



Tuolumne Tomorrow:

*Tuolumne County Regional Blueprint Project
Report*

August 2012

Executive Summary

Tuolumne Tomorrow is the Regional Blueprint planning process for directing future growth and enhancing quality of life in Tuolumne County across the next few decades. Tuolumne Tomorrow is a coordinated effort between the City of Sonora, Tuolumne County, Tuolumne County Transportation Council and local residents to develop a long-range vision for growth and development in the County. This is done by coordinating land use, transportation, housing, economic development, and environmental protection. The decisions made today will affect residents for 10, 20, 30 or 40 years into the future. With residents help, we have developed a Blueprint for growth for Tuolumne County.

Tuolumne County is a special place. It has a rich, diverse population that values rural and scenic landscapes while accommodating suburban and regional growth. Tuolumne County's population is expected to increase by 21,000 in coming years. With such growth come challenges and questions:

- Where will our roads go?
- What type(s) of housing should be built and where?
- How will this growth affect our natural environment?
- Are there ways we can minimize impacts created by development?
- How can we maximize efficiency in providing public services, such as fire protection?
- How can we maximize use of existing infrastructure, such as public water and sewer systems?

The Tuolumne County Transportation Council, Tuolumne County and the City of Sonora recognize the potential and opportunity of a regional Blueprint plan with coordinated planning efforts. Local policy-leaders in Tuolumne County are dedicated to improving the quality of life for its residents while promoting the growth of the local economy. This long-range planning effort will help guide County and City decision-makers as they address the changing needs of our communities.

The Tuolumne Tomorrow Regional Blueprint planning process began in 2007 with funding from the California Regional Blueprint Planning Program. The process entailed developing Guiding Principles, Performance Measures and Alternative Growth Scenarios.

The Guiding Principles are basic values that represent what is desirable for Tuolumne County and the City of Sonora. They were used to guide the development of the future Alternative Growth Scenarios.

Alternative Growth Scenarios are the different ways growth in Tuolumne County and the City of Sonora can be concentrated and distributed – how growth will occur, or not occur. Weighing the different scenarios with elements of the Guiding Principles helped us create our vision for our future.

The Performance Measures allowed residents to evaluate the impact of the different Alternative Growth Scenarios. They showed how our decisions today shape Tuolumne Tomorrow.

Public Participation with local residents helped to address the following questions:

- How should we grow?
- Where should we grow?

- How will we travel around the region?
- How will growth affect the environment?
- How will growth affect our quality of life?

Public participation was a key aspect of Tuolumne Tomorrow. Project staff connected with residents through a series of workshops and other outreach methods to discuss the community's vision for the coming years. Staff facilitated dialogue about the three Alternative Growth Scenarios and participants reached a consensus for a Preferred Growth Scenario. This scenario includes locally-preferred alternatives to transportation, housing, economic development, land use and the environment which will provide the foundation for future planning documents.

Setting the Stage: What is Regional Blueprint?

The State of California has made a major effort to encourage regional planning as part of overall transportation planning. Termed "Blueprint Planning", the focus of the effort is to use computer models to forecast the likely locations of new development based upon specified assumptions. The State requirements to do Blueprint Planning currently only apply to Metropolitan Planning Organizations (MPO) in urban areas, but all indications are that in the future, transportation planning grant funding will be focused on areas that are participating, including the rural counties. Tuolumne County has participated in a Blueprint Planning project, funded by the State of California Department of Transportation (Caltrans) California Regional Blueprint Planning Program grant, since 2007 and is one of the first rural counties to do so.

A Regional Blueprint is a collaborative planning process that engages residents of a region in articulating a vision for the long term future of their region. It is intended to act as a guide for future planning documents, including the General Plan, but it is not itself a legally binding plan. The regional vision is developed from residents' values and priorities, and informed by advanced Geographic Information System (GIS) modeling and visualization tools that demonstrate the impacts of growth and planning decisions. The process leads to the development of alternative growth scenarios for the region, and through a public process a preferred growth scenario is selected that can then guide regional and local land use and transportation decisions for a future that meets residents' needs and provides a high quality of life for all.

As identified in the *San Joaquin Valley Blueprint Planning Process Summary Report, September 2010*, prepared by Mintier Harnish, the origins of the California Blueprint Program is summarized as follows:

Regional planning in California has evolved over the last six decades through a variety of initiatives, planning efforts, and other broad-based movements. Major forces such as the emergence of single-function State infrastructure planning agencies and heightened awareness of environmental and growth impacts have raised serious questions about how communities should grow. Following World War II, the State began building large-scale infrastructure systems, such as highways and water supply systems, to support increased demand for residential development. In 1962 the United States Congress passed legislation requiring the formation of metropolitan planning organizations (MPOs) in regions with populations greater than 50,000. MPOs were charged with ensuring that expenditures of governmental funds for transportation projects and programs were based on a continuing, cooperative, and comprehensive planning process. During this time local governments also began to form councils of governments (COGs) that served as Federal MPOs and as the State regional transportation planning agencies (RTPAs).

Despite improved institutional arrangements at the local, regional, and state level, funding and maintenance of public facilities – schools, highways and water delivery systems – did not keep pace with growth. During the 1980s and 1990s rapid growth throughout the state’s most populated areas alarmed citizens and lawmakers and raised concerns regarding growth related challenges such as air quality, regional economic health, overcrowded schools, affordable housing, urbanization of prime agricultural land, and water shortages. These issues prompted COGs and MPOs to consider how they could address growth and manage resources on a regional scale.

State and local governance reforms in the 1990s set the stage for COGs/MPOs to begin conducting focused regional planning. As a result, innovative regional environmental programs (e.g., habitat conservation plans) provided new planning tools for coordinating local land use policy. At the same time a growing national “smart growth” or “sustainable development” movement was gaining popularity and promoting integrated planning for land use, infrastructure, and the environment. Several states, including Maryland, New Jersey, Oregon, and Florida, passed new or modified regional growth management legislation that included smart growth themes and a focus on regional coordination. California COGs/MPOs increasingly looked to these models to address their regional issues.

By the late 1990s, California COGs/MPOs had taken on greater responsibilities and had expanded their traditional role as transportation planning agencies by addressing broader planning issues related to air quality, the environment, affordable housing, and land use. They began working with cities and counties to develop local land use strategies that would address regional issues. In the early 2000s, facing increasing growth pressures, four metropolitan regions (San Francisco Bay Area, Sacramento, San Diego, and Los Angeles) launched visioning processes to develop regional land use growth scenarios and smart growth principles. These were the first efforts by California COGs/MPOs to engage in blueprint planning.

Prompted by the success of these regional efforts, in 2005 the State created the California Department of Transportation’s California Regional Blueprint Planning Program (Blueprint Program) to assist in conducting regional planning efforts that would result in consensus by regional leaders, local governments, and stakeholders on a “Blueprint” for a 20-year planning horizon (through 2025). The Blueprint Program emphasized collaboration with stakeholders at all levels to address issues such as housing needs, job creation, traffic congestion, and air quality. The Blueprint Program continues to provide resources and grant funding to integrate local land use planning across broad, multi-jurisdictional regions, while recognizing the key land use authority of counties and cities.

The Caltrans Blueprint Program supports collaborative regional planning efforts across California through grants, support services and interagency coordination. Regional Blueprint grants help MPOs and rural RTPAs engage in public outreach to select community preferred growth scenarios for the future. Through Regional Blueprints, local transportation agencies attempt to balance transportation planning with land use planning, housing needs, resource protection and other planning issues in order to achieve more sustainable regional growth patterns and improve the quality of life for Californians. Regional Blueprints are tools that will help communities reduce greenhouse gases and will assist transportation agencies in creating enduring communities for residents throughout the entire State. The funds support regions’ outreach to local government officials, encouraging them to consider a regional context as they exercise their authority to make local land use decisions.

The Blueprint Program will lead to an on-going framework for collaboration among regional agencies, local governments and State agencies to promote mobility, more housing and transportation choices, access to jobs, healthy communities, and a thriving economy.

The purpose of the Blueprint Program is to support regional collaborative decision-making and engagement in a regional blueprint planning process that will achieve performance outcomes to foster more efficient land use patterns that: (a) support improved mobility and reduced dependency on single-occupant vehicle trips; (b) accommodate an adequate supply of housing for all incomes; (c) reduce impacts to valuable habitat, productive farmland, and air quality, (d) increase resource use efficiency; (e) promote a prosperous economy; and (f) result in safe, healthy and vibrant communities.

Caltrans has developed the following Program Goals to implement the Blueprint Program. These Program goals also serve as the underlying goals of Tuolumne Tomorrow.

1. **Improve multimodal mobility** through a combination of strategies and investments to accommodate growth in transportation demand, reduce congestion, and contribute to a strong economy;
2. **Reduce dependency on auto trips and increase use of active forms of transportation** by fostering a more efficient regional land use pattern that enables more walking, bicycling and transit use to meet State congestion reduction goals while supporting State health and obesity prevention goals;
3. **Provide for an adequate supply of housing** over at least the next 20-plus years by working with stakeholders to adopt land use plans and regulations that include new residential opportunities proximate to transit and other transportation facilities, jobs, health facilities, convenience retail uses, and support services;
4. **Increase transportation choices** by adopting plan(s) which increase housing affordability and choices, including a variety of housing types and densities with access to alternate forms of transportation;
5. **Avoid and minimize impacts to natural resources**, valuable habitats (including wildlife, riparian and wetlands), farmland and water and air quality;
6. **Increase conservation and efficient use of resources** including energy, water, and mineral resources such as aggregate;
7. **Promote California's economic competitiveness and quality of life** by improving the region's transportation infrastructure and strengthening regional economies;
8. **Reduce costs and time needed to deliver transportation and other infrastructure projects** through informed early public and resource agency involvement;
9. **Improve coordination and collaboration among all local and regional agencies** through engagement in the blueprint process to inform planning decisions and infrastructure investments;
10. **Reduce the region's greenhouse gas emissions and its vulnerability to the effects of climate change** including sea level rise and changes in temperature and precipitation.

11. **Secure local government and community support**, including that of Tribal governments and under-represented groups, to articulate a comprehensive regional vision through the use of modeling, visualization tools and enhanced public engagement activities; and
12. **Build awareness of and support for critical infrastructure** such as transportation facilities, housing, energy, health care, schools, communication systems, emergency services, green infrastructure, waste facilities and water facilities.

The above Blueprint Program Goals are long range goals, which were measured during development of the Blueprint through the evaluation of the adopted Performance Measures with the Alternative Growth Scenarios. It was the intent of the Blueprint Program that the Program Goals were kept in mind when developing computer model layers, involving stakeholders, conducting public outreach, and developing Alternative Growth Scenarios.

The Regional Blueprint process provides a glimpse of what most likely 'will be' based on existing trends, plans, and policies, compared to what 'could be' if growth and development related decisions were more closely aligned with shared community values and priorities. Sometimes referred to as 'scenario' planning, a forecast map of a region is generated based on known relationships between population growth, household demographics, employment statistics, land-use, transportation, the environment and other key factors.

What if, for example, we incorporated more natural open space? Extended towns along major road corridors? Or mixed different types of land uses together in more densely populated areas? Specialized computer software is used to simulate such decisions and project the outcome decades into the future. These alternative futures may then be compared and contrast against current trends and the region's shared vision and priorities.

Performance Measures are used to help tell the individual story of each scenario and allow residents to assess the impact, for better or worse, that different choices might have on daily life years from now. Armed with objective information presented in a readily understood format, local residents are able to play a more meaningful and consequential role in planning for their region.

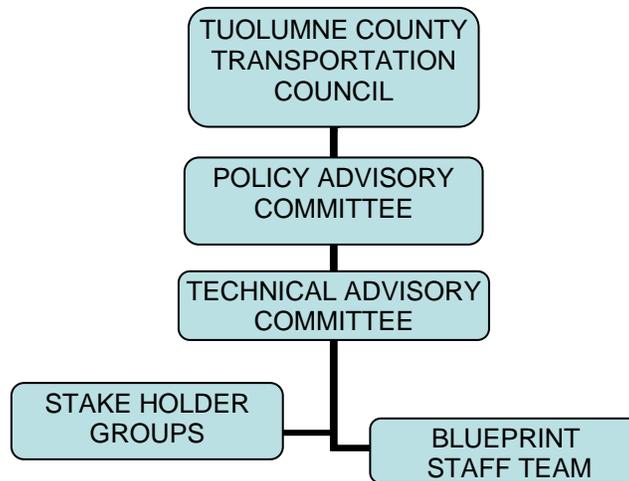
The Tuolumne Tomorrow Blueprint Process

In 2007, the Tuolumne County Transportation Council partnered with Tuolumne County and the City of Sonora to develop a long-range vision for growth and development in the County through a Regional Blueprint. The Tuolumne County Transportation Council served as the Lead Agency and secured grant funding from 2007 to 2012 from the California Regional Blueprint Planning Program from Caltrans to implement the project.

The Blueprint Committee structure for Tuolumne Tomorrow was comprised of two committees, the Technical Advisory Committee (TAC) and the Policy Advisory Committee (PAC), which held joint meetings. The two committees reviewed the work of staff and gave guidance as development of the model progressed. The TAC composed of representatives of various related agencies such as utilities, along with representatives of various interest groups and the public. The joint meetings were conducted in an environment where all viewpoints from the various stakeholders were entertained, and the goal was to find general consensus when considering the inputs and settings to be employed by the UPLAN model. The decision-making at the PAC level was more formal

than the TAC. The voting members of the PAC represented two Tuolumne County Supervisors, one City of Sonora Councilperson, and two at-large members.

Blueprint Committee Structure



The Policy Advisory Committee was intended to be a multi-jurisdictional advisory committee to the Tuolumne County Transportation Council (TCTC). The Policy Advisory Committee provided oversight of the Regional Blueprint Development. The Policy Advisory Committee considered recommendations from the Technical Advisory Committee on various aspects of the Regional Blueprint and gave direction on its overall development. The Policy Advisory Committee made recommendations to the TCTC on funding and the Blueprint adoption into the Regional Transportation Plan. Policy Advisory Committee members included Sonora City Council Representative Ron Stern, County Board of Supervisors Representatives Randy Hanvelt and Richard Pland, and At-Large members David Campbell and Jim Garaventa with Rick Breeze-Martin as the alternate.

The Technical Advisory Committee was the review body for all items that went before the Policy Advisory Committee and included 29 members. The Technical Advisory Committee was advisory to the Policy Committee on all matters relating to the Regional Blueprint development. Both Committees operated under the Brown Act and all stakeholders were notified of the Committees joint meetings.

Stakeholders were representatives of groups having a vested interest in the regions' growth. Each stakeholder had expertise in specific functional areas. Input from these experts was essential to developing a preferred growth management plan. Stakeholders were invited to participate in all aspects of the Regional Blueprint development. Input from specific stakeholders was sought when appropriate for expert advice in their respective area of authority by Blueprint staff.

What is the UPLAN Model?

In collaboration with Tuolumne Tomorrow, UC Davis Information Center for the Environment (ICE) supplied data, modeling tools, and technical support for evaluation of alternative growth scenarios. UC Davis ICE specializes in the development and distribution of geospatial data and

technologies and decision support systems geared to land use planning. UC Davis ICE works with Caltrans to provide technical support for all of the Blueprint programs in the state.

Tuolumne Tomorrow used UPLAN, a computer-based Geographic Information System (GIS) tool developed by UC Davis ICE, to conduct Blueprint modeling. UPLAN enabled Tuolumne Tomorrow to modify variables based on projected population, land use policies from the City and County General Plans, attraction areas where growth was encouraged (e.g., availability of utilities), and discouragement areas where growth was not appropriate (e.g., very steep slopes). Blueprint staff consulted with the Blueprint TAC and PAC on UPLAN assumptions and parameters to provide the most locally-relevant inputs for the model. UPLAN allowed users to modify land use patterns and densities to create future growth scenarios. By inserting these inputs, the model projects where certain types of residential, commercial and industrial development are likely to take place.

Through the development of the UPLAN model there were several assumptions adopted by the PAC such as population projections, number of employees per household, vacancy rates, and assumptions for attractions and discouragements.

The UPLAN model was originally developed as an urban growth model; therefore, some parameters were modified to customize the model for use in a rural setting like Tuolumne County, where there is a significant number of dwellings constructed that do not have permanent or year-round residents. In order to account for Tuolumne County's high percentage of vacant homes, approximately 25%, the Persons per Household figure was adjusted, based on Permanent Residents per Total Housing Units and was adopted by the PAC. This prompted the model to allocate additional residential development, accounting for anticipated construction of new dwelling units beyond the number that will actually be occupied full-time. Rather than using the current California Department of Finance Persons per Household projection of 2.293, the PAC adopted 1.701 Permanent Residents per Household, based on the following calculation:

$$51,904 \text{ household pop} / 30,521 \text{ total housing units} = 1.701 \text{ persons per household}$$

The UPLAN model acknowledges that in a "built-out" subdivision, some lots will likely remain undeveloped for an extended period of time. In order to simulate these undeveloped lots, the model sets a parameter that skips the defined percentage of undeveloped area when allocating land area for residential development. UPLAN does allow the user to set different percentages of undeveloped property for areas defined as "Inner" versus "Outer." During analysis and subsequent discussion, the PAC concluded that subdivisions that are not served by both public water and sewer systems typically have a higher percentage of undeveloped land than those with full public water and sewer infrastructure. After an in-depth analysis of an extensive sample of representative subdivisions, the PAC adopted a percentage of 8% for the "Inner" areas served by both public water and sewer systems, and 18% for the "Outer" areas that lack either water or sewer systems. These percentages were applied to land area that had the capacity to be developed.

The Blueprint assumed a population projection of 80,000 persons for the project. The population projections took into account Department of Finance Forecasts, Census Population Projections and TCTC Adopted Population Projections. The PAC initiated the population projection by taking the base County population of 59,000 and projecting the population into three steps: 66,000; 73,000 and 80,000.

Assuming a population of 80,000 persons, new residences would generate new employees, and new employees require space for their workplace. The UPLAN model utilized an "employees per

household” setting to predict the amount of space in offices, stores and other establishments that would be required to be constructed to provide employment for the increase in the employee population. Therefore, for Tuolumne Tomorrow, the assumption of 0.755 employees per household was adopted by the PAC.

Four Employment Land Use Types were adopted for Tuolumne Tomorrow: Retail, Service, Public and Industrial & Other. The Retail Employment Land Use Type includes restaurants, stores, gas stations and casinos. Professional offices, medical centers, financial institutions and hotels are workplaces found in the Service Employment Land Use Type. Public Employment Land Use Type includes federal, state, county, schools and the prison. The Industrial & Other Employment Land Use Type includes industries, mines, lumber mills and all other employment types.

Based on a comprehensive employment database for the County, purchased from InfoUSA, the PAC adopted the following percentages of the workforce employed in the four Employment Land Use Types:

Table 1 – Percentage of Employment Land Use Types

Land Use Type	Percentage of Overall Total
Retail	21.75%
Service	37.41%
Industrial & Other	9.64%
Public	20.17%
(No Workspace)	10.73%

The four UPLAN Land Use Types account for all employment that requires workspace that is outside of the dwelling, but within the boundaries of Tuolumne County. The No Workspace group accounts for those working at home, or as truck drivers or forest workers, or others that require no structural workspace that UPLAN needs to accommodate. None of these categories account for those that commute from homes in Tuolumne County to workplaces outside of the County, as UPLAN does not need to provide workspace for those persons within the County.

Using the InfoUSA dataset and the County Assessor’s data, many of the employment business records were made available for a sample group. The information from InfoUSA included a Standard Industry Code (SIC), which indicated the type of business: Retail, Service, Public, or Industrial & Other. Geographically representative samples were chosen for each of these Types. When the Assessor’s data included square footage of the building, the number of employees was compared to the building area to compute square feet per employee. Using the area for the Assessor’s parcels where the buildings were located, the Floor-Area Ratio was estimated by dividing the size of the structure(s) by the size of the lot. Therefore, the PAC adopted the following assumptions for the square footage per employee and floor-area ratio.

Table 2 – Square Footage per Employee and Floor-Area Ratio by Employment Land Use Type

Employment Land Use Type	Square Footage per Employee	Floor-Area Ratio
Retail	370	0.23
Service	425	0.19
Public	425	0.19
Industrial & Other	510	0.13

Within the Land Use Types, UPLAN uses a calculation determined by the various qualities and issues related to particular areas to decide if those areas are allocated for growth or not. Those qualities are identified as Masks, Attractions or Discouragements. Masks are features used by the model to establish which areas of the County are not available for growth, and prevents the model from allocating any growth to those particular areas. Masks included lakes, reservoirs, and other bodies of water as well as public lands and public land. For obvious reasons, the model can assume that no one will construct a residence or business on a body of water or in Yosemite National Park.

Once the PAC completed the various settings and parameters to tell UPLAN how much growth to account for and how to distribute the various types of development, the model established priorities for growth based on Attractions and Discouragements. These are all based on GIS layers of data, and the model has settings to prioritize the level of the Attraction or Discouragement, with a setting called “weighting.” The model also allows the user to establish areas around a particular point, line or polygon layer that extends the influence of the Attraction or Discouragement, with settings called “buffers.” How the Attractions and Discouragements work is by the influence on each point in the region being modeled. An Attraction contributes its weighting value as a positive influence and a Discouragement subtracts based on its weighting value. Each point ends up with a net attraction, and the points with the highest net attraction get growth allocated first.

Some assumptions made for Attractions and Discouragements adopted by the Pac included Roads and Utilities, Shopping Centers, Residential Subdivisions, Agricultural and Timber Preserves, and Wildlife Habitats and Oak Woodlands.

Roads and Utilities were considered attractions for most Land Use Types. For example, a State Highway or Major Collector Road is a strong attraction to Retail but a discouragement for Residential; where as, public water and public sewer is a strong Attraction for both Retail and Residential.

Shopping Centers are considered significantly attractive for additional Retail and Service development, and relative proximity to shopping opportunities is considered an amenity for urban-style residential development.

Residential Subdivision locations are relatively powerful attractions for development of the residential Land Use Types on the parcels of the proposed subdivisions, and as a proximity attraction for Retail and Service Types.

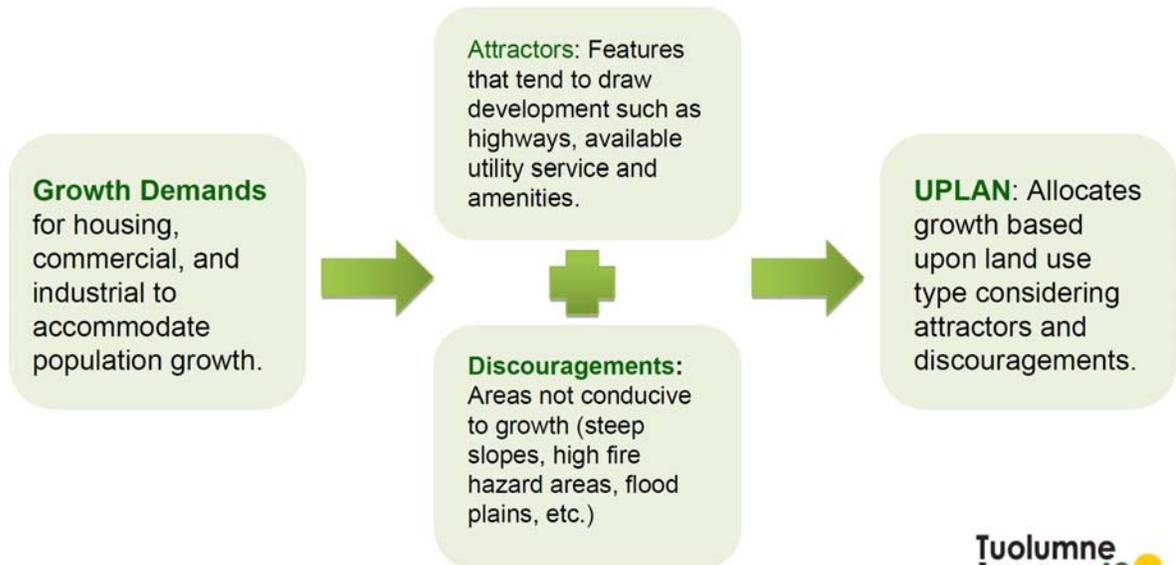
A moderate level of discouragement is proposed for most Land Use Types that bound Agricultural and Timber Preserve areas. However, these areas would be an attraction for Agricultural Land Use Types.

Wildlife Habitats and Oak Woodlands was divided into a two-tiered discouragement system based on Higher Value Habitat and Moderate Value Habitat, with oak woodlands identified as Higher Value. In this two-tiered system, growth was allocated to the Moderate Value Habitat prior to allocating growth to the High Value Habitat.

Tuolumne Tomorrow – Performance Measures

How UPLAN works ...

UPLAN is a computer based model that considers a series of user-defined inputs.



Performance Measures

In 2009 Tuolumne Tomorrow carried out the second phase of the Blueprint planning process: Performance Measures. The purpose of this phase was to set growth principles and benchmarks that could be used to evaluate the effectiveness of Alternative Growth Scenarios. The Performance Measures continued to evolve throughout the Blueprint process.

A Performance Measure was used to evaluate differences in outcomes in response to changes to inputs to the computer model. In most cases, a model such as UPLAN provides a measurable value as an indicator of how much of a resource was impacted. A resource is interpreted liberally, such as land use, wildlife habitat, air quality, transit routes, vehicle miles travel, etc. Similarly, an “impact” to a resource can be measured, such as how much land is available for a certain land use type or is allocated. Performance Measures are used to compare results between the Recent Trends Scenario, which is based on current land use development trends, and other alternative scenarios. The Performance Measures developed are intended to be used when considering all types of land use alternatives.

Performance Measures developed within other jurisdictions were reviewed, to see how other Blueprint Planning projects were approaching the use of Performance Measures. These jurisdictions included the Council of Fresno County of Governments (Fresno COG), San Joaquin

Council of Governments (SJCOG), San Diego Association of Governments (SANDAG), Sacramento Area Council of Governments (SACOG) and the California Department of Transportation (CalTrans). Ideas gained from this research were used for the development of Tuolumne Tomorrow's Performance Measures.

To prepare the Performance Measures, the respective General Plan of the City of Sonora and the County of Tuolumne were reviewed and a list of the Goals, Policies and Implementation Programs that could be measurable by the UPLAN land use model were extracted. Once the quantifiable Goals, Policies and Implementation Programs were identified, Performance Measures were drafted. Many of the Goals, Policies and Implementation Programs within the General Plans were found to be repetitive in that they appear in more than one Element. In other cases, it was found that the same basic Performance Measure serves to quantify the results for more than one Goal, Policy or Implementation Program. Therefore a single Performance Measure may measure multiple Goals, Policies and Implementation Programs. A total of 11 key Performance Measures were adopted by the Tuolumne County Regional Blueprint Technical Advisory Committee and Policy Advisory Committee.

Table 3 – Performance Measures Adopted

PM ID	Performance Measure	Description
1	Proximity of growth to Infrastructure	Number of dwelling units of Very High, High and Medium Density Residential types; and number of acres of Commercial, Industrial and Business Park allocated for growth in proximity (300 ft.) to public water or sewer lines.
2	Growth within Defined Communities	Number of dwelling units of Very High, High and Medium Density Residential, Mixed-Use, Commercial, allocated for growth within defined communities and the City of Sonora.
3	Growth within existing urban areas	Number of dwelling units of Very High, High and Medium Density Residential allocated for growth within urban development boundaries of defined communities and the City of Sonora to meet population projections.
4	Growth affecting surrounding lands	Number of dwelling units of Very High, High and Medium Density Residential and Mixed-Use allocated for growth within 1,000 feet of Agricultural, Industrial and Timberland (TPZ).
5	Dense Residential Growth in Proximity to Amenities	Number of dwelling units of Very High and High Density Residential allocated for growth within the area defined by at least 4 of the 7 location criteria used to determine proximity to amenities and services for low income housing project grants and tax credits. ¹
6	Proximity to workplaces and shopping	Number of dwelling units of Very High, High and Medium Density Residential allocated for growth within 1/4 and 1/2 mile from Commercial and Mixed-Use, and highways and collector roads.
7	Growth near Transportation	Number of dwelling units, new residents and new employees allocated within transit service areas and within 1/4 mile of fixed

¹ The housing location criteria used include proximity to a pharmacy, hospital or clinic, elementary school, transit stop, convenience or grocery store, library, or park. For purposes of this exercise, being in proximity to any 4 of the 7 criteria is considered to be a better location.

PM ID	Performance Measure	Description
	Alternatives	route, rail, bicycle or pedestrian walkways.
8	Miles driven	Vehicle Miles Traveled (VMT) Countywide.
9	Traffic congestion	Number of roads with Level of Service E and F congestion.
10	Greenhouse Gas Emissions	Amount of Greenhouse Gas (GHG) emissions generated.
11	Growth impacts to wildlife habitat	Number of acres of moderate and high value wildlife habitat impacted by residential development.

In general, the Performance Measures provide indicators to measure proposed alternatives to Tuolumne County's Recent Trends Scenario. This assisted with determining where and how growth could be distributed in Tuolumne County in the future.

Guiding Principles

Once Performance Measures were adopted, Guiding Principles were drafted to develop Alternative Growth Scenarios to be used in the Blueprint Planning project. A Guiding Principle is a fundamental value that represents what is desirable and positive for Tuolumne County and help in determining the rightfulness or wrongfulness of Alternative Growth Scenarios. Guiding principles are more basic than policies and objectives, and are meant to govern both. Guiding Principles assisted with determining the advantages or disadvantages of different scenarios as to where and how growth could be distributed in Tuolumne County. A total of nine Guiding Principles were adopted by the Tuolumne County Regional Blueprint Technical Advisory Committee and Policy Advisory Committee.

Table 4 – Guiding Principles

Guiding Principles	
1.	Provide for an adequate supply of housing opportunities and choices. By creating a diverse range of housing choices, communities can mitigate the environmental costs of auto-dependent development, use infrastructure resources more efficiently, and generate a strong foundation of support for neighborhood transit stops, commercial centers, and other services.
2.	Create safe, healthy, walkable and vibrant communities. Walkable communities reduce dependency on auto trips and increase use of other forms of transportation by fostering a more efficient regional land use pattern that facilitates more walking, bicycling and transit use.
3.	Promote distinctive, attractive communities with a strong sense of place. By promoting development within Defined Community boundaries and by incorporating architectural and natural elements that reflect the interests of all residents, communities will retain their economic vitality and draw a stronger tax base.
4.	Increase the quantity of Mixed Use land uses. By putting uses in close proximity to one another, alternatives to driving become viable. This can enhance the vitality and perceived security of an area by increasing the number of people on the street.
5.	Minimize impacts to natural resources. Conserve animal and plant habitat, the natural topography, important environmental areas and hillsides and hilltops by removing the development pressure and redirecting new growth to Defined

Guiding Principles	
	Communities. Conserve farmland and agricultural lands outside the Defined Community boundaries.
6.	Provide a variety of transportation choices. Adopt land use plans which provide people with more options in transportation thereby allowing more choices in housing, shopping, and communities.
7.	Reduce the region's greenhouse gas emissions. By focusing future population and job growth within and adjacent to the Defined Community boundaries greenhouse gas footprints will be reduced.
8.	Make development decisions predictable, fair and cost effective. Make development decisions more timely, cost-effective, and predictable for developers, articulating a comprehensive regional vision through the engagement of the blueprint process.
9.	Provide for an adequate supply of commercial, industrial, recreational and tourism uses. Promote and enhance economic vitality by encouraging a diversity of commercial, industrial, recreational and tourism uses to meet the needs of County residents and visitors. Encourage the expansion of existing businesses and the development of new businesses to enhance the local economy.

Identify the Possibilities: Alternative Growth Scenarios

In 2010 and 2011, Tuolumne Tomorrow conducted the fourth phase of the Blueprint planning process: Alternative Growth Scenarios. Alternative Growth Scenarios present different ways growth can be concentrated and distributed at the regional level. Alternative Growth Scenarios developed within other jurisdictions were reviewed, to see how other Blueprint Planning projects were approaching Alternative Growth Scenarios and the Preferred Growth Scenario. These jurisdictions included Shasta County Regional Transportation Planning Agency, Calaveras Council of Governments (CCOG), San Joaquin Council of Governments (SJCOG), Sacramento Area Council of Governments (SACOG) and the California Department of Transportation (CalTrans). Ideas gained from this research were used in the development of Tuolumne Tomorrow's Alternative Growth Scenarios.

Alternative Growth Scenarios are tools to facilitate agreement about the use of land resources at a regional level. The Scenarios provide critical information to determine a Preferred Growth Scenario that best meets the region's future development needs while preserving important natural resources and environmental quality. Together with the results of public outreach workshops on the Scenarios, the evaluation of the Scenarios was an integral part of selecting the Preferred Growth Scenario.

The adopted Guiding Principles were used to assist with the development of the Alternative Growth Scenarios. Three Alternative Growth Scenarios were developed for Tuolumne Tomorrow – Recent Trends, Public Services and Distinctive Communities. The Comparison of Alternative Scenarios with Guiding Principles chart provides a straightforward approach to compare the advantages or disadvantages of the three different Scenarios as to where and how growth would occur in Tuolumne County. The adopted Performance Measures were used to compare the results between the Recent Trends Scenario, which is based on current land use development trends, and the other two Alternative Growth Scenarios.

Recent Trends Scenario

The Recent Trends Scenario is based on the existing City's and County's General Plan land use designations and assumes no change in market demand for housing types. This scenario continues the existing pattern of development, in which Residential Medium (Single-Family Residential, R-1, District) is the primary demand choice for residential development.

Recent Trends will provide a sufficient mix of residential uses in all land use categories except Residential Medium Low (1 to 5 acres per dwelling unit) and Residential Low (5 to 10 acres per dwelling unit). This scenario will require auto dependency for many parts of Tuolumne County, because walkable communities, defined as a 5-minute walk (1/4 mile) between home and the core of a community, shopping, jobs, recreation, community facilities and transit, would exist only within community cores. The amount of Mixed-Use land uses will remain the same as today.

Although greenbelts will likely preserve communities and their individual identity, some community boundaries become blurred because of Residential Medium Low and Residential Low development occurring between communities. Transportation choices will remain the same as today as residential development continues to spread out.

The Recent Trends scenario is projected to have the least vehicle trips, a total of 265,283 vehicle trips, with a population of 80,000 residents with an average trip length of 11.16 miles, the longest average trip length when compared to the other two scenarios, therefore having the most Vehicle Miles Traveled (VMT), a total of 2,961,690 VMTs.

The Recent Trends scenario provides a "business-as-usual" estimate of how emissions will change over time if consumption trends and behavior continue as they did in 2010, absent any new local or regional policies or actions that would reduce greenhouse gas emissions, but inclusive of state level regulations that are intended to reduce emissions. Under this scenario, GHG emissions are projected to decrease by 9.6 percent (from 782,846 MT CO₂e to 707,321 MT CO₂e) with a population of 66,000 residents and 4.0 percent (from 782,846 MT CO₂e to 751,257 MT CO₂e) with a population of 73,000 residents, and increase by approximately 4.9 percent (from 782,846 MT CO₂e to 821,586 MT CO₂e) by a population of 80,000 residents. The decreases from the current population to a population of 73,000 are attributed to state level reductions, despite growth in population and employment. The increase in total emissions by a population of 80,000 residents is attributed to overall population and employment growth, where eventually the decreases due to state level measures are outweighed by population and employment growth. The initial decrease in emissions from the current population levels is the result of implementation of state-level regulations, including the Renewable Portfolio Standard, Low Carbon Fuel Standards, and Pavley regulations.

Table 5 – Recent Trends Emissions Forecast

Population	59,000	66,000	73,000	80,000	% Change
MT CO₂e	782,846	707,321	751,257	821,586	4.9%

Public Services Alternative Growth Scenario

In the Public Services Alternative Growth Scenario growth is located where multiple services, such as major transportation corridors, transit lines, and public water and sewer, are located.

Development will continue to grow within defined communities, however development will radiate outward along a select number of arterials, major collectors, and transit corridors, where public water and sewer exist, creating linear communities containing a mix of multi-family housing, townhouses, neighborhood commercial and traditional neighborhoods. In this scenario, the incorporation of a passenger rail system is a possibility.

This scenario will result in some auto dependency for residents residing beyond transit corridors and community cores. The amount of Mixed-Use land uses will increase by placing these uses in close proximity to transit stations and community cores, thereby increasing walkability in these areas.

Some community boundaries may become blurred because of rural development occurring between communities, along State Highways and transit corridors. In relation, impacts to natural resources and agricultural uses are limited since a majority of development is located within defined communities and along arterials, major corridors and transit corridors where public water and sewer exist. However, General Plan land use designations within or adjacent to community boundaries may be converted to urban land uses to maximize the benefit of available infrastructure.

This alternative provides an opportunity for more transportation choices, by locating a high population of residents within transit corridors, creating mixed-use, pedestrian-oriented centers, designed so that people can access destinations via transit and then walk to other nearby destinations. This alternative may propose densities along rail corridors necessary to make passenger rail feasible. In addition, dispersed housing can be served by park-and-ride facilities; however, destinations must be close to transit stations. Providing an adequate supply of commercial, industrial, recreational and tourism uses can be achieved by providing a very high employment density near transit corridors and stations, in order to locate as many jobs as possible near transit and to make transit a viable commute option.

The Public Services scenario is projected to have the most vehicle trips, a total of 267,590 vehicle trips, with a population of 80,000 residents but the shortest average trip length, 11.03 miles, therefore having the least VMT of 2,953,739 when compared to the other two scenarios.

Through the development of this scenario, greenhouse gas emissions would be reduced through an increase in transit ridership and development would be concentrated around transit corridors and community cores. Under the Public Services scenario, GHG emissions are projected to decrease by 9.7 percent (from 782,846 MT CO₂e to 706,831 MT CO₂e) with a population of 66,000 residents and 4.1 percent (from 782,846 MT CO₂e to 750,374 MT CO₂e) with a population of 73,000 residents and increase by 4.8 percent (from 782,846 MT CO₂e to 820,300 MT CO₂e) with a population of 80,000 residents. The decreases from the current population to a population of 73,000 are attributed to state level reductions, despite growth in population and employment. The increase in total emissions by a population of 80,000 residents is attributed to overall population and employment growth, where eventually the decreases due to state level measures are outweighed by population growth and employment. Similar to the Recent Trends scenario, the initial decrease in emissions from the current population levels is the result of implementation of state-level regulations, including the Renewable Portfolio Standard, Low Carbon Fuel Standards, and Pavley regulations.

Table 6 – Public Services Emissions Forecast

Population	59,000	66,000	73,000	80,000	% Change
MT CO₂e	782,846	706,831	750,374	820,300	4.8%

Distinctive Communities Alternative Growth Scenario

Within the Distinctive Communities Alternative Growth Scenario each community contains a well-defined, cohesive, and compact community built around an appropriately-scaled urban core and community gathering places. The size of each community is based on a locally defined urban development boundary area. The existing urban development boundaries may be expanded to allow dense growth to occur near existing community nodes. Infill, redevelopment and mixed-use are used to take advantage of existing public infrastructure and services. Residential and commercial areas become more compact within new urban development boundaries promoting mixed-use and higher density residential development to supply housing demand. With compact neighborhoods and the possibility of incorporating a passenger rail system, auto dependency and new roads are reduced and transportation options are increased.

This scenario will create and provide a mixture of residential, retail, entertainment, office and commercial uses near each other within the urban development boundaries creating active communities. By having compact communities, auto dependency is greatly reduced and walking, bicycling and transit use becomes an increasing form of transportation.

Urban development is centralized within the urban development boundaries with rural development radiating outward to the defined community boundaries. Surrounding rural development will serve as buffers between communities and help meet the functional needs of the natural environment and nearby agriculture production. Rural development may be primarily located on the fringe of defined communities, but clustered or grouped together to make the best use of infrastructure and avoid disruption to agricultural lands and environmentally sensitive areas.

Transportation investments, such as passenger rail, are used to link communities and to support a wide range of mobility choices within individual communities. With urban development limited within urban development boundaries, more than one downtown, community center or pedestrian-oriented center is possible in each community, providing a 5-minute walk (1/4 mile) between home and the core of a community, jobs, recreation, community facilities and transit.

Local government policies and programs would work in concert to encourage more complete and economically self-sufficient communities, where residents can live, work, and shop in the same community.

The Distinctive Communities scenario is projected to have a total of 266,925 vehicle trips with a population of 80,000 residents with an average trip length of 11.08 miles and a total of 2,958,727 VMT.

Under this scenario, emissions will decrease by 9.7 percent (from 782,846 MT CO₂e to 707,138 MT CO₂e) with a population of 66,000 residents and 4.1 percent (from 782,846 MT CO₂e to 750,928 MT CO₂e) with a population of 73,000 residents and increase by 4.9 percent (from 782,846 to 821,107 MT CO₂e) with a population of 80,000 residents. The decreases from the current population to a population of 73,000 are attributed to state level reductions, despite growth

in population and employment. The increase in total emissions by a population of 80,000 residents is attributed to overall population and employment growth, where eventually the decreases due to state level measures are outweighed by population and employment growth. Similar to the other scenarios, the initial decrease in emissions from the current population levels is the result of implementation of state-level regulations, including the Renewable Portfolio Standard, Low Carbon Fuel Standards, and Pavley regulations.

Table 7 – Distinctive Communities Emissions Forecast

Population	59,000	66,000	73,000	80,000	% Change
MT CO₂e	782,846	707,138	750,928	821,107	4.9%

Table 8 – Comparison of Alternative Scenarios with Guiding Principles

GUIDING PRINCIPLES	RECENT TRENDS	PUBLIC SERVICES	DISTINCTIVE COMMUNITIES
<p>1. Provide for an adequate supply of housing opportunities and choices.</p> 	<ul style="list-style-type: none"> Provides sufficient land for all land use categories except Residential Medium Low and Residential Low. 	<ul style="list-style-type: none"> Provides a mix of multifamily, townhouses, and traditional neighborhoods. 	<ul style="list-style-type: none"> Provides a mixture of residential housing types near each other within urban development boundaries.
<p>2. Create safe, healthy, walkable and vibrant communities.</p> 	<ul style="list-style-type: none"> Walkability exists only within community cores. 	<ul style="list-style-type: none"> Walkability exists near transit stations and community cores. 	<ul style="list-style-type: none"> Walkability and bicycling exists within urban development boundaries.
<p>3. Promote distinctive, attractive communities with a strong sense of place.</p> 	<ul style="list-style-type: none"> Community boundaries become blurred. 	<ul style="list-style-type: none"> Community boundaries may become blurred along State Highways and transportation corridors. 	<ul style="list-style-type: none"> Community boundaries are buffered by rural development promoting distinct communities.
<p>4. Increase the quantity of Mixed Use land uses.</p> 	<ul style="list-style-type: none"> Mixed-Use land uses remains the same as today. 	<ul style="list-style-type: none"> Mixed-Use land uses will increase near transit stations and community cores. 	<ul style="list-style-type: none"> Mixed-Use land uses will increase within urban development boundaries.
<p>5. Minimize impacts to natural resources.</p> 	<ul style="list-style-type: none"> Potential impacts to natural resources are not addressed. 	<ul style="list-style-type: none"> Potential impacts to natural resources adjacent to community boundaries occurs from the conversion of General Plan land use designations. 	<ul style="list-style-type: none"> Potential impacts to natural resources and agricultural land are preserved outside of defined communities.
<p>6. Provide a variety of transportation choices.</p> 	<ul style="list-style-type: none"> Transportation choices remains the same as today. 	<ul style="list-style-type: none"> Transportation choices, walking, bicycling, transit, passenger rail, and park-and-ride, increase greatly. 	<ul style="list-style-type: none"> Transportation choices, walking, bicycling, transit, passenger rail, and park-and-ride, increase but not to the extent of Public Services.
<p>7. Reduce the region's greenhouse gas emissions.</p> 	<ul style="list-style-type: none"> Greenhouse gas emissions are not reduced. 	<ul style="list-style-type: none"> Greenhouse gas emissions are reduced through an increase in transit ridership. 	<ul style="list-style-type: none"> Greenhouse gas emissions are reduced greatly due to clustering within communities.
<p>8. Make development decisions predictable, fair and cost effective.</p> 	<ul style="list-style-type: none"> Cost of development remains the same as today. 	<ul style="list-style-type: none"> Cost of development decreases due to concentrating development around transit corridors and community cores. 	<ul style="list-style-type: none"> Cost of development decreases due to clustered communities.
<p>9. Provide for an adequate supply of commercial, industrial, recreational and tourism uses</p> 	<ul style="list-style-type: none"> Provides sufficient land for all land use categories. 	<ul style="list-style-type: none"> Provides sufficient land for all land use categories near transit corridors and stations. 	<ul style="list-style-type: none"> Provides sufficient land for all land use categories near each other within urban development boundaries.

Several UPLAN model runs were conducted for each growth scenario. The Alternative Growth Scenarios were evaluated based on Performance Measures, such as land use patterns, transportation options, economic development opportunities, greenhouse gas emissions, agricultural land consumption, and habitat protection.

Table 9 – Comparison of Alternative Growth Scenarios with Performance Measures

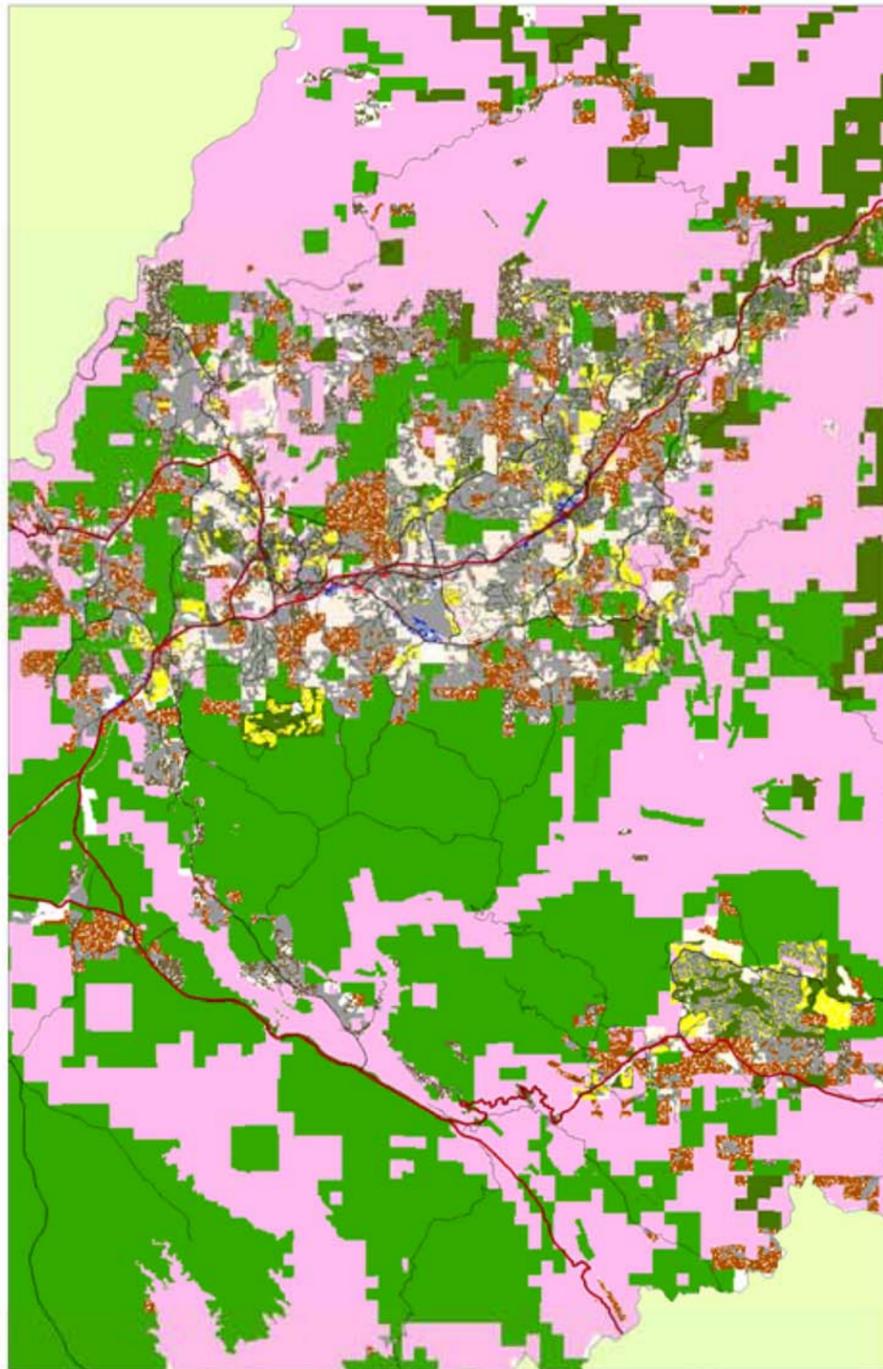
PM ID	Performance Measure	Recent Trends Results	Public Services Results	Distinctive Communities Results
1	Proximity of growth to Infrastructure	4,667 Dwelling Units	7,253 Dwelling Units	6,240 Dwelling Units
		326 acres Commercial, Industrial & Business Park	339 acres Commercial, Industrial & Business Park	315 acres Commercial, Industrial & Business Park
2	Growth within Defined Communities	7,384 Dwelling Units	9,798 Dwelling Units	10,472 Dwelling Units
		289 acres Commercial	209 acres Commercial	293 acres Commercial
3	Growth within existing urban areas	6,978 Dwelling Units	9,243 Dwelling Units	9,928 Dwelling Units
4	Growth affecting surrounding lands	3,105 Dwelling Units	3,964 Dwelling Units	2,783 Dwelling Units
5	Dense Residential Growth in Proximity to Amenities	428 Dwelling Units	1,136 Dwelling Units	1,234 Dwelling Units
6	Proximity to workplaces and shopping	2,572 Dwelling Units w/in 1/4 mile	4,177 Dwelling Units w/in 1/4 mile	4,322 Dwelling Units w/in 1/4 mile
		4,521 Dwelling Units w/in 1/2 mile	6,454 Dwelling Units w/in 1/2 mile	5,730 Dwelling Units w/in 1/2 mile
7	Growth near Transportation Alternatives	2,881 Dwelling Units	4,397 Dwelling Units	4,226 Dwelling Units
		4,900 New Residents	7,479 New Residents	8,379 New Residents
		7,305 New Employees	7,233 New Employees	7,333 New Employees
8	Miles driven	2,961,690 VMT Countywide (37.024 VMT Per Capita)	2,953,739 VMT Countywide (36.925 VMT per Capita)	2,958,727 VMT Countywide (36.987 VMT Per Capita)
9	Traffic congestion	27.1 Miles of Level of Service (LOS) E and F	27.1 Miles of Level of Service (LOS) E and F	27.1 Miles of Level of Service (LOS) E and F
10	Greenhouse Gas Emissions	4.9% increase in emissions by population 80,000	4.8% increase in emissions by population 80,000	4.9% increase in emissions by population 80,000
11	Growth impacts to wildlife habitat	Impacts to Moderate Value Habitat – 3,188 acres	Impacts to Moderate Value Habitat – 2,544 acres	Impacts to Moderate Value Habitat – 2,372 acres
		Impacts to High Value Habitat – 1,371 acres	Impacts to High Value Habitat – 837 acres	Impacts to High Value Habitat – 731 acres

Legend		
Very Desirable	Undesirable	Most Undesirable

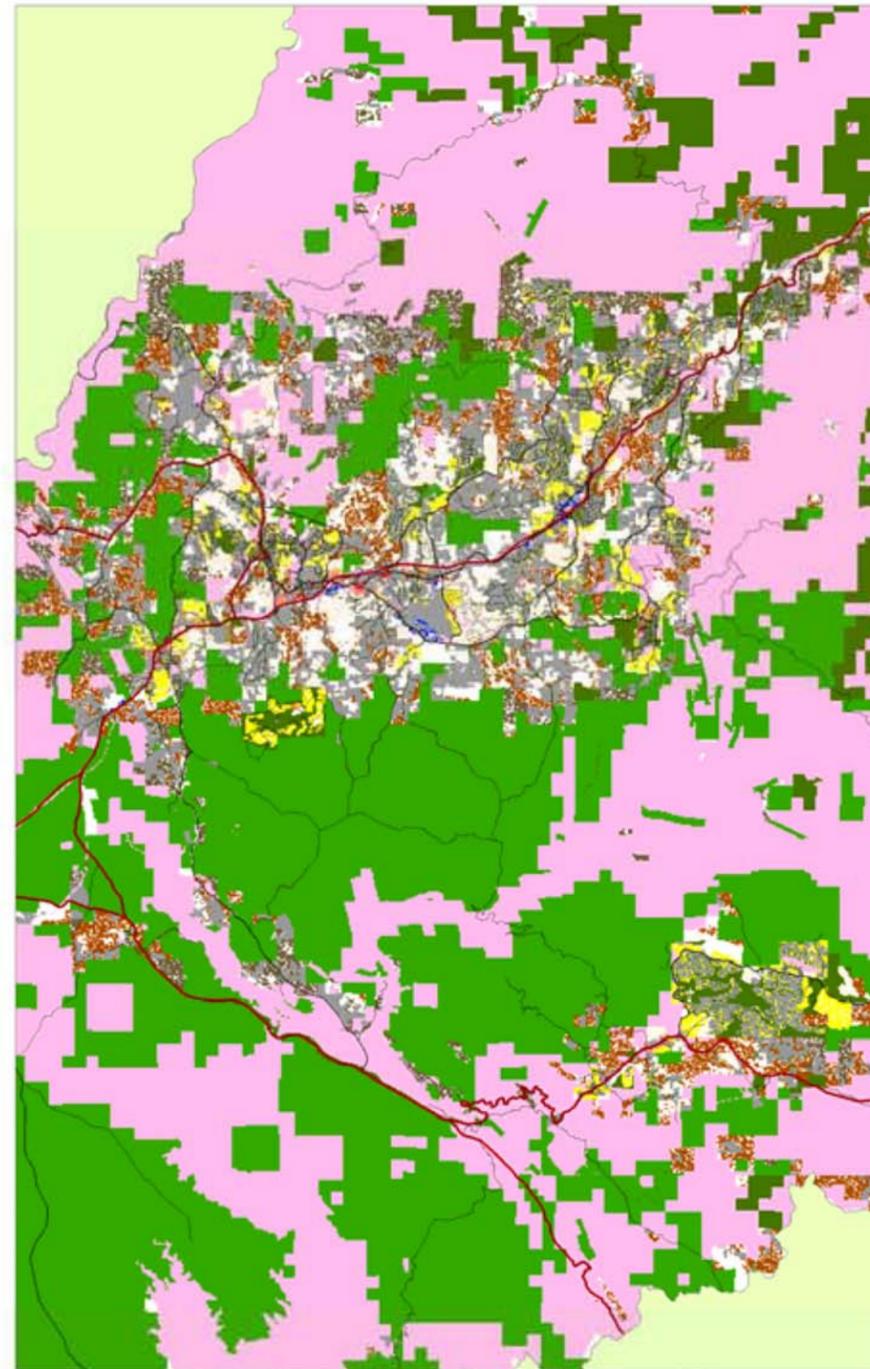
Table 9 indicates that the Distinctive Communities Alternative was the most desirable scenario when compared to the Recent Trends and Public Services Alternative growth scenarios based on the evaluation of the Performance Measures. Although the Distinctive Communities Alternative did not place as much growth in proximity of infrastructure, when compared to the Public Services Alternative, it was the most desirable alternative in regards to placing growth within defined communities, providing growth in existing urban areas, impacting the least amount of surrounding lands, providing growth near transportation alternatives and impacting wildlife habitat the least. The Public Services Alternative was the second desirable scenario and the Recent Trends Alternative was the least desirable scenario based on how the alternative growth scenarios related to the adopted Performance Measures.

Figure 2 shows the mapping results of the Recent Trends, Public Services and Distinctive Communities Alternative Growth Scenarios for Tuolumne Tomorrow. All three scenarios are based on the same, existing General Plan, although the alternative scenarios are based on different density and distribution of new development while accommodating the same population growth of 80,000 persons.

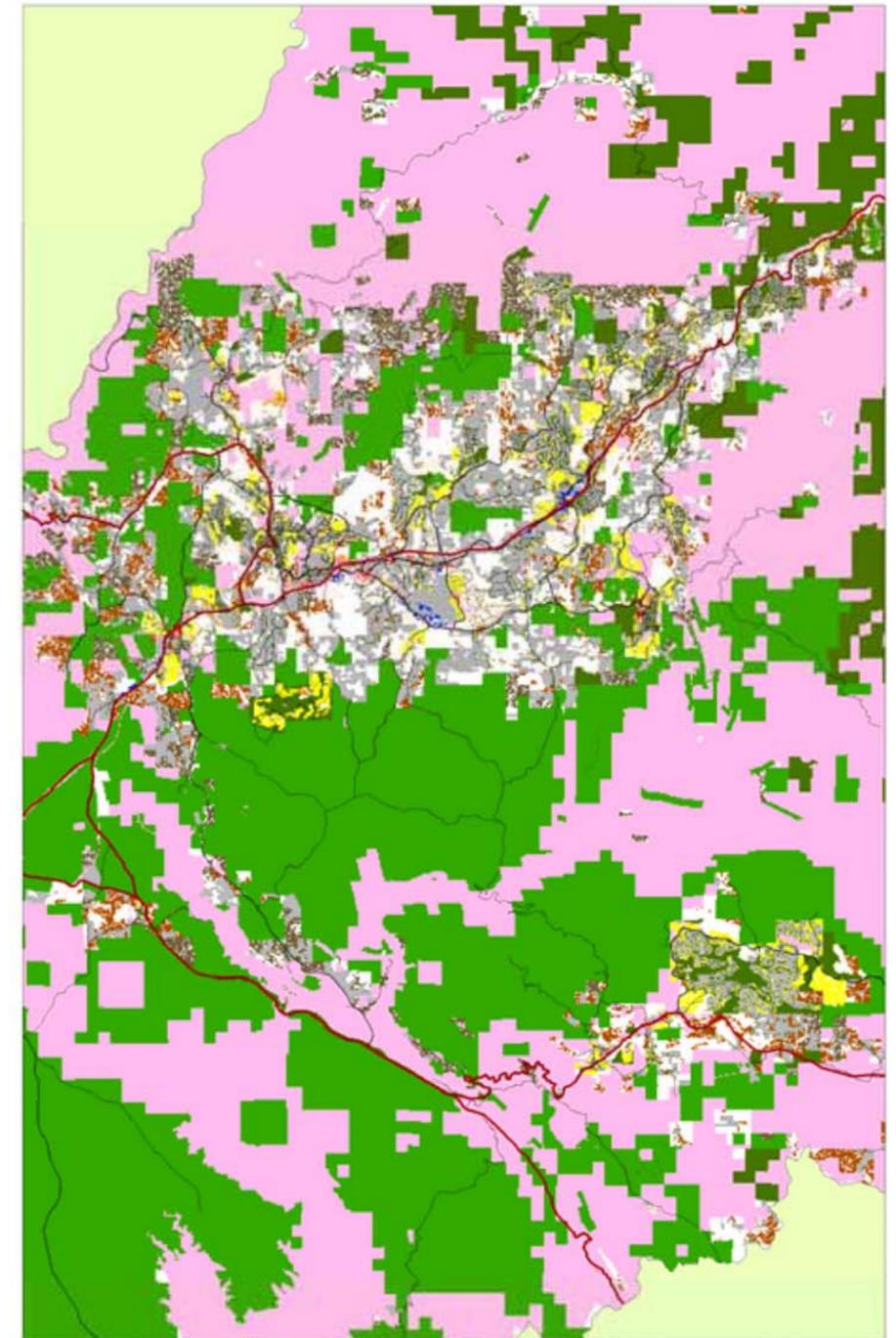
Figure 2 – Comparison of Recent Trends, Public Services and Distinctive Communities Scenarios
At end of Model Period (Population increased to 80,000)



Recent Trends Alternative



Public Services Alternative



Distinctive Communities Alternative

Greenhouse Gas

As part of the Blueprint project, TCTC received a grant to hire a consultant to conduct a County-wide baseline greenhouse gas study and to evaluate and compare greenhouse gas emissions for each Alternative Growth Scenario. Greenhouse gas emission reductions are required by AB32. California has set the target of cutting greenhouse gas emissions in 2020 back to year 1990 levels. A County-wide greenhouse gas study was prepared to establish a baseline and to quantify and evaluate each Alternative Growth Scenario's greenhouse gas emissions.

The Greenhouse Gas Study conducted a baseline study on current (2010) greenhouse gas (GHG) emissions. These emissions totaled 782,846 metric tons of carbon dioxide equivalent greenhouse gas emissions.

Emissions forecasts for the three Alternative Growth Scenarios were completed for three population projections, 66,000, 73,000, and 80,000, in order to compare Recent Trends and the Alternative Growth Scenarios, and assist in the decision process for selecting the Preferred Growth Alternative. The forecasts were derived by projecting emissions from the 2010 baseline using growth factors specific to each of the emissions sectors. All three forecasts account for state-level regulations that will affect Tuolumne County's emissions, including the Renewable Portfolio Standard, Low Carbon Fuel Standard, and Pavley I and II.

As shown in the previous tables, the Recent Trends scenario is projected to result in the greatest amount of GHG emissions with a population of 80,000 residents (821,586 MT CO₂e) compared to the two alternative growth scenarios. By continuing current development patterns, minimal mixed land use is likely to occur, resulting in few walkable communities thus perpetuating auto-dependency within Tuolumne County. In addition, continued focus on Residential Low and Residential Medium Low development is likely to result in a gradual blurring of communities as developments sprawl outward.

The Public Services scenario is projected to result in the lowest amount of GHG emissions with a population of 80,000 residents (820,300 MT CO₂e) among the three scenarios. Specifically, this scenario projects 1,286 fewer MT CO₂e than the Recent Trends scenario and 807 fewer MT CO₂e than the Distinctive Communities scenario when a population of 80,000 residents is reached. Compared to the Recent Trends scenario, this alternative would result in fewer GHG emissions because it allocates new development at higher densities along transit corridors where services and public facilities exist within walking distance. This scenario also makes public transportation services, including passenger rail, a more likely possibility. As a result, this scenario produces a shorter average trip length and greater use of alternative transportation modes (transit, walking, bicycling, and carpools) compared to the other two scenarios, which results in fewer vehicle miles traveled (VMT) and associated GHG emissions.

The Distinctive Communities scenario is projected to result in 479 MT CO₂e fewer GHG emissions than the Recent Trends scenario and 807 MT CO₂e more GHG emissions than the Public Services scenario. This scenario projects fewer GHG emissions than the Recent Trends scenario because it allocates more pronounced land use growth in or near the relatively-urbanized, high-density population centers such as the City of Sonora, and encourages more economically self-sufficient areas where residents can live, work, and shop, all within their own community. As with the Public Services scenario, more compact development creates more transit opportunities and justifies the development of other transportation services, including passenger rail. As a result, this scenario results in an average trip length (11.08 miles) that is

shorter than the Recent Trends scenario (11.16 miles), but slightly longer than the Public Services scenario (11.03 miles), and results in greater use of alternative transportation modes (transit, walking, bicycling, and carpools) than the Recent Trends scenario. This results in fewer vehicle miles traveled (VMT) and GHG emissions.

Figure 1: GHG Emissions Forecasts by Growth Scenario (by population)

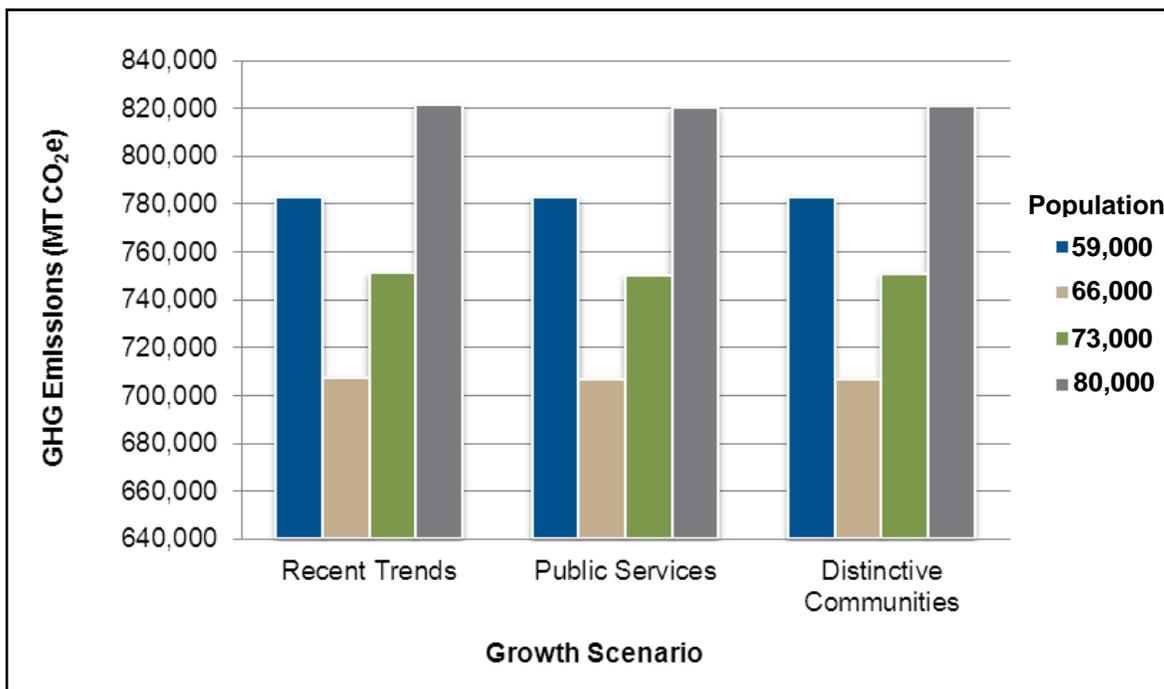


Table 10 – Comparison of Growth Scenarios' GHG Emissions Forecasts

Growth Scenario	59,000 Population (MT CO ₂ e)	66,000 Population (MT CO ₂ e)	73,000 Population (MT CO ₂ e)	80,000 Population (MT CO ₂ e)	% Change (59,000 to 80,000)
Recent Trends	782,846	707,321	751,257	821,586	4.9%
Public Services	782,846	706,831	750,374	820,300	4.8%
Distinctive Communities	782,846	707,138	750,928	821,107	4.9%

Community Awareness and Engagement: Public Outreach

One of the goals of the Tuolumne Tomorrow Regional Blueprint process was to assist in creating a long-range vision for growth in Tuolumne County and the City of Sonora. With the County's population expected to increase by as many as 21,000, the decisions made as a community today will determine the resources available to future generations. Public involvement is the key to a successful Blueprint Plan. The Tuolumne Tomorrow project offered a wide variety of opportunities for residents to voice their opinions, offer suggestions and identify priorities.

The Tuolumne Tomorrow Regional Blueprint Planning process included two rounds of public workshops, each taking place at different stages of the project. The first round of workshops was held during the week of February 14, 2011, and was intended to introduce the public to the project and gauge community desires regarding growth. The workshops allowed residents to gain a regional perspective regarding their common assets and discuss how local planning issues related to the region. The workshops set the stage by providing an introduction to Blueprint Planning goals, objectives, and public outreach. The first round of workshops raised awareness about Tuolumne Tomorrow throughout the community and identified local values and priorities. The workshops were held in five communities throughout Tuolumne County: Jamestown, Groveland, Twain Harte, Tuolumne and Sonora. A presentation was given at a Board of Supervisors meeting to familiarize the Board with the project.

A PowerPoint presentation was given at each workshop (either projected on a screen, printed, or both). Each session began with an introduction of the project team wherein Tuolumne County Transportation Council and County staff was introduced. The presentation was designed as a two-part session. The first half gave a broad overview of the project and ended with a brief discussion-period. After a short intermission, the presentation continued with more detailed information regarding the UPlan model and how various data inputs were developed. The meetings concluded with open discussion regarding the project, with staff answering questions and addressing any concerns related to the project.

The following is a brief description of each of the first round community workshops:

Groveland Community Hall

The first public meeting was held Monday, February 14, 2011 at the Groveland Community Hall from 1:00 pm to 4:00 pm. Approximately 15 residents attended, most of whom were senior citizens.

Elks Lodge

The second meeting took place on Tuesday, February 15, 2011 at the Elks Lodge in Sonora. The workshop ran from 1:00 pm to 4:00 pm, and was attended by about 25 persons. Discussion topics raised by community members ranged from a desire to limit government's role in local decision-making to a need for the process to account for peak oil and alternative modes of transportation. Three of the attendees were retired or not currently in the workforce, and remained relatively neutral with regards to the project. One individual expressed their support for long term planning efforts as a whole and emphasized an interest in reducing vehicle miles traveled within Tuolumne County.

Jamestown Elementary

On the evening of February 15, 2011, a third meeting was held in a classroom at Jamestown Elementary School and was attended by three local residents. The discussion was primarily focused on issues affecting seniors in Tuolumne County. Participants made clear the need for land use and transportation decisions to account for the needs of the County's aging population (i.e., homes closer to services, communities designed for those who can no longer drive, etc.).

Veteran's Memorial Hall

The fourth meeting was held on the evening of Wednesday February 16, 2011 at Veteran's Memorial Hall in Tuolumne. Eight residents attended, ranging from students to local business owners, all of whom were generally supportive of the process. Discussion focused on the impact the Blueprint process may have on the General Plan and Regional Transportation Plan as well as

how policy makers are involved in the Blueprint process. Community members present at the meeting expressed a desire for enhanced transportation connections and improved walkability and also made clear they were pleased the community was being involved early in the process.

Association of Realtors

The morning of February 17, 2011 a presentation was given to the Association of Realtors. This workshop took on a more free-form discussion of the Tuolumne Tomorrow process because those in the Real Estate industry already had a working knowledge of some of the key ideas related to Blueprint Planning. Participants expressed a great deal of support for the process and embraced the fact it allowed policy-makers to plan ahead for inevitable growth in the County. Participants provided industry insight regarding current housing market trends, and offered their assistance in subsequent project efforts.

Twain Harte Elementary

The final community workshop took place on the evening of February 17, 2011 in the Twain Harte Elementary cafeteria. Three residents showed up as a result of poor local weather conditions, two were with the Central Sierra Environmental Resource Center (CSERC) and one was a local real estate broker. Discussion related primarily to environmental impacts, avoiding urban sprawl and providing increased access to public transportation.

The first series of community workshops were generally well received. Despite some concerns related to increased government intervention, residents were open to the Tuolumne Tomorrow project. Attendees provided excellent insight into their personal vision for a future Tuolumne, and many expressed an interest in aiding in future project efforts. The second series of workshops were scheduled for the week of April 30, 2012, and took a more participatory approach as residents were asked to express their opinions regarding the three Alternative Growth Scenarios and to select a Preferred Growth Scenario. The second series of workshops were held in five locations as follows:

- Monday, April 30th – Sonora Elks Lodge from 4:00 pm to 6:00 pm.
- Tuesday, May 1st – Tuolumne Memorial Hal from 6:00 pm to 7:30 pm.
- Wednesday, May 2nd – Groveland Community Hall from 1:00 pm to 3:00 pm.
- Thursday, May 3rd – Eagle Cottage in Columbia from 3:00 pm to 5:00 pm.
- Tuesday, June 5th – Tuolumne County Board of Supervisors meeting at 1:30 pm.

Presentations were also provided to the Building Industry Association of Tuolumne County President, Tuolumne County Business Council Director, Tuolumne County Chamber of Commerce and the Tuolumne County Association of Realtors.

A PowerPoint presentation was given at each workshop. Each session began with an introduction of the project team wherein TCTC and County staff were introduced. The presentation was designed as a two-part session. The first part gave a broad overview of the Blueprint and ended with a discussion of the three Alternative Growth Scenarios: Recent Trends, Public Services and Distinctive Communities. During the intermission, the public were provided green, yellow and red dots to be placed on their Preferred Growth Scenario, second choice scenario and the scenario they rejected.

After the public voted on their Preferred Growth Scenario there was an open discussion of the “likes” and “dislikes” for each Scenario. Overwhelmingly all the participants stated they did not “like” anything regarding the Recent Trends Alternative. “Dislikes” of the Recent Trends

Alternative included: (1) sprawl; (2) depletes resources; (3) prone to fire hazards; (4) inefficient; and (5) does not provide walkable communities.

Input on the “likes” of the Public Services Alternative included: (1) better utilization of transit and services; (2) serves the senior population best; and (3) provides more efficient use of the existing infrastructure. “Dislikes” of the Public Services Alternative included: (1) growth pattern is less accommodating; (2) creates sprawl development; and (3) infrastructure should not be the driver for growth.

The Distinctive Communities Alternative “likes” included: (1) builds upon sense of community and preserves community identity; (2) conserves energy/resources; (3) creates walkable and bikeable communities; (4) financial viability; (5) attractive to younger generations; and (6) is in line with the new real estate market. The only “dislike” of this Alternative was that implementation may be difficult.

In addition to the presentations provided, the Tuolumne County Transportation Council received a letter from Thomas Parrington, a County resident, regarding the Tuolumne Tomorrow Alternative Growth Scenarios. The letter indicated future growth should be directed to preserve the County’s rural character and its natural resources. The author of the letter indicated a preference for the Distinctive Communities Alternative growth scenario for future growth, and said the concept of growth concentrated around already developed communities was the most desirable choice to preserve the beauty and historic character of the unique foothill viewshed of Tuolumne County. The letter stated that an advantage of concentrating growth within an established community is the feasibility of providing water and sewer service in an economical manner. The author concludes that the Distinctive Communities Alternative also provides the greatest reduction to impacts on moderate and high value habitat.

Based on the public participation at the workshops, the Distinctive Communities Alternative was the Preferred Growth Scenario. The Recent Trends Alternative was almost unanimously rejected by the workshop participants.

Consensus Building: Preferred Growth Scenario

The Blueprint Policy Advisory Committee considered the three Alternative Growth Scenarios at its August 13, 2012 meeting. After evaluating input from the Public Outreach Workshops, the Committee adopted the Distinctive Communities Alternative growth scenario as the Preferred Growth Scenario for Tuolumne Tomorrow. This action officially concluded the Tuolumne Tomorrow Blueprint Planning Process and set the stage for the transition to implementation of the Blueprint project. The Preferred Growth Scenario will serve as a guideline for the City of Sonora and the County of Tuolumne as they update their General Plans to guide future growth.