along Commerce Street.



For illustrative and visioning purposes only; the ultimate buildout will be determined through a specific plan update, further discussions with property owners, and interested developers.

Vision Plan Goals

#1: Preserve and reinforce the unique industrial character that has defined the Marketplace District

#2: Ensure access to affordable housing for residents of the Marketplace District and Eastside neighborhood

#3: Promote an environmentally-sustainable TOD district that can become a laboratory for new technologies and best practices

#4: Foster healthy and engaged residents through investments in active transportation infrastructure and programming

#5: Promote a complete streets approach that balances the needs of all users

#6: Establish a unique brand for the Marketplace District through placemaking improvements

Major Development Areas

Major Development Areas contain clusters of complementary priority projects.

- MD 1** Mobility Hub
- MD 2** North Park
- MD 3** Lincoln Park
- MD 4** University / Park
- MD 5** North Commerce Creative Hub
- MD 6** South Commerce

Priority Projects

Priority projects are targeted infrastructure or public realm improvements that could catalyze development and private investment in the Pilot Project Area.

Bicycle and Pedestrian Projects

- B 1** Mission Inn / Vine Protected Bicycle Intersection
- B 2** Mission Inn / Commerce Protected Bicycle Intersection

Pedestrian/Greening Projects

- PG 1** Transit Core Paseo
- PG 2** SR-91 Bicycle and Pedestrian Bridge
- PG 3** North Commerce Linear Park
- PG 4** North Commerce Complete Street Improvements
- PG 5** North Park Redesign
- PG 6** North Commerce Linear Park

- PG 7** Riverside Canal Stormwater Management and Multi-use Path
- PG 8** 12th Street Pedestrian Tunnel
- PG 9** North Commerce Linear Park

Corridor Projects

- C 1** Vine Street
- C 2** Mission Inn Avenue
- C 3** Commerce Complete Street Reconstruction

Parking and Transit Projects








- PT 1** Mobility Hub and Plaza
- PT 2** Layover Facility
- PT 3** New Shared Public Parking Structures
- PT 4** Parking Management District

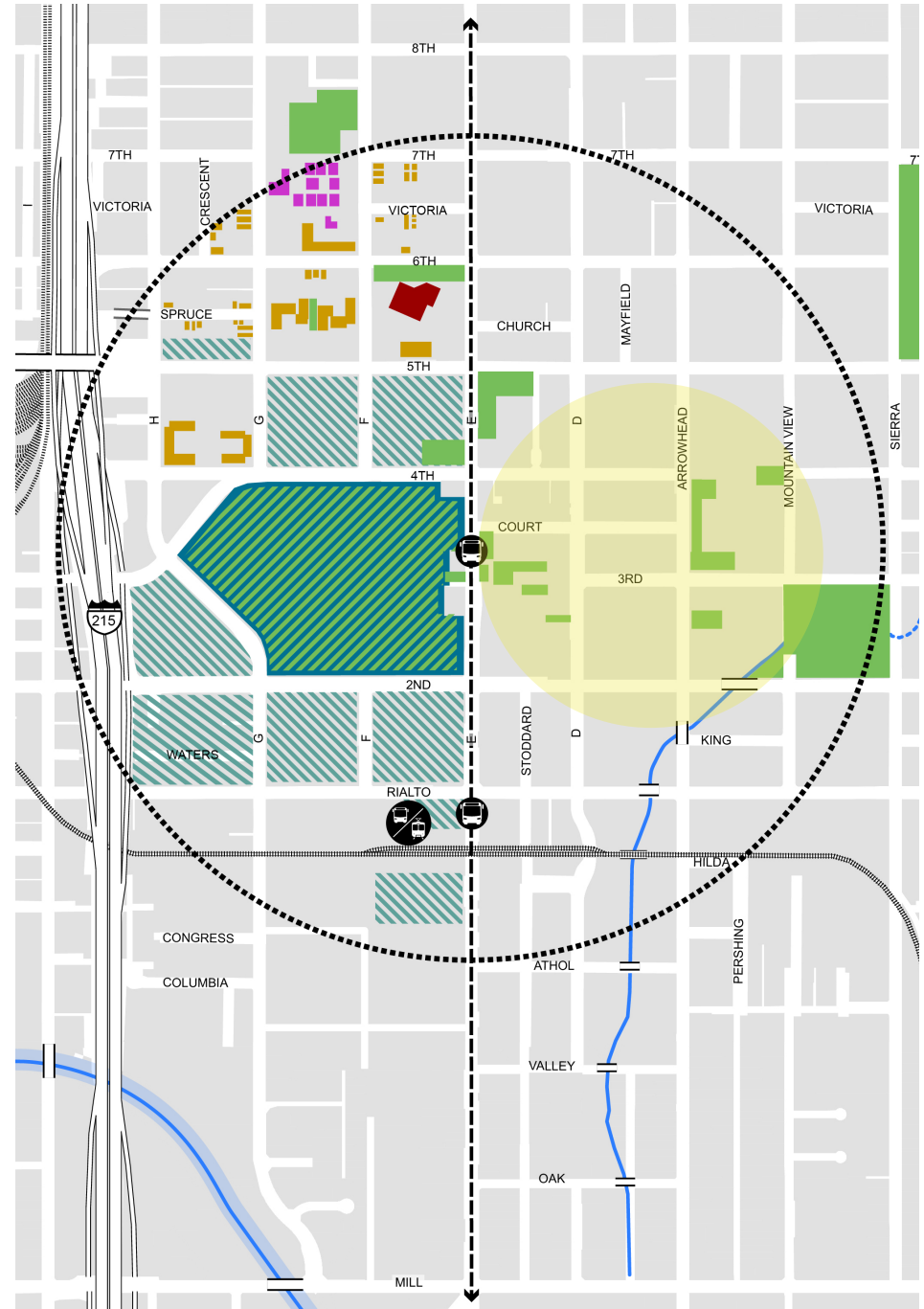
SAN BERNARDINO BRIEFING BOOK SUMMARY

The City of San Bernardino's HQTA is centrally located in the City's downtown core, which includes the new San Bernardino Regional Transit Center and the now closed Carousel Mall.

The HQTA is as represented in the map at right. It currently includes stops for the San Bernardino Express (SbX) Bus Rapid Transit line, regional and local buses, stops for Metrolink, and stops for the future Redlands Passenger Rail "Arrow" transit line, providing multi-modal access to Downtown San Bernardino. The City has adopted a TOD overlay zone for all properties within half-mile of their SbX BRT stops and will prepare a Downtown Specific Plan to incorporate TOD principles. The area is about three miles north of Hospitality Lane, which includes a cluster of hospitality and employment activities.

Land Use Opportunities

- 
Major Redevelopment Opportunities: Large vacant land properties and publicly-owned properties that are suitable in size and location for a catalytic project.
- 
Carousel Mall: The mall site is large enough to become a catalytic new development and could add a substantial amount of centralized open space for the downtown area.
- 
Park / Open Space: Existing parks provide neighborhood anchors and could be elevated in importance and use. There are a number of smaller existing plazas and open spaces throughout Downtown San Bernardino, which could be better connected through parkways and wayfinding. The Carousel Mall site provides an opportunity for a central open space (potentially more unique programming than what currently exists) and smaller open spaces.
- 
Existing Residential: There are opportunities for infill residential development on blocks with existing residential uses. Existing residential areas are located to the north of the Carousel Mall site consist of a mix of housing from senior, multi-family, and single-family. New development should provide a transition between more commercial uses in Downtown and existing residential areas to develop a cohesive and continuous urban fabric within Downtown.
- 

Neighborhood Services: Churches, schools, civic institutions, local shops and markets, and other organizations that increase the social capital of the neighborhood. Preserve existing neighborhood-serving uses.
- 
Employment Center: There is a large concentration of government employers and investments in new structures just east of the study area.



EL MONTE HQTA VISION PLAN SUMMARY

- The Pilot Project Area contains Downtown El Monte, which has a strong historic character along Main Street.
- The Pilot Project Area is adjacent to many recently approved TOD projects and TOD projects that are under construction.
- The multiple publicly-owned parcels in the Pilot Project Area may allow for shared parking strategies in the Downtown area.
- There is potential for El Monte's City Hall to be relocated more centrally within the Downtown to form a more active and accessible civic core.



For illustrative and visioning purposes only; the ultimate buildout will be determined through a specific plan update, further discussions with property owners, and interested developers.

Vision Plan Goals

#1: Leverage public realm and infrastructure improvements to create an attractive, unified sense of place

#2: Create a vibrant downtown atmosphere through higher density transit-oriented development

#3: Improve pedestrian and cyclist safety through the creation of complete streets

#4: Increase pedestrian circulation and transit ridership through the downtown and to and from the transit stations with improvements to critical corridors

#5: Reconfigure the supply of off-street parking to free up land for future development along key corridors

Major Development Areas

Major Development Areas contain clusters of complementary priority projects.

- MD 1** City Hall Relocation
- MD 2** School District Office Relocation
- MD 3** Main Street
- MD 4** Metrolink / Area Y
- MD 5** Zócalo / Ramona
- MD 6** Santa Fe Trail Plaza

Priority Projects

Priority projects are targeted infrastructure or public realm improvements that could catalyze development and private investment in the Pilot Project Area.

Bicycle and Pedestrian Projects

- B 1** Protected Bicycle Intersection
- B 2** Rio Hondo Path Bicycle Access Point

Pedestrian/Greening Projects

- PG 1** El Monte and Monterey Street Paseos
- PG 2** Las Flores Street Pedestrian Shared Street Extension
- PG 3** Infill Public/Private Parks
- PG 4** Transit Plaza

Corridor Projects

- C 1** Santa Anita Avenue
- C 2** Ramona Boulevard
- C 3** Valley Boulevard
- C 4** Main Street
- C 5** Tyler Avenue

Parking and Transit Projects

- PT 1** Shared Parking Structures
- PT 2** Arterial Bus Rapid Transit

OXNARD HQTA VISION PLAN SUMMARY

- The Pilot Project Area is located in the downtown area, which already has pedestrian alleys connecting major commercial streets.
- A Street has an existing “main street” character.
- The City is drafting a new downtown development code that allows for greater, TOD-compatible densities at Plaza Park and the Oxnard Transit Center.
- Oxnard Boulevard has multiple surface parking lots which may be developed into more active uses.
- The Royal Palms Mobile Home Park may be re-imagined as a more walkable, diverse housing cluster.



For illustrative and visioning purposes only; the ultimate buildout will be determined through a specific plan update, further discussions with property owners, and interested developers.

Vision Plan Goals

- #1: Linear circulation and/or open space elements that unify the parcels which comprise the HQTA Pilot Project Area
- #2: Establish a new model of a lively self-contained urban village for young workers and multi-generational households
- #3: Capitalize on Oxnard’s thriving biomedical industry, tech industry, and large student population with a transit-adjacent innovation hub
- #4: Create a 21st Century employment cluster that allows employees to live and work within walking distance of a Metrolink Station
- #5: Incorporate modern technology and best practices to ensure longterm environmental sustainability

Major Development Areas

Major Development Areas contain clusters of complementary priority projects.

- MD 1** Oxnard Transit Center Block
- MD 2** Carnegie Museum / Plaza Park Block
- MD 3** Royal Palms Mobile Home Park
- MD 4** Infill along Oxnard Boulevard

Priority Projects

Priority projects are targeted infrastructure or public realm improvements that could catalyze development and private investment in the Pilot Project Area.

Bicycle and Pedestrian Projects

- B 1** Bike Hub
- B 2** Rail Path Bicycle Trail

- B 3** B Street Bicycle Track
- B 4** North-South Bicycle Connection
- B 5** East-West Bicycle Connection

Pedestrian/Greening Projects

- PG 1** Transit Plaza
- PG 2** Green Alleyways
- PG 3** Festival Street
- PG 4** Street Grid at Mobile Home Park
- PG 5** Infill Public Parks
- PG 6** Rail Bicycle Path Greening
- PG 7** Rail Bicycle Path Greening
- PG 8** Tree Canopy Gap Closure
- PG 9** 3rd Street Bridge Vertical Transportation and Bridge Sidewalk Improvements

- PG 10** Oxnard Blvd / 4th St Scramble Crosswalk

Corridor Projects

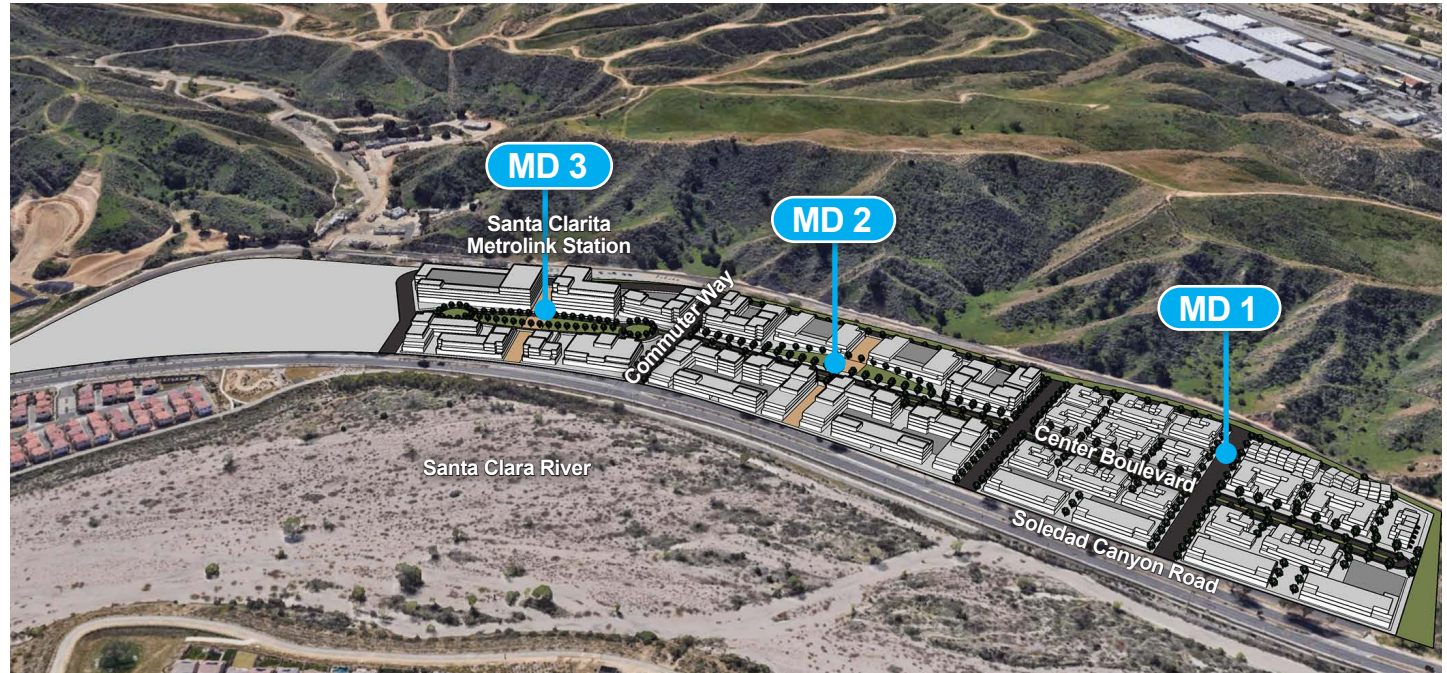
- C 1** 3rd Street
- C 2** 4th Street
- C 3** 5th Street
- C 4** Oxnard Boulevard
- C 5** A Street
- C 6** B Street
- C 7** C Street

Parking and Transit Projects

- PT 1** Reconfigured Bus Bays
- PT 2** Transit Priority Corridors
- PT 3** Arterial Bus Rapid Transit
- PT 4** New Public Parking Structures

SANTA CLARITA HQTA VISION PLAN SUMMARY

- The Pilot Project Area consists of parcels owned by two separate entities. The limited number of owners makes site development relatively easy.
- Santa Clarita has seen a steady growth of biotech and a sustained demand for housing.
- Vista Canyon is a similar, recently approved project at the Via Princesa Station, another Santa Clarita Metrolink Station, that will test the local market.
- Large parking lots for Metrolink could be redeveloped if parking replaced in structures.



For illustrative and visioning purposes only; the ultimate buildout will be determined through a specific plan update, further discussions with property owners, and interested developers.

Vision Plan Goals

#1: Linear circulation and/or open space elements that unify the parcels which comprise the HQTA Pilot Project Area

#2: Establish a new model of a lively self-contained urban village for young workers and multi-generational households

#3: Capitalize on Santa Clarita's thriving biomedical industry, tech industry, and large student population with a transit-adjacent innovation hub

Goal #4: Create a 21st Century employment cluster that allows employees to live and work within walking distance of a Metrolink Station

#5: Incorporate modern technology and best practices to ensure longterm environmental sustainability

Major Development Areas

Major Development Areas contain clusters of complementary priority projects.

- MD 1** Saugus Residential
- MD 2** Saugus Mixed-use
- MD 3** Transit Core

Priority Projects

Priority projects are targeted infrastructure or public realm improvements that could catalyze development and private investment in the Pilot Project Area.

Bicycle and Pedestrian Projects

- B 1** Center Boulevard Multi-use Path
- B 2** Bike Hub

Pedestrian/Greening Projects

- PG 1** Transit Plaza

- PG 2** Center Boulevard Rambla
- PG 3** Transit Promenade
- PG 4** Speedway Parks
- PG 5** Speedway Promenade
- PG 6** Railway Green

Corridor Projects

- C 1** Soledad Canyon Road
- C 2** Commuter Way
- C 3** Center Boulevard

Parking and Transit Projects

- PT 1** Shared Parking Structures
- PT 2** Pick-up / Drop-off Zone
- PT 3** EV Charging Stations

SAN CLEMENTE HQTA VISION PLAN SUMMARY

Vision Plan Goals

Goal #1: Promote safety, collision reduction, and expanded economic vitality with pedestrian improvements to critical corridors

Goal #2: Encourage economic development through focused redevelopment projects

Goal #3: Identify select locations where infill housing may be incorporated to balance commercial and non-commercial uses in the downtown area

Major Development Areas

Focused areas of development proposed in the buildout scenario with clusters of complementary priority projects which may catalyze the envisioned development.

- MD 1** Transit Station Area Infill
- MD 2** El Camino Real Infill
- MD 3** Los Molinos Industrial Village
- MD 4** Pico Plaza Infill
- MD 5** Outlets Infill

Priority Projects

Priority projects are targeted infrastructure or public realm improvements that could catalyze development and private investment in the Pilot Project Area.

Corridors

- C 1** El Camino Real
- C 2** Calle de Los Molinos
- C 3** Via Pico Plaza



Outcomes and Metrics

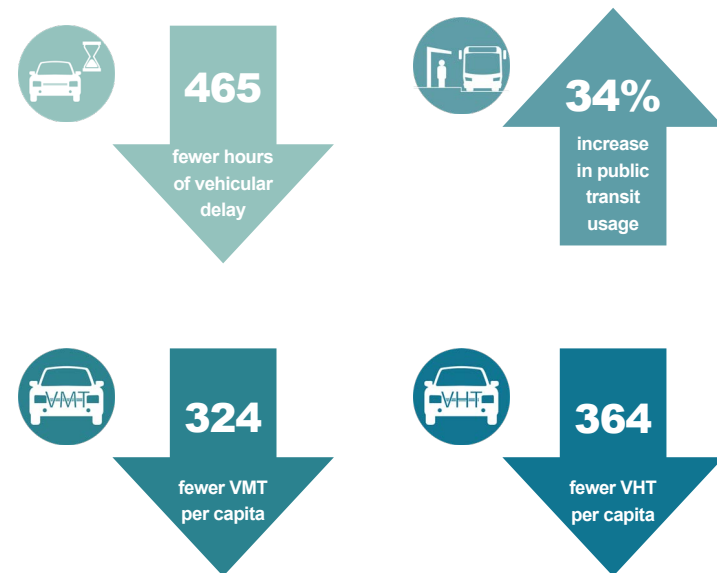


For each Vision Plan, the Project Team evaluated how the proposed vision would affect the future growth of the HQTA area. The current 2040 SCAG Model scenario Socio-economic data (SED) is considered as the “No Build” (i.e., business as usual) condition for the purposes of evaluating the effectiveness of the HQTA Vision Plan on transportation metrics. The HQTA Vision Plan land uses were converted to SED (households, population, employment) for use in the model, using industry standard factors. Residential dwelling units were used to calculate the estimated population, and office and retail square footage was used to calculate employment. The Vision Plan SED was then proportionally added to the appropriate TAZ’s based on the district, thus creating a 2040 With Vision Plan scenario, considered the “Build” scenario.

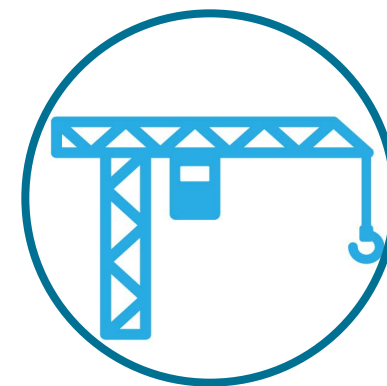
The following pages compare the No Build scenario to the HQTA Vision Plan using the following metrics: vehicular delay (in hours), transit mode share (in % of total travel trips), public transit usage, vehicular miles traveled (VMT), and vehicular hours traveled (VHT). Across all 5 complete vision plans (Riverside, El Monte, Oxnard, Santa Clarita, and San Clemente), the Project Team projected significant reductions in VMT and VHT and increases to public transit usage. The cumulative affect of these vision plan metrics are summarized to the right.

As described, with the increased density resulting from buildout of the 5 complete HQTA Vision Plans, several long-range transportation benefits enumerated in the 2016 RTP/SCS have the potential to be achieved.

A comparison of the 2040 “Build” versus “No Build” model results show the following cumulative anticipated projections for the HQTAs with full buildout of the Vision Plans:



Lessons Learned and Next Steps



In completing the visioning process for six jurisdictions the Project Team identified a few key takeaways that will help ease the process of completing similar Vision Plans for other jurisdictions in the future. With regard to the San Bernardino HQTA, the Team advises future HQTA selections take into greater account if the jurisdiction has ongoing planning processes which conflict with the HQTA Vision Plan process. When it came time to complete the sixth vision plan for San Clemente, the Team leaned on its experience from completing the previous round of plans to create more streamlined Vision and Implementation chapters. Some of these streamlining measures included:

- Land use implementation strategies were simplified from “districts” and “major development areas” (MDAs) to just MDAs for a more focused, tailored build-out plan.
- The naming convention for “priority projects” was made consistent with the funding sources categories found in the Toolkit. For example, “Pedestrian/Greening Projects” was renamed to “Urban Greening & Environmental Projects.”
- The Bicycle, Pedestrian/Greening, and Parking and Transportation Network maps were consolidated into a single, easier to read Public Realm Improvements Map.
- The cost estimates and funding sources for priority projects in the “Phasing and Financial Strategy” were presented in a single table instead of multiple tables across several pages.

This allowed the Team to produce a document which was just as robust, but cut down on redundant or extraneous plan sections. The Project Team recommends implementing these adjustments to the HQTA vision plan methodology for any future vision plans. SCAG may pursue additional vision plans for other HQTAs in the region using the applications submitted in the first round of the Pilot Program, or may solicit new applications from applicable jurisdictions.

