SCAG Growth Vision Interim Report
Table of Contents:

1    A Growth Vision for Southern California
9    Regional Challenges
21   Public Input & Involvement
29   Coordinating Land Use with the Regional Transportation Plan
35   Putting it Together: The Growth Vision
51   Next Steps: Implementation
63   SCAG Compass Regional Vision: Within Our Reach
65   Appendix I: Workshop Development Types
79   Appendix II: Scenario Allocation Development Types
81   Appendix III: Benchmarks
93   Appendix IV: Southland Policy Dialogues
A GROWTH VISION FOR SOUTHERN CALIFORNIA

Southern California is a diverse region in a variety of ways— including in its physical, cultural and economic landscapes. The region boasts an enviable setting: a moderate climate with varied terrain that ranges from sandy beaches to rolling hills, to snow-capped mountains to captivating deserts. Its diverse cultural mix offers residents and visitors alike a haven for community, entertainment and enrichment. As the 12th most productive economy in the world and one of the largest concentrations of employment, income, business, industry and finance, Southern California offers the potential for prosperity to everyone.

Because of these, and many other reasons, millions of people continue to recognize Southern California as a very desirable place to live.

As the region continues to grow, it's important to move forward in preserving and enhancing the area’s land, culture and economy.

The Southern California Association of Governments (SCAG) has taken the first steps in that stewardship. SCAG has embarked on a process that will create a vision of the future for the Southern California region. In an effort to maintain the region's prosperity, continue to expand its economy, house its residents affordably, and protect its environmental setting as a whole, SCAG has brought together the ideas, hopes and dreams of interdependent sub-regions, counties, cities, communities and neighborhoods.

This process is called Southern California Compass, and the result is a shared Growth Vision for Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. SCAG began Compass in 2002, spearheaded by the Growth Visioning Subcommittee, which consists of civic leaders from throughout the region. Creating a shared regional vision is an effective way to begin addressing issues, such as congestion and housing availability, which may threaten the region’s livability.

By definition, a successful Growth Vision must be driven by a wide array of input from the public and from various stakeholder groups. Such a process involves gathering a broad range of participants and stakeholders to gradually sculpt a consensus vision for the region. This includes administering a region-wide citizen survey, developing and refining a series of principles to guide the vision and the process, crafting growth scenarios based on the principles and on detailed public input, evaluating each scenario based on objective benchmarks, developing a preferred growth scenario, and gaining acceptance and endorsement of the preferred growth vision.

In the short term, SCAG's growth visioning process has found common ground in a preferred vision for growth and has incorporated it into immediate housing allocation and transportation planning decisions. In the long term, the Growth Vision is a framework that will help local jurisdictions address growth management cooperatively and will help coordinate regional land use and transportation planning.

A Growth Vision is important to preserve the quality of life for future generations.
THE ROLE OF THIS REPORT

This Growth Vision Report presents the comprehensive Growth Vision for the six-county SCAG region as well as the achievements of the Compass process. It details the evolution of the draft vision, from the study of emerging growth trends to the effects of different factors.

This report begins with a general discussion of the challenges facing Southern California as it prepares to accommodate an estimated 6.3 million additional people by 2030. It studies historical trends in demographics, housing, jobs and other key aspects essential to understanding how the region will evolve and grow. Looking forward, the report explores how emerging trends and conditions will affect future growth in the region. It also discusses the challenges of continuously developing and refining the Growth Vision.

The Growth Vision report then turns to the public and to the stakeholders within each sub-region. This section emphasizes the close connection between the Growth Vision and the public input that shaped it. The results of a comprehensive regional survey and focus groups are presented. A detailed discussion of the Compass regional visioning workshops follows, including the major themes gleaned from the public workshops held throughout the region. Descriptions and findings of the ensuing sub-regional review sessions and policy dialogues then summarize how the Compass public process continued to refine the elements of the Growth Vision.

In the next step, the report outlines the PILUT (Planning for Integrated Land Use and Transportation) test scenarios and the Growth Vision scenario. The PILUT scenarios, along with other regional development scenarios in SCAG's Regional Transportation Plan (RTP) process, present essential lessons and challenges for coordinating development and transportation in the final Growth Vision. The major themes and organizing principles of the Growth Vision are then presented. The section concludes with an analysis of the Growth Vision scenario and discusses the modeled impacts and effects the Growth Vision scenario is likely to have on Southern California.

The Growth Vision report concludes with a series of implementation steps - including tools for each guiding principle as well as overarching implementation strategies - that will guide Southern California toward its envisioned future.

It should be noted that this report concentrates on the physical aspects of regional growth - where people and jobs locate, the type and quantity of buildings that may be constructed, and how people and goods move in the region. To truly address all of the Growth Visioning principles, SCAG, sub-regions and cities should continue to refine the social, economic and other components that are also crucial to the Vision's success, including: workforce housing, job training and education, prosperity that reaches everyone, and protection of key open spaces.

A vision is not static but is constantly evolving. One goal of this report is that it will foster additional progress toward a vision of truly shared values - a vision that will evolve through well informed and wide debate about the direction the Southern California region should take as it embarks on a new era of challenges, growth and prosperity.
THE NEED FOR A REGIONAL VISION

The Southern California region is the second largest metropolis in the country and one of the most diverse. While it contains one of the world’s most dynamic economies, it also “boasts” some dubious titles, such as the most congested region in the country. At times it is also the national leader for air pollution.

In addition, the SCAG region is challenged by both a high growth rate and substantial physical constraints. Part of the reason the region is so appealing is the proximity of beaches and mountains, yet the Los Angeles Basin is also confined by these same geographical barriers. What is not already developed is often regarded as a precious and scarce open space resource. Examples include the agricultural lands of Ventura County, the foothills that surround the Coastal Plain, and the unique habitats areas in the High Desert.

Nevertheless, the region will grow and change during the next 30 years, facing daunting challenges due to its physical land constraints. Some of these challenges can be solved by community action – the people of this region acting together in their own enlightened self-interest. When a country or a state faces these kinds of challenges, there is a democratic government through which these solutions can be debated and implemented. But regions have no common forum or process for debating and implementing these types of issues; instead, they rely on a patchwork of local and regional governments. This approach can work when issues are fundamentally local in their impact and solution, or when a specific regional problem is addressed by an entity with the necessary skills and authority.

Increasingly, however, most regional challenges are complex, with causes and solutions intertwined across political authorities and jurisdictions. Cooperation and coordination on a much wider scale than has been practiced in the past is required to address this complexity.

The solution is for Southern Californians to debate solutions, propose ideas and cooperate on important initiatives at both regional and sub-regional scales. Compass was begun for this reason – to develop a vision for the future that embodies the shared values of the Southland and details the actions necessary to preserve the livability of this region.

The SCAG region incorporates six diverse counties and covers 38,000 square miles.
THE PURPOSE OF A REGIONAL VISION

The word vision conjures up some ethereal images—of saints and mystics but not practical people. However, the word also represents the ability of people to imagine a reality that is not apparent in the immediate present. It refers to explorers of distant lands and of inventors who can envision how their new machines will work. In fact, the presence of this kind of vision is essential for most creative and innovative work—if visions did not exist, nothing new or untried would ever be pursued, except by fortuitous accident.

A regional vision is a special kind of practical vision—it is a shared vision. This is when a future is defined and agreed upon by a group of people. This kind of vision led the original colonists to fight for the independent democracy that became the United States. Their vision was described by authors such as Thomas Paine in the Common Sense pamphlets and Thomas Jefferson in The Declaration of Independence. These documents pointed the way and set out key guiding principles. The future did not turn out precisely as envisioned, but the principles were used to adjust to new realities as they came to pass. The documents had the ability to inspire large numbers of people to work toward the same cause, to adhere to the same principles, and to express the purpose of their struggle.

The regional Growth Vision is an attempt to develop the same kind of vision—one that expresses the common interests of multiple stakeholders as well as the desired end point: a sustainable Southern California with a high quality of life for everyone.

SCENARIO PLANNING: A NEW APPROACH

The way governments have converted visions into reality in the past has been through a fairly simple planning process. In part because city planning has its roots in architecture, landscape architecture, and engineering, the concept of laying out a plan for a city or town was an easy leap—if one can build a building or bridge, why not a town? This model often works well at the small scale, where there is a fair degree of control over key variables. However, regions, especially regions as large as Southern California, have millions of actors and countless variables that interact to produce the resulting metropolis. A better approach in this type of situation is to use a model called scenario planning.

Scenario planning is widely used in business and military settings. Given the complexity of issues faced in today’s environment, the number of variables that have to be considered, and the 20 or 30-year time frame, it’s apparent that getting the right prediction isn’t really possible or even necessary. The better approach is to develop a method for outlining possible future scenarios.

Scenarios are really stories about what might be. They are not forecasts, and they are not predictions. They are possible futures that are based on what already exists, on trends that are evident, and on the values and preferences of a region and on decisions that might shape future outcomes. Scenarios are fed by input received from the combination of public workshops, surveys, and stakeholder meetings. The essential requirement of any scenario is that it be plausible—in the realm of what exists and what is now known. Usually three or four scenarios are built as a way to compare outcomes and learn about the forces that are shaping the future. The point of this is to find out which strategies work in which scenarios. If a strategy works in any scenario, it’s deemed robust—or a safe bet. If a strategy works in only one scenario, it is fragile and should be approached cautiously, with a good knowledge of the possible downsides.
The scenarios for the SCAG region were developed from several sources, but they are all feasible. The purpose of this growth visioning process is to find out how to achieve our shared regional vision with strategies that are as robust as possible.

**MODELS**

Models were used extensively in developing these scenarios. Models are representations of reality that are used to learn, teach and explore new possibilities. Architects build scale models of their projects to see how it might look before the real thing is built. A scale model of an airline cockpit, outfitted with a computer model of different flight scenarios, can be used to teach pilots how to fly.

For Compass, three sophisticated computer models were used in preparing and evaluating the scenarios.

The first is the SCAG forecasting model. This develops future demographic and economic projections based on national and international inputs and factors such as birth rates. It gives an internally consistent total for each scenario.

The second is a land use model, developed at a very fine level of detail for the 38,000-square-mile area of the SCAG region. This model not only maps existing conditions but also allocates future growth using various assumptions. The land use model keeps a running inventory of how land resources are used and where people live and work.

The third model is SCAG's transportation model, which is used to design future transportation systems and evaluate the consequences of these systems in terms of traffic congestion, pollution, time spent in traffic, trade-offs between cars and public transportation, and much more. The transportation model used by SCAG is one of the most progressive in the country — sensitive to the impacts land use changes have on transportation and capable of considering separately the effect freight movement has on congestion.

These models were used to evaluate the scenarios created for the SCAG region, allowing the use of objective measurements to understand the scenarios and determine which would be best for the region.
The underlying goal of the growth visioning effort is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity or income. To organize the strategies for improving the quality of life in the SCAG region, a series of principles was established by the Growth Vision Subcommittee. The four principles are intended to promote and maximize regional mobility, livability, prosperity and sustainability. Decisions regarding growth, transportation, land use and economic development should support and be guided by these principles. Specific policy and planning strategies also are provided as a way to achieve each of the principles.

**PRINCIPLE #1**

*Improve mobility for all residents*

- Encourage transportation investments and land use decisions that are mutually supportive
- Locate new housing near existing jobs and new jobs near existing housing
- Encourage transit-oriented development
- Promote a variety of travel choices

Providing transit options is a way to improve mobility for residents within the region.

**PRINCIPLE #2**

*Foster livability in all communities*

- Promote infill development and redevelopment to revitalize existing communities
- Promote developments that provide a mix of uses
- Promote “people-scaled,” pedestrian-friendly communities
- Support the preservation of stable, single-family neighborhoods

Walkable communities help improve livability and promote a mix of uses.
**PRINCIPLE #3**

*Enable prosperity for all people*

- Provide a variety of housing types in each community to meet the housing needs of all income levels
- Support educational opportunities that promote balanced growth
- Ensure environmental justice regardless of race, ethnicity or income class
- Support local and state fiscal policies that encourage balanced growth
- Encourage civic engagement

A variety of housing types enables prosperity for all people.

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**GROWTH VISIONING SUBCOMMITTEE**

SCAG’s Growth Visioning Subcommittee consists of elected officials from around the region. It serves as the regional leadership body and is charged with leading the visioning process. The interaction between the regional leadership and SCAG’s sub-regions form the foundation of the visioning process. Local jurisdictions and other local stakeholders provide input into the process at the sub-regional level. Regional stakeholders and the Compass Advisory Committee – which consists of participants from varied disciplines who generously donate their time and viewpoints – provide input into the process through the Growth Visioning Subcommittee. All results from surveys and focus groups are presented to the Subcommittee for review and feedback.

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**PRINCIPLE #4**

*Promote sustainability for future generations*

- Preserve rural, agricultural, recreational and environmentally sensitive areas
- Focus development in urban centers and existing cities
- Develop strategies to accommodate growth that use resources efficiently, eliminate pollution, and significantly reduce waste
- Utilize “green” development techniques

Open space is integral to the health of communities.
To develop a common vision for the future, it’s important to understand the challenges facing the Southern California region. Because the past often provides an indication of what is to come, this section summarizes the recent trends of the Southern California region – those issues that historically have been a struggle for the region. Then the section looks forward to 2030 to paint a picture of the challenges the region will encounter in the coming decades. It is precisely these challenges that a successful regional vision must address.

California’s biggest challenge is the extraordinary growth that it has experienced and will continue to experience. In recent years, Southern California has faced some of the most dramatic growth seen anywhere in the world for decades. The U.S. Census reports that between 1980 and 2000 the overall population in the region grew by 5 million people, from 11.5 million to 16.5 million. Projections indicate that 6.3 million more people will be added to the region between 2000 and 2030, bringing the total population to 22.9 million.

The dynamic interplay between immigration, out-migration, and natural increase (births minus deaths) accounts for the complexity of the population change. Immigrants – from around the world, but dominantly from Mexico, Central America and Asia – will continue to come to the region. But although immigration will continue to play a major role in the population change, the greatest portion of new growth is expected to come from natural increase – the children of people who are already here. At the same time, a net population increase of nearly 1.9 million people. Most of the population increase was attributable to natural increase (more births than deaths in the existing population). A higher rate of births among the foreign-born population in the region is a contributing factor.

The population remains relatively young. The average age of the population in the SCAG region, between 1990 and 2000, increased at a slower rate than that of the state of California or the U.S. Overall, the region has a younger population than the state. The distribution, however, is varied. In San Bernardino County, the median age is 30, while in Ventura it is 34. All counties in the region have a younger median age than the nation; only Ventura has an older median age than the state. Compared to the nine largest metropolitan regions in the country, Southern California is the second youngest in terms of median age.

Demographics

The SCAG region has experienced dynamic population change in the last decade. Primarily due to the recession that struck the SCAG region from 1990-1993, 1.5 million people moved out of the region during the 1990s. Most of the population loss was in Los Angeles County. However, this loss was part of a bigger picture of turnover. During the same period, many people were born or moved into the region, resulting in a net population increase of nearly 1.9 million people. Most of the population increase was attributable to natural increase (more births than deaths in the existing population). A higher rate of births among the foreign-born population in the region is a contributing factor.

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From 1990 to 2000, the region's senior population (aged 65 years or over) increased slightly to 10 percent, which is below the national rate but slightly higher than that of the state. In 2000, a total of 1.7 million seniors were counted in the region, up by nearly 220,000 from 1990. Only Riverside County had a higher senior population than the rest of the nation in 2000, while San Bernardino County had the lowest number of seniors in the region.

The ethnic makeup of the population also changed significantly during the last decade. The region continues to be a magnet for immigrants. Between 1980 and 2000, the region's foreign-born population increased by 3 million, from 2.1 million to 5.1 million. In 2000, one out of every three Southern Californians (31 percent) was born in a foreign country. In this regard it is now comparable to other immigrant destinations such as New York; Vancouver, B.C.; and Toronto, Ontario.

The age and ethnic diversity of citizens in the SCAG region drives the demand for critical public services such as schools, job training, public transportation and senior housing. Consequently, the study of current and future trends in demographics is important to any long-range planning effort.

**Percent Hispanic Population**

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<tr>
<th>Year</th>
<th>1990</th>
<th>2000</th>
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<td>Red and dark purple represent a higher percent of Hispanic population in the census tract.</td>
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**Housing**

Recent trends and existing housing conditions point to an unmet demand for a greater diversity of housing throughout the six-county region. During the 1990s, the overall supply of housing did not match increasing demand in the SCAG region. Even as the population continued to grow, home construction lagged behind. The number of annual building permits decreased by 20 percent between 1990 and 2000. Further, those units built were out of sync with the demand for a broader array of housing choices from an increasingly diverse Southern California.

Single-family detached homes account for about 60 percent of housing in the region, according to the U.S. Census Bureau, mirroring the proportion of single-family units constructed during the last decade. And while multi-family units account for a significant proportion of the overall supply at about 40 percent, there were fewer multi-family building permits issued in 2000 than in 1990.

As a result, as populations in need of multi-family housing increase the demand for such housing is outpacing production. Immigrant populations and the 20-29 year-old and senior populations – those most likely to want multi-family housing – are increasing faster than the multi-family housing supply.
The cost of living has soared across the region, causing an affordability crisis for low-income households and increasingly for middle-income families wanting single-family homes. This is especially true in the coastal and jobs-rich areas of the region where vacancy rates are low, housing costs are high, and new housing typically consists of single-family homes for people in upper-income brackets. Earning the median household income no longer qualifies families for the median mortgage payment. Households earning the Area Median Income (AMI) in Los Angeles, Orange, and Ventura Counties, for example, spend more than 50 percent of their income on housing.

The increase in construction of townhomes also suggests that there are housing types that are becoming more in demand. While townhomes account for only 18 percent of the region’s multi-family units, they accounted for more than 40 percent of the growth in multi-family housing built from 1990 and 2000.

Although Los Angeles County still retains the bulk of the region's housing (approximately 60 percent), Census data show that the new housing is being constructed in equal proportions across Los Angeles, Orange and Riverside Counties. Between 1990 and 2000, about 25 percent of housing in the region was built in each of these counties, with another 15 percent of the new housing in San Bernardino County. And while multi-family housing construction has increased in Los Angeles and Orange Counties in the last couple of years, it still has not kept up with population growth, a situation exacerbated by the slump in multi-family housing construction in the 1990s. At the same time, Riverside and San Bernardino Counties are building single-family homes in greater proportion (85 percent are single-family) than what currently exists (75 percent). This shift in population away from existing job centers can compound the lack of housing near jobs in the counties that already have the longest commutes in the region.

The gap in unmet demand for greater housing diversity will continue to grow without a regional long-term planning effort. In particular, the housing need for new employees entering the workforce and senior housing must be addressed if the region is going to sustain economically viable and healthy communities.
When housing is built on land that is already developed, or on scattered small sites of undeveloped land, the process is called infill. The images to the right show where redevelopment and infill occurred in the 1990s. The fuchsia represents Census tracts in which all the development in the 1990s was through infill and redevelopment, while the lavender shows tracts in which some of the development in the 1990s occurred through infill and redevelopment. In the 1990s, 35 percent of the new housing developed in the region was built on already developed land. Most of the redevelopment occurred in the Los Angeles basin. This high redevelopment rate is a testament to the limited land supply and continuing strong demand for housing in the basin.

**Jobs**

The recession in the early 1990s hit the Southland hard. The employment growth rate in the SCAG region between 1990 and 2000 was only 8 percent, about half of the 16 percent job growth experienced in California, and well below the national rate of 20 percent. During the second half of the decade, however, the region’s employment grew faster than the nation, at 14 percent. During the 1990s, certain counties fared better than others. The Inland Empire experienced an explosive growth rate of 37 percent, followed by Ventura and Orange Counties at 19 percent and 18 percent respectively. Los Angeles County had a net loss of 67,000 jobs during the 1990s.

In the 1980s the manufacturing sector accounted for nearly one-quarter of the jobs in the region, but during the past two decades manufacturing jobs have declined and now represent only 14 percent of the employment mix. Service sector jobs, on the other hand, have skyrocketed from 22 percent in 1980 to 31 percent. Jobs were also added in government, trade, transportation and public utilities, and construction and mining between 1990 and 2000.

Most of the manufacturing decline occurred in Los Angeles County and was defense or aerospace related. While Orange County also experienced a net loss of manufacturing jobs from 1990 to 2000, Riverside and San Bernardino gained about 39,000 manufacturing jobs.

Since a healthy economy is the driving force behind a healthy community, it’s important to plan for an equitable dispersion of employment opportunities throughout the region. Job location affects public services such as transportation, education and housing, making a regional coordinated planning effort key.
**Transportation**

In the 1990s, the region experienced an infusion of transit infrastructure investment. Most notably, the Los Angeles County Metropolitan Transportation Authority (MTA) embarked on an ambitious process to improve existing systems, while also developing new light, heavy and commuter rail systems. The improved system has helped spawn development around major transit stations, contributing to increased ridership along the lines.

The region still depends heavily on the freeways to move people and goods.

The MTA has also recently introduced “Metro Rapid” – a form of bus rapid transit – along two major transit corridors. Additionally, many municipalities in the region have upgraded bus service. Worth mentioning is the Santa Monica Big Blue Bus, one of the most successful transit systems in the country. In the year 1998-1999, according to the Center for Neighborhood Technology, the Big Blue Bus moved more than 20 million passengers.

Other transit agencies made big strides in the 1990s as well. Orange County Transportation Authority increased ridership by nearly 10 million trips between 1990 and 1999. In the seven-year period from 1992 to 1999, 100 percent more transit trips were taken on Foothill Transit, while ridership in Antelope Valley increased by more than 200 percent in the 1990s.

The Wilshire Boulevard rapid transit bus has improved service along this busy corridor.

During the 1990s, transit use in Southern California increased more than vehicle miles traveled.

Across the Southern California region as a whole, transit use increased by 20 percent in 2000 – outpacing both the 13 percent growth in population and the 15 percent growth in the Vehicle Miles Traveled (VMT).

In 2000, total unlinked transit trips in the region increased by more than 40 million, or 7 percent since 1999. However, even in a time of increasingly improved transit access, the region is still encountering a number of transportation-related challenges.
The mode choice to work in the region remained essentially unchanged in the 1990s, contrary to the national trend. In 2000 the area had the highest share of workers that carpooled among the nine largest metropolitan regions and maintained a higher level of carpooling than the rest of the nation.

Despite the fact that in 2000 23 percent of commuters found alternatives to driving alone to work, congestion continues to be a problem in the Southern California region. In 2000, the Los Angeles metropolitan area (Los Angeles and Orange Counties) remained the most congested metropolitan area in the country in terms of hours of delay and congestion cost per person.

From 1980 to 2000, VMT nearly doubled. The good news, though, is that VMT growth has slowed down considerably. Whereas between 1980 and 1990 VMT increased three times faster than population growth, in the 1990s persistent congestion played a factor in slowing VMT growth to nearly the same rate as the region’s population growth.

Between 1990 and 2000, the average time it took to commute to work increased in every county in the region. The region’s average travel time to work increased from about 26 to 29 minutes and continued to be higher than the state and national averages but significantly lower than other large regions.

Transportation behavior is greatly affected by household, employment and service location. An aging population will change transportation mode choice, travel time and location. These changes affect future transportation decisions.
The dynamic interplay between past and current challenges will shape any vision for the Southland’s future. A shared vision must anticipate the needs of a population that is simultaneously younger, older and more diverse.

Reduction in the wage-earning population will affect revenue for public services, yet more public services will be demanded. The growing senior population will require more housing options close to shopping and health care services, as well as alternatives to getting around by automobile.

In addition, the limited land supply in the basin will require new strategies for accommodating housing and employment.

The knowledge gained through observing these trends will enable the region to respond to these challenges and provide a range of options for accommodating the housing, transportation and employment changes that will help the region grow and prosper.

These changing demographics will provide the driving force for much of how the region will evolve. New housing markets will be opened as families look for cost-effective housing near jobs. Many people in the region will place a greater value on living close to family members and on proximity and quality of schools. These preferences will encourage the creation of a wide variety of housing products aimed toward the different needs and wishes that occur throughout this diverse region.

The increase in diversity also will fuel the natural progression of the “international city.” With a broad range of customs, languages and international ties, Southern California will serve as the gateway for the majority of the country’s commerce with Asia and Latin America. The ability to have a base in the prosperous and stable United States — but also tap into a workforce that is fluent in Spanish, Mandarin, Cantonese, Korean and other languages — will be a tremendous advantage in a global marketplace.

The future population will demand more entry-level and mid-priced housing. It will place a premium on location and good access to work opportunities, services and family. It will be important to place a high priority on locating new housing and job opportunities in areas that meet these criteria. Reinvesting in the region’s corridors as mixed-use areas and opening up housing opportunities through infill and redevelopment will provide needed options in communities that are well served by transportation infrastructure and ripe with urban amenities.

**LOOKING FORWARD**

**Changing Ethnicity**

In the next several decades, recent trends will persist, and the Southland will continue to become more diverse. While all ethnicities and races will experience an increase in numbers, the most dramatic gains will be among the Hispanic and Asian populations. By 2030 there will no longer be one race or ethnicity in the majority; the region will be truly international.
Changing Workforce

One of the greatest scientific achievements in the last several decades is the dramatic increase in an individual’s lifespan. Many news segments, however, have depicted some of the worrisome aspects of an aging population – namely a growing number of people who are cared for through programs such as Medicare and Social Security. The Southland faces another daunting challenge. As our population ages and leaves the workforce, there will be a delay in filling their jobs until enough younger people become of working age. Currently, roughly two-thirds of the population in Southern California is of working age – the demographic generating the tax revenue that pays for public services that everyone uses. During the next 25 years, it is expected that the number of people over age 55 will increase by six times, while the number of children will also increase modestly. These two factors will interact to produce a situation in which the non-working population will increase from a mere 11 percent today to nearly one-third of the population. In 25 years, it is projected that less than 40 percent of the population will be in the wage-earning workforce.

Change in Job Types

The region, as well as the nation, has seen a general decline in the manufacturing sector in recent years, resulting in the loss of a large number of living wage jobs. At the same time, the region is increasingly becoming dependent on the service sector. Service jobs are not as lucrative as union manufacturing jobs of past generations and often do not require a highly educated workforce. In many cases service jobs are located within communities whose home prices exclude service workers from living close to their workplaces. The shift to a service economy therefore intensifies the need for workforce housing close to jobs. To create prosperity for everyone and to diminish the impacts of long commutes, housing diversity and affordability will become increasingly important.
Land Supply

Since the SCAG region covers more than 38,000 square miles, few would imagine the area could be short of undeveloped land. But the region does in fact face a severe limit on the amount of undeveloped land suitable for development, which hinders its ability to accommodate new housing and jobs. The Coastal Basin of Los Angeles and Orange Counties, along with the San Fernando Valley, is home to 77 percent of the region's jobs and 71 percent of its population. Under current general plans, capacity on vacant land accommodates only 238,000 new households. That means that only 29 percent of the SCAG 2030 growth projection for this area could be accommodated through new development on vacant land.

With limited undeveloped land, developed land will become increasingly important in accommodating growth. Infill, or new development in already developed areas, will be the method used to construct nearly half of the new housing region wide. In the city of Los Angeles, infill development could accommodate up to 80 percent of the projection for this area.

Another factor adding to the issue of a constrained land supply is the cost in time, money, and community building that is incurred by long commutes between the region's job centers and areas with plentiful land.

Accommodating growth through infill housing is one way of dealing with the limited land supply in the Coastal Basin.
Provision Of Open Space

While some communities in the Southland provide an exceptional amount and quality of open space, other areas provide few opportunities for experiencing the outdoors. As the hillsides, once considered too steep for development, are now sprouting houses, there is a growing concern about natural areas that are not preserved by public or protective ownership. As the population grows, the pressure to develop environmental assets will only increase. Likewise, with a growing population there will be more demand to save these areas and to create more recreational opportunities. All the region’s general plans address open space in some fashion. Additionally, several innovative and progressive projects are currently under way. Some of these programs, such as the Coachella Valley Habitat Conservation Plan, are taking place at the sub-regional level. Other notable efforts, such as the Ventura County SOAR initiative (Save Open Space and Agricultural Resources) and the Riverside County Integrated Project (RCIP), are being implemented through general plans at the county level. Too numerous to list are the varied efforts taking place among the many cities of the Southland.

Congestion

Congestion will continue to pose a problem for the Southland. The increasing population in the region will cause vehicle miles of travel to rise. Without significant changes in the way land uses are integrated with transportation, congestion is predicted to worsen. If current trends continue, estimates are that congestion, in terms of regional daily vehicle hours of delay, will more than double from 1.6 million to 3.6 million in 2030. In Riverside County alone, vehicle hours of delay could more than triple.
Pollution

Despite significant air quality improvements in the region in the last 30 years, the Southern California region is still, and will continue to be, challenged with air pollution. Maximum pollutant concentrations in the region still exceed the federal standards for ozone, carbon monoxide and particulate matter (PM10 and PM2.5) significantly. In the last several years the downward trend of pollution production has reversed. Despite improved emission standards for passenger automobiles, big trucks and sport utility vehicles, which are exempt from fuel efficiency standards, have increasingly become the vehicle of choice.

Daily vehicle miles of travel also are still very high, despite a slower rate of increase in recent years. Additionally, emissions from ships, locomotives, buses, trucks, other large vehicles, as well as many household chemical products, remain unregulated. Thus, the combination of increased emissions, the regional geography, and the hot climate encourages ideal conditions (temperature inversions) for increased pollutant buildup and reaction. As a result of these factors, the air quality in the region could continue to worsen unless measures are taken and policy is introduced to reduce pollution production.

Freight Management

Freight operation in the Los Angeles region originated next to the Port of Los Angeles at Long Beach in the early 20th Century, when these ports were separate from other development in the region. Subsequent growth has surrounded the original industrial lands and is currently constraining the expansion of operations needed to keep pace with increases in freight volume. Truck access directly to the ports contributes to severe congestion on the freeway system and to poor air quality in the region. The Alameda Corridor was built to alleviate some of the problems associated with truck access to the port.

In addition to rail and truck freight, the Southern California region is experiencing astonishing increases in air freight volume. During the next 30 years, conservative projections indicate that this market of high value shipments will triple in volume, despite the dramatic growth anticipated in other freight sectors. And because air freight shipments intended for the local market must be transferred to trucks for delivery, air freight relies upon the surface transportation network, in the same way that other types of freight do.
PUBLIC INPUT & INVOLVEMENT

The Compass process has defined a shared vision that can guide regional and local land use decisions, transportation improvements and housing development for the next 30 years. The Growth Vision creates a goal toward which objectives and implementation strategies can strive. Arriving at the goal consisted of an extensive public outreach and input process. The Growth Vision was formed and refined through public surveys, focus groups, public workshops, sub-regional review sessions and policy dialogues held throughout Southern California. This section summarizes the process and findings of each of these components of public involvement and discusses how the results are incorporated into the Growth Vision.

SURVEY FINDINGS

At the beginning of the Compass process, SCAG conducted a survey that asked Southern Californians them about the region's "biggest problems," perceived impacts of population growth, and transportation priorities.

Overall, the survey shows that while the results are diverse, Southern Californians hold collective concerns and hopes for growth in their region. The respondents want a balanced approach to managing growth. Respondents support allocating tax money to a variety of transportation improvements, from freeways to transit to bike paths. They were receptive to higher density development and redevelopment as long as it is coupled with preserving open space. And they believe that environmental protection must be balanced with economic growth. The summaries below provide a better understanding of why respondents are concerned with growth and their openness to solutions to growth-related challenges.

The Role of Planning

The survey results indicate that the respondents are very concerned that growth and its impacts will erode quality of life. In fact, 46 percent of respondents in the region agree that "my local government should try to slow growth down." When respondents prioritized their top four growth-related concerns, overcrowding of schools, at 46 percent, was of greatest concern. Traffic congestion was second, with 38 percent of respondents identifying it as their first or second most significant concern. Housing costs and increased air pollution were next on respondents' list of concerns.

Despite the concern about growth, wide support for planning solutions to growth exists throughout the region: 78 percent of the survey participants believe planning is necessary to maintain livability. The strongest support for planning exists among the most active voting population of citizens 55 and older. These survey results validate findings from previous focus groups. Balanced approaches to managing growth are also important. Respondents supported both transit and freeway expansion, allocating tax money to a variety of infrastructure (from freeways to bike paths), and they believe that environmental protection must balance economic growth. This search for balance and varied solutions means that any strategic policy or funding initiative is not likely to be widely supported if it focuses on just a single answer. Respondents also thought that it was both likely (78 percent) and desirable (61 percent) that Southern California will become more ethnically diverse.

The green bars show the proportion of survey respondents who were Somewhat or Very Concerned with each topic.
Transportation

The survey, as well as web surveys and earlier focus groups, reflected a strong desire among residents for balanced approaches to managing transportation. The results indicated that citizens view freeways as an integral part of the region’s future and dislike the current congested state of these roads. When asked how future tax money should be spent on the transportation system in the Southern California region, nearly 30 percent of respondents mentioned freeway improvements.

Yet more than two-thirds of the survey respondents believe transit is part of the solution to traffic congestion. Nearly 3 out of 5 found it desirable that transit trips would replace more and more automobile trips, and a large minority (34 percent) thought that it was likely as well. Survey respondents would allocate 37 percent of transportation funds to public transit (high-speed and bus) on average. They would allocate 30 percent to freeway improvements and 14 percent to surface streets. In total, respondents would allocate 54 percent of transportation funding to non-automobile modes of travel. These allocations hold true across all the counties in the region, with the exception of San Bernardino and Riverside, where residents allocated more funds to street-widening than bus service. Imperial County, despite its distance from the major employers of the Coastal Basin, gave highest priority to transit.

Survey respondents’ mean allocation of tax funds to transportation projects

"We should widen congested freeways and build new ones."

"Building more high quality, high speed transit is part of the solution to the traffic congestion problem."
**Land Use**

Survey respondents showed a general concern for open space. More than 60 percent of respondents were somewhat or very concerned with urban sprawl and the loss of open space. And 56 percent of the respondents found it somewhat or very desirable that environmental protection will become more important than economic growth. Almost half (49 percent) of those surveyed believe this is likely to occur. The public was also receptive to the ideas of higher density development and redevelopment as long as they were combined with preserving open space. However, the same respondents were less amenable to higher density development or to new residents in their own neighborhoods. Overall, there was a general awareness of land use issues and little willingness “to not plan” or “to believe that somehow there is enough space to accommodate unfettered development.” On the issue of infill, only 25 percent thought that growth will be concentrated in existing cities in the future, while 43 percent thought that this concentration would be positive.
Southern Californians in different Counties showed that they are more alike than different. For example, between 84 and 90 percent of respondents in each of the Counties except Imperial were very or somewhat concerned with traffic congestion. Each County’s survey respondents would allocate 18 - 24 percent of transportation funds to high-speed transit, while the proportion for freeway improvements was 28 - 36 percent. Their prioritization of transportation fund allocations was the same across all Counties, with one small exception in Riverside and San Bernardino Counties. Respondents from Los Angeles, Orange, and Ventura Counties put greater priority on bus service than on widening major streets, while residents in Riverside and San Bernardino Counties preferred the reverse. The overall distribution of funds fell into three categories in the following order of priority: (1) freeway and high-speed transit, (2) increased bus service and wider streets, and (3) more sidewalks and bike paths.

Respondents showed similarities toward general land use and planning issues as well. At least 70 percent of respondents in all Counties strongly or somewhat agreed that planning is necessary to keep the region livable. Nearly 80 percent agreed in five of the six Counties (70 percent agreed in Orange County). At least 70 percent of all Counties also agreed with the idea of higher density neighborhoods that are carefully designed and provide open space.

While it is often said that the sub-regions of Southern California are very different – and in many respects they are – this survey reveals that when it comes to picking strategies and investments, people across the region are remarkably consistent in their preferences. This similarity is a key asset to building a shared regional vision and to implementing positive long-range strategies.

Workshops

The Compass workshops allowed Southern Californians to explore ideas about what the region will look like in the next 25 to 30 years. The workshops specifically asked the public how and where to accommodate the region’s next 6 million people and 3 million jobs. Nearly 1,300 members of the public attended 13 Compass workshops. Using maps of the entire region, Southern Californians experienced firsthand the interdependence of regional land use, transportation, economics, and environmental issues across political boundaries.

The workshop participants came up with countless ideas, solutions, and plans, as well as more than 100 maps – each a unique vision of the future. While land use, transportation, and development issues are often approached at a local level, each Compass workshop map created solutions to these regional challenges. The workshop results support both the survey findings and the Growth Vision principles. They reflect the need for balance and planning, with consistent concern for environmental protection as well as economic growth, for multi-family and single-family housing types, and for mixed-use centers as well as single-use districts.

Participants placed “chips” representing growth on this regional base map.

Workshop participants assess growth options.
Workshop Process

Compass used workshop maps of three different scales to gather the greatest diversity of citizen input. At the kickoff workshop Southern Californians from around the region worked on the entire six-county SCAG region. The majority of workshops were conducted at the sub-area scale — smaller than the entire region but incorporating multiple counties. Different sub-areas overlapped so participants had a choice of workshops. They were also formed based on commuting patterns, urbanized land and other geographic factors — not jurisdictional boundaries. Sub-area workshop participants were given the opportunity to work at the regional scale as well. The final two workshops allowed participants to work at an even finer level of detail in the South Bay/Gateway Cities and the Four Corners/Inland Empire Focus Areas. Also, as a result of public input the latter workshops allowed participants to select from a menu of transportation improvement options — allowing them to coordinate regional land use and transportation while considering the costs of transportation infrastructure.

Workshop participants sat at tables of eight to 12 people with people from diverse backgrounds. The diversity of each table allowed the participants to experience alternative points of view. Environmentalists and developers, students and seniors, immigrants and California natives often sat at the same table. They frequently found that they agreed more often than they disagreed — despite their different backgrounds. Other times, they negotiated trade-offs and developed successful compromises.

Each workshop group was given a base map that included existing land uses, existing and planned highways and transit lines, and environmental constraints (steep slopes, floodplains, and wetlands). The participants were also given regional transportation, topographical, and endangered habitat maps — vital information that showed a regional context and with more detail than feasible on a workshop base map.

Participants first identified areas where they felt growth should not occur. These areas included stream and trail corridors, environmentally sensitive areas, and other significant natural features they thought should be preserved. The participants were then challenged to accommodate the base map area’s projected growth in housing and jobs using various combinations of development-type game pieces, or chips. The development types represent a range of ways in which jobs and housing could be accommodated. Each development type has a unique development pattern (from auto-oriented to pedestrian-friendly), number of households and jobs, density, and combination of retail, office, and residential space. They were modeled after communities and places in Southern California (See Appendix I: Workshop Development Types).
The workshop groups were given three to four “starter” sets of chips. Each chip set consisted of a different combination of 14 development types. The development types were either separate-use, auto-oriented or they were mixed-use, pedestrian-oriented. They also included different levels of redevelopment. By choosing a starter chip set, groups indicated the quality of development (auto-oriented vs. pedestrian-oriented) and the general quantity of redevelopment they wanted on their map.

To accommodate the same growth increment, a chip set consisting solely of low-density, auto-oriented chips would consume more land than a set consisting of mixed-use, pedestrian-friendly chips. The workshops allowed participants to grapple with these tradeoffs. Each workshop group had to reach consensus on tradeoffs of low-density versus compact growth, redevelopment versus greenfield development, and other important development issues facing the region. As the exercise progressed, groups were allowed to trade chips if their preferences changed. In order to accommodate the region’s projected growth, however, the final number of households and jobs had to remain constant after trading.

In conjunction with land use decisions made by placing chips, workshop groups marked ideal improvements and additions to the regional transportation system. This task serves as one example of how the workshops responded to the demands of its participants. As more and more workshop groups were eager to plan transportation improvements and modes, the final workshops provided participants with various colors of tape to delineate planned transportation improvements. Since the transportation options were described in detail (see Appendix I), participants could then coordinate development with appropriate transportation service and even calculate the costs of the transportation improvements.

At the end of each workshop, the groups had the opportunity to present their own visions and ideas about growth. This exchange proved valuable, informative and enjoyable for the participants.

Workshop Results

The workshop maps were compiled into a Geographic Information System (GIS) database that identified and analyzed the location, type and number of chips placed on each workshop map. Composite maps also were made of the transportation networks and open space corridors envisioned by each workshop group. The composite maps then formed the basis of the draft Growth Vision scenario—an alternative for future regional growth shaped by the visions and wishes of Southern California residents. The following summaries outline the common land use and transportation characteristics among workshop maps, as well as key differences between the various workshops.

Land Use

Whether or not the criticism of Southern California as an area of sprawl is true, there is a limited amount of easily developable land left in the region. That means there will be little opportunity to sprawl in the future. With this truth in mind, most of the workshop groups opted for higher degrees of infill development.

The workshop participants showed a strong preference for development in mixed-use centers and corridors. A surprising majority of workshop participants chose the most intense, mixed-use starter chip set (Chip Set 1). Chip Set 4 often approximated development trends from the 1990s or was slightly more compact. In most sub-areas, this chip set consumed all remaining undeveloped land. Of all the sub-area workshop groups, not one chose Chip Set 4.
The vast majority chose either Chip Set 1 or 2, both of which contained a majority of mixed-use, pedestrian-oriented development types. Through their chip selection, workshop participants indicated that they do not prefer one style of development over another. Instead, they seek choices and a wider array of options in building their future.

In nearly every workshop, participants demonstrated the importance of the region's transportation corridors. Through the placement of high intensity land uses and improved transit and auto service, participants assured a place in any scenario for these important corridors.

Conservation of existing parks and mountains was a high priority for many workshop groups. These groups sought to enhance networks of green corridors through mountain ranges and along rivers, particularly the Los Angeles and San Gabriel rivers, and worked to incorporate wildlife habitat corridors in their plans.

**Tranportation**

Consistent with the surveys, the workshops illustrate that transportation networks are indeed on the public mind. Workshop groups often complained of congested freeways and routes, but they also proposed many solutions to the problem. While many participants advocated expanded capacity or new alignments, the majority used land use decisions and alternative means of transportation in addition to the more conventional manners of addressing congestion. This again illustrates that people want a wider range of options in their quest to achieve better mobility.

Workshop maps and comments also called for better access to transit and more comprehensive transit systems that approximate commute flows rather than remaining within political boundaries – most often with connections between Orange and Los Angeles Counties. Even residents who do not use transit supported upgrading transit networks. Many called for greater access to local bus routes for students and seniors.

**Workshop Variation**

The development types that participants typically chose to accommodate growth were heavily influenced by where they lived. For example, participants in the Downey workshop were much more likely to emphasize corridor reinvestment and intense, mixed-use centers than were participants in Palmdale, or even in built-out areas such as Garden Grove and the San Fernando Valley.

While many of the workshop groups opted for redevelopment over greenfield development, the workshop exercise exposed the difficulty of redevelopment in accommodating projected growth in nearly built-out areas such as the Los Angeles Basin and San Fernando Valley. While a strong desire to reinvest in the historic downtowns of San Bernardino and Orange Counties remained, interest in redevelopment was generally low in these counties compared to Los Angeles County. The High Desert cities incorporated more single-use development and fewer mixed-use centers than most other parts of the region. However, workshop participants continued to locate mixed-use development in High Desert city and town centers.

Compilation map representing the sum of all land set aside for conservation by the more than 100 workshop groups.
Residents in the Coachella Valley, the High Desert and other, more remote communities created more roads than other places. This is most likely due to the available land, recent growth, and the prevalence of automobile travel in these areas. While new roads mean more travel options, they also hamper conservation measures envisioned by many participants. Imperial County generally prioritized transportation connections to San Diego over connections to Riverside or Orange Counties.

The workshop participants encountered challenges in thinking regionally. Many were concerned with the effect of a regional scheme on other cities or neighborhoods on their maps. Similarly, others focused growth and improvements in areas they knew best—their own cities or neighborhoods—and did not attempt to change other areas. This stands in contrast to experience in other similar exercises where locals shun the idea of growth in their own neighborhoods and place disproportionate amounts of development in other communities.

Web-based Outreach

Compass also has used the worldwide web extensively to maximize outreach to Southern Californians. The award-winning Compass website offers a range of valuable resources, including news articles and reports related to regional planning and growth. It also offered several ways to get involved in the Compass process. Since not everyone could attend a workshop, web-based access to workshop information was made available. A web-based survey also was conducted so that people could respond to the issues of regional growth at a convenient time and place for them. The web survey was consistent with the phone survey. The Southern California Compass website was the recipient of an American Planning Association award of excellence.
COORDINATING LAND USE WITH THE REGIONAL TRANSPORTATION PLAN

As a metropolitan planning organization, SCAG is required by federal law to create a Regional Transportation Plan (RTP) that determines the needs of the transportation system and prioritizes proposed transportation projects. The RTP is also necessary to obtain and allocate federal funding for regional transportation projects. The RTP must be updated every three years to ensure that the plan adequately addresses future travel needs and is consistent with the federal Clean Air Act. While the Compass workshops were taking place, SCAG staff was working to update the 2004 RTP.

In keeping with the philosophy of scenario planning, the research project was undertaken in partnership with the SCAG RTP team to examine the effects of land use on regional transportation performance. Various regional development scenarios — alternative snapshots of land use 30 years into the future — were created to measure the various impacts of land use on congestion, vehicle trips, transit use and air pollution. The research was undertaken with the understanding that the scenario analysis would inform both the RTP and the Growth Vision. Incorporating land use into a regional transportation model is nothing short of a paradigm shift in the way regions plan transportation. The outcome of this scenario analysis will have tremendous implications for future RTP cycles in Southern California and regions nationwide.

To study the effect of alternative land use designs on regional transportation performance, multiple regional development scenarios were created through SCAG’s Planning for Integrated Land Use and Transportation (PILUT). Two “bookend” PILUT land-use scenarios were developed to compare variations on regional trend scenarios and the draft Growth Vision scenario. One bookend, PILUT 1, focused on infill development in existing cities while the PILUT 2 distributed growth over a broader area in newer cities. Comparing these two extremes to the Trend Scenario provided valuable lessons for the Growth Vision principles and the Growth Vision scenario. Below is a summary of the PILUT scenario analysis process and its findings.

PILUT SCENARIO ANALYSIS

How the Scenarios Were Modeled

A detailed land use model can help create scenarios that more fully test the integration of land use and transportation than regional transportation models can alone. Through the use of robust computer planning tools, development types were combined to create the two PILUT scenarios. These scenarios were designed to test two possible future outcomes. The PILUT scenarios were engineered not as draft visions but as studies that could help create a draft vision. Measures of the effects of the PILUT scenarios were then compared to the same measures of various baseline or trend-based scenarios.

Both the PILUT 1 and 2 scenarios consist of the same population as the total projected by SCAG for the trend scenarios and approximately the same distribution among the counties. In defining the scenarios, SCAG provided a mix of housing and jobs for each of the seven modeling zones within the region. This allocation was broken down to include population, households and three categories of employment.

The PILUT methodology incorporated many datasets from a variety of sources. The primary reference layers were from SCAG (regional land use 1993), satellite data (1992 and 2001), and Census data (1990 and 2000). Additional data included general plans for each of the counties, environmental layers, and derived layers from a digital elevation model. These layers were combined to create a database that could be queried to provide the most accurate land use information available.

The overall strategy in developing the map layers was to identify developed, environmentally constrained, and committed (publicly owned or tax exempt) land. The model assumes that publicly owned land is not available for either development or redevelopment, and removes it from developed and vacant inventories. Environmentally constrained land was also removed from the vacant land inventories in order to leave it in its natural state as much as possible. The resulting inventories of vacant and developed land are assessed for suitability for development and redevelopment, taking into account the land’s proposed density and connection to infrastructure.
In addition to the detailed land use models that are used to both establish scenarios and monitor crucial themes (such as types of jobs and housing and the amount of vacant land versus infill development), SCAG maintains transportation models that use these scenarios as inputs. These models are capable of measuring the changes in land use, and in conjunction with current and planned infrastructure, of determining how the region’s travel will be affected by the future growth.

The Trend Projection

As part of the RTP update, SCAG performed a detailed analysis of the region’s existing conditions. This inventory counted the location and variety of the region’s jobs, households, and people. The modelers at SCAG then integrated this inventory with the transportation system and behavioral patterns to understand impacts on travel. Finally, the modelers developed a series of alternative land use scenarios.

One scenario, known as the Baseline alternative, represents what is likely to happen given the continuation of existing trends. Scenario planning relies on the idea of a Baseline alternative because it serves as a point of comparison for other alternatives. The Baseline is a prediction of where the future jobs and people will locate within the region if policies remain the same. It represents the continuation of current development trends, with adjustments made based on local input. The Baseline scenario for the Compass project is known as the 2030 No Project scenario. In the RTP process, several trend-based scenarios were created.

The Trend Projection

The process used to create the PILUT scenarios is very similar to the process participants in the workshops used to create their plans for the region’s future. The scenarios were built by placing development types, representing a mix of land uses, throughout the region. The 17 development types (see Appendix II: Scenario Allocation Development Types) used to create the scenarios are more detailed and refined than the ones used in the workshops, but they are similar in that they are based on places experienced by residents and workers alike.

The components of the development types are “building types,” which were established based on real world examples found within the Southland. The building types represent a wealth of data – from jobs and housing types to the mix of land uses to building height and parking requirements – applied at the smallest level of geography available (about five acres). Each development type represents a unique grouping of building types.

At their most basic level, development types represent households and employees for a given amount of land. In addition to this simple representation of density, information can be associated with these development types indicating many factors, such as the amount of impervious surface, percentage of rental units, single-family and multifamily mix, infrastructure costs, and other derived assumptions. Scenarios were populated using development types, allowing for direct comparisons between them via evaluation criteria such as land consumption, comparative infrastructure costs, and housing and job profiles.

The scenarios themselves also are host to a wealth of data that can be used for further modeling or analysis. The following is a description of the two PILUT scenarios and the results of the scenario analysis.
PILOT Scenario Analysis Results

PILOT 1

This alternative is often referred to as the “infill” scenario. It’s based on an intense realization of the growth potential of the Coastal Basin of Los Angeles and Orange Counties and the San Fernando Valley. In PILUT 1, both jobs and housing growth would be focused on existing centers and corridors throughout the region. The majority of the workshop maps used similar strategies for accommodating growth.

In this scenario the city of Los Angeles, building upon its growing multi-ethnic population, will be transformed into an international city rivaling any in the world. Los Angeles would be home to significant amounts of growth, with most of it occurring through infill development. The intensive network of transportation corridors would be the target of significant reinvestment, creating highly desirable places to live and work in the central city that are near excellent transit service.

Beyond the Coastal Basin, cities would experience a significant amount of investment. To reduce trips and make transit more widely available, development that might currently locate along interchanges instead would be focused on the combination of existing well-connected road networks, transit access and services. This development would be mixed use, with close proximity to goods and services for new households.

PILOT 2

This alternative is often referred to as the “Fifth Ring” scenario. It is based on a broad distribution of future growth in the region. While the basin is still popular, an increasing share of growth will relocate in newer cities. Places such as Palmdale and Ontario would become regional centers, with growth similar to that experienced by Orange County in the 1960s and 70s. Because most of the development occurs at the edge of what is current development, many towns and cities that today are separate from one another will grow together.

The growth of the outer ring cities will transform the region, bringing economic growth to areas that have seen mostly housing development over the last decade. The region will become even more polycentric, with Palmdale, San Bernardino/Riverside, and Los Angeles operating as the three large centers from which growth extends.
With the outward expansion in business growth, Los Angeles will not see the extent of growth seen in PILUT 1. With job growth focused around the Ontario airport, San Bernardino and Riverside will merge to become one unified job destination. Palmdale will grow at a rate and density similar to Las Vegas during the last decade – minus the casinos.

There will be a significant number of new jobs coming to these emerging areas as manufacturing finds its place among the new investments in airports and centers. Accompanying all of these jobs are thousands of new homes, ensuring a balanced mix of jobs and housing that will allow the transportation system to work most efficiently.

Within the centers themselves, housing will play a smaller role, since commerce is more predominant. These areas will, however, be home to a significant number of homes, primarily multi-family with some small-lot, single-family housing at the edge. Redevelopment and infill will continue to play a role in the development of new housing, likely continuing at about the same pace as today.

**PILUT Performance**

The two PILUT scenarios, using land use integrated with transportation, modeled significantly better than the conventionally created scenarios, the projected trend, and the composite of local plans. Specifically, with the same amount of investment, there was significantly less congestion and slightly more transit and walking than unaided. When the results are taken in whole, it is clear that either of the PILUT land use scenarios would be superior to the trend scenarios – and that they would achieve benefits equivalent to billions of dollars of transportation investments. Clearly, smart land use choices are one of the best potential strategies that can be used today. It is interesting to note that while PILUT 1 and 2 have very different distributions, they have similar development patterns that were developed by SCAG’s Growth Visioning Subcommittee. When these principles are implemented, transportation improves to some extent, regardless of the specific location of development in the region. This is a robust strategy – it works well in many scenarios.

**Toward the Growth Vision**

Both PILUT 1 and PILUT 2 are plausible scenarios in the long term. But because they are “bookends,” neither scenario represents a story about growth that is readily feasible in the short term. Both require significant and immediate policy changes. PILUT 1 requires policy changes at the local level to focus infill in existing centers, in transportation corridors, and around areas with high quality transit service. While PILUT 2 also would require significant policy changes to achieve its compact form, it also requires intensive investment in transportation facilities to spur the employment growth required in the High Desert. Based on results of the PILUT scenario modeling and the workshops, the team began to create the Growth Vision alternative.
Regional Daily Vehicle Hours of Delay

Daily Vehicle Hours of Delay By County

Heavy Duty Truck
Regional Daily Vehicle Hours of Delay

Transit Accessibility
(PM Commute Trips Within 45 Minutes)
PUTTING IT TOGETHER: THE GROWTH VISION

The foundation of the Growth Vision is built on lessons learned from surveys, workshops, scenario modeling, subregional review sessions, and policy dialogues.

Fundamental among the “lessons learned” from the PILUT scenarios is that the physical limits on developable land, from mountains and streams to existing development, will require finding new ways for the region to grow. Unable to rely on a never-ending supply of usable vacant land, cities and developers will need to focus on mixed-use development and on locating new jobs and houses in developed areas that are capable of supporting additional growth.

The region is rich with efficient and well-connected centers and corridors. These are prime areas where investment in infrastructure can act as a catalyst to focus growth. Development in these areas provides residents with many options for travel — from foot to bus to car — and minimizes reliance on scarce vacant land. Modeling has shown that more intense development, along with a mix of uses in these areas, has a great effect on reducing regional congestion.

Residents of the Southland can be open to higher-density development, especially when it brings investment to areas in need or preserves the region’s open space. There is increasing evidence that new forms of higher density housing, when combined with the proper amenities and urban environment, are successful in the marketplace.

The amount of land that the region might consume does not depend on differing policy choices as much as it depends on the many smaller regions surrounded by rural land. Because there is such a limited supply of available land near infrastructure, the amount of land consumed in the future is less important than how the land is used.

The strategy of combining compact, mixed-use development with housing and jobs near major transportation infrastructure proved to be of enormous benefit in accommodating future growth. There is much evidence that a reduction in vehicle driving occurs in areas where land use and transportation are integrated and densities are higher. In a congested region such as the Southland, integration of land use and transportation has an even greater effect.
Creating the Growth Vision alternative is one way to combine these principles into a viable and realistic alternative. It is important to note that there are many ways to configure the Growth Vision alternative and still achieve the same (or better) results. The important decisions are the principles, strategies and performance of the results. In crafting a practical Growth Vision for the region, the goal should be to achieve high performance and beneficial results – while tailoring the land use and investments to local needs and wishes.

Short-term Issues

It was important to include SCAG’s projections for 2010 into the Growth Vision process so that the two projects can be folded into each effectively. While many of the policy changes depicted by the Growth Vision scenarios were positive, it may take some time to incorporate them into local ordinances and local development practices. By building the Growth Vision alternative on top of the 2010 projections, a full six years is incorporated for “ramp-up,” or adoption of new policies and acceptance of new building styles. Further, the alternative was designed to recognize the local input received by SCAG during the RTP process. While the locations of jobs and housing are significantly different than in the conventional models, for the most part the total projection is very close to that requested by the member jurisdictions of SCAG.
Prosperity: Economic Drivers

Southern California is an international center for freight, manufacturing, services and artistic production. These traditional sources of job growth will be reinforced in the regional vision through investments and strategies that bolster the local economy.

Southern California will continue to be both the cultural and financial center of the western United States, with major markets in Asia and Latin America. With increased opportunities for work and significant reinvestment, the motto will surely be “place matters.” Major employers and corporate headquarters, along with start-up and creative-class businesses, all will be drawn to the region’s core.

In addition to a commercial and cultural core, the region depends on the free flow of goods from its ports to maintain a healthy economy. The Growth Vision will help ensure the movement of freight flows efficiently through the region. Its aim is to reinvigorate the economy in the short term with road and rail improvements and to carry on long-term prosperity via the free flow of goods. The Growth Vision calls for upgrading much of the region’s freight movement infrastructure. Dedicated truckways would be built along many sections of busy freeways to improve the movement of freight truck traffic. Railway improvements along specific corridors would move freight more efficiently. A MAGLEV train would offer an alternative mode for regional travel, to reinforce the larger business centers, and to improve the connections between the region’s airports.

The success of the Alameda Corridor has spawned numerous proposals for improvements that will benefit freight movement. An inland port in San Bernardino County, which capitalizes on the regional interface between trucking, rail, and air is key among these enhancements. The ultimate vision is to provide direct rail access between the port and this major intermodal facility that will intercept through-region shipments for repackaging before distribution. Shipments for local markets still will be distributed from Long Beach but will cause less congestion.

The inland port intermodal facility will become a regionally significant employer, cementing the area’s role as both a job and distribution center. In the process, a large number of currently underutilized industrial sites in the City of Los Angeles will become available for new uses.

Air freight plays a significant role in the region’s economy. While Los Angeles International Airport (LAX) currently handles the majority of air freight in the region, the Growth Vision proposes shifting more cargo movement to Ontario International Airport to free LAX for passenger travel. Ontario International Airport has already become a major facility for United Parcel Service, handling most shipments arriving or departing from the West Coast. With the acceleration of Internet commerce, special delivery services can be expected to increase at a higher rate than traditional shipping. Ontario Airport is planning an additional runway to increase capacity.
Employment in proximity to Ontario Airport.

These strategies carry the potential to increase the hum of the region's economy. Investing in freight movement infrastructure will keep the region's ports healthy. Ports – the beginning points for trade and commerce – are at the heart of this region's economy. Ensuring free-flowing movement of goods is imperative to the region's economic prosperity.

The Growth Vision depicts a region of many centers. The centers, in conjunction with the high intensity corridors that contain a significant amount of the region’s commerce, will be filled with the vibrancy that comes from investment and additional people and jobs. While growth will be shared, variety will be intensified. These centers and corridors will continue to specialize, providing a home to unique business and cultural elements. The critical mass that can be attained through clustering of these uses will help cement the identities of places such as Burbank with the film industry, Los Angeles as a cultural center, and job centers such as the harbor or inland port as centers of industry.

Beyond the Coastal Plain, the shape of new development will undergo change. Auto-oriented commercial uses, from stores to offices, will find vacant land with good auto access difficult to obtain. While there will continue to be areas that are dominated by auto-oriented business, redevelopment and its higher densities will become more common. Existing city centers and the remarkable network of corridors will become the choice location for new jobs, combining with existing employment to strengthen the centers. These areas are locations with well-connected street systems, a pedestrian-friendly street environment, efficient freeway access and many transit options.

The cities and towns of the High Desert will make a name for themselves as they grow into unique new places. With a large supply of available raw land and a rapid rate of growth, these areas will have the unique opportunity to go from the planning stage to realization of a vision quickly.

Ventura County will continue to embrace the value placed on agriculture and open space. The SOAR boundaries, drawn for preservation, will demonstrate their power in bringing land uses together and lessening the impact on the transportation system. As long as Ventura County can accommodate sufficient workforce housing to match its employment growth, the SOAR boundaries will have a beneficial impact on transportation – if the boundaries cause long commutes because of a lack of housing, they could exacerbate congestion. Communities in this area will grow in popularity, capitalizing on the scenic beauty and quality of life.

Farthest from the Coastal Basin, Imperial County also will retain its strong agricultural heritage. Existing towns such as El Centro will evolve as even more important commercial and cultural centers. Strong preservation of agricultural land will keep the cities from unnecessarily growing outward. Building on a compact urban form, residents will have ready access to jobs, goods, services, and cultural activities within a very short distance of their front doors.

**Livable Communities**

Along with the Basin’s increase in employment, Los Angeles and Orange Counties will become significant magnets for housing growth. Long commutes to outlying areas will be discouraged by rising congestion and the availability of nearby jobs and services. With many new residents from areas with high urban densities, the new population will be more adapted to urban living. The new availability of old industrial sites within the Basin will provide a much needed increase in land available for housing. These areas will be transformed into new neighborhoods, complete with a range of housing options and excellent accessibility to the Basin’s
Open space protected by general plans, government ownership, or other conservation management efforts.

jobs, entertainment, and cultural opportunities. New housing will sprout at a rapid rate along the transportation corridors that define the area. This resurgence will provide housing for thousands of people through infill and redevelopment.

Throughout the region, existing centers also will become the focus for new housing. Like the Basin, but on a smaller scale, these areas will to some extent replace the demand for today's subdivisions. People will choose to live closer to work, shopping and transit. Local businesses will prosper as people enjoy shopping close to home. For areas such as Ventura and El Centro, as well as much of the region, this will mean a plethora of fresh local foods and quality local products. People living in the bustling urban core will find daily needs and cultural opportunities easily accessible. With a great variety of transportation choices as well, people living in commuter suburbs will also reap the rewards of a livable region.

Suitable housing will be available to everyone, regardless of where they live in the region. There will be a wide variety of housing choices – from public housing to multi-family housing and single-family homes – that are within the means of the majority of the labor force. Although many affordable housing units will be built through infill development, a fair share of workforce units will be located throughout the region, not just in the inner urban areas.

The Growth Vision also depends on investment in important regional infrastructure and transit services that satisfy the transportation needs of the labor force throughout the region. Transit services that serve low-income residents are enhanced and upgraded in the Growth Vision.

Sustainability

Sustainable cities pay close attention to their environment – recognizing correctly that it contributes significantly to an area's quality of life and that it creates a sense of place and character. Humankind has always modified the environment to meet its needs, but throughout most of history these changes have been, by modern standards, relatively modest adjustments to the landscape. It is only recently that such monumental attempts to control the landscape, as are commonly seen in American cities, have been made to develop land. Steep slopes, flood plains and wetlands are persistent features in the environment that have historically shaped development. Disregarding the risks involved in urbanizing them is potentially an enormous community liability, both financially and in terms of predictable community disruption.

The Growth Vision seeks to accommodate growth while avoiding the development of sensitive open space resources. In developing the scenario, development was avoided on steep hillsides, areas designated as open space in local plans, protected agriculture, and areas identified as potential future open space. Actually, the avoidance of these areas increased the beneficial transportation results by concentrating new housing and jobs closer together, and by providing access and views of the natural areas of the region to its urban inhabitants.
Mobility

The vast network of transportation corridors that help to define the Los Angeles Basin will undergo a transformation. Fueled by demand from new residents, the boulevards, with their high quality transit, will play a dominant role in people's daily lives. They will shine as a signature to the health and vitality of the Basin. Transit will play an even greater role in serving people's daily needs.

A combination of increased separate lane – or fixed guideway – bus and rail transit, along with growth in traditional buses, will enable quick and easy travel throughout the Basin. Los Angeles and Orange Counties will become part of a seamless transit network. For longer distances, high-speed trains and MAGLEV (trains that can go more than 240 miles per hour because they use magnets to hover over the guideway) will fill a role of ever increasing importance. This high-speed system will easily serve center-to-center regional travel as well as longer in-state trips.

The Ontario Airport will experience a unique type of growth as it is developed to an international standard. And by largely eliminating short distance flights, Los Angeles International Airport can shift to become more of a national and international airport without expanding the number of planes using it as a destination. These two airports will ensure Southern California's connection to the world and will further cement the region's position in the global marketplace.

Smaller airports around the region will absorb the demand for some of the flights from the rest of California and other nearby states, while the majority of the short-haul trips will occur by rail.

One of the keys to this strategy is promoting the use of freeways for long trips and local streets for short trips. The Southern California region has a good system of arterial streets that can replace the need to use freeways for short trips. In the Vision, many arterials are converted to boulevards, which are laid out in a web-like network or grid so that convenient access is provided to the greatest number of locations and multiple routes are available in times of congestion. The arterials will emphasize capacity and good design rather than speed, somewhat redefining the goals of mobility and accessibility. Only a small fraction of total daily trips in the region are longer than 15 miles, so the arterials are designed to serve trips of moderate length (up to 30 minutes) at moderate speeds (30 mph). The Growth Vision emphasizes good transportation facilities closer in, connecting our existing communities with an arterial network and planning future growth areas near existing transportation infrastructure.
Arterials Strategy

To reduce congestion on key streets and make them a viable alternative to freeways for medium distance travel, the Growth Vision proposes community-friendly arterials. They are designed to be safe and convenient for pedestrians as well as cars, to promote a pedestrian-friendly pattern of land uses, and to encourage alternative modes of travel.

Open spaces, landscaping, and sidewalks help make a safe walking environment.

The Purpose of A Street

Conventional highway and road planning and design has focused on efficient car movement, often at the expense of the adjacent business environment, community interaction, pedestrians, bicyclists, and others not in cars. Because of this, the word “arterial” often conjures up an image of wide roads, grit, traffic signals, and ugly roadside development. They are generally designed to have uniform speeds throughout their length, resulting in places that tend to look the same.

Multimodal streets focus on moving people, not just automobiles.

Multimodal Streets for Multiple Modes

The Growth Vision views most roadways, from local streets to intra-regional arterials, as places that add to the quality of life of adjacent neighborhoods. Roads are not simply routes to move people and goods from place to place but have the potential to be quality places themselves. The focus of a roadway should be the people using it, not the cars and trucks moving through it. Roads have the potential to be many things and to accommodate a variety of travel modes. Seen in this light, a road can accommodate pedestrians as well as bikes and cars, while simultaneously serving as a community gathering place.

Arterials should be multi-modal, or multi-purpose, balancing the needs of all types of travel, including walking, bicycling, and transit, so that people have choices in how they get from one place to another. This is important for at least two reasons. To start with, a roadway with a fixed width can move more people and goods – which will improve regional mobility – if forms of travel such as walking, bicycling, and transit are used in addition to automotive vehicles. These means of travel simply take up less space per person.

An additional advantage is that walking, bicycling, and transit produce many positive qualities – they produce less pollution and noise, promote exercise and physical fitness, and spur development that is geared toward pedestrians.

Consider Streets And Buildings Together

The characteristics of each type of road suit some forms of development better than others. To take advantage of pedestrian-oriented land uses envisioned in the SCAG Growth Vision, a new circulation pattern to match these land uses must be developed – one that accommodates the car and transit and that reinforces pedestrian locations rather than isolating them. Instead of designing roads to be most convenient for cars and drivers, without regard to the resulting land use implications, it is important to consider the type of communities desired and to design roads to fit in and foster these communities.

Strong arterial design also focuses on how the adjacent buildings are designed and used. Arterial streets should not be considered by themselves, because they are defined in part by the adjacent buildings and land uses. Streets are made up of the area where vehicles move, the area where pedestrians move, and the areas where buildings interface with the rest of the street. The Growth Vision calls for street design that considers the entire right of way – travel lanes, parking, bike lanes, medians, sidewalks, and street trees – and ensures it is appropriate for and complements the adjacent buildings.

Since every trip begins and ends with walking, the pedestrian system is the primary transportation element that connects all travel modes. An arterial’s pedestrian environment should move people and provide them access to adjacent land uses. A safe, comfortable and attractive environment includes a continuous system of sidewalks, wider sidewalks at congested locations, visible crosswalks, pedestrian signals, landscape buffers between sidewalks and streets, and a variety of public open spaces.
RESULTS

The Growth Vision alternative places most growth in the Los Angeles Basin, Riverside County, and the San Bernardino Basin. These modeling zones have existing infrastructure, particularly transportation related, that allows growth to be absorbed with minimum adverse effects.
In the Growth Vision alternative, the Riverside and San Bernardino High Desert modeling zones absorb the most greenfield development – new development on vacant land. Ventura and Orange Counties have the least development on vacant land. Los Angeles Basin absorbs the most growth – both in households and employees – through infill, far more than any other modeling zone. Orange County also absorbs almost half of its households through infill.

The eight transportation modeling zones.

New Development on Vacant Land

New Development through Infill

Percent of New Households through Infill

Percent of New Jobs through Infill
The Growth Vision alternative has much higher transit ridership than the Baseline alternative. Total daily transit boardings increase 44 percent in the Growth Vision alternative over the Baseline. MTA bus boardings increase 24 percent over the Baseline and 53 percent over the current level. The Baseline increases only 23 percent over the current level.

While the Baseline increases the current average travel time to work by 21 percent, the Growth Vision alternative actually decreases the average travel time by 2 percent. The Growth Vision alternative also decreases the average travel distance to work, while the Baseline increases average travel distance. The Growth Vision alternative decreases average travel distance to work by 2 percent as compared to the Baseline.
The Growth Vision alternative decreases the average travel time for all trips by 7.5 percent, while the Baseline increases the average travel time by 12 percent, from 13.6 minutes to 15.2 minutes. The Growth Vision alternative decreases average travel time by 11 percent over the Baseline.

In both the Baseline as well as the Growth Vision alternatives, vehicle miles traveled per capita in the region decrease from the current level. However, the Growth Vision alternative represents a much greater decline – a 5 percent decrease compared to the decrease of less than 1 percent seen in the Baseline.

The Growth Vision alternative performs even better when considering total vehicle hours of travel. While the Baseline increases hours of travel by 50 percent compared to the current level, the Growth Vision alternative only increases the hours of travel by 32 percent compared to the current level – reducing the hours of travel by 12 percent compared to the Baseline.
Vehicle hours of delay increase by 132 percent from the current level in the Baseline alternative. The Growth Vision alternative represents a reduction of 42 percent from the Baseline, limiting the increase from the current to 35 percent.

**Total Daily Vehicle Hours of Delay, 2030**

While the rate of people driving alone decreases significantly in both the Baseline and the Growth Vision alternatives, the Growth Vision alternative shows a greater increase in the transit mode split. The percentage of people using transit to get from home to work or school increases from less than 5 percent currently and in the Baseline to 7.4 percent in the Growth Vision alternative. This represents an increase of 54 percent.
Strategies & Performance

The transportation model results of the previous section indicate that the Growth Vision performed better than any other scenario. Transit mode split is increased while travel distance and time, vehicle miles of travel, and vehicle hours of delay all decrease. The obvious question is why: What makes the Growth Vision perform better than the Baseline scenario? What strategies contributed to the superior performance of the Growth Vision?

The Growth Vision alternative was created by thoughtfully locating a mix of land uses around the region, while taking into account current development, vacant land, the current and proposed road and transit network, and environmentally constrained areas. In this way, certain guidelines could be followed:

- Locate growth in areas with robust existing transportation infrastructure (plenty of streets)
- Locate growth in centers and along transportation corridors
- Locate growth near transit corridors/stations
- Locate jobs near housing and vice versa
- Locate heavy trip-generating development in areas with robust existing transportation infrastructure
- Avoid sensitive environmental features such as steep slopes, wetlands and stream corridors

Adhering to the guidelines listed to the left resulted in the following development patterns, which the Compass team believes to be the reason for the excellent performance of the Growth Vision:

**Compact, Corridors- and Centers-Focused Development**

The Growth Vision is much more compact than the Baseline Scenario. In the Growth Vision alternative, growth was located, as much as possible, in centers and along corridors. Growth was primarily located in existing centers and corridors, but if none existed, new centers and corridors were created.

Locating growth in centers improves transportation performance in several ways. First, the centers themselves usually have a good street network. There are many streets, options, and routes for getting where you want to go, so that not everyone will need to use the same road at the same time. Secondly, centers usually are easy to access. They are usually near freeway exits or at the intersection of other important roadways. Finally, centers are usually accessible by transit, and transit may provide mobility within the center as well. These factors allow centers to absorb growth without as much strain on the transportation system.

In addition, when employment and housing are located in centers and along corridors, trips become shorter. Housing, shopping, errands, recreation, entertainment and employment are more likely to be nearby. Even if housing or employment is elsewhere, the center or corridor encourages trip chaining for other needs such as shopping and errands.

**Mixed use development**

The Growth Vision employs mixed-use development, which ensures a mix of jobs and housing. Similar to the centers-focused strategy, mixed-use development brings daily errands within reach, shortening the two-thirds of trips that are non-commute trips.

**Transit-oriented development**

The Growth Vision located as much growth as possible near transit corridors and stations. In some cases, transit stations grew into mixed use, pedestrian-oriented centers, designed so that people can access them via transit and then walk to all other destinations.

Centers-based, transit-oriented development is particularly important for employment. Dispersed employment is almost impossible to serve via transit, because it is too expensive and takes too long. For commuting by transit to be feasible, employment density is even more important than housing density. Dispersed housing can be served by park-and-ride facilities, but dispersed employment cannot. Destinations (employment) must be close to transit stations. In the Growth Vision, employment density near transit corridors/stations was very high, in order to locate as many jobs as possible near transit and to make transit a viable commute option.
Sub-Regional Review

Southern California Compass conducted review sessions with city planners, public officials and local experts in an effort to refine the Growth Vision scenario that arose from the PILUT scenarios and workshop results. The SCAG region consists of 14 sub-regions, each of which operate as councils of governments in their own right. In an unprecedented effort to include sub-regional input and refine the draft Growth Vision based on local commentary, SCAG hosted review sessions in nearly every sub-region—often more than once. Through reviewing the Growth Vision scenario maps with SCAG, with neighboring jurisdictions and with sub-regional coordinators, local planners, officials and experts refined the public’s ideas in finer detail and shaped the draft Growth Vision scenario to make it more consistent with sub-regional growth visioning efforts. In most cases the sub-regional review sessions confirmed the concepts behind the vision and tailored the scenario to a level of detail that only local knowledge and experience could provide.

The sessions showed consistencies and differences between sub-regions and the draft Growth Vision scenario. Open space provisions were consistent between the Growth Vision and much of the local planning initiatives in the region. Yet they also showed differing expectations concerning future housing, jobs and development. Local planners were concerned that entitled and recently constructed projects were sometimes not shown in the Growth Vision scenario. Since the draft Growth Vision scenario was based on public and regional input at the time of the review, local representatives were aware of new and pipeline projects that may not have been known by others. Other comments sought to better coordinate mixed-use centers with existing commercial developments.

The sub-regional review sessions shed light on existing growth visions and opportunities for future collaborative visioning efforts. Just looking at the maps of the Growth Vision and local plans made apparent the local competition for commercial development and opportunities for better land use and transportation coordination between cities. At the same time, the sessions created the opportunity to coordinate the Compass Growth Vision with sub-regional visions already under way. Such visioning efforts have been a great success and, as shown later in the implementation section, local officials and Compass agree that sub-regional visioning is key to achieving the goals of the Growth Vision and a sustainable Southland. (Individual sub-regional review sessions are summarized in Appendix.) The Growth Vision and sub-regional review sessions also serve as valuable input to the Regional Transportation Plan (RTP) and are further discussed in the Coordination With the Regional Transportation Plan section below.
Next Steps: Implementation

Southland Policy Dialogues

After the ideas from the public workshops were refined into the Growth Vision and the Growth Vision scenario was vetted in the sub-regional review sessions, Compass returned to the sub-areas where the map-based workshops were held to conduct five Southland policy dialogues in March 2004. By exploring the tools to make the vision a future reality, the dialogues represented an opportunity to “close the circle” from the map-based workshops. The dialogues aimed to achieve the following:

- Familiarize leaders across the region with the draft Growth Vision
- Help leaders to understand its implications for growth-related decisions within Southern California’s sub-regions
- Identify barriers (regional and local) to effective implementation of the Growth Vision
- Develop priorities on key implementation strategies for SCAG, local governments and other decision-makers

At the dialogues, a diverse array of public and private sector community leaders explored implementation strategies, with a particular emphasis on the programs and policies needed to achieve the Growth Vision. Attendees at the dialogues included local civic leaders, government officials, business owners, developers and representatives of state agencies. Nearly 200 local community leaders participated in the five dialogue sessions.

The dialogue participants were asked a series of questions within each of the Growth Vision’s four categories of guiding principles: mobility, livability, prosperity and sustainability. The questions were:

1.) What changes in local, regional and state decisions will need to be made in order to achieve the Vision?
2.) What are the barriers to those changes taking place?
3.) What policy and program strategies would help overcome those barriers?
4.) Given the near-term state budget crisis and its implication for transportation and conservation funding (as well as local government services) what needs to be defended to ensure that the longer-term policy and program strategies are not impeded by near-term policy and funding decisions?

Leadership Southern California Class XIV (a diverse group of 48 leaders from across the region) assisted in organizing and executing the dialogues. In addition to the five dialogues held throughout Southern California, a “pilot” Southland policy dialogue was convened with the participation of the 48-member Leadership Southern California (LSC) Class XIV. This group provided invaluable feedback about the Dialogue presentation and discussion format. In addition, many LSC Class members and alumni attended the dialogue sessions.

Policy Dialogue Findings

Key themes emerged from the dialogues in all sub-regions. (Summaries of the policy dialogues can be found in Appendix IV)

Dialogue participants agreed that the region is likely to reach the population growth projected by SCAG for the Compass project (6 million additional people), though when that will occur was debated. To achieve the goals of the Growth Vision in accommodating such growth, policy dialogue participants came to some conclusions, disagreed on other issues, and asked more questions. While each of the policy dialogues produced unique ideas, three broad categories of ideas encompass the majority of the input. The first is the need for better collaboration and coordination of planning. The second theme is recognizing the importance of, and creating incentives for, the private sector and local decision-makers. Finally, there was significant call for sustained education and consensus building.
Better Collaboration and Coordination of Planning:

A primary theme of policy dialogue comments and ideas was better collaboration and coordination. Participants felt that SCAG and sub-regional agencies need to foster better coordination and collaboration among different levels of government, among the various agencies that affect land use, and between land use and transportation planning.

The idea that "sub-regions matter" was a resounding message at the dialogues. Participants emphasized the importance of planning that is tailored to the particular needs of a sub-region. Through the collaboration of sub-regional visioning efforts and the Growth Vision, Compass has acknowledged this need and taken the first step to making the vision a reality at the sub-regional scale. The diversity of the Growth Vision Subcommittee and the multiple public workshops have also helped Compass address the diversity of issues inherent to such a large and variegated region.

To continue along this path, better collaboration of the multiple scales of government and land use planning entities is necessary, according to dialogue participants. The principles need to be acknowledged and acted upon at the state, regional, sub-regional, local and community levels. For example, state agencies and regional agencies have tremendous impact on transportation infrastructure, while local entities have greater control over land use. With this understanding, participants expressed a desire for greater partnership with state agencies. At the same time, SCAG sub-regions are increasingly creating their own visions of growth to coordinate between their cities. Community planning initiatives also shape the design of open space, main streets and local districts. Participants recognized that these various jurisdictions exist and each has a unique role in land use and transportation planning. Achieving the Growth Vision therefore means relying upon and coordinating between each of these entities and levels of government.

The policy dialogue participants also stressed the need for collaboration among the many local public agencies that make land-use decisions. Transportation agencies, school districts, utility districts, redevelopment authorities and others all have an impact on land use and, consequently, transportation. Coordinating decisions between these public bodies is another essential step in the direction of the Growth Vision.

As the Growth Vision principles are recognized locally and regionally, better coordination of land use and transportation planning is necessary. The Growth Vision analyses showed the benefits the coordination of land use and transportation will have on congestion, air pollution and commute times. To ensure these benefits, dialogue participants called for linking land use plans and project approval with transportation investments.

The Importance of the Private Sector

The policy dialogue participants recognize the importance of business location decisions in achieving a better jobs-housing balance and making jobs more accessible to employees. However, many questions remain about how to influence such private sector decisions. Beyond the traditional strategies of shaping infrastructure and using the project-approval process to influence business development and location decisions, participants could not agree on how to best influence private sector decisions. However, acknowledging these "traditional strategies" while increasing collaboration between public entities will guide business location decisions while removing impediments to market forces – market forces such as the trend toward transit-oriented development or pedestrian-friendly main streets. In the end, local and regional agencies need to maximize choice through incentives for the private sector. By creating development incentives and making them clear to the private sector, Southern California can achieve the Growth Vision by enabling businesses to make their own decisions and by increasing choice in the marketplace.
Sustained Education and Consensus Building

The final theme that emerged from the policy dialogues is the need for sustained efforts in public education and consensus-building related to the Growth Vision.

The participants agreed that a major step is to encourage local and regional officials to approve the Growth Vision principles and use them as guidance for local development and planning. Through this Growth Visioning process, Compass has taken the first step to listen, acknowledge and act upon the diverse ideas of elected officials, planners and citizens from throughout the region.

At the same time, participants recognized the need to acknowledge differing opinions. Not everyone agrees on redevelopment, on solutions to congestion, and on what to create as incentives and how. Achieving the Growth Vision will require broad public understanding and the alignment of thousands of individual decisions made in both the public and private sectors over many years. Thus, participants said, achieving the Growth Vision is as much a “cultural” shift as it is a technical or policy challenge.

In this sense, participants agreed it is necessary to sustain extensive public outreach and education campaigns to achieve the Growth Vision. Education curricula and worker training can encourage new and local ways to achieve vision goals. SCAG and sub-regions should promote exemplary projects and innovative policies that support and complement the Growth Vision. With examples, discussion and popular support, the communities, developers and businesses that make land use decisions will be enabled to set the region on track toward the Growth Vision.

**Implementing the Vision**

As a result of the policy dialogues, sub-regional input, and a look at best practices around the country, Compass compiled the following implementation framework to turn the Growth Vision into a reality for Southern California. While Compass has succeeded in garnering citizens, planners and officials to create a shared regional vision, its true success will be measured over the time. Southern California can achieve maximum mobility, livability, prosperity and sustainability through a series of agreed upon and feasible implementation tools. What follows, therefore, is a framework for implementing the Compass Growth Vision at the regional, sub-regional and local levels.

The Compass Growth Vision relies primarily on the four principles for a more livable future -- mobility, livability, prosperity and sustainability -- that were adopted by the Growth Visioning Subcommittee. These principles serve as the foundation for both the vision itself and for the strategies that will implement that vision and make it a reality. There are a number of implementation strategies that could be used, including some that are broad and overarching, thus applying to all the principles. Other implementation strategies are narrower and apply specifically to an individual principle.

**General Strategies**

Develop a monitoring system to gauge local and regional success of the elements within the Growth Vision

What gets measured gets done. One of the key advantages of a scenario planning approach is the reliance on monitoring, evaluation and adjustment of strategies based on success or failure. Without quality monitoring systems in place it can be difficult, even impossible, to accurately gauge the success of planning efforts. The RTP and Growth Vision both lend themselves well to detailed monitoring. The statements and policies about the future that will result from actions made today, tomorrow and the next few years can only be ensured if we can continually verify that we are on track. It is vital to measure our actions objectively to determine the level of performance being reached. This monitoring can provide an early warning system if things are not going according to plan. On the other hand, it can also alert us to early successes that provide valuable lessons and that further the plan’s goals.
Of utmost importance in developing a monitoring system for the Growth Vision is that the measures and techniques to be used are developed through a collaborative process where all participating jurisdictions can agree on both the purpose and the method of monitoring. Once developed, this monitoring system should be used on a regular basis, resulting in a report that is shared with all member jurisdictions, which will help everyone understand how their policies and actions affect the collective goals of the vision.

SCAG should begin by incorporating the Growth Visioning monitoring system into the annual State of the Region Report. The report should include benchmarks and indicators, which evaluate progress toward quantifiable goals derived from the Vision. This monitoring system also should be used to compare the differences between the 2001 and 2004 Regional Transportation Plans to learn more about the effects of land use on transportation measures, such as reductions in congestion and emissions.

**Develop a legislative agenda to aid in the realization of the Vision**

Coordinate this agenda with the other regional governments in the state, such as ABAG/MTC, SACOG, and SANDAG, to change state law that hinders the a common regional approach. State policy affects a wide variety of issues including transportation policy, housing and even labor laws that may weaken the Southland’s potential to attract manufacturing firms.

Issues to be addressed at the state level include:

- Establishing priorities based on the Vision that can leverage funds for local governments.
- Using housing allocation funds and discretionary decisions at the state and federal level to reinforce and support the Vision.
- Complying with a regional vision of tangible benefit, such as shifting the burden of proof for EIR compliance from the city and developer to the plaintiff; once compliance with objective measures of a growth management strategy are attained.

**Use the Regional Comprehensive Plan as a tool to coordinate local plans and embrace the Southland’s many unique local identities**

Experience suggests that SCAG, the sub-regions, and local jurisdictions can more easily achieve their collective goals by actively encouraging and empowering sub-regional planning and coordination within the context of a regional comprehensive plan. The Vision should be built on this type of cooperative partnership. The Vision will be implemented through everyday decisions made at the local level and will therefore only succeed if it helps to accomplish local desires. The effort required to implement the Vision will not fall on any one jurisdiction. Cities, counties, transportation authorities and SCAG are partners, sharing the responsibility for making the Vision a reality for the residents of the Southland.
Create a targeted public relations strategy that emphasizes regional leadership and builds a sense of common interests among Southern Californians. Begin to develop a deeper respect for SCAG by the sub-regions and local jurisdictions.

Sub-regional groups have discussed the critical importance and lasting potential of a good public relations strategy. This outreach should take a variety of forms. Publicizing the regional planning activities under way with SCAG’s partners and the public is the primary goal of a regional PR strategy. This could involve a speaker’s bureaus, planning assistance, and various media strategies. Other regions have also found great success by preparing handbooks or tools to assist their member cities in achieving a shared vision.

Education also is a key component of this outreach strategy. Education opportunities exist both in and out of the classroom. Conferences or symposia are an excellent way to bring important regional lessons to groups of elected officials, planners, and even students — our future leaders. Introducing regional planning into the schools themselves has also been a successful strategy. A first strategy might involve university-level course work through some of the many planning schools in the Southland. Further down the road, a program could be developed to educate high-school age students. For years Chicago had a mandatory class that taught children about their famed Burnham Plan of 1909. Getting children involved in the importance and quality-of-life benefits of planning at an early age helps to ensure that it will remain a topic of interest and concern as they become adults.

Establish a method to convene representatives from government, civic leaders and members of the development community to work together on issues and challenges that are shared by communities within the Southland.

Setting up periodic forums to bring these groups together can be extremely valuable in helping everyone understand different perspectives and goals. Solutions are more easily derived from a common understanding. This coordination will allow the private sector to build the type of products that jurisdictions and their citizens want.
Implementation Tools by Principle

**PRINCIPLE #1**

*Improve mobility for all residents*

- Encourage transportation investments and land use decisions that are mutually supportive
- Locate new housing near existing jobs and new jobs near existing housing
- Encourage transit-oriented development
- Promote a variety of travel choices

Providing transit options is a way to improve mobility for residents within the region.

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**The Regional Transportation Plan is now aligned with the principles of the Growth Vision. SCAG should prioritize transportation improvements so that they parallel goals within the Vision**

Projects funded by the RTP could be evaluated using the Vision, and the Vision could provide incentives for implementation of key policies in the RTP. The corridors described in the Vision and on the map are one of several items to explore. Corridors are the easiest places to make a case for using federal and state dollars to help cities with planning. Fully using the corridors will help focus the necessary land use changes into areas where change is both wanted and needed, protecting stable neighborhoods from significant impact. Increasing the housing and jobs in these corridors was one of the leading components of the Vision and led to many of the modeled transportation efficiencies of the 2004 RTP.

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**The 2004 RTP benefited from the land use element that came out of the Compass process. SCAG should begin each RTP process with scenarios based on land use to inform projections and transportation modeling**

The 2004 RTP benefited from the land use element that evolved from the Compass process. This “bottom-up” approach has met with success during the Compass process. This includes incorporating input received locally from the sub-region and city review of the Growth Vision into a “starter Compass scenario” for the 2007 model runs, informed by the monitoring of key indicators in the interim.

There is no reason to wait to model these virtual futures. Iterative scenario modeling coupled with a detailed monitoring system will allow SCAG and local jurisdictions to stay continually informed regarding the benefits of the various growth strategies they are employing.
Develop a diverse set of pilot corridor projects that show the Growth Vision in action

Successful pilot projects can demonstrate progress in implementing some of the key principles of the Vision. These studies can help in understanding market and regulatory barriers that inhibit both economic growth and the provision of needed housing. Further, they can act as a catalyst, showing other developers, lenders, and jurisdictions the potential that can be achieved.

For each of the corridor pilot projects, the parties involved should engage in a full land use and transportation study. Strategies would include

- Combining land use and transportation strategies, rather than holding land use constant and changing transportation investments on a case-by-case basis.
- Using scenario planning to investigate options and develop feasible strategies that allow the region to “plan without boundaries.”
- Using a wide-ranging public awareness program, including workshops or charrettes to engage the public in developing scenarios and strategies.
- Developing a set of measurable criteria to evaluate different scenarios and using a consistent set of criteria to select a final strategy.
- Using this process to help define options for developing the Environmental Impact Review.

POSSIBLE PILOT PROJECTS

Below is an initial list of possible pilot projects for implementing the vision.

- Gold Line Extension
- Exposition Line
- Valley Bus Way
- Maglev IOS
- San Jacinto Line
- Highway 30
- 101 Corridor HOT lanes
- Centerline
- North Los Angeles County to the High Desert
- Other corridors with significant transportation and land use interaction

Work with county transportation commissions to help coordinate inter-regional transit travel

A recurring theme at the many Compass workshops was the difficulty many people face in using transit to travel across the region. Concerns ranged from varying fares, to headways, and most importantly gaps in service that seem to correspond to jurisdictional boundaries. The needs of residents of the Southland transcend city and county borders. These boundaries must be removed from the thought process in planning for seamless travel.
PRINCIPLE #2

Foster livability in all communities

- Promote infill development and redevelopment to revitalize existing communities
- Promote developments that provide a mix of uses
- Promote “people-scaled,” pedestrian-friendly communities
- Support the preservation of stable, single-family neighborhoods

Walkable communities help improve livability and promote a mix of uses.

Establish elements of the Growth Vision scenario, such as centers and corridors and a well-defined open space system, with clear objectives for development, preservation and social equity

Agencies may use these objectives in providing assistance to developers who want to further city goals with their projects. SCAG can work to ensure that the Vision and its concept map evolve to recognize the local implementation efforts and priorities that are discovered during the process.

Offer planning assistance and cooperatively develop recommended model ordinances for those who wish to implement specific parts of the regional Vision

Model ordinances can make development that supports the vision the rule, rather than the exception. Through pilot projects, handbooks and partnerships, cities in the region have many resources at their fingertips to assist in planning and achieving the Vision. Research of pilot projects during the Compass project alone has shown that policies such as allowing for flexible building height standards and reductions in parking requirements for pedestrian-friendly areas can reduce costs by as much as 30 percent. Continued exploration and ongoing projects will provide the region with the tools necessary to properly use land use, specifically infill to enhance the transportation corridor efficiency.

The Regional Housing Needs Assessment process should be coordinated with visioning and planning at the regional level to identify areas of common interest and mutual benefit

The Compass process should be used as a means of collaboration and compromise to revise the RHNA process to one that is less adversarial and more creative. As creator of the RTP, SCAG has the ability to bring about this change by facilitating a common understanding among local jurisdictions – one based on the demographic needs of the region. Building the process on top of a commonly held vision of the future can help focus the discussions on both regional and local needs while bringing consistency to the regional planning effort.

Endow the sub-regions with greater responsibility in conducting their own visioning

Use sub-regional efforts to guide the shape of regional plans and recognize that sub-regional, county and local collaboration is the cornerstone of implementation. SCAG’s role would be to facilitate sub-regional efforts and help coordinate inter-jurisdictional planning projects. Building the Growth Vision from local planning efforts resonated well with the sub-regions and local jurisdictions that participated in Compass workshops, policy dialogues and scenario review sessions.
PRINCIPLE #3
Enable prosperity for all people

- Provide a variety of housing types in each community to meet the housing needs of all income levels
- Support educational opportunities that promote balanced growth
- Ensure environmental justice regardless of race, ethnicity or income class
- Support local and state fiscal policies that encourage balanced growth
- Encourage civic engagement

Create a rich, comprehensive regional database for planning and economic development

SCAG should assemble and keep current a quality GIS inventory of: vacant and reuse opportunity sites, local and regional open space plans and information that will help companies find locations within the Southland near their desired employees. This data should be shared with jurisdictions and the development community. Such data sharing promotes jobs-housing balance, open space preservation and infill development and investment in areas that are largely developed.

Accelerate employment balance throughout the region

The natural progression of growth in the Southland during the past several decades has been to initially develop an area as a place for people to live who have either been priced out of the market where they work or are willing to commute farther in exchange for other housing or neighborhood amenities. This of course leads to an imbalance of too many households versus available jobs in the area. In the years that follow, manufacturing and professional jobs often move to these areas in response to both land price and the availability of workers.

During the next 25 years freight coming into the Southland is expected to nearly triple – threatening further congestion. A goods movement strategy that addresses this tremendous growth can play a vital role in enabling employers to locate in these housing rich areas. It is therefore important when planning for the region’s transit and highway corridors to also focus on logistics and goods movement. Southern California is multi-centric. Creating efficient access and goods movement allows these centers to develop in a balanced fashion. Being locations for people to live, they also have the basic elements for prosperous job centers.

Foster greater cooperation between business, government and community organizations through training in public-private partnerships

This effort opens the door to the creation of important partnerships with the development community, learning from them how policies and practices both help and hinder the creation of products that support the vision. These developers will benefit as they work with the cities and counties and will be able to act as ambassadors to their colleagues.
Implement the techniques outlined in the 2004 Regional Transportation Plan’s privately funded projects

Jobs for people in the middle class are not as available as they should be. State policies and changing demands on infrastructure from the increases in distribution are hindering the region’s competitive advantage for manufacturing jobs. Addressing the infrastructure and location needs of the manufacturing and distribution sectors would allow more people to have access to these jobs. This would enable people in that cohort to more readily afford homes.

Discussion has been initiated at the state level about a manufacturing tax credit. SCAG could help increase economic security by using the Vision to create empowerment zones where employers would reap benefits for providing family wage jobs to people living locally. This can also be an assistance tool for areas that historically have been overlooked by new investment.

Engage a study to look at how public investment such as transit facilities increase land value and what options may exist to use newly created wealth to increase opportunities for others and create more transit-oriented developments

The increased value that comes with reinvestment in a specific area can often mean existing families are priced out of housing, or that it is not feasible for the market to produce the needed affordable housing. Cities are further trapped in that funds provided by the developers for city creation of affordable housing have diminishing purchase power with the success of the nearby developments. There may be avenues to explore in which the public could benefit from land value increases that occur because of new publicly-funded projects related to transit.
PRINCIPLE #4

Promote sustainability for future generations

- Preserve rural, agricultural, recreational and environmentally sensitive areas
- Focus development in urban centers and existing cities
- Develop strategies to accommodate growth that use resources efficiently, eliminate pollution, and significantly reduce waste
- Utilize “green” development techniques

Open space is integral to the health of communities.

Integrate the many open space and habitat plans under way throughout the region into an open space element for the Growth Vision

Much significant work in this arena has been completed or is under way throughout the region. The open space component of the Vision should be considered as important as urban centers and infrastructure. Through collaboration, SCAG should assemble the many planning efforts into a standardized inventory that can both inform the Vision and provide lessons to other jurisdictions interested in performing similar analysis. This green infrastructure should in no way hinder a jurisdiction’s ability to accommodate needed housing or jobs. Instead, they should be rewarded for the extra effort of ensuring sustainability for the Southland. This inventory should be used to monitor sustainability and livability goals and help neighbor cities plan for open spaces in a coordinated fashion.

Offer training for elected leaders, planning officials, and the development community in green planning and design

As with planning for infill, handbooks, symposiums, and other education tools should be used to enable cities and counties to embrace the sustainable practices of green building. SCAG should act as a coordinating body to help the region determine a standard set of approaches. With SCAG helping to create these standards, the region’s cities may face much less uncertainty at the state level as they work to implement the various techniques.
Cities and counties with a well-defined open space system or urban limit lines have a reputation for becoming desirable and expensive. Offer planning assistance and model ordinances that will help preserve the environment and enable inclusionary housing practices and housing choice.

Cities throughout the region grapple with deciding how to appropriately address growth for their community while preserving their cherished open space and productive agricultural areas. Some cities and counties, for example, have adopted urban limit lines or growth boundaries. These tools can be very successful; however, they can also lead to unintended consequences. As a coordinating body, SCAG can help to share the best practices and lessons learned by cities that have employed these sprawl preventive measures. These tools can help ensure that the jurisdiction’s goals are met and reduce the likelihood of problems arising. Cities across the country that have employed these preservation techniques have had to learn a few hard lessons before finally tuning the regulations to work as intended. By helping with these lessons learned, SCAG can help jurisdictions achieve their goals without facing the pitfalls that invariably come from trying something for the first time.

Calculate demand for water based on the Growth Vision projections and distribution

SCAG can bring the cities, counties and water providers together to better coordinate the availability of water with projections and capacity calculations for housing and jobs throughout the region.
The key to success now is the most difficult – discovering the specific actions Southern Californians can agree on to make the region of their dreams come true. To this end, SCAG, its member governments, and the hundreds of other organizations must contribute and work together in a true regional partnership. SCAG stands ready to contribute to this important effort.

Fifty years ago, Southern California had a common vision of its future. The vision was based on a common set of values as well as the strategies to achieve that vision. In today’s world, the problems and their solutions are much more complex. However, there are many efforts under way in the Southland to craft a viable solution that matches the values of the region today. Compass is only one such effort. All are working to identify solutions that will help the Southern California region move into the future with confidence and optimism.

While the solutions remain elusive, it is clear that there are common values in this region that can form the basis of a common vision. Most people want a plan for the future that adheres to the principles adopted as the SCAG Growth Visioning principles.

SCAG cannot implement this Growth Vision alone. It will require the efforts and collaboration of hundreds of groups and thousands of leaders. However, SCAG brings a unique, region-wide perspective, as well as the energy and the vision needed to solve regional problems that require a large-scale view. Conversations with residents of the region reveal what many other groups have found – some anxiety and some dissatisfaction, but more importantly, a common core of support for ideas that will actually work.
APPENDIX I: WORKSHOP DEVELOPMENT TYPES

The Urban Center development type incorporates households, offices, retail, and civic uses into a walkable and mixed-use environment. This type is modeled on downtown Los Angeles and serves as a commercial destination and employment center. The Urban Center development type also contains a diverse array of multi-family homes and townhouses. The building types range from mid-rise residential buildings to mixed residential towers and commercial high-rise buildings. Interconnected street networks and a variety of amenities within walking distance make Urban Centers accessible by automobile, transit, bicycle and foot. Civic and open spaces lend to the walkability and diversity of uses in Urban Centers, they are lively throughout the day and evening. This development type is especially apt for infill in downtown Los Angeles.

<table>
<thead>
<tr>
<th>Urban Center</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>160</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>110</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>320</td>
</tr>
</tbody>
</table>
The City development type incorporates a diverse mix of residential and employment uses, though at a lower density than the Urban Center. The City still serves as a significant source of employment. Like Pasadena or Santa Monica, this development type has a walkable center at its core. It may require structured parking and is accessible via multiple modes of transportation. Cities include a greater proportion and diversity of housing than downtowns, including multi-family homes, single-family homes and townhouses.

<table>
<thead>
<tr>
<th>City</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>640</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>35</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>70</td>
</tr>
</tbody>
</table>
As with the Urban Center and City, Towns are also walkable because of their mix of uses and interconnected street network, but at a lower density. Towns primarily function as service destinations with a central Main Street rather than centers of employment. Surface parking lots provide parking in Towns. Buildings on the Main Street typically stand two to four stories tall and include townhouses or apartments above storefronts. Most homes in a Town are detached single-family residences that are oriented towards the street, commercial areas and open space.

<table>
<thead>
<tr>
<th>Town</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>640</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>20</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>20</td>
</tr>
</tbody>
</table>
Similar to an Urban Center, High Intensity Corridors incorporate households, offices, and retail uses at a high density. However, High Intensity Corridors are stretched along one central Boulevard without the street connectivity and accessibility experienced in Urban Cores. Considered a high employment area, building types range from mid-rise residential to office high-rise tower, with less mixed-use than in other high-density development types. Wilshire Boulevard is considered a High Intensity Corridor.

<table>
<thead>
<tr>
<th>High Intensity Corridor</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>480</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>65</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>95</td>
</tr>
</tbody>
</table>
Like a High-Intensity Corridor, Medium-Intensity Corridors are also stretched along one single Boulevard but experience less dense building types. Households, offices and retail uses are accommodated with a few high-rise towers but are primarily comprised of mid-rise building types. Pedestrian access is limited with transit generally only available along the Boulevard. The Medium-Intensity development type is patterned after Ventura and Sepulveda Boulevard.

<table>
<thead>
<tr>
<th>Medium Intensity Corridor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>480</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>25</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>30</td>
</tr>
</tbody>
</table>
An Edge City, such as Warner Center, is a central location for offices, retail uses and multi-family housing. Building types range from high-rise office towers to low to mid-rise residential. As an auto-oriented environment, surface parking lots are plentiful and transit options limited. Retail centers are located in strip malls with minimal walkability. Multi-family residential units are located on streets that lack connectivity and promote auto usage.

<table>
<thead>
<tr>
<th>Edge City</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>640</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>30</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>100</td>
</tr>
</tbody>
</table>
An Activity Center is an agglomeration of large-scale retail buildings, offices and multi-family housing such as South Coast Plaza and Ontario Mills. The Activity Center development type contains a relatively dense mix of uses, comparable to a City. But, unlike the City, it is not pedestrian-friendly. Land uses are separated from each other by parking areas, freeways or arterials. Activity Centers are usually positioned at intersections of highways or arterials, sometimes along major transit corridors.

<table>
<thead>
<tr>
<th>Activity Center</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>640</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>15</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>15</td>
</tr>
</tbody>
</table>
This type is modeled after highway-oriented development. Like the Activity Center, it contains many residential units. But rather than being agglomerated at a highway intersection, Highway Commercial development takes a linear form along both sides of the highway. Connections in this development type consist mostly of highways and frontage roads. Housing is either in the form of multi-family apartments or residential subdivisions; both are typically auto-oriented.

<table>
<thead>
<tr>
<th>Highway Commercial</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>480</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>10</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>10</td>
</tr>
</tbody>
</table>
Often considered to be an Office Park, Employment Districts are comprised of low to medium density office buildings surrounding by surface parking. Generally located near highways for easy auto-access, transit and walking options are limited. Employment districts lack residential or retail uses, thus increasing the number of auto trips needed.

<table>
<thead>
<tr>
<th>Employment District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
</tr>
<tr>
<td>Households per Acre</td>
</tr>
<tr>
<td>Employees per Acre</td>
</tr>
</tbody>
</table>
The Industrial development type is made up of a mix of low and medium density industrial buildings. They often consist of industrial yards and campuses separate from other uses due to the nature of industrial use. This development type is often near highways and accessed via automobiles with large surface parking for autos and trucks. Walking and transit options are severely limited.

<table>
<thead>
<tr>
<th>Industrial</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>640</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>0</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>20</td>
</tr>
</tbody>
</table>
City Neighborhoods are comprised of mid to low-rise multi-family, townhouses and small lot single-family dwellings. With the same number of residential units per acre as the Town development type, City Neighborhoods are medium-high density residential areas with a small number of service or office jobs. Street connectivity is favorable, allowing for a high degree of walkability and transit options.

<table>
<thead>
<tr>
<th>City Neighborhood</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>640</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>20</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>6</td>
</tr>
</tbody>
</table>
Residential Subdivisions are comprised of single-family, detached homes and duplexes. Street networks are typical of post-World War II suburbs. Residential Subdivisions are designed for automobile travel. Due to the extensive use of cul-de-sacs, street connectivity and walkability are generally low. Examples include Santa Clarita and parts of San Bernardino and Riverside Counties.

<table>
<thead>
<tr>
<th>Residential Subdivision</th>
<th>Acres per Chip</th>
<th>640</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Households per Acre</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Employees per Acre</td>
<td>0</td>
</tr>
</tbody>
</table>
Large-Lot Subdivisions consist entirely of single-family, detached homes. This development type can be found in Orange and Ventura Counties as well as outlining areas. Large-Lot Subdivisions are typically isolated or far from employment and retail services. Averaging two units per acre, this development type is characterized by very large residences without sidewalks. Street connectivity is low and travel to and from the Large-Lot Subdivision development type is usually by automobile.

<table>
<thead>
<tr>
<th>Large-Lot Subdivision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
</tr>
<tr>
<td>Households per Acre</td>
</tr>
<tr>
<td>Employees per Acre</td>
</tr>
</tbody>
</table>
The Rural Housing development type consists of estate lots that amount to one unit per five acres. Rural Housing development provides residents with access to rural areas while being within reach of urban amenities. This development type consumes greater amounts of open space and tends to be farther from employment than Large-Lot Subdivisions. Street connectivity is also generally low among estate lots.

<table>
<thead>
<tr>
<th>Rural Housing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres per Chip</td>
<td>5,760</td>
</tr>
<tr>
<td>Households per Acre</td>
<td>0.2</td>
</tr>
<tr>
<td>Employees per Acre</td>
<td>0</td>
</tr>
</tbody>
</table>
APPENDIX II: SCENARIO ALLOCATION DEVELOPMENT TYPES

Place3s methodology

Planning for Community Energy, Economic and Environmental Sustainability (Place3s) is a GIS ArcView3.2 extension used to simulate land-use patterns for scenarios. A geographic representation of each scenario is created in Place3s by locating different development types on vacant and developed land while limiting development in environmentally constrained areas. The geographic representation of development types for each scenario is the foundation for calculating benchmarks. The benchmarks are then used to evaluate the viability of each growth scenario.

Similar to the workshop development type chip sets, the series of development types for Place3s are created from a set of building types that represent residential, employment and mixed-use alternatives. Each building type has an associated employee and household density. The households and employees per acre for each building type is multiplied by the percentage each building type represents within the development type to determine the employees and households per acre for each development type.

Because the development type densities are based on vacant land, a set of standards is used to calculate the propensity of a certain development type to redevelop. Areas such as Downtown are more likely to redevelop than Towns, while Centers are more likely to redevelop than Residential land. The redevelopment percent is then multiplied by the employees and households per acre for vacant land to obtain a redevelopment density.

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Emp/acre</th>
<th>HH/acre</th>
<th>Emp/acre</th>
<th>HH/acre</th>
<th>Redev %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Center</td>
<td>367.88</td>
<td>30.64</td>
<td>91.97</td>
<td>7.66</td>
<td>25%</td>
</tr>
<tr>
<td>Downtown Residential</td>
<td>46.03</td>
<td>119.19</td>
<td>9.21</td>
<td>23.84</td>
<td>20%</td>
</tr>
<tr>
<td>City Center</td>
<td>54.67</td>
<td>15.63</td>
<td>10.93</td>
<td>3.13</td>
<td>20%</td>
</tr>
<tr>
<td>City Residential</td>
<td>8.95</td>
<td>31.98</td>
<td>1.34</td>
<td>4.80</td>
<td>15%</td>
</tr>
<tr>
<td>Town Center</td>
<td>17.14</td>
<td>11.24</td>
<td>2.57</td>
<td>1.69</td>
<td>15%</td>
</tr>
<tr>
<td>Town Residential</td>
<td>3.53</td>
<td>13.79</td>
<td>0.35</td>
<td>1.38</td>
<td>10%</td>
</tr>
<tr>
<td>City Neighborhood</td>
<td>0.53</td>
<td>9.07</td>
<td>0.03</td>
<td>0.45</td>
<td>5%</td>
</tr>
<tr>
<td>Residential Suburb</td>
<td>0.22</td>
<td>1.25</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Large Lot Residential</td>
<td>-</td>
<td>0.25</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Rural Cluster</td>
<td>-</td>
<td>0.41</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Activity Center</td>
<td>12.66</td>
<td>10.27</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Transit Station</td>
<td>12.70</td>
<td>20.29</td>
<td>3.81</td>
<td>6.09</td>
<td>30%</td>
</tr>
<tr>
<td>Transit Corridor</td>
<td>7.06</td>
<td>16.91</td>
<td>1.41</td>
<td>3.38</td>
<td>20%</td>
</tr>
<tr>
<td>Main Street</td>
<td>8.24</td>
<td>12.99</td>
<td>1.65</td>
<td>2.60</td>
<td>20%</td>
</tr>
<tr>
<td>Office Park</td>
<td>39.69</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Industrial</td>
<td>14.86</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Highway Commercial</td>
<td>6.62</td>
<td>5.85</td>
<td>-</td>
<td>-</td>
<td>0%</td>
</tr>
</tbody>
</table>
### Building Type Proportions

<table>
<thead>
<tr>
<th>Development Types</th>
<th>Mixed-Use</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DT Mixed</td>
<td>DT Residential</td>
</tr>
<tr>
<td>Downtown Center</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Downtown Residential</td>
<td>5%</td>
<td>65%</td>
</tr>
<tr>
<td>City Center</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>City Residential</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Town Center</td>
<td>50%</td>
<td>30%</td>
</tr>
<tr>
<td>Town Residential</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>City Neighborhood</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>Residential Suburb</td>
<td>10%</td>
<td>35%</td>
</tr>
<tr>
<td>Large Lot Residential</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>Rural Cluster</td>
<td>30%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Employment

<table>
<thead>
<tr>
<th>Development Types</th>
<th>DT Office-H</th>
<th>Office Park-</th>
<th>Regional Mall</th>
<th>Office Park</th>
<th>Light Industrial</th>
<th>Heavy Industrial</th>
<th>Strip Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Center</td>
<td>40%</td>
<td>35%</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
<td>5%</td>
<td>25%</td>
</tr>
<tr>
<td>Downtown Residential</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
<td>3%</td>
<td>20%</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>City Center</td>
<td>5%</td>
<td>2%</td>
<td>15%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>City Residential</td>
<td>5%</td>
<td>2%</td>
<td>15%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Town Center</td>
<td>5%</td>
<td>2%</td>
<td>15%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Town Residential</td>
<td>5%</td>
<td>2%</td>
<td>15%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>City Neighborhood</td>
<td>5%</td>
<td>2%</td>
<td>15%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Residential Suburb</td>
<td>2%</td>
<td>1%</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
<td>5%</td>
<td>25%</td>
</tr>
<tr>
<td>Large Lot Residential</td>
<td>2%</td>
<td>1%</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
<td>5%</td>
<td>25%</td>
</tr>
<tr>
<td>Rural Cluster</td>
<td>2%</td>
<td>1%</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
<td>5%</td>
<td>25%</td>
</tr>
<tr>
<td>Activity Center</td>
<td>20%</td>
<td>25%</td>
<td>10%</td>
<td>15%</td>
<td>25%</td>
<td>25%</td>
<td>10%</td>
</tr>
<tr>
<td>Transit Station</td>
<td>10%</td>
<td>15%</td>
<td>10%</td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
<td>5%</td>
</tr>
<tr>
<td>Transit Corridor</td>
<td>10%</td>
<td>15%</td>
<td>10%</td>
<td>15%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>Main Street</td>
<td>15%</td>
<td>15%</td>
<td>10%</td>
<td>25%</td>
<td>35%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Office Park</td>
<td>10%</td>
<td>30%</td>
<td>25%</td>
<td>35%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Industrial</td>
<td>60%</td>
<td>40%</td>
<td>55%</td>
<td>40%</td>
<td>35%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Highway Commercial</td>
<td>15%</td>
<td>10%</td>
<td>20%</td>
<td>15%</td>
<td>20%</td>
<td>35%</td>
<td>5%</td>
</tr>
</tbody>
</table>
APPENDIX III: BENCHMARKS

AVERAGE TRAVEL DISTANCE

What does it mean?
The average travel distance is a measure of how well the transportation network in each scenario is performing in conjunction with the placement of land uses. Travel distance is dependent on the locations of jobs, housing and services, which in turn influence the total distance traveled. If the jobs and housing balance is not favorable, distance traveled for each alternative increases. However, if jobs and housing are within close proximity, then the home-to-work average distance decreases.

How was it measured?
The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input to calculate the travel distance for each type of trip based on the transportation network. The trip types are summed to determine average distance traveled by category.

<table>
<thead>
<tr>
<th>Average Travel Distance - Miles</th>
<th>2000</th>
<th>2010</th>
<th>Baseline</th>
<th>Growth Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home-To-Work Avg Travel Distance</td>
<td>12.72</td>
<td>12.57</td>
<td>12.77</td>
<td>12.50</td>
</tr>
<tr>
<td>All Trip Type Avg Travel Distance</td>
<td>8.00</td>
<td>8.04</td>
<td>7.85</td>
<td>7.88</td>
</tr>
</tbody>
</table>

Average Travel Distance - Miles

- Home-To-Work Avg Travel Distance
- All Trip Type Avg Travel Distance
AVERAGE TRAVEL TIME

What does it mean?

The average travel time is a measure of how well the transportation network in each scenario is performing as well as a measure of the effectiveness of designated land uses for each scenario. Travel time is dependent on the locations of jobs, housing, and services that influence the total distance traveled; shorter distances require less time spent for each trip.

How was it measured?

For each link in the transportation network, the model generates the amount of time it takes to travel that link given the average road conditions in each scenario. The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input to calculate the travel time based on the transportation network.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>Baseline</th>
<th>Growth Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home-To-Work Avg Travel Time</td>
<td>21.6</td>
<td>22.1</td>
<td>26.1</td>
<td>21.2</td>
</tr>
<tr>
<td>All Trip Type Avg Travel Time</td>
<td>13.6</td>
<td>14.0</td>
<td>15.2</td>
<td>13.5</td>
</tr>
</tbody>
</table>
What does it mean?

Daily transit boardings is a measure of the number of trips made on an average day by each type of transit service. The higher the transit ridership, the more capacity the roads will have to carry people and goods. Transit trips consolidate many travelers to a single vehicle with specific capacities depending on each transit mode.

How was it measured?

The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input. The travel demand model uses these inputs, including the service characteristics of each mode, to calculate a probability of a trip choosing each type of transit. Choices are summed to determine the total probability of use by mode.

Average Daily Transit Boardings

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>Baseline</th>
<th>Growth Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrolink</td>
<td>32,615</td>
<td>45,315</td>
<td>92,904</td>
<td>98,258</td>
</tr>
<tr>
<td>MTA Bus</td>
<td>1,241,561</td>
<td>1,429,990</td>
<td>1,525,716</td>
<td>1,893,678</td>
</tr>
<tr>
<td>MTA Rail</td>
<td>211,327</td>
<td>266,275</td>
<td>325,698</td>
<td>608,896</td>
</tr>
<tr>
<td>Others</td>
<td>710,459</td>
<td>844,675</td>
<td>922,003</td>
<td>1,062,540</td>
</tr>
<tr>
<td>Maglev</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>465,646</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,195,962</td>
<td>2,586,255</td>
<td>2,866,321</td>
<td>4,129,018</td>
</tr>
</tbody>
</table>

Average Daily Boardings by Transit Type

- Metrolink
- MTA bus
- MTA Rail
- Others
- Maglev
EMPLOYMENT MIX & DISTRIBUTION

What does it mean?

The mix and distribution of employment types—retail, service, and other—is an indicator of the land use pattern of an area, and can have great effect on the efficiency of the transportation system. For example, an area with high service and retail employment may serve shopping, entertainment, and recreational trips, while an area with a concentration of other type employment may only serve commute trips. Transit use as well as trip-chaining—the term for combining many trips needs into one outing—work best when there is a mix of employment types concentrated in one area.

How was it measured?

The forecasting department at SCAG provided control totals for the number of retail, service, and other employees in each subregion. For the Growth Vision alternative, these employment numbers were then distributed across each modeling zone by association with development types.

<table>
<thead>
<tr>
<th>Year</th>
<th>Retail Employees</th>
<th>Service Employees</th>
<th>Other Employees</th>
<th>Total Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,256,917</td>
<td>2,751,322</td>
<td>3,456,683</td>
<td>7,464,922</td>
</tr>
<tr>
<td>2010</td>
<td>1,487,324</td>
<td>3,472,229</td>
<td>3,773,413</td>
<td>8,732,966</td>
</tr>
<tr>
<td>Baseline</td>
<td>1,781,132</td>
<td>4,057,286</td>
<td>4,205,510</td>
<td>10,134,128</td>
</tr>
<tr>
<td>Growth Vision</td>
<td>1,856,491</td>
<td>4,203,640</td>
<td>4,422,696</td>
<td>10,502,827</td>
</tr>
<tr>
<td>2000-2010</td>
<td>230,407</td>
<td>740,907</td>
<td>316,731</td>
<td>1,288,045</td>
</tr>
<tr>
<td>Baseline Increment</td>
<td>294,006</td>
<td>565,057</td>
<td>522,097</td>
<td>1,381,162</td>
</tr>
<tr>
<td>Growth Vision Inc.</td>
<td>369,167</td>
<td>711,411</td>
<td>669,283</td>
<td>1,749,861</td>
</tr>
</tbody>
</table>

Employment Mix by Modeling Zone
What does it mean?

Housing mix indicates whether the housing in an area is single-family or multi-family. This measures the variety of housing types provided, as well as the density typical of new housing types. The 2000 and 2010 projection data allow for comparison.

How was it measured?

Each scenario contains a different mix of development types. Each development type is defined as a certain mix of building types. Therefore, each development type contains a certain mix of single-family homes and multi-family homes. The number of acres of each development type in each scenario were multiplied by the single-family and multi-family percentages in each development type to come up with the number of single-family and multi-family households in each scenario.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Single-family Households</th>
<th>Multi-family Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2,898,175</td>
<td>2,487,372</td>
</tr>
<tr>
<td>2010</td>
<td>3,219,676</td>
<td>2,636,204</td>
</tr>
<tr>
<td>Baseline</td>
<td>3,095,169</td>
<td>1,558,562</td>
</tr>
<tr>
<td>Growth Vision</td>
<td>3,935,989</td>
<td>3,701,470</td>
</tr>
<tr>
<td>2000-2010</td>
<td>369,101</td>
<td>348,831</td>
</tr>
<tr>
<td>Baseline Increment</td>
<td>675,493</td>
<td>722,358</td>
</tr>
<tr>
<td>Growth Vision Increment</td>
<td>746,399</td>
<td>865,266</td>
</tr>
</tbody>
</table>

Percent Single-family Household by Modeling Zones
What does it mean?

Infill development or redevelopment indicates the extent to which a city is renewed on an ongoing basis. It indicates that older parts of the city are attracting new housing and investment. High percentages of infill development indicate that a larger proportion of growth is occurring where development has already occurred before, through recycling of older buildings.

How was it measured?

For each scenario, a raster format map is made showing new development by development type. A raster map with the location of vacant land and one with developed land are also made, and the grid cells of each development type that fall on the vacant land can be summarized separately from those that fall on developed land. The number of redeveloped acres of each development type is multiplied by the number of households and employees per redeveloped acre to get new households and employees on developed land.
What does it mean?

The ratio of jobs to households in each modeling zone can be an important indicator of the health of a region. If there exists a large mismatch between employment and housing in one or more modeling zones, then significant incommuting and outcommuting will occur, putting pressure on the transportation system.

How was it measured?

For the Growth Vision alternative, a raster format map is created that shows the location of the various development types that comprise the scenario. Each development type represents a certain number of households and employees per grid cell. From the number of grid cells of each development type, the number of households and employees can be calculated for each modeling zone. The number of employees are divided by households to get jobs-housing balance. The 2000, 2010, and Baseline data are obtained at the TAZ level from the forecasters at SCAG and then summarized to the model zone level.

<table>
<thead>
<tr>
<th>Jobs-Housing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Region</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>Growth Vision</td>
</tr>
<tr>
<td>2000–2010</td>
</tr>
<tr>
<td>Baseline Increment</td>
</tr>
<tr>
<td>Growth Vision Inc.</td>
</tr>
</tbody>
</table>

Total Jobs-Housing Balance
## MODE SHARE

### What does it mean?

The mode share is a measure of the percent of trips made on an average day that are made by the various modes—walking, transit, and auto. Trips may originate from home, work, university, school or other. Even small changes in the share of trips made by automobile can make a big difference in congestion levels for those who are driving, especially in areas of congested corridors.

### How was it measured?

The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input. The travel demand model uses these inputs, including the service characteristics of each mode, to calculate a probability of a trip choosing each mode. Choices are summed to determine the total probability of use by mode as well as categorized by the home base and trip destination.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>Baseline</th>
<th>Growth Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL Person Trips</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mode Choice</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive Alone</td>
<td>26,461,571</td>
<td>29,464,117</td>
<td>35,710,642</td>
<td>35,406,343</td>
</tr>
<tr>
<td>% Person Trips</td>
<td>48.0</td>
<td>47.3</td>
<td>47.7</td>
<td>46.7</td>
</tr>
<tr>
<td>Carpool</td>
<td>22,206,444</td>
<td>25,265,296</td>
<td>30,550,236</td>
<td>30,227,403</td>
</tr>
<tr>
<td>% Person Trips</td>
<td>40.2</td>
<td>40.5</td>
<td>40.8</td>
<td>39.9</td>
</tr>
<tr>
<td>Transit</td>
<td>1,185,606</td>
<td>1,509,972</td>
<td>1,507,345</td>
<td>2,301,119</td>
</tr>
<tr>
<td>% Person Trips</td>
<td>2.1</td>
<td>2.4</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>School Bus</td>
<td>736,367</td>
<td>732,267</td>
<td>899,170</td>
<td>876,214</td>
</tr>
<tr>
<td>% Person Trips</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Non Motorized</td>
<td>4,591,408</td>
<td>5,386,262</td>
<td>6,255,318</td>
<td>6,940,129</td>
</tr>
<tr>
<td>% Person Trips</td>
<td>8.3</td>
<td>8.6</td>
<td>8.3</td>
<td>9.2</td>
</tr>
</tbody>
</table>

### Mode Choice Distribution

![Mode Choice Distribution Graph](image-url)
What does it mean?

The vehicle hours delayed is the amount of time travelers spend in congestion getting to their destinations over and above the amount of time it would take traveling in uncongested conditions. This measure reflects spatial relationships between residence and employment or other destinations as well as the efficiency of the road and transit network. The more hours in delay, the less time is allowed for work, recreation and other activities. Lower vehicle hours of delay reflects more efficient transportation networks and transit alternatives.

How was it measured?

The traffic speeds on each road network link are calculated using travel demand modeling software. The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input. Congested link speed values are divided by link length to determine the link travel time. Subtract the uncongested link travel time to determine the amount of time per link caused by delays. The sum of these links is the total vehicle hours of delay for the region.

<table>
<thead>
<tr>
<th></th>
<th>Vehicle Hours Delayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,516,109</td>
</tr>
<tr>
<td>2010</td>
<td>1,989,824</td>
</tr>
<tr>
<td>Baseline</td>
<td>3,523,369</td>
</tr>
<tr>
<td>Growth Vision</td>
<td>2,053,128</td>
</tr>
</tbody>
</table>

Vehicle Hours Delayed - Thousands

The chart shows the vehicle hours delayed in thousands for the years 2000, 2010, Baseline, and Growth Vision. The data indicates a decrease in vehicle hours delayed from 1,516,109 in 2000 to 2,053,128 in the Growth Vision scenario.
What does it mean?

Vehicle Hours Traveled (VHT) is the total hours of travel for cars or trucks per year for the total region. This measure reflects spatial relationships between residences and employment or other destinations as well as the efficiency of the transportation network and resulting air quality. The more hours spent traveling, the less time is allowed for work, recreation and other activities, and the higher the environmental impacts. Lower vehicle hours traveled reflects additional trips by non-auto modes as well as trips eliminated due to jobs, residences, and services within close proximity.

How was it measured?

The traffic speeds on each road network link are calculated using travel demand modeling software. The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input. The link speed and length are used to determine the link travel time. The link travel time is multiplied by the number of vehicles per link to obtain the vehicle hours traveled.

<table>
<thead>
<tr>
<th>Total Vehicle Hours Traveled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>Growth Vision</td>
</tr>
</tbody>
</table>

Vehicle Hours Traveled - Thousands

<table>
<thead>
<tr>
<th>Years</th>
<th>Total Vehicle Hours Traveled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>10,040</td>
</tr>
<tr>
<td>2010</td>
<td>11,759</td>
</tr>
<tr>
<td>Baseline</td>
<td>15,098</td>
</tr>
<tr>
<td>Growth Vision</td>
<td>13,227</td>
</tr>
</tbody>
</table>
What does it mean?

Vehicle Miles Traveled (VMT) per person per day is the average distance traveled by a single person in a 24 hour period. This can reflect the spatial relationship between residence and employment or other destinations. Lower average VMT often reflects a better spatial match between place of residence and place of employment, while higher average VMT can indicate a spatial mismatch between place of residence and place of employment. VMT per person per day also will be lower when non-auto mode share (walk and transit) increases.

How was it measured?

The traffic volumes on each road network link are calculated using travel demand modeling software. The demographic, travel behavior, and transport infrastructure data for each scenario are used as model input. Each link volume is multiplied by the average vehicle occupancy rate in the region. This value is multiplied by the length of each link to determine the person-miles traveled on each network link. All these values are added and then divided by the total regional population to determine the average VMT per person per day.

### Vehicle Miles of Travel per Capita

<table>
<thead>
<tr>
<th>Year</th>
<th>VMT per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>21.9</td>
</tr>
<tr>
<td>2010</td>
<td>21.8</td>
</tr>
<tr>
<td>Baseline</td>
<td>21.5</td>
</tr>
<tr>
<td>Growth Vision</td>
<td>20.8</td>
</tr>
</tbody>
</table>

### Vehicle Miles per Capita

![Vehicle Miles per Capita Graph]

- 2000: 21.9
- 2010: 21.8
- Baseline: 21.5
- Growth Vision: 20.8
APPENDIX IV: SOUTHLAND POLICY DIALOGUES

Report on the Southern California Compass Project
by
The California Center for Regional Leadership
May 2004

I. Why Southland Policy Dialogues?

The Southern California Compass Project is a collaborative regional planning process designed to develop a shared regional vision that will enable residents, local governments, developers, and other decision-makers to wisely manage projected growth across the region over the next twenty-five years. The Southern California Association of Governments and its Compass consultant team have produced a draft Growth Vision for the Southern California region through a variety of processes: development of growth principles, a survey of public opinion, development of growth “scenarios” through technical analysis, and public input through map-based workshops.

The Compass Project organized the Southland Policy Dialogues to enable local civic leaders to review and develop ideas for implementing the draft Growth Vision. The sessions aimed to achieve the following:

- Familiarize leaders across the region with the draft Growth Vision
- Help leaders to understand its implications for growth-related decisions within the Southland’s “sub-regions”
- Identify barriers (regional and local) to effective implementation of the draft Growth Vision
- Develop and set priorities on key implementation strategies for SCAG, local governments, and other decision-makers

This report presents the key themes emerging from the Dialogues. Notes of the discussions were taken and revised by CCRL staff, and are available on the Compass website. They were sent to all participants, as was an online survey (results presented below).
II. WHAT DID WE DO?

The California Center for Regional Leadership organized the Southland Policy Dialogues in five locations around the SCAG region, each focused on the unique issues of different sub-regions:

- Inland Empire – March 10, 2004
- San Fernando Valley, Ventura County, Arroyo Verdugo, North Los Angeles County (held in Van Nuys) – March 11, 2004
- South Bay Cities and Gateway Cities – March 17, 2004
- Orange County – March 25, 2004
- Downtown and Westside Los Angeles – March 26, 2004

The Compass Team also coordinated two sessions focused on the Latino community in Los Angeles and Orange County during April 2004.

In addition to the Dialogues noted above, a “pilot” Southland Policy Dialogue was convened on February 27, 2004, with the participation of the 48-member Leadership Southern California (LSC) Class XIV. This group provided invaluable feedback about the Dialogue presentation and discussion format. In addition, many LSC Class members and alumni attended the March Dialogue sessions.

Dialogue participants included local civic leaders, government officials, business owners, developers, neighborhood activists, and representatives of state agencies. In total, nearly 200 local community leaders participated in the five Dialogue sessions. Major sub-regional organizations, such as Councils of Government and other regional entities, were recruited to help plan and host these events. Summary reports and participant lists of each the sessions are attached to this report.
III. What Did We Learn?

1. About the Growth Vision and its Implementation

The attached Summaries provide detail about responses to the draft Growth Vision and ideas for implementation. However, certain key themes emerged from Dialogue participants across the sub-regions, especially the following actions and issues:

• Encourage local and regional officials to approve, and then use as guidance, the basic principles and directions of the Growth Vision, such as preserving stable, existing single-family neighborhoods; directing new development, whenever possible, to existing employment or housing centers and to robust transportation corridors; promoting development around transit stations; protecting or expanding park and recreation facilities and open space; using land more efficiently wherever development occurs.

• Understand that there are differing opinions on: 1) where further development can be accommodated in existing communities ("it's a good idea, just not here -- we're built out"); 2) which highways or arterials could accommodate additional traffic; and 3) what level of incentives it would take for more people to use transit over automobiles.

• Plan from the bottom up, and recognize and value the particular needs of sub-regions and localities. The Southland is composed of connected but profoundly diverse places, and planning should advance different models of development that fit these differences.

• For more integrated and cost-effective results, link regional and local land use planning and project approvals with transportation planning and investment.

• Foster collaborative planning across and among all public sector agencies making land-use and infrastructure investment decisions, including local governments but also transit agencies, school districts, and water districts.

• Promote "choice" (particularly housing and transportation options) through consumer and governmental incentives rather than top-down mandates.

• Appreciate that achievement of the Growth Vision will require broad public understanding and the alignment of thousands of individual decisions made in both the public and private sectors over many years. In that sense, achieving the Growth Vision is as much a "cultural" shift as it is a technical or policy challenge, and will require sustained public education and involvement.
• Make the state government a full partner in achieving the Growth Vision, through major reforms in fiscal policy, state agency planning decisions, and infrastructure investments.

• Protect the environment. The commitment to this value runs deep and broadly across the region and among all kinds of groups.

• Create more effective means of influencing business-location decisions to achieve a better “jobs-housing balance.”

• Understand the differences of opinion on the economics benefits and challenges of mixed-use development.

• Acknowledge that, on the critical issue of whether or not the projected population growth in the region (6 million additional people) will actually occur, there was common agreement that it is likely to happen (often expressed with expressions of resignation rather than anticipation). On the other hand, long-term questions about the “carrying capacity” of the region, particularly with respect to water supply, remain unresolved.

• Bring the education sector into the collaboration. It is crucial to align K-12 education and worker training, as well as school siting, with community needs.

• Promote viable infill development projects by removing the regulatory barriers and supporting local public officials who make tough decisions.

2. About the Compass Project and the Southland Policy Dialogues

• Participation in the Dialogues was somewhat diverse, but did not mirror the population, let alone the future demography of the SCAG region and its sub-regions. Two additional Dialogues, with Latino leaders, were organized to ensure an opportunity for feedback and participation from that community.

• Participants were earnest about becoming engaged in discussion about the future of the entire SCAG region. They do not entirely believe that the Growth Vision will have a large enough impact on growth patterns, but there was general appreciation of SCAG’s efforts to reach out to their communities.

• The Dialogues were a largely a conversation about possible futures and not necessarily the technical aspects of planning and growth management, even among local elected officials.

• The Dialogues represented an opportunity to “close the circle” from the map-based workshops, though the overlap in participants between the two was minimal.

• The opportunities for oral presentation directly to the Growth Visioning Subcommittee of first, the design, and then the results, of the Dialogues ensured a strong linkage between the Committee process and the Dialogue outcomes.
3. Of Interest to the Southern California Association of Governments

- Sub-regions matter, and local leaders were pleased that SCAG acknowledged them as important “building blocks” and valued their opinions.

- There was deep interest (especially among local elected officials and planners) about how the kind of Vision discussion engendered by the project can be continued, and expanded to the scale necessary to actually result in effective, sustained change.

- Participants expressed a desire for partnership and greater alignment of goals and decisions with the state government, but little knowledge or willingness to get directly involved in making that happen (“Let SCAG do it.”).

- Very few participants (even many of the local elected officials) understand what leverage SCAG itself has (and does not have) to advance the Growth Vision.

IV. Evaluation Results

1. Who participated in the Southland Policy Dialogues?

Dialogue participants were surveyed electronically two weeks following the events in an effort to help us better understand the sessions. Approximately 200 people attended the five Southland Policy Dialogues and were representative of a wide range of sectors, with business/building developers and regional/local government making up the greatest numbers of participants.

2. Selected survey results

- In all five subregions, over 90% of survey respondents agreed that “the Dialogue increased my knowledge and understanding of the Growth Vision.”

- By contrast, Downtown/Westside Los Angeles session data indicates that 50% of survey respondents were “dissatisfied” with the dialogue overall.

- In four of the five subregions, 75% of survey respondents agreed that “the Dialogue generated solutions to the successful implementation of the Growth Vision.”
3. Written feedback

Below is a sampling of the written comments provided by respondents to the survey:

...These are fundamentally regional issues that can only be addressed regionally.

There are some good elements in the Vision, but there is no clear road to implementation, and especially no identification where the funding will come from.

...Mobility will be key. Alternatives to the auto must be provided and linked in the region...Maybe this is a start to really address the great challenges ahead to maintain and improve the quality of life in the region.

Although the concepts are terrific and very important to the future of our region, the Vision must include practical/durable locally supportable implementations for it to make a difference in the real world. This next step in SCAG's vision effort (implementation) is so very critical.

Libility is a key ingredient often overlooked when visioning.
4. Ranking of barriers

Survey respondents ranked a series of statements regarding barriers to successfully implementing the Growth Vision:

- The highest-ranking barrier in all five regions was an “under-informed general public, media and other key institutions.”
- The second-highest-ranking barrier in the five regions was the recognition that “local control over land use decisions and competition between municipalities drives land use decisions.”
- There was some variation among the remaining barriers, with “big, diverse, multiple jurisdictions in the region” and “state government historically slow to respond to changing land use needs at the regional level” ranking as third in the South Bay and Downtown/Westside L.A., but fourth in the remaining subregions.

5. Ranking of policy recommendations

Survey respondents ranked a series of policy recommendations regarding the successful implementation of the Growth Vision. The following three strategies were rated as high priorities by participants at all of the Dialogues:

- **First priority:** Create a targeted public education campaign to increase awareness of the issues outlined in the Growth Vision

- **Second priority:** Develop a best practices database that shows progress towards implementation of the key principles outlined in the Growth Vision

- **Third priority:** Foster greater cooperation between business and government through public-private partnerships

The policy recommendations that received the most varied response, with no more than 30% of survey respondents supporting the strategy, were:

- Develop a legislative agenda for the region, supported by a range of local governments, to aid in the realization of the Growth Vision

- Work to make the regional economy of the Southland a place where businesses are supported by government policies
V. Questions for the Future

A. Would this project add value to the work of COGs and MPOs? How?

B. Is it possible to reach agreement on 5-10 statewide goals and 35-40 indicators that would measure progress against these goals?

C. Is it possible/valuable to present a few goals and measures unique to each sub-region?

D. Is the timeframe practical and are there sufficient resources to develop a quality product?

E. Who are the audiences for this report?
   - Governor & Cabinet
   - California Performance Review
   - Legislature
   - Regional leaders
   - Media
   - General Public
   - Who else?