



COMPLETE COMMUNITIES RESEARCH SUMMARY

COUNTY OF SAN LUIS OBISPO

MARCH 7, 2012

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PREFACE

Building Community

Building a community requires both private and public investment. This Research Summary explores the public infrastructure and facilities that are needed to make a community complete, such as water and sewer systems, drainage facilities, sidewalks, transit, parks, libraries and other public facilities. It includes a look at past research, case studies, and examples of how communities have planned and paid for capital improvements. It also identifies the characteristics that can support an equitable balance between land uses, transportation and employment.

Private development depends upon market demand and the supply of developable land, which is affected by public decisions on the general plan, zoning and adequate infrastructure and public facilities. Community development, on the other hand, is broader in scope and depends on public investment in facilities. Thus, coordination is important between public facilities, zoning and market forces in order to create vibrant economic growth, a complete community and a high quality of life.

This Research Summary is the first report of the Complete Communities Survey, a project involving the communities of Nipomo, Oceano, San Miguel, and Templeton. The Survey takes a strategic approach to identify enhanced and/or additional facilities that will be needed to support a high quality of life as growth occurs. The Survey will estimate the costs of the needed facilities and identify realistic financing options. The major tasks in this project include the following:

- 1. Communities Research Summary [completed].** The Planning Center/DC&E prepared this analysis of past research, case studies and examples of community-focused growth and planning for complete communities. The detailed summary of findings describes the range of facilities that promote strategically planned, livable and walkable communities. The findings will guide the following facilities inventory.
- 2. Facilities Inventory.** Rick Engineering will prepare an overview and inventory of the status and general condition of community facilities. The inventory will include a detailed description, together with maps,

of how complete the needed facilities are. Rick Engineering will then identify and categorize key areas for their physical condition. They will then estimate the costs of providing needed facilities.

- 3. Funding and Financing Plan.** A second consulting firm, EPS, will assemble a preliminary Community Capital Improvement Program, which relates the estimated facility costs to existing development and new growth. EPS will then identify the funding sources and related financing mechanisms available for capital improvements and related operations and maintenance costs, taking into account political and financial feasibility. EPS will prepare an action plan outlining the steps, funding sources and financing mechanisms that can be implemented by the responsible agencies and districts.
- 4. Community Profiles.** The Planning Center - Design, Community and Environment will prepare a Community Profile for each community. This is the final product that will describe existing conditions, summarize the facilities inventory, and identify an implementation scenario and applicable funding strategies. The Community Profile will also provide phasing recommendations and identify how zoning, development standards and other regulations might be changed to achieve additional benefits.

We encourage you to make comments and suggestions and attend workshops and meetings as they are announced. Contact Brian Pedrotti at bpedrotti@co.slo.ca.us or call 781-5600 to make comments and/or be added to the mail list. Workshops will be held in summer 2012--one in the North County to address preliminary findings for San Miguel and Templeton, and one in the South County to address Nipomo and Oceano. We also encourage you to tell people within your community about this project.

More information is available online at <http://www.sloplanning.org>.

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COMPLETE COMMUNITIES RESEARCH SUMMARY

A complete community is one that has adequate public infrastructure and facilities, and land use policies which balance the social, economic, health and safety needs of its residents. This research summary report discusses each of these features in detail, focusing primarily on how each one is critical to the creation of complete communities.



The County of San Luis Obispo has adopted land use policies which are intended to direct future growth and development towards existing urban areas, in order to conserve land and agricultural resources elsewhere. They can create beneficial land use and transportation relationships, concentrate economic activity, and allow for efficient delivery of services and utility infrastructure. A key policy states that the County should “create complete communities with appropriate areas for housing, commerce, civic uses, schools, recreation, and open spaces.”¹

To support this policy direction, the County has embarked on the Complete Communities Survey project, which will identify the capacity and conditions of existing community features, assess future needs given projected growth, and provide recommendations for funding identified improvements. As a first step in this process, this Research Summary describes community features that are essential in the creation of a complete community, and it provides a list of references for further information regarding complete communities planning.



A. Complete Community Features

Table 1 below lists the community features that are necessary to facilitate new growth and to help make existing towns more pleasant places in which to live, work and play. The table consists of

¹ County of San Luis Obispo, 2009, *Land Use Element, Framework for Planning, Planning Principle 2, Policy 4*, p. 1-11.

four major categories: infrastructure, transportation, public facilities, and zoning balance. This section provides detailed descriptions of the components that make up each feature and their relative importance in achieving a complete community.

TABLE 1 COMPLETE COMMUNITY FEATURES

Utility Infrastructure	Transportation
Water Supply	Street & Highway System
Water	Pedestrian Circulation System
Wastewater	Bicycle Infrastructure
Stormwater	Public Transit System
Solid Waste	Park & Ride Lots
Communication Systems	

Public Facilities	Zoning Balance
Public Parks and Open Space	Zoning for Walkability
Schools	Commercial Mix & Access to Fresh Food
Community/Civic Facilities	Job-Creating Uses
Social Services	Diverse and Affordable Housing Opportunities
Public Safety Services and Buildings	Zoning for Economic Benefits
	Community Design and Density

1. Utility Infrastructure

Utility infrastructure is generally not as visible as some other features but is absolutely critical to a community’s quality of life and its ability to support new growth. This section describes the components of utility infrastructure, including water supply and water, wastewater, stormwater, solid waste, and communication systems.

a. Water Supply

Supplying fresh water is a critical issue for any community, and particularly in San Luis Obispo County, where water supply is paramount. Water supply sources provide appropriate quantities of water that are available consistently, ensuring safe and equitable access to water for drinking, cooking, personal and domestic hy-

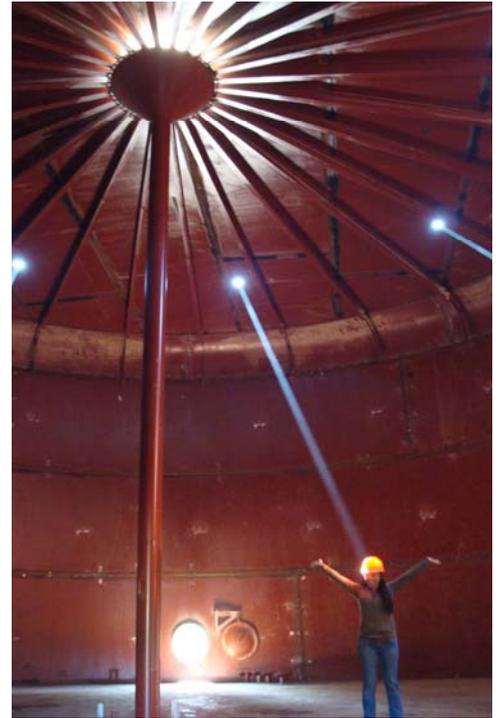
giene, and agriculture. Given population growth, climate change, and changes in flooding and drought patterns, securing a sustainable long-term water supply has become a critical and challenging issue.

Sustainable growth means development that meets the needs of the present generation without compromising the needs of future generations.² In San Luis Obispo County, which has a limited water supply, managing a sustainable water supply is essential. Water is a reusable resource and implementation of water management practices, such as reclamation, rainwater harvesting, and gray-water reuse, will help achieve a sustainable water supply. The County has estimated that water demand from conventional growth in 2030 would be about eight percent greater than if development is designed with smaller yards and lawns.³

b. Infrastructure Systems

Complete communities are only possible if adequate infrastructure systems are in place to serve them, including water, wastewater, and stormwater. Development patterns that use land efficiently can save expenses for infrastructure compared with infrastructure investments that would require significant extensions to large parcels or areas outside of existing urban communities.

- ◆ Several studies have found that compared with lower average suburban densities, development that uses land more efficient-



² Electric Power Research Institute, *Sustainable Water Resources Management, Volume 3: Case Studies on New Water Paradigm*, January 2010, <http://www.ndwrcdp.org/documents/DEC6SG06a/Case%20Studies%20on%20New%20Water%20Paradigm.pdf>, accessed on January 20, 2012.

³ County of San Luis Obispo, 2009, *Growth Assessment: Comparing Conventional and Strategic Growth*.

⁴ U.S. Environmental Protection Agency, 2010, *Local Government Climate and Energy Strategy Guides: Smart Growth*, http://www.epa.gov/statelocalclimate/documents/pdf/smart_growth_guide.pdf, accessed on December 28, 2011.

ly can result in a 25 to 27-percent savings in water and wastewater infrastructure costs.⁴

- ◆ Another study found that costs per household were less than half with more efficient growth development patterns.⁵

To facilitate development that results in efficient infrastructure, County land use policies encourage a range of building design that includes a more compact form, giving high priority to funding infrastructure improvements within urban areas.⁶ This policy directly supports the creation of complete communities in San Luis Obispo County with respect to infrastructure conveyance systems.

- ◆ **Water Conveyance Systems.** In addition to water supply discussed above, water distribution systems must be in place to transfer fresh water from water supply sources to consumers, including residential, industrial, commercial, and agricultural uses, and other usage points, such as fire hydrants. A complete community must have adequate water infrastructure in place to support daily human activities, local economic activity, and to ensure public safety.

- ◆ **Wastewater Systems.** Wastewater systems include sewers, wastewater treatment, and water reclamation plants. Wastewater, such as sewage, industrial waste, or other liquid substances discharged by domestic residences, commercial properties, or industry, is carried in sanitary sewers to wastewater treatment facilities. Wastewater treatment systems collect water from sewers and remove chemicals and



⁴ U.S. Environmental Protection Agency, 2010, Local Government Climate and Energy Strategy Guides: Smart Growth, http://www.epa.gov/statelocalclimate/documents/pdf/smart_growth_guide.pdf, accessed on December 28, 2011.

⁵ Litman, Todd, 2004, Understanding Smart Growth Savings, http://www.vtpi.org/sg_save.pdf, accessed on December 28, 2011.

⁶ County of San Luis Obispo, 2009, *Land Use Element, Framework for Planning, Planning Principle 8, Policy 1, p. 1-16, and Planning Principle 2, Policy 9, p. 1-12.*

other contaminants, so that the wastewater can be safely released back into the environment.

To support and preserve water quality in the County, installing and maintaining an adequate wastewater system is critical. Without a proper wastewater system, sewage may drain directly into major watersheds without treatment. The untreated sewage can have serious impacts on the quality of the environment and the health of the community.

- ◆ **Stormwater Systems.** Stormwater systems improve water quality by managing water runoff, particularly from wet weather events. In urban areas, which consist of many impervious surfaces such as parking lots and roads, providing adequate stormwater systems is critical in conveying runoff to local streams or watersheds. The runoff often picks up pollutants, such as heavy metals, gas, and oil, along the way to the nearest ditch, culvert, storm drain, and stream. In addition, uncontrolled stormwater can erode stream banks and result in flooding.



Complete communities need to provide stormwater systems for preventing flooding and conveying stormwater off of properties and streets. Stormwater management features should also be prioritized in new development to reduce strain on existing stormwater conveyance systems to the extent feasible. Low-Impact Development (LID) is a stormwater management strategy that seeks to mitigate the impacts of increased runoff and stormwater pollution. Through LID practices, new development can successfully minimize impervious surfaces, allowing stormwater to be released back into the soil. Moreover, LID practices can be fiscally beneficial to communities. Case studies have demonstrated that total capital cost savings ranged from 15 to 80 percent less when LID methods were used.⁷ The savings were achieved because of reduced costs

⁷ EPA, Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices, EPA publication number 841-F-

for site grading and preparation, stormwater infrastructure, site paving, and landscaping.

c. Solid Waste

Solid waste collection systems must be in place to support increased numbers of households and businesses in the county. Solid waste systems include collection, transfer, and disposal of residential and commercial solid waste and recyclables. A complete community must have agreements and methods in place to ensure safe transfer of materials to appropriate landfills or recycling centers. To conserve land resources and reduce impacts on landfills, recycling should be heavily encouraged in the county's communities.

d. Communication Systems

Providing communication, information, and data system networks throughout a community is essential to achieving a complete community. Communication systems include internet and cell-phone systems, which both require transmission infrastructure. Vital to economic growth, such technology infrastructure should be integrated into community planning. Given the growing needs for construction of communications towers, several communities such as Mt. Vernon, Washington and Blacksburg, Virginia set forth basic regulations, plans or ordinances to address location, safety and aesthetics for wireless communications towers.⁸

Data resources provide access to information and education for residents. For instance, better information access can facilitate searching for jobs or housing for the county's residents. To provide telecommunication access to areas not served by private providers, several communities developed a comprehensive in-

07-006, December 2007, <http://www.epa.gov/owow/NPS/lid/costs07/>, accessed on January 20, 2012.

⁸ Charles H. Kaylor and Christopher Steins, Today's Scheme for Tomorrow's Technology, <http://www.urbaninsight.com/articles/planmag0704.html>, accessed on January 31, 2012.

ventory, needs assessment, and a plan for expanding municipal telecommunications utilities.⁹ Free internet access, including Wi-Fi (wireless internet access), in public spaces and community facilities such as libraries, can benefit local residents including low-income households who may not be able to afford private internet access.

2. Transportation

Transportation infrastructure, including vehicular, bicycle, pedestrian, and transit, is essential to achieving a complete community in urban areas of the San Luis Obispo County. Transportation networks increase mobility for residents, support local economies, and are critical to defining the urban character of a community. Complete communities provide viable alternatives to driving for local residents through efficient street and highway systems, adequate pedestrian circulation systems, bicycle amenities, and transit options. County policies encourage a variety of transportation choices to reduce the need to drive, to minimize air pollution and save energy.¹⁰ This section describes the components of the transportation infrastructure system and how each component helps to create complete communities.



a. Street and Highway System

In most places, and in particular in San Luis Obispo County, auto travel and vehicular traffic are inevitable elements of daily life and have an enormous impact on urban form and community character. Street and highway systems provide connections to regional destinations, jobs, and services. Also, local streets create the framework within which the built environment is formed, including how new development is accommodated within existing urban areas. Streets and highways are critical to achieving complete

⁹ Charles H. Kaylor and Christopher Steins, Today's Scheme for Tomorrow's Technology, <http://www.urbaninsight.com/articles/planmag0704.html>, accessed on January 31, 2012.

¹⁰ County of San Luis Obispo, 2009, *Land Use Element, Framework for Planning, Planning Principle 5*, p. 1-15.

communities, and an interconnected street system will help to achieve numerous goals for each community as growth occurs.

Specifically, a well-connected street system can help provide the framework for a walkable neighborhood and can also reduce automobile trips, which together can result in the following:¹¹

- ◆ Reduced arterial traffic volumes because more trips remain internal to neighborhood street system.
- ◆ Less need for arterial streets widening.
- ◆ Higher levels of walking and bicycling
- ◆ Lower speeds with reduced accident severity.
- ◆ Lower vehicle miles traveled.

b. Pedestrian Circulation Systems

Sidewalks and pedestrian amenities are critical components of complete communities. Streetscape enhancements, including bulb-outs, safe pedestrian street crossings, street lighting, benches, trash cans, and improved bus stop amenities, are all critical to creating walkable communities.

Improved pedestrian facilities result in safer streets, more connected land uses, and better accessibility for children, the elderly, and the disabled.¹² Sidewalks and pedestrian walkways in and around school zones increase the sense of safety for parents and students and increase the likelihood of students walking to and from schools. Research has found that enlarging sidewalks and installing medians and crosswalks can reduce traffic accidents



¹¹ Fehr & Peers Associates, Inc. Traditional Neighborhoods: Street Design and Connectivity. Congress for the New Urbanism, San Francisco, <http://contextsensitivesolutions.org/content/reading/traditional-neighborhoods-street-design/resources/traditional-neighborhoods-street-design/>, accessed on December 28, 2011.

¹² San Luis Obispo Council Of Governments, 2010 Regional Transportation Plan.

and fatalities.¹³ Pedestrian crashes are more likely to occur in places without sidewalks, while streets with sidewalks on both sides have the fewest crashes. More than 40 percent of pedestrian fatalities occurred where no crosswalk was available.¹⁴

The volume of traffic is also closely related to the walkability of neighborhoods. One study found that among three neighborhood streets in San Francisco, streets with the heaviest traffic had fewer gathering places on the sidewalk and fewer social interactions among neighbors.¹⁵

Moreover, pedestrian amenities encourage people to walk and therefore result in health, environmental, and economic benefits. Data from the Nationwide Personal Transportation Survey and the Center for Disease Control and Prevention indicates that there is a significant relationship between walking for transport and obesity. The more miles a person travels by driving, the more likely they are to be obese.¹⁶ Walkability also fosters social and business vitality in downtown cores and can decrease crime rates. As such, pedestrian-friendly streets can facilitate social interaction and local economic vitality.



Adequate pedestrian infrastructure will be paramount in accommodating new development in the county's communities and ensuring that communities are complete.

¹³ Smart Growth America website, <http://www.smartgrowthamerica.org/issues/transportation/>, accessed on December 28, 2011.

¹⁴ National Complete Streets Coalition website, <http://www.completestreets.org/complete-streets-fundamentals/factsheets/safety/>, accessed on December 28, 2011.

¹⁵ Donald Appleyard, *Livable Streets*, University of California Press, October 26, 1982.

¹⁶ James Sallis, PhD, 2010, Using Research to Create a Less Obesogenic World, healthylompoc.lvcho.org/attachments/076_J-Sallis_Lompoc_Summit_032510.ppt, accessed on December 28, 2011.

c. Bicycle Infrastructure

Bicycle infrastructure and amenities, such as bike lanes, bike trails, and bicycle parking, make travel easier, more convenient, comfortable, and safer for both cyclists and motorists. Recent bicycle safety studies found that the addition of bicycle infrastructure on roadways tends to reduce injury and crash risk; more specifically, adding bicycle lanes has been shown to reduce crash rates by about 50 percent.¹⁷

Bicycle-friendly environments also result in healthier communities. A recent study suggests that bicycle infrastructure encourages people to get out of their cars and ride their bikes.¹⁸ Another study found that bicycle commuting has been shown to be related to lower rates of obesity.¹⁹

Bicycle amenities also make bicycling a viable transportation opportunity, which can reduce vehicle use and lower automobile emissions that create air quality issues and greenhouse gas emissions.

d. Public Transit Systems

Public transit includes transportation systems that allow multiple users to “share” the cost of transportation, such as buses, subways, and passenger rail. By accommodating more travelers in the same space, public transit can decrease the number of cars on the road, reduce emissions, and create a healthier environ-



¹⁷National Complete Streets Coalition website, <http://www.completestreets.org/complete-streets-fundamentals/factsheets/safety/>, accessed on December 28, 2011.

¹⁸Jennifer Dill, Ph.D., 2007, Understanding and Measuring Bicycling Behavior: a Focus on Travel Time and Route Choice, <http://www.ibpi.usp.pdx.edu/bikegps.php>, accessed on December 28, 2011.

¹⁹Jennifer Dill, Ph.D., 2007, Understanding and Measuring Bicycling Behavior: a Focus on Travel Time and Route Choice, <http://www.ibpi.usp.pdx.edu/bikegps.php>, accessed on December 28, 2011.

ment. Research has found that, nationwide, the cost and time lost from traffic congestion would be at least 15 percent worse without public transportation service.²⁰

Transit systems also foster economic vitality for both businesses and communities. An analysis of the 2009 federal stimulus package revealed that funds spent on public transportation were more effective job creators than funds spent on highways.²¹ Additionally, public transit helps people save money on gas and promotes public health for those walking or biking to/from transit stops. Transit systems can provide greater mobility options for seniors and low-income families, particularly those without access to a vehicle.



e. Park-and-Ride Lots

Park-and-ride lots encourage alternative transportation by providing a parking area for transit or carpooling commuters to connect to more efficient transportation. Parking needs to be in safe, convenient, and accessible locations such as near transit stations, bus stops, and highway on-ramps. These facilities provide more affordable transportation options for those with lower incomes. Park-and-ride facilities also increase access to public transportation and rideshare opportunities, allowing for improved and potentially more efficient connectivity within and between communities of San Luis Obispo County. Furthermore, they reduce traffic congestion by decreasing the number of single occupant vehicles on streets and highways. Park-and-ride is a cost-effective method of reducing traffic congestion, noise levels, and air pollution emissions by decreasing the number of cars traveling on the roads and transportation infrastructure maintenance costs.

Park-and-ride lots are important components of complete communities in that they provide residents with options for transportation,

²⁰ Smart Growth America website, <http://www.smartgrowthamerica.org/issues/transportation/>, accessed on December 28, 2011.

²¹ Smart Growth America website, <http://www.smartgrowthamerica.org/issues/transportation/>, accessed on December 28, 2011.

allow for cost saving for commuting, and can result in reduced vehicle emissions.

3. Public Facilities

This section discusses how public facilities are important to provide services, amenities, institutions, and other resources that are necessary for a complete community. Examples include parks and open space; schools, civic, recreation and community facilities; social services; and public safety services and buildings. Each of these components is discussed in greater detail below.

a. Public Open Space

Outdoor public spaces are indispensable to urban contexts. Similar to development and street systems, these spaces help shape urban form and influence community character. Additionally, public spaces enhance quality of life and improve public health by providing opportunities for relaxation, recreation, and social opportunities.²² Furthermore, public gathering spaces, such as outdoor dining, plazas, and pocket parks, enhance the pedestrian experience and facilitate community activity. Research has shown that people with access to parks and recreation facilities are more likely to be active,²³ therefore reducing chances of having health problems related to lack of activity. Moreover, in the case of green spaces in urban areas, public open spaces can reduce urban heat island effect, which are generated by excessive pavement. These elements are vital for public health and providing amenities in existing urban areas.



There are several different types of public spaces, which are generally defined based on the size, function, program, and relationship to other elements.

²² Cherry, Nathan, Grid/Street/Place, 2009, American Planning Association.

²³ James Sallis, PhD, 2010, Using Research to Create a Less Obesogenic World, healthylompoc.lvcho.org/attachments/076_J-Sallis_Lompoc_Summit_032510.ppt, accessed on December 28, 2011.

- ◆ **Squares/Plazas** typically serve as activity centers for neighborhoods. Small kiosks, pavilions or neighboring buildings providing food, security, or information are common in squares/plazas. These spaces provide for public interaction and public events, and can also serve as rest areas for pedestrians within urban areas.
- ◆ **Neighborhood Parks** serve immediate surrounding neighborhoods and can provide a range of facilities, such as playgrounds, benches, gardens, greens, or other similar elements. These facilities can be passive or active recreation spaces and include recreation buildings. Neighborhood parks are located within at least a quarter-mile radius from residences and are accessible by foot, bicycle, or public transit.
- ◆ **Community Parks** offer social and recreational focal points for communities and include a variety of elements, such as sports fields, picnic areas, dog parks, walking trails, recreation centers, and other similar programming that is more unique. Programming in community parks is often more costly to provide and draws visitors from all over a community.
- ◆ **Regional Parks** provide unique natural and cultural attractions, drawing visitors from the entire region. Regional Parks offer a variety of facilities, such as golf courses, trails, pools, boating, fishing, education elements, nature centers, ball fields, amphitheaters, botanical gardens, and other similar elements.

Plazas, neighborhood parks, and community parks are all important features for a complete community, while regional parks are an asset for more than any single community, to accommodate regional recreation needs. Provision of a variety of parks creates convenient recreation opportunities in keeping with County policy to provide parks, natural areas, and recreation facilities



with new urban development to enhance a community's quality of life and improve public health.²⁴

b. Schools

Providing school services within communities, preferably in walking distance of neighborhoods, is important to support a complete community. Convenient schools can attract pedestrian and bicycle commuting, foster more after-school activities, and improve children's health. Promotional and educational programs, such as Safe Routes to School, as well as building sidewalks, crosswalks, and traffic-control devices around schools, help increase the percentage of students who walked to school. Research has found that walking or bicycling to school is associated with greater physical activity and lower obesity rates.²⁵ As growth occurs, community schools can experience higher student enrollment, so it is important that expansions and additional facilities are anticipated within the community plan. In some cases schools can potentially benefit nearby neighborhoods by sharing their recreational facilities with local residents.

c. Community/Civic Facilities

Community/civic facilities include public offices, libraries, and recreation and community centers. These facilities provide space for community events and access to services, information, education, recreational opportunities, and community meetings. Community/civic facilities help in achieving a complete community and supporting County planning goals, particularly if they are located within urban areas and are within walking or biking distance for residents (and local employees).



²⁴ County of San Luis Obispo, 2009, *Land Use Element, Framework for Planning, Planning Principle 4, Policy 4, p. 1-14.*

²⁵ Active Living Research, San Diego State University, 2009, http://www.activelivingresearch.org/files/ALR_Brief_ActiveTransportation.pdf, accessed on January 30, 2012.

d. Social Services

Social services include services such as health clinics, homeless shelters, emergency shelters, food programs, counseling services, and other similar functions. In addition to those provided by the County, services are also often provided by non-profit groups. Social services are important for public health, safety, and for educational and counseling reasons. When possible, it is important for residents facing emergency or difficult times to have convenient places to seek aid and/or counseling. As growth occurs in the future, the need for these services will grow. To achieve County goals, these services would ideally be accessible in existing urban areas.



e. Public Safety Buildings

Public safety buildings include fire stations and police stations. Public safety buildings should be in place in every community to protect residents, employees, and visitors from crime and hazards, and to provide emergency services. Residential land uses create the highest demand for police and fire services. With more compact community growth, efficiencies can be realized in the delivery of these services. For example, such development patterns may result in smaller areas of service and response times than might occur with large lot development on the fringes of urban communities. Therefore, central locations of fire and police buildings within urban areas will contribute to efficient safety services.



4. Zoning Balance

Complete, walkable, and compact communities consist of a healthy mix of uses that provide employment opportunities, commercial opportunities and services, and diverse housing types at various affordability levels. As such, for a community to be complete, it is important that a full and balanced range of zoning is available to accommodate a variety of uses. For example, if a community is too heavily zoned for residential uses, it may not be allowing for enough commercial uses or services to support walkable communities and the overall goals for complete communities.

This section discusses how zoning policies relate to complete community and County planning goals.

a. Walkable Communities

Land use mix significantly contributes to walkability. Research has found that the most significant factor effecting walkability was the diversity of land uses proximate to trip origins.²⁶ As such, it is critical that local zoning regulations aim to accommodate and support a closely knit mix of housing, commercial, open space, service, and employment opportunities. Zoning for complete communities also allows mixed-use development that can more readily support a mix of uses within close proximity to one another.

b. Commercial Mix and Access to Fresh Food

Balanced zoning allows for an appropriate mix of commercial development. Zoning can facilitate a concentration of commercial uses along key corridors, within central business districts, or near transit stations so as to create economic synergy and provide access to a variety of shops and restaurants for residents and employees. In particular, providing sufficient food resources, such as grocery markets, is essential to support a healthy community.

c. Job-Creating Uses

Another important component of effective mixed use neighborhoods is jobs-housing balance, which reduces distance between homes and work, preferably in walking distance. With a better jobs-housing balance, there are more chances for residents to commute by walking, biking, or riding transit, thereby reducing vehicle miles traveled and air pollution emissions. As such, zoning regulations to support a complete community should allow for a



²⁶ Robert Cervero and Michael Duncan Walking, Bicycling, and Urban Landscapes: Evidence From the San Francisco Bay Area. American Journal of Public Health: September 2003, Vol. 93, No. 9, pp. 1478-1483, <http://ajph.aphapublications.org/doi/full/10.2105/AJPH.93.9.1478>, accessed on December 28, 2011.

mix of employment-generating uses, such as offices, industrial, retail, educational institutions, and healthcare institutions.

d. Diverse and Affordable Housing Opportunities

Local zoning should allow for a range of housing types. Complete communities offer a variety of housing types, such as single-family homes, townhouses, duplexes, and apartments that are affordable for local workers. As a result, complete communities can attract and retain diverse residents, ranging from single-person households, to young families and workforce families, to retirees.²⁷ Local zoning should also reflect the housing needs of communities. If a community consists of more low- or medium-income households than high-income households, its zoning codes should require housing options that are affordable for low- or medium-income households, such as small houses or one-bedroom apartments. It is also important to provide a balanced mix of housing at the neighborhood level as opposed to the regional level. This approach will be consistent with County policy to offer “a range of housing types within each neighborhood and avoid creating adverse concentrations of affordable units²⁸”



Additionally, the location of housing can provide an advantage, since homes that are near schools, jobs, shopping, and services reduce residents’ transportation costs. Housing integrated into commercial buildings, such as residences above first-floor stores and offices on main streets may make it more convenient and affordable for residents to reach daily destinations while also providing a support for businesses.

²⁷ U.S. Department of Agriculture, 2011, Supporting Sustainable Rural Communities, http://www.epa.gov/smartgrowth/pdf/2011_11_supporting-sustainable-rural-communities.pdf, accessed on December 28, 2011.

²⁸ County of San Luis Obispo, 2009, *Land Use Element, Framework for Planning, Planning Principle 6, Policy 3*, p. 1-15.

e. Zoning for Economic Benefits

Balanced zoning to accommodate a mix of land uses can also result in economic benefits. Commercial development often provides a positive fiscal impact on local governments; when commercial and civic uses are close to one another, there can be a positive impact on residential property values.²⁹ Moreover, bringing and keeping civic institutions, such as schools, city halls, and post offices in the central business district of small communities is critical to drawing customers downtown.

f. Community Design and Residential Density

To achieve walkable and livable communities, commercial centers, transit lines, and community facilities should be located no more than ¼-mile from compact residential development.³⁰ Moreover, an appropriate residential density is critical to support transit services, active street life, and viable neighborhood businesses. Research has found that a density of seven residential units per acre is required to support basic bus service, and commercially, 50 employees per acre are necessary to support premium transit service.³¹ Other research suggests that seven units per acre or higher is the minimum density needed to support a small corner store, with 18 units per acre needed to support a small supermarket.³²



²⁹ Best Development Practices: A Primer, <http://www.fta.dot.gov/documents/BestDevprimer.pdf>, accessed on December 28, 2011.

³⁰ Best Development Practices: A Primer, <http://www.fta.dot.gov/documents/BestDevprimer.pdf>, accessed on December 28, 2011.

³¹ Reid Ewing, Pedestrian- and Transit-friendly Design: A primer for Smart Growth, American Planning Association, http://www.epa.gov/smartgrowth/pdf/ptfd_primer.pdf, accessed on January 20, 2012.

³² U.S. EPA and Local Government Commission, Creating Great Neighborhoods: Density in Your Community, September 2003, <http://www.epa.gov/smartgrowth/pdf/density.pdf>

B. Complete Communities Research References

For further information on complete community planning, see below:

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