

# PRUDLER TENTATIVE SUBDIVISION MAP PROJECT

SCH# 2014122036

## FINAL ENVIRONMENTAL IMPACT REPORT

PREPARED FOR  
THE CITY OF WOODLAND



MARCH 2016

PREPARED BY



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**Prudler Tentative Subdivision Map Project  
Final Environmental Impact Report**

SCH# 2014122036

**Lead Agency:**

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March 2016

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## 1. INTRODUCTION AND LIST OF COMMENTERS

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# 1

## INTRODUCTION AND LIST OF COMMENTERS

### 1.0 INTRODUCTION

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This Final Environmental Impact Report (EIR) contains public and agency comments received during the public review period of the Prudler Tentative Subdivision Map Final EIR. This document has been prepared by the City of Woodland, as lead agency, in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines Section 15132. The Introduction and List of Commenters chapter of the Final EIR discusses the background and organization of the Draft EIR, and lists the comment letters received.

### 1.1 BACKGROUND

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The Prudler Tentative Subdivision Map Project Administrative Final EIR contains the following environmental analysis chapters:

- Air Quality and Greenhouse Gas Emissions (Including Energy); and
- Transportation and Circulation.

The City of Woodland used the following methods to solicit public input on the Administrative Final EIR: a Notice of Preparation (NOP) for the Draft EIR was released for a 30-day review from December 17, 2014 to February 2, 2015. In addition, a public scoping meeting was held on January 8, 2015 for further discussion and comments regarding the scope of the Draft EIR. A Notice of Availability of the Draft EIR was distributed from September 8, 2015 to October 23, 2015 to applicable public agencies, responsible agencies, and interested individuals. In addition, a public meeting was held before the Planning Commission on October 1, 2015 in order to receive verbal comments on the Draft EIR. Copies of the document were made available at the public counter of the City of Woodland Community Development Department located at 300 First Street, Woodland, California 95695. Copies were made available on the City of Woodland website at <http://www.cityofwoodland.org>, and at the Woodland Library (250 First Street) and the Woodland Community and Senior Center (2001 East Street).

### 1.2 ORGANIZATION OF THE FINAL EIR

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The Final EIR is organized into the following chapters:

#### **1. Introduction and List of Commenters**

Chapter 1 provides an introduction and overview of the document, describing the background and organization of the Final EIR. Chapter 1 also provides a list of commenters who submitted letters in response to the Draft EIR.

**2. Responses to Comments**

Chapter 2 presents all of the comment letters received and responses to each comment. Each comment letter received has been numbered at the top and then bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. For example, the first comment in Letter 1 would have the following format: 1-1.

**3. Mitigation Monitoring and Reporting Plan**

The Mitigation Monitoring and Reporting Plan (MMRP) in Chapter 3 includes a description of the requirements of CEQA. The intent of the MMRP is to prescribe and enforce the proper and successful implementation of the mitigation measures as identified within the EIR for the Prudler Tentative Subdivision Map project.

**1.3 LIST OF COMMENTERS**

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The City of Woodland received four comment letters during the open comment period on the Draft EIR for the proposed project. The comment letters were authored by the following representatives of local groups and individuals:

- Letter 1 .....Alysa Meyer, Legal Services of Northern California
- Letter 2..... Andrea Matarazzo, Pioneer Law Group
- Letter 3..... Bobby Harris, Resident
- Letter 4..... Bobby Harris, Resident

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## 2. RESPONSES TO COMMENTS

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**2**

**RESPONSES TO COMMENTS**

The Responses to Comments chapter includes responses to each of the comment letters submitted regarding the Prudler Tentative Subdivision Map Project Draft EIR. Each bracketed comment letter is followed by numbered responses to each bracketed comment. The responses amplify or clarify information provided in the Draft EIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the project unrelated to its environmental impacts) may either be discussed or noted for the record. Text changes in the Draft EIR were not warranted based on comments received, updated project information, or information provided by City of Woodland staff. Therefore, in accordance with CEQA Guidelines, Section 15088.5, recirculation of the Draft EIR is not required.

Letter 1



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September 30, 2015

City of Woodland Planning Commission  
Kirby Wells, Chairman  
Chris Holt, Vice Chairman  
Marco C. Lizarraga, Commissioner  
Fred Lopez, Commissioner  
John Murphy, Commissioner  
Elodia Ortega-Lampkin, Commissioner  
Steve Harris, Commissioner  
300 First Street  
Woodland, CA 95695

Via email: [ana.gonzalez@cityofwoodland.org](mailto:ana.gonzalez@cityofwoodland.org)

Re: 16-131, Prudler Tentative Subdivision Map Project Draft EIR

Dear Chairperson Wells, Vice Chairperson Holt and Commissioners,

1-1

Legal Services of Northern California provides civil legal assistance to low income households throughout Yolo County. We submit the following comments on behalf of the Sacramento Housing Alliance regarding the Proposed Prudler Tentative Subdivision Map Project Draft Environmental Impact Report ("Draft").

1-2

We disagree with the Draft's finding that there is a less than significant impact on land use and planning, and that the proposed zoning amendments would result in a less than significant impact pertaining to conflicts with land use plans, policies or regulations. (Chapter 4.0, page 4.0-4) Specifically, the Draft fails to include a discussion of the project's impact on the City's housing element adopted on October 15, 2013. Although the Draft briefly mentions that the General Plan requires the City to "promote the provision of adequate housing including a variety of housing types for all persons in the community regardless of income, age, gender, race, or ethnic background," it erroneously concludes that the proposed project would implement this principle. (Appendix C, page 39) Instead, the project conflicts with the housing element because it proposes to further add to the surplus of above-moderate income units in the City.

1-3

California law requires that all local governments adopt a housing element as part of the general plan which makes "adequate provision for the housing needs of all economic segments of the community." Cal. Govt. Code §65583 et seq. Development-related local actions are required to be

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[www.lsnc.net](http://www.lsnc.net)

A Legal Services Corporation Program 

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Planning Commission  
September 30, 2015

1-3  
Cont'd

consistent with the housing element, including subdivision maps. The housing element requires the community to plan for meeting its fair share of regional housing needs by making available sufficient sites zoned at densities that accommodate the housing needs of all economic segments. The numbers are broken down into income categories that include very low, low, moderate, and above moderate. The housing element must include a site-specific land inventory with sites identified that are suitable for housing for each income category within the planning period. Cal. Govt. Code §65583.

The City of Woodland was required to demonstrate that it can accommodate 664 very low and low income housing units, 349 moderate income housing units, and 864 above moderate income housing units by October 2021. (Housing Element, Page 41, Table 2-33) The City's sites inventory included a shortfall of 173 very low income units and 57 low income units and a surplus of 256 moderate and 1,164 above moderate income units. (Housing Element, page 57, Table 2-39) Because the City failed to identify adequate sites for very low and low income units, the City adopted Program 2.A.2, which requires that the City rezone at least 15 acres to R-25 (20-25 units per acre) in addition to lands currently containing this zoning designation to accommodate the deficit of 664 units affordable to households earning 80% or less of the Yolo County median household income. (Housing Element, Page 4) The rezone must be completed within two years of the adoption of the 2013 Housing Element, or by October 15, 2015. Here, the proposed project would rezone the Prudler site from General Commercial to Low Density Residential, which allows for residential densities ranging from 3.0 to 8.0 units per acre. As proposed, the project would increase the City's supply of above-moderate income units by 186. The project is in direct conflict with the housing element policy and program of rezoning land to accommodate the deficit in the very low and low income categories and providing housing for all economic segments in the City. The Draft is insufficient because it fails to adequately analyze the impact of the project on the housing element.

1-4

The Draft also omitted a discussion of the project's impact on the City's affordable housing ordinance. Housing element program 2.A.11 requires the provision of affordable housing as a component of market rate projects, which is codified as Chapter 6A of the Woodland Municipal Code. The Draft states that the proposed project is for 186 single-family residential units on 38 acres of vacant land without discussing the impact on the ordinance, which requires that 10% of the units be affordable to and occupied by low income households. The Draft should include a discussion of potential conflicts with the affordable housing ordinance.

**Letter 1  
Cont'd**

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1-5

The Draft also conflicts with the City's recently adopted "Housing First" policy for a coordinated approach to addressing homelessness. The "Housing First" model is an approach to ending homelessness that centers on providing people experiencing homelessness with permanent housing as quickly as possible and then providing services as needed. The City should be commended for adopting "Housing First" as a model to address homelessness. The policy represents a strong commitment by the City and is an important first step to alleviating homelessness for individuals and families in Woodland. The proposed project, however, would increase the supply of above-moderate income units within the City and negatively impact the City's ability to implement the "Housing First" policy. The Draft should discuss the project's conflict with the City's "Housing First" policy and analyze the anticipated impact.

1-6

Thank you for the opportunity to submit comments on the Draft Environmental Impact Report. We appreciate your consideration of our concerns. Should you have any questions, or if you wish to discuss this matter in further detail, I can be reached at 530-662-1065.

With kind regards,

LEGAL SERVICES OF NORTHERN CALIFORNIA



Alysya Meyer  
Managing Attorney

cc: Cindy Norris

**LETTER 1: ALYSA MEYER, LEGAL SERVICES OF NORTHERN CALIFORNIA**

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**Response to Comment 1-1**

The comment is an introductory statement that does not address the adequacy of the Draft EIR.

**Response to Comment 1-2**

Impacts related to land use and planning were analyzed beginning on page 38 of the Initial Study. The Initial Study concludes that impacts related to the physical division of an established community, conflicts with any applicable land use plans, policies, or regulations, and conflicts with any applicable habitat conservation plan or natural communities conservation plan would be less than significant. The project site encompasses approximately 38 acres in the General Commercial zoning area (C-2). The current City of Woodland General Plan land use designation for the project site is General Commercial (GC). Under these existing land use designations, the site would not be developed with any single-family residential units. It should be noted, however, that multi-family housing could be allowed in the C-2 zone with a Conditional Use Permit. Nevertheless, because the project site is zoned and designated for commercial use, the site was not anticipated by the City to provide high-density and/or affordable housing units. However, while multi-family development could be conditionally allowed on-site, because a Conditional Use Permit would be required to develop multi-family housing on the site, the site was not included on the list of possible sites in the City's Housing Element. Thus, the site was not included in the assumptions of the Housing Element, and the General Plan does not compel the development of inclusionary housing units at this location. In addition, the proposed project would not impede the City's ability to provide affordable housing units outlined in the Housing Element. The commenter's concern regarding the project's consistency with the Housing Element will be forwarded to the City decision-makers for their consideration.

**Response to Comment 1-3**

See Response to Comment 1-2. The City's progress regarding the provision of affordable housing units on a citywide basis does not specifically relate to the analysis in the EIR. It should be noted that impacts related to conflicts with applicable land use plans, policies, or regulations were analyzed in Section X, Land Use and Planning, of the Initial Study. However, the provision of affordable housing and consistency with the voter approved Urban Limit Line is a policy question related to economic and social effects. In accordance with Section 15131, economic and social effects shall not be treated as significant effects on the environment.

Due to this project site's current land use designation, the site was not included on the possible inventory of eligible sites in the Housing Element. The City of Woodland's Housing Element requirement in Program 2.A.2, states that the minimum density for sites to be rezoned shall be to a density greater than 20 du/ac, (Program 2.A.2, in which the city shall rezone up to 15 acres to R-25 (20-25 units/acre). The location for this zoning category is within the Spring Lake Specific Plan. The General City designation for High Density has a range of 16-25 du/ac.

However, since the Housing Element adoption in October of 2013, approximately 9.3 acres of land within Spring Lake have been rezoned to R-25, for approximately 150 units, and the City has received an application outside of Spring Lake to re-designate 5.87 acres of land from public/quasi-public to High Density Residential with approximately 80 qualified low income units. Further, the City is progressing with the General Plan 2035 Update, in which residential land use designations will provide for increased densities and provide for corridor mixed use and downtown mixed use designations that will allow higher residential densities. So far the City has made progress toward meeting the requirement to provide sites and/or qualified low income units.

**Response to Comment 1-4**

The project will be required to comply with the City’s affordable housing ordinance and will be required to provide a minimum of 10 percent of the units as low-income. Therefore, a conflict with the City’s Affordable Housing Ordinance 6A would not occur.

**Response to Comment 1-5**

The proposed project does not impede the City from achieving its “Housing First” policy. The City’s progress regarding the “Housing First” policy does not specifically relate to the analysis in the EIR or to the project site in particular. The commenter’s concern regarding the project’s consistency with the Housing First policy will be forwarded to the City decision-makers for their consideration.

**Response to Comment 1-6**

The comment is a conclusion statement that does not address the adequacy of the Draft EIR.

**Letter 2**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

Blair W. Will  
Of Counsel

Jay M. Harris  
Associate

October 13, 2015

Via Electronic and U.S. Mail  
[cindy.norris@cityofwoodland.org](mailto:cindy.norris@cityofwoodland.org)

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
300 First Street  
Woodland, California 95695

Re: Draft Environmental Impact Report for the Proposed Prudler  
Tentative Subdivision Map Project (SCH #2014122036)  
Our File No. 5053-001

Dear Ms. Norris:

2-1

Thank you for the opportunity to comment under the California Environmental Quality Act ("CEQA"), Planning and Zoning Law, and other statutes on the Draft Environmental Impact Report ("EIR") for the proposed Prudler Tentative Subdivision Map project ("Project"). On behalf of property owners in the Spring Lake Specific Plan, we submit these comments in furtherance of the City's review and consideration of the proposed Project.

2-2

City residents and property owners have a vital interest in the environmental effects of the proposed Project. The Project as proposed has significant consequences in relation to the City's planning goals and future options; its existing General Plan and ongoing update; and voter-approved community policies regarding land use, infrastructure financing, and inclusionary housing, among others. The City must consider how amending its General Plan in the manner the applicant desires would ensure that the new development "pay its own way" without undermining the City's commitments to build-out of the

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Letter 2  
Cont'd

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
October 13, 2015  
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Cont'd
- Spring Lake Specific Plan and its significant public benefits.<sup>1</sup> It appears clear from the Project proposal that that the developer expects Spring Lake homeowners to provide backbone infrastructure to the Project site at no cost. The proposal continues to urge the City to disregard its commitments to, and investment in, Spring Lake and its residents, who deserve the City's continued assurance that all members of the community stand on equal footing.
- 2-3
- Under CEQA, the City must ensure that the Project developer, not the community at large, mitigates the Project's impacts and infrastructure needs. The impact fees and mitigation identified for the proposal must reflect the Project's true fair share.<sup>2</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Project site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption. The current fee proposal is arbitrary and unfair, and wholly contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. Spring Lake homeowners cannot reasonably be required to subsidize a residential project on the proposed Project site, especially when that subsidy would substantially delay public services in Spring Lake. Allowing the Project to go forward as proposed would severely set back the Spring Lake community, its parks, schools, and neighborhood amenities, and deprive existing City residents of the basic benefits for which they paid.
- 2-4
- CEQA expects that the EIR will fully and fairly disclose, analyze, and identify measures to mitigate the proposed Project's impacts and infrastructure needs to the extent feasible, as well as account for the proposed Project's relationship to local, regional and statewide directives concerning sustainability and smart growth. Yet, the City inexplicably failed to offer *any* policy or planning goals, community standards or expectations, or environmental sustainability targets as objectives for the proposed Project. Instead, the Draft EIR permits the

<sup>1</sup> / Creating residential development opportunities that are not subject to the same environmental scrutiny and mitigation standards imposed on the Spring Lake financing district will make it more difficult to build out areas in Spring Lake that are inherently better sites for residential development. (See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

<sup>2</sup> / See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

**Letter 2  
Cont'd**

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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Project proponent to offer five narrowly crafted objectives in order to avoid answering the real environmental questions. As a result, the document circulated for public review meets none of the City's responsibilities under CEQA.

2-5

The Draft EIR is styled as a "focused" analysis that dismissed a host of resource issues as unnecessary to evaluate. Even a cursory review of the Draft EIR and the Project proponent's statement of objectives shows, however, that the EIR analysis is skewed to avoid meaningful consideration of thorny environmental issues. The Project's significant adverse environmental impacts relate to numerous resource areas including land use and community character, air quality, greenhouse gas emissions and climate change, transportation and circulation, public facilities and services, open space and recreation, and population and housing. The EIR's gaps in critical information implicate each and every one of these important issues.

2-6

Having failed to adequately disclose and mitigate the significant adverse impacts of the proposed Project, the Draft EIR further fails to describe real alternatives, including an increased density alternative. Instead, the Draft EIR burdens the consideration of alternatives with outdated parameters and assumptions regarding traffic and air quality impacts in order to cause impacts of increased density to appear worse than those of the proposed low-density Project. The resulting range of alternatives discussed in the Draft EIR is manifestly unreasonable. The City must consider how designating this property for low-density residential development rather than smart growth would affect the community's balance of land uses, livability, and environmental sustainability.

2-7

This Project, like every planning effort and development proposal in the City, requires careful and objective consideration to ensure that development will enhance the quality of life in the City's existing and future neighborhoods. The Draft EIR fails to address the substantive comments previously submitted to the City on January 30, 2015, May 14, 2013, and September 18, 2013, which raised significant environmental issues concerning environmental review of the proposed Project under CEQA. True and correct copies of those comments are attached to this letter as Exhibits A, B, and C, and are incorporated by reference as if set forth fully herein. Our further detailed comments are set forth below.

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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**1. The Project Objectives Are Impermissibly Narrow**

2-8

CEQA requires that the EIR contain a "statement of the objectives sought by the project." (CEQA Guidelines, § 15124(b).) "The statement of objectives should include the underlying purpose of the project." (*Ibid.*) It is important to note that the statement of objectives is to assist the *lead agency* (i.e., the City of Woodland) in developing a reasonable range of alternatives to the proposed Project. Thus, it is imperative that the City develops a statement of objectives that explains the purpose of the Project and allows the City to adequately evaluate a range of potentially feasible alternatives. The City's statement of project objectives must not uncritically accept the applicant's criteria or wish list, lest the Draft EIR risk defining the project objectives in such a manner that only the applicant's preferred alternatives are deemed feasible. Such a circular approach to project objectives would render the alternatives analysis meaningless and would run directly counter to CEQA. (See, e.g., *Preservation Action Council v. City of San Jose* (2006) 141 Cal.App.4th 1336, 1356; *Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587; *Save Round Valley v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1460.)

As the lead agency responsible for preparing an informative EIR, the City must develop a statement of project objectives that allows for evaluation of a reasonable range of alternatives, even if such an approach means that the applicant will not be able to implement its preferred alternative(s). The Draft EIR must unite the applicant's objectives with *the City's* objectives, in order to state a proper project purpose. The City must use its independent judgment. (Pub. Resources Code, § 21082(c)(1); CEQA Guidelines, § 15084(e); see *Uphold Our Heritage, supra*, 147 Cal.App.4th at p. 595 [allowing a project proponent to dictate project objectives and resulting range of alternatives is legally untenable].)

2-9

Here, the City's planning goals and commitments to the community promise thoughtful solutions to land use planning for parcels of this size that represent key pieces of the future development in the City. (See, e.g., Spring Lake Specific Plan, p. 8-1.)<sup>3</sup> The 38-acre site of the proposed Project was

<sup>3</sup> / The Spring Lake Specific Plan guides and controls orderly and systematic development of over 1,000 acres located primarily south of Gibson Road and east of SR 113, immediately south of the City limits. The City adopted the Plan to create a desirable extension of Woodland's existing character and traditional neighborhoods. All individual development projects in the area are subject to the Specific Plan's

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excluded from the Spring Lake Specific Plan on the basis of representations at the time that it would "immediately" be developed with big-box commercial uses as an extension of the existing shopping mall, and therefore should not be part of a comprehensively planned community. No logical basis to exclude this parcel from the requirements of the Spring Lake Specific Plan was presented other than the asserted imminent development to expand the mall. The site has always been envisioned for development more intense than the currently proposed low-density residential Project,<sup>4</sup> and such uses cannot reasonably be excluded from a proper alternatives analysis in the EIR. (See *City of Maywood v. Los Angeles Unified School Dist.* (2012) 208 Cal.App.4th 362.)

2-10

Yet, in its evaluation of the proposed Project, the City offers *not a single project objective*, failing even to attempt to state a project purpose that reflects its General Plan policies, voter-approved land use initiatives, and related community-building commitments. Instead, the objectives are stated only by the Project proponent, in such a manner as to predetermine that the proponent's preferred alternative(s) are the only ones that can meet the project objectives. (Draft EIR, p. 3-4.) It is imperative that the City supports its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. Allowing development of the site to go forward as proposed – with no City objectives stated in the Draft EIR – would substantially undermine the City's planning goals and policies and would

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requirements. If a proper alternatives analysis were to determine that low-density residential uses are appropriate for the Project site, then as a minimum, the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Project site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

<sup>4</sup> / The Draft EIR also asserts that an even *lower* density alternative than the proposed Project is the "environmentally superior" option. (Draft EIR, p. 6-14.) This straw-man approach to the alternatives analysis begs the question of whether the Project proponent actually prefers the "Reduced Intensity Alternative."

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
October 13, 2015  
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Cont'd

severely set back the Spring Lake community, its parks, schools, and neighborhood amenities.

2-11

Moreover, the Project objectives rest on faulty assumptions regarding the character of the subject site, which does not meet any credible definition of the term "infill." It's a term with many applications, but none of them envision the type of low-density spot zoning proposed here. Infill increases the density of the built environment. It builds and fosters community. It focuses on the reuse and re-positioning of obsolete or underutilized buildings and sites. It activates neighborhoods, making them more useful and livelier for longer periods of the day and night. It lessens or avoids environmental impacts. (See, e.g., *Transportation and Land Use Tool Kit* (2003), pp. 3, 6-7, 10, 14-20 [true and correct copy attached hereto as Exhibit D].) The proposed Project does none of these things. (Draft EIR, pp. 3-4 – 3-6.)<sup>5</sup> The law compels the lead agency to embrace CEQA's requirement for independent reasoning and judgment. (CEQA Guidelines, § 15084(e); see *Save Round Valley, supra*, 157 Cal.App.4th at p. 1460 [an "applicant's feeling about an alternative cannot substitute for the required facts and independent reasoning" required by CEQA].) Unfortunately, the Draft EIR shows that thus far, the City has failed to do so.

2-12

## 2. The Impacts Analysis Skirts Significant Environmental Issues

As noted above, the Draft EIR is styled as a "focused" analysis that dismissed a host of resource issues as unnecessary to evaluate. (Draft EIR, pp. 4.0-1 – 4.0-6.) The document lacks the requisite substantial evidence to support such conclusions, however. The Project's significant adverse environmental

<sup>5</sup> / The Draft EIR similarly mischaracterizes a random combination of low-density residential development (it "would involve fewer dwelling units and future residents") and two non-descript "commercial buildings" as a "mixed-use" alternative. (Draft EIR, p. 6-11; see Exhibit D, p. 6 [land uses are "mixed" when they combine retail, office, and a variety of housing opportunities]; *id.* at pp. 36-38 [mixed-use development combines housing, retail, jobs, and services so that residents and workers can meet most of their basic needs without using a car].) The Draft EIR provides no discussion whatsoever of land use principles that bear directly on environmental impacts (including but not limited to jobs/housing balance, community access to neighborhood retail, shortening travel distances). (See, e.g., footnote 6, *infra.*) Not surprisingly, the Draft EIR concludes that this asserted "mixed-use" alternative "would result in greater impacts than the proposed project." (Draft EIR, pp. 6-12 – 6-13.)

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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impacts (direct, reasonably foreseeable indirect, and cumulative) relate to numerous resource areas including land use and community character, impacts resulting from lack of consistency with applicable plans, air quality, greenhouse gas emissions and climate change, energy use, transportation and circulation, public facilities and services, water supply, open space and recreation, and population and housing. The EIR's gaps in critical information implicate each and every one of these important issues.

**3. Even Accepting the Project Objectives, the Evaluation of Alternatives Violates CEQA**

2-13

Identifying project objectives and analyzing a reasonable range of alternatives are critical components of an EIR. (*Habitat and Watershed Caretakers v. City of Santa Cruz* (2013) 213 Cal.App.4th 1277.) In the present circumstances, as discussed above, the proponent's statement of project objectives is too narrow and fails to reflect the City's independent considerations regarding land use planning and community development. (Draft EIR, p. 3-4.) Moreover, even accepting the proponent's objectives, the Draft EIR has unreasonably restricted the range of alternatives. (Draft EIR, pp. 6-3 – 6-6.) Alternatives that would reduce the significant adverse impacts of the proposed Project, including an increased density alternative, are not considered. An increased density alternative is dismissed, apparently on the basis of being more environmentally impactful than the proposed low-density Project – an outmoded pretext that is simply not credible. Indeed, the fallacy of that premise has been codified in state law in both SB 375 and SB 743.<sup>6</sup>

<sup>6</sup> / The Legislature has recognized that the environmental effects of land use choices and traffic impacts relate to much more than simply moving cars quickly through the roadway system. Volumes have been written on the deep flaws of the outdated LOS (level of service) paradigm used in the Draft EIR: it makes road widening look good for the environment, discourages *true* infill, encourages traffic engineers to remove pedestrian crosswalks, and slows transit projects. Through an evaluation of VMT – which is easier and faster – a proper impact analysis in the EIR can help the City shape the Project to better help reduce greenhouse gas emissions and create transportation choices. This is more than just a good idea; this is the good faith effort at full disclosure that CEQA requires. ((CEQA Guidelines, §§ 15151, 15144; *Laurel Heights Improvement Assoc. v. Regents of U.C.* (1993) 6 Cal.4th 1112; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553.)

**Letter 2  
Cont'd**

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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Cont'd**

The Draft EIR nevertheless clings to the notion that traffic impacts are to be measured in terms of how convenient it is to drive, when a meaningful environmental review should instead evaluate vehicle miles traveled (VMT) and whether or not a project reduces car dependency and contributes to other state goals. (Draft EIR, pp. 4.2-1 – 4.2-27.) VMT is easier and faster to estimate and produces a measure of a project's overall effect on the environment, while the tools of the past do not. When the true environmental picture is revealed, it becomes clear that low-density development is not less adverse in impact than compact development, and mitigation measures become more environmentally meaningful as well – choices include funding better transit, creating better access to transit, building better pedestrian facilities, improving the jobs/housing fit of the community, incorporating a neighborhood electric vehicle network, or other improvements that would actually improve travel choices and reduce VMT. (See, e.g., Exhibit D, pp. 14-16, 32.) Increasing project density is among the most basic alternatives to reduce VMT and the associated significant adverse environmental effects of cars. (See *id.* at p. 33.)

**2-14**

Similar issues arise in the context of water quality, in which compact, higher-density development often is environmentally superior. Low-density development can exacerbate non-point pollutant loading by consuming permeable open space and increasing impervious surface area relative to compact development. (See, e.g., U.S. Environmental Protection Agency (EPA), "Protecting Water Resources with Higher-Density Development," 2006 [true and correct copy attached hereto as Exhibit E.]) Higher density development lessens and avoids impacts on regional water quality (helping to maintain watershed functions) by consuming less land and minimizing impervious surface cover; it is more efficient and less polluting by accommodating more activity while covering less space. (See *id.* at pp. 26-28 [higher-density scenarios generate less stormwater runoff per house at all scales – one acre, lot, watershed].) Without meaningful consideration in the EIR – based on evidence and analysis rather than assumptions and speculation – the decision makers and the public are not sufficiently informed regarding the comparison of a higher-density alternative to the proposed Project and other alternatives, and the EIR's summary dismissal of such an option violates CEQA.

**2-15**

While CEQA contains no iron clad rules on when and how to exclude alternatives, it is clear that mere interference with project objectives is insufficient grounds for rejection of an alternative. (CEQA Guidelines § 15126.6(a), (b).)

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Cont'd

Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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Moreover, the lead agency bears the responsibility to ensure the EIR meets the test of "adequacy, completeness, and a good faith effort at full disclosure," and imposes on the agency the duty to "find out and disclose all it reasonably can." (CEQA Guidelines §§ 15151, 15144.) The applicant's reasons for deciding upon the project as proposed are merely a factor to be considered. The lead agency must independently investigate, review, analyze and discuss potentially feasible alternatives in good faith. (*Foundation for San Francisco's Architectural Heritage v. City and County of San Francisco* (1980) 106 Cal.App.3d 893, 908-910; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 736.)

Eliminating alternatives at an early stage based on conclusory determinations that they may result in greater levels of environmental impact than the proposed Project is antithetical to the very purposes of the alternatives analysis – CEQA is a framework of disclosure and public participation that requires the agency to show its work. It is precisely through a careful evaluation and comparison of a reasonable range of alternatives and their relative merits *in the Draft EIR* that the lead agency complies with CEQA's fundamental informational purposes. (Pub. Resources Code, §15126.6(a) [the EIR must study a range of potentially feasible alternatives that will foster "informed decision making and public participation"]; CEQA Guidelines, § 15126.6(d) [lead agency has the responsibility to provide sufficient information about alternatives to allow meaningful evaluation, analysis, and comparison with the proposed project].)

**A. An Increased Density Alternative is Rejected without Substantial Evidence**

2-16

The Draft EIR's "analysis" of alternatives rests on faulty, outmoded assumptions. (See, e.g., Yolo-Solano Air Quality Management District, <http://www.ysaqmd.org/TransportationandLandUse.php>; "Transportation and Land Use Toolkit, 2003 ["Best Practices" handbook prepared by Yolo-Solano Air Quality Management District in partnership with regional transportation agencies (true and correct copy attached hereto as Exhibit D)].<sup>7</sup> An increased density

<sup>7</sup> / The Draft EIR's efforts to ignore industry standards accepted for over a decade are inexplicable. Environmental planners and other professionals now consider the following to be common knowledge:

Transportation systems and land use patterns influence air quality. Roads, transit, and other transportation elements shape land development, while the

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Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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alternative would certainly meet any proper formulation of project objectives as discussed above, and it is clear from the Draft EIR that an increased density alternative would meet most, if not all, of the proponent's stated objectives. (Draft EIR, p. 3-4.) An increased density alternative could do so with fewer environmental impacts, so its rejection is improper as a matter of law.

**B. An Increased Density Alternative Is Environmentally Superior to the Proposed Project**

2-17

An increased density alternative is consistent with the City's planning goals and policies – while the proposed Project is not – and is environmentally superior to the proposed Project by resulting in substantially less overall impact associated with air quality, greenhouse gas emissions and energy use, transportation and circulation, and water quality, among others. An increased density alternative meets the proponent's basic project objectives, making it at least potentially feasible, and is the environmentally superior alternative. Environmentally superior alternatives must be examined whether or not they would impede to some degree the attainment of the project objectives. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 736-737.) The Draft EIR's failure to consider a smart growth alternative is manifestly unreasonable and violates CEQA as a matter of law. (Pub. Resources Code, §§ 21002, 21081; *City of Maywood v. Los Angeles Unified School District* (2012) 208 Cal.App.4th 362; *City of Marina v. Board of Trustees* (2006) 29 Cal.4th 341, 368-369.)

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distribution and types of land uses affect travel patterns and transportation facilities. A dispersed pattern of low-density development relies almost exclusively on cars as the primary mode for transportation. Alternatively, denser and more mixed use urban development can combine different land uses in closer proximity, encouraging walking, biking, transit and other non-motorized travel. The type of development is sometimes referred to as "smart growth" or "sustainable development."

(Yolo-Solano Air Quality Management District,  
<http://www.ysaqmd.org/TransportationandLandUse.php>.)

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Cindy Norris, Principal Planner  
City of Woodland Community Development Department  
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CEQA requires the lead agency to be independent, transparent, and accountable for its policy choices. We look forward to a substantially revised and recirculated draft EIR for this Project that provides the meaningful information necessary to enable the City to fulfill those duties.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

cc: Tom Stallard, Mayor  
William L. Marble, Mayor Pro Tempore  
Jim Hilliard, Council Member  
Sean Denny, Council Member  
Angel Barajas, Council Member  
Paul Navazio, City Manager  
Ken Hiatt, Community Development Director

AAM:jis  
Enclosures

# Exhibit A

**Letter 2  
Cont'd**



January 30, 2015

Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

Blair W. Will  
Of Counsel

Jay M. Harris  
Associate

Via Electronic and U.S. Mail  
*Paul.Hanson@cityofwoodland.org*

Paul L. Hanson, AICP, Senior Planner  
City of Woodland Community Development Department  
300 First Street  
Woodland, California 95695

Re: Notice of Preparation of an Environmental Impact Report for the  
Proposed Prudler Tentative Subdivision Map Project  
Our File No. 5053-001

Dear Mr. Hanson:

Thank you for the opportunity to comment on the scope and content of the environmental impact report ("EIR") that the City of Woodland is preparing for the proposed Prudler Tentative Subdivision Map project ("Project").

Of substantial importance in the City's consideration of the potential environmental consequences of the proposed Project is its relationship to the City's planning history, its existing and General Plan ongoing update, and voter-approved policies regarding land use, infrastructure financing, and inclusionary housing, among others. The EIR likewise must account for the proposed Project's relationship to local, regional and statewide directives concerning sustainability and smart growth.

In prior correspondence with the City, we have commented on the proposed Project's potentially significant adverse environmental impacts related to various resource areas including land use and community character, air quality, greenhouse gas emissions and climate change, transportation and circulation, public facilities and services, open space and recreation, and population and housing. Copies of those letters are attached hereto as Exhibits

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1122 S Street Sacramento, CA 95811  
v. (916) 287-9500 f. (916) 287-9515 [www.pioneerlawgroup.net](http://www.pioneerlawgroup.net)

**Letter 2  
Cont'd**

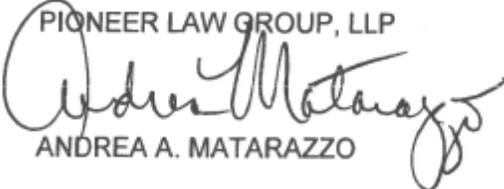
Paul L. Hanson, AICP, Senior Planner  
City of Woodland Community Development Department  
January 30, 2015  
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A, B, and C. We reiterate the concerns set forth in detail in those comments and incorporate them by reference as if set forth fully herein.

The City must consider how designating this property for low-density residential development would affect the balance of land uses and livability and social health of the community. Further, the City must consider how amending the General Plan in this manner would ensure that the new development "pay its own way" without undermining the City's fiscal balance or build-out of the Spring Lake Specific Plan and its significant public benefits. While we recognize that social or economic effects, by themselves, are not considered environmental impacts under the California Environmental Quality Act ("CEQA"), the reasonably foreseeable impacts on the physical environment associated with such effects must be analyzed. Any failure of this proposed Project to pay its true fair share for infrastructure and public facilities results in significant adverse effects on the physical environment.

Thank you in advance for the City's careful consideration of these issues.

Very truly yours,

PIONEER LAW GROUP, LLP  
  
ANDREA A. MATARAZZO

AAM:jis  
Enclosures

# EXHIBIT A

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Mayor Davies:

Thank you for the City of Woodland's ongoing efforts to seek input from a variety of stakeholders and the public at large to ensure that its General Plan will function as it should to enhance the quality of life in the City's existing and future neighborhoods. On behalf of property owners in the Spring Lake Specific Plan, we submit the attached comments for the City's consideration.

In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The recently resubmitted Prudler Tentative Map proposes a subdivision that will rely on services and infrastructure funded and constructed by the developers and residents of Spring Lake – indeed, the Project would not be possible but for the backbone infrastructure provided by Spring Lake – yet the developer's proposed impact fee structure is far less than the project's fair share. In essence, the developer expects Spring Lake homeowners to provide backbone infrastructure to the Mall Expansion site at no cost. The proposal flies in the face of the City's commitments to, and investment in, Spring Lake and its residents, who deserve the City's continued support and assurance that all members of the community stand on equal footing.

Like all others in the City, the Mall Expansion site developer must "pay its own way" and bear the project's fair share of the true cost of its infrastructure and public facilities. The current fee proposal is arbitrary and unfair, and wholly

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Cont'd**

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
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contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. Spring Lake homeowners cannot reasonably be required to subsidize a residential project on the Mall Expansion site, especially when that subsidy would substantially delay public services in Spring Lake. Allowing the Mall Expansion site development to go forward as proposed would severely set back the Spring Lake community, its parks, schools, and neighborhood amenities, and deprive existing City residents of the basic benefits for which they paid.

The Mall Expansion site development would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on homeowners in the Spring Lake Mello Roos financing district will result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

During this crucial planning process, the City should not proceed with review of proposed projects, such as the recently resubmitted Prudler Tentative Map, that unfairly expect existing City residents to subsidize their basic infrastructure costs; are fundamentally inconsistent with the City's planning history, existing General Plan, and voter-approved policies regarding land use,

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<sup>1</sup> / See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

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Marlin H. "Skip" Davies, Mayor  
City of Woodland  
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sustainability, infrastructure financing, and inclusionary housing, among others; and will be detrimental to and interfere with the General Plan Update. At a minimum, if the City determines the Mall Expansion site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

Thank you in advance for the City's careful consideration of these issues and concerns.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

AAM:jis  
Enclosure

cc: Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member  
Paul Navazio, City Manager  
Ken Hiatt, Community Development Director

# EXHIBIT B

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Cindy Norris, Principal Planner  
Community Development Department  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Ms. Norris:

Thank you for the opportunity to participate in the City of Woodland's visioning process as it sets out to prepare a General Plan Update and Climate Action Plan. As formulation of these plans begins in earnest, we request, on behalf of property owners in the Spring Lake Specific Plan, that the following critical issues be considered. In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The proposal would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities.

The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on Spring Lake homeowners will

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
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result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mail Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

**I. Existing Land Use Patterns, Resources, and Development Opportunity Sites**

**A. Spring Lake Specific Plan**

The Spring Lake Specific Plan guides and control orderly and systematic development of over 1,000 acres located primarily south of Gibson Road and east of SR 113, immediately south of the City limits. The City adopted the Plan in order to create a desirable extension of Woodland's existing character and traditional neighborhoods. All individual development projects (including the issuance of any discretionary land use entitlement) in the area are subject to the requirements of the Plan.

The City's "Implementation Concept" set forth in the Spring Lake Specific Plan states:

New development is expected to "pay its own way", both in terms of capital costs (financing of infrastructure) and ongoing costs (generation of sufficient general fund revenue to support ongoing maintenance and operational costs). The General Plan goal for new development is "fiscal and financial neutrality" to the greatest feasible extent (General Plan Policy 4.B.1 and 4.B.3) in terms of impacts to the general fund, and financing of infrastructure. However, it is also important to note, that typically only "high end" housing would be able to do this assuming a primarily residential community. The clear goal of the General Plan, and the people of Woodland for this new growth area, is a rich, diverse,

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<sup>1</sup> / See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
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balanced community with a variety of housing and neighborhood opportunities, and a very large school component. As such, the General Plan policies also allow for leniency from the "neutrality rule" for development that generates "significant public benefit" provided an alternative source of funding can be obtained to offset foregone revenues.

As described herein, assuming full implementation of the vision and intent of this Plan, this test would clearly be met in the Specific Plan boundaries. The new community will offer significant housing opportunities for all economic segments with affordability by design as well as by market manipulation. It will also offer responsibly designed neighborhoods that minimize the need for vehicles, emphasize sustainable design, encourage defacto neighborhood policing by increasing activity, and replicate in the modern world the best characteristics of Woodland's favorite original neighborhoods. If adhered to and accomplished, these are significant public benefits.

It is also important to point out that full build-out of the General Plan was determined to be fiscally balanced when the General Plan adoption occurred in 1996, and this Specific Plan is consistent with that Plan. Revenue-generating land uses (e.g. commercial and industrial) designated elsewhere in the City (e.g. the Mall expansion property and the commercial property on the north side of Gibson Road) were found to balance the location of this mixed density, primarily residential community at the subject location. Additionally, the large acreage of public sector and exempt land uses which generate no property taxes, and the high level of development amenities expected from this development are highly relevant factors. Both affect fiscal balance, as well as the ability to finance the Plan.

Therefore, the final determination regarding net fiscal impact must look at how the General Plan balanced land uses overall, and acknowledge as well, the contribution this Plan will make to the livability and social health of the community.

(Spring Lake Specific Plan, p. 8-1.)

Ms. Cindy Norris, Principal Planner  
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The City's Implementation Concept makes clear that as it evaluates existing land use patterns, resources, and development opportunity sites as part of the General Plan Update, it must carefully consider how a General Plan Amendment for the Mall Expansion Property would affect the balance of land uses and the livability and social health of the community. Further, the City must consider how designating the Mall Expansion Property for residential rather than commercial use would ensure that the new development "pay its own way," without undermining the City's fiscal balance or build-out of the Spring Lake Specific Plan and its significant public benefits.

The City likewise must consider how designating the Mall Expansion Property for residential rather than commercial use would undermine the phasing considerations that were a focus of the Spring Lake Specific Plan. The General Plan Update should discourage development that does not contribute to the sense of an integrated community in accordance with the phasing factors identified by the City, including property owner financial commitment and participation and equity between property owners in order to secure cooperation.

**B. "Mall Expansion" Site**

**1. Site History**

The 38-acre property commonly known in the City as the "Mall Expansion" site (APN 041-070-42) was excluded from the Spring Lake Specific Plan on the basis of representations at the time that it would "immediately" be developed with big-box commercial uses as an extension of the existing shopping mall, and therefore should not be part of a comprehensively planned community. No logical basis to exclude this parcel from the Spring Lake Specific Plan was presented other than the asserted imminent development of the property to expand the mall, which the City summarized during the 1998-2000 proceedings essentially as follows:

- a) The 38-acre parcel south of the existing mall (one-half of the original parcel) was already designated for commercial use in the 1996 General Plan and earlier in City policies supporting the mall.

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- b) Public services for the 38-acre site would be provided through existing mall infrastructure.
- c) The site developer had identified commercial tenants ready to move into the mall expansion.
- d) Projected sales tax revenue from the mall expansion would not be credited to the Spring Lake Specific Plan for the purpose of determining neutrality, because the commercial development would proceed well before Spring Lake and was not contingent on a Spring Lake residential development.

The site thus was excluded from the Spring Lake Specific Plan, which the City adopted in December 2001. No commercial development of the Mall Expansion site materialized, however. In the years that followed, several proposals for development of the site have come forward, but none have come to fruition. The rationale for excluding the site from the Spring Lake Specific Plan no longer exists, and indeed, there is none. As the City updates its General Plan (of which the Spring Lake Specific Plan is a crucial part), alternative scenarios for the Mall Expansion site should be considered. If residential uses are appropriate for the Mall Expansion site and will use services and infrastructure funded by development of the Spring Lake Specific Plan, then the site should be included in Spring Lake, subject to the same obligations as homeowners in the Spring Lake Mello Roos financing district.

**2. Current Development Proposal**

The Mall Expansion site, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is proposed for residential development. The proposed subdivision will rely on services and infrastructure funded and constructed by the developers and homeowners of Spring Lake, however the impact fee structure proposed by the developer is far less than the project's fair share and undermines the basic assumptions in the nexus study the City used to establish development impact fees imposed on the Spring Lake community.

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
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The revised Mall Expansion project seeks a General Plan Amendment and rezone from General Commercial (GC) to Low Density Residential (LDR) (as well as other significant discretionary land use approvals, including a conditional use permit and amendment to the Spring Lake Specific Plan) in order to develop approximately 204 conventional single-family units on about 38 acres (5.37 du/ac) in the City of Woodland. The proposed development will rely on infrastructure funded and constructed pursuant to the Spring Lake Specific Plan. The developer proposes to make a pro-rata reimbursement for the Spring Lake infrastructure based on its capacity of use, which results in a fee differential to the proposed project's advantage of approximately \$14,280 per unit. The developer proposes to pay half of that difference (approximately \$7,140 per unit) as a voluntary contribution to the City, for unrestricted use by the City to fund public improvements or services. The developer's pro-rata calculation fails to satisfy the City's requirement that new development "pay its own way," because it does not reflect the revised Mall Expansion project's fair share of the true cost of its infrastructure and public facilities. The funding proposal is arbitrary and contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. The developer's proposed "voluntary contribution" is insufficient to reflect the project's fair share contribution, even if it was properly characterized as an impact fee and not improperly "unrestricted."

In addition to the elements of the revised Mall Expansion proposal that undermine the economics of the City's comprehensive planning efforts, the project raises a host of other significant policy concerns. Among them are the mischaracterization of the proposal as "infill" and the fundamental inconsistency of the currently proposed General Plan Amendment and rezone with the City's planning framework and policies regarding sustainability and housing, among others.

In prior discussions of a proposed General Plan Amendment and rezone for the Mall Expansion site, City staff has characterized the project site as "infill." Although the site does not represent "leapfrog" development, it does not satisfy any contemporary definition of infill and conflicts with the urban development policy adopted by Woodland's voters. For example, the project conflicts with the City's existing General Plan, which designates the Mall Expansion site as General Commercial ("GC"). The revised Mall Expansion project seeks a General Plan Amendment to Low Density Residential ("LDR"). As such it

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
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conflicts with the sustainable communities strategy set forth in the regional "Blueprint" adopted by the Sacramento Area Council of Governments ("SACOG"), which designates the Mall Expansion site for retail use and designates the surrounding areas for high-density residential and mixed uses to promote transit-oriented development. Because it conflicts with the sustainability and smart growth principles embodied in the City's zoning regulations as well as the SACOG Blueprint, the revised Mall Expansion project is not properly characterized as infill.

As currently proposed, the revised Mall Expansion project would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies.

**II. Alternative Growth and Development Scenarios**

From a land use policy and community sustainability perspective, the appropriateness of an LDR designation (already abundant in the City) for the Mall Expansion site is highly questionable. Particularly in light of the new grocery store opening at the County Fair Mall this summer, which will provide a neighborhood market as well as at least 75 jobs, the City should carefully evaluate whether the Mall Expansion site should retain its commercial designation, and if not, whether it is more suitable for higher-density residential development. The City's General Plan Update process should consider alternative development scenarios for the site that are more consistent with the City's vision, sustainability goals, and policies regarding land use, housing, transportation, and public services.

From an economic development perspective, the City cannot promote and sustain growth consistent with its vision if developers and homeowners who invest in the City's comprehensive planning efforts, such as the Spring Lake

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Cont'd**

Ms. Cindy Norris, Principal Planner  
Community Development Department  
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Specific Plan, then face arbitrary and fundamentally inequitable treatment. Rather, the City must ensure that its development policies and fee structure are consistent with the constitutional principles of equal protection and substantive due process as well as nexus and rough proportionality.

**III. Conclusion**

The City's General Plan Update process must evaluate the existing and potential uses of key parcels in order to advance the City's goals and implement the community's vision. The process thus should include a meaningful evaluation of the Mall Expansion Site and alternatives for its development as primarily a commercial or residential project. If the City determines the Mall Expansion Site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion Site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Specific Plan and its Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

Thank you in advance for the City's careful consideration of these issues and concerns, which play an important role in the City's evaluation and update of virtually every element of its General Plan, including but not limited to Land Use and Community Design; Housing; Public Facilities and Services; Recreational, Educational, and Community Services; Environmental Resources; and Economic Development.

Ms. Cindy Norris, Principal Planner  
Community Development Department  
May 14, 2013  
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Pursuant to Public Resources Code section 21092.2, please send all notices for the City's General Plan Update to me at the above address.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

AAM:jis

cc: Heidi Tschudin, General Plan Project Manager  
Ken Hiatt, Community Development Director  
Paul Navazio, City Manager  
Marlin H. "Skip" Davies, Mayor  
Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member

# ATTACHMENT C



Yolo County Office  
819 North Street  
Woodland, CA 95685  
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woodland-office@lsnc.net

July 29, 2013

Robin Huntley  
Department of Housing and Community Development  
Division of Housing Policy Development  
1800 Third Street, Room 430  
P.O. Box 952052  
Sacramento, CA 94252-2052

Sent via email

Re: City of Woodland's Draft Housing Element

Dear Ms. Huntley,

Legal Services of Northern California provides civil legal assistance to low income households throughout Yolo County. We submit the following comments regarding the City of Woodland's Draft Housing Element ("Draft"). We did not have the opportunity to meet with City staff to discuss our comments but have copied the City on this correspondence.

These comments are intended to strengthen the commitment Woodland has made to affordable housing in its previous planning period and assure the Housing Element's compliance with state law.

#### Statement of Goals, Quantified Objectives and Programs

##### 1. Quantified Objectives

Quantified objectives designate how many units in each income category the housing element policies and programs are expected to create during the planning period through new construction, rehabilitation or preservation. The City's draft Programs and Policies do not quantify any units. Instead, the City lists the quantified objectives in Table 1-1, stating their objective to construct 75 extremely low income units, 80 very low income units, 90 low income units, 349 moderate income units, and 864 above moderate income units. The planned development accounts for the entire Regional Housing Needs Allocation for moderate and above-moderate income units but a deficit of 205 extremely low and low income units and 159 low income units compared to the need. The City has not provided the basis for the conclusion that it can only produce a fraction of the need for extremely low, very low, and low income units. The City should include a quantitative analysis demonstrating its limited capacity based on assessments of current and anticipated economic conditions and available resources.

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A Legal Services Corporation Program LSC

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## 2. Programs

The City's proposed programs overall represent a watered down version of the previous programs, and contain very few required actions. As mentioned above, the City removed the quantified objectives in most of the proposed programs, which weakens the programs as a whole. The implementation actions also lack specificity. An adequate program should require a specific action by a specific date and have measureable outcomes. The proposed programs lack these important elements. The following is a list of the City's proposed programs and recommended revisions:

- 2.A.1— This program should be strengthened by adding back the higher densities and mixed uses in the innovative approaches consistent with the previous program that the City has indicated it will continue (2.1).
- 2.A.2—The City removed the multi-family language and added "any income group." Land is not zoned by income group, so multi-family zoned land should be included, which is consistent with the previous program that the City said it would continue (2.6).
- 2.A.7—The City should add using financial assistance from the Housing Trust Fund as well as other federal and state sources.
- 2.A.10—The City eliminated contact with non-profit builders and agricultural stakeholders. Since there is no indication that this program is being discontinued, it should be added back to this program consistent with previous program 2.18.
- 2.A.11—The City should use the previous program's language addressing the affordable housing ordinance, as it is much stronger than this scaled back version. (See Previous Program 2.15)
- 2.A.12— This program should be strengthened by adding that the City participate in the County-wide Ten Year Plan to End Homelessness.
- 2.A.13—This program should be strengthened by including language about allocating funds from the Housing Trust Fund.
- 2.A.14— This program should be strengthened by adding that the City contract for the services of the Homeless Coordinator and eliminate the use of the vague term "support," consistent with the previous program (2.13).
- 2.A.15—This program should be strengthened by stating the City will allow residential care homes with more than six mentally disordered or otherwise handicapped persons as a permitted use in the R-M zone. The City states on page 66 of the Draft that the City will need to amend the zoning ordinance to permit such use to remove the constraint but the current proposed program only states the City "shall consider options" to allow such homes.
- 2.B.1—In the evaluation of the previous program, the City indicated it will continue to fund repair and renovation programs. The proposed program, as written, does not require the set aside of funding to support this program.

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- 2.C.3—The proposed program does not require an amendment of the Municipal Code, which was listed in the previous program. The evaluation should indicate whether or not it was amended during the previous planning period.
- 2.D.1—The proposed program uses discretionary language, unlike the previous program that the evaluation says the City will continue. As written, the program does not require the City to apply its energy conservation city-wide.

In addition, the City indicated it will continue program 2.33 but there does not appear to be a similar program in this Draft. The previous program required the City to initiate a change to the General Plan and Zoning Ordinance to allow for additional mobile home park units to be located in a mobile home park. The City also removed program 2.20, which required the City to amend the Municipal Code to allow SROs in certain districts but the City did not provide a rationale for its removal.

**Analysis of Need**

**1. Disabled Households**

The Draft identified 6,157 disabled households in the City but only 19 units to meet their needs at Summer House, Inc. and New Dimensions. The Draft did not discuss facilitating development or rehabilitation of units to accommodate disabled households, like fast-tracking the permit process for projects or waiving or deferring fees for disabled households since many are on a limited budget. Further, the Draft did not include an analysis of persons with disability by disability type, which is readily available through the County's Alcohol, Drug, and Mental Health Department, which compiles the information for its Mental Health Services Plan. The Draft also omits any viable program for meeting the need. Although the City lists Program 2.A.16, there is no such program in the Draft.

**2. Elderly Households**

According to the Draft, 2010 census data indicates a need in Woodland for additional programs to assist senior renters. (Page 32) However, the Draft omits any specific program to assist senior renters, nor does it contain a list of available resources or services addressing senior housing needs. The City cites program 2.A.16, which does not exist, and program 2.B.1, a home rehabilitation program, as an action to address the needs of older adults. The City should address the identified need of senior renters and draft a program or programs specific to the need.

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### 3. Large Households

The Draft indicates that there are 439 rental units in the City with 4 or more bedrooms, while there are 1,463 renter occupied households with 5 or more persons. These numbers suggest that there is a deficit in units for large households. We commend the City for approving the Mutual Housing at Spring Lake project, which will provide 61 apartments and townhomes for agricultural workers and include some units for large families. However, the City has not provided any programs to address the need of large families. Further, the needs assessment is incomplete in that it does not include household size by income.

### 4. Farmworkers

The Draft quantifies the number of farmworkers, including seasonal and permanent workers who have different housing needs (3,953 and 1,928 respectively). The City also identified existing resources near Woodland for farmworker housing, including seasonal sites in Madison and Davis accommodating 152 farmworker households. The City did not include its Mutual Housing at Spring Lake multi-family farmworker housing project that will meet some of the need for permanent farmworker housing in Woodland. Full time agricultural workers have their housing needs best met through permanent affordable housing like Mutual Housing at Spring Lake. The program to amend the zoning code to facilitate farmworker housing as required by Health and Safety Code Section 17021.6 is a good start toward meeting the identified need, but the Draft should be strengthened by including other viable programs.

### 5. Homeless Persons

The analysis of special housing needs for families and persons in need of emergency shelter does not include a breakdown of the number of single males, single females, and families, all of which is available from the Homeless Poverty Action Coalition (HPAC), which serves as Yolo County's Continuum of Care. The analysis also omits important information relevant to identifying the needs of homeless persons, including the numbers of homeless persons who identify as mentally ill, substance abusers, victims of domestic violence, developmentally disabled, unaccompanied youth, and disabled. This information is available locally through HPAC and is imperative as the needs of each sub-group vary significantly. Further, the City's staff report covering a proposed Emergency Shelter Ordinance dated February 19, 2013 contains a detailed assessment of unmet need for shelters and bed count plus the sites that could support an emergency shelter by zoning, which should be included in the analysis of need.

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In addition, the inventory of existing resources for homeless persons is incomplete. The information is readily available from HPAC and is divided into resources for emergency housing, transitional housing, and supportive housing by geographic location in the County.

Further, the Draft's programs to meet the needs of homeless persons are insufficient. The City's proposed programs include providing support for the homeless coordinator and considering options for residential care homes with more than six mentally disordered or otherwise handicapped persons or dependent and neglected children as a permitted use in the R-M zone. While supporting the homeless coordinator is commendable and should be continued, other programs should also be implemented to address the needs of homeless persons in Woodland. The City could include the zoning codes allowing emergency shelters, transitional housing and supportive housing as programs to meet the identified need of homeless persons. In addition, programs that address long-term solutions to homelessness, like serving on the County's Ten Year Plan to End Homelessness and participating in HPAC, are also potential programs to address the needs of homeless persons in Woodland. Another recommended program is implementing zoning code provisions that permit SROs, which was a program in the previous housing element (Program 2.20) and omitted in the Draft for this planning period with no explanation of the basis for the omission.

#### Sites Inventory

Tables A.1 and A.2 contain the City's parcel inventory of vacant and redevelopable land zoned for residential and commercial use. There are multifamily sites that should be removed from the inventory because they are not available for immediate development and are inadequately sized for multifamily development. Also, neither the map provided nor the inventory identify the Spring Lake Specific Plan sites with sufficient detail to determine if they are available for development for housing affordable to a particular income group.

##### 1. Site Designation

Most of the sites that are zoned for multi-family housing are in the Spring Lake Specific Plan area. The land inventory at Table A.2 lists the acreage of high density residential and estimated holding capacity of those four sites but does not include a unique reference or the requisite specificity required in order to evaluate the availability of sites for development. The sites map at Page 51 only shows vacant and developable parcels, not their zoning designation. Thus, it is impossible to determine whether the sites are contiguous or interspersed throughout the Spring Lake Specific Plan Area. To the extent possible, multi-family housing should be interspersed with lower density housing, which generates much less community opposition and fosters an integrated community.

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## 2. Size and Occupied Sites

The City's land inventory by general plan designation and zoning district at Table 2-38 does not provide an accurate assessment of the residential holding capacity for multi-family housing. The City assumed very low and low income housing opportunities were provided by R-M and Spring Lake Specific Plan R-25 zones. (See Draft, Page 53) Yet, to arrive at the residential holding capacity, it appears that the City added up the size of all parcels located in each zone and multiplied by the maximum density, which provides an unrealistic assessment of the actual residential holding capacity. For example, in the ESD zone, the City added all ESD-zoned sites and multiplied the total acreage by 25, arriving at a residential holding capacity of 412. The City committed to not including 41 of the vacant and underutilized sites zoned ESD in its Draft at page 49 because they are not realistically developable during the planning period. The undevelopable parcels include all sites on the first page of Table A.1. Nonetheless, these sites were included in the realistic capacity assessment. Moreover, there are additional sites that should not be included in the sites inventory in the ESD zone. Parcel numbers 066-021-027-000, 063-060-001-000, 066-021-028-000, 066-021-004-000, 063-060-005-000 and 063-060-010-000 are listed as redevelopable but there is no analysis of the development potential of those occupied sites as required. The City must describe the extent to which the existing uses may impede residential development, recent development trends in the area and for similar sites, market conditions affecting development potential, and existing or proposed incentives to encourage residential development on the identified sites in order to count those sites as developable during the planning period. Consequently, there are currently no sites in the ESD zone that could realistically be developed for very low and low income households during the planning period.

The R-M sites should similarly be removed from consideration. As the City states in its Draft, 14 sites with R-M zoning are less than one acre and were removed from consideration, yet it appears that Table 2-38 includes those parcels. The only parcel that could potentially be considered is APN 066-030-033-000, although it is questionable whether it could support multi-family housing given its size of 1.09 acres. Affordable housing developers consider a site of five to ten acres to be ideal for an affordable multi-family development. A site of less than two acres is generally not feasible for development as a rental project. The size of the parcel is important because a project will need an economy of scale in order to be financially sound, especially with the limited funding sources available to support affordable housing projects.

## 3. Deficit in Very-Low and Low Income Sites

Even assuming the 1.09 acre parcel in the R-M zone is developable and adding the four unidentified R-25 sites in the Spring Lake Specific Plan Area, there is still a deficit in land suitable for development of housing for very-low and low income households within the planning period.

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July 29, 2013

**Letter 2  
Cont'd**

The realistic holding capacity of the R-M and Spring Lake Specific Plan Area sites is 584, leaving a deficit of 244 units for very-low and low income households. The City will need to take steps to address this issue including re-working the relevant tables and narrative in the draft.

**Conclusion**

The City of Woodland, like many jurisdictions, produced very few housing units during the last planning period as a result of economic conditions. Now that the economy, and in particular the housing market, is starting to recover, it is imperative that the City develop a housing element that furthers the goal of providing housing to all income levels in the 2013-2021 planning period. Although we would have appreciated the opportunity to meet with City staff to discuss our concerns prior to the Draft's submission to your office, we appreciate the opportunity to submit comments regarding the Draft Housing Element and thank you for considering them. We also welcome questions or comments from City staff.

With kind regards,

LEGAL SERVICES OF NORTHERN CALIFORNIA



Alysya Meyer  
Managing Attorney

cc: Heidi Tschudin, General Plan Project Manager  
Cindy Norris, Principal Planner  
Ken Hiatt, Community Development Director

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Mayor Davies:

Thank you for the City of Woodland's ongoing efforts to seek input from a variety of stakeholders and the public at large to ensure that its General Plan will function as it should to enhance the quality of life in the City's existing and future neighborhoods. On behalf of property owners in the Spring Lake Specific Plan, we submit the attached comments for the City's consideration.

In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The recently resubmitted Prudler Tentative Map proposes a subdivision that will rely on services and infrastructure funded and constructed by the developers and residents of Spring Lake – indeed, the Project would not be possible but for the backbone infrastructure provided by Spring Lake – yet the developer's proposed impact fee structure is far less than the project's fair share. In essence, the developer expects Spring Lake homeowners to provide backbone infrastructure to the Mall Expansion site at no cost. The proposal flies in the face of the City's commitments to, and investment in, Spring Lake and its residents, who deserve the City's continued support and assurance that all members of the community stand on equal footing.

Like all others in the City, the Mall Expansion site developer must "pay its own way" and bear the project's fair share of the true cost of its infrastructure and public facilities. The current fee proposal is arbitrary and unfair, and wholly

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**Letter 2  
Cont'd**

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
May 14, 2013  
Page 2

contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. Spring Lake homeowners cannot reasonably be required to subsidize a residential project on the Mall Expansion site, especially when that subsidy would substantially delay public services in Spring Lake. Allowing the Mall Expansion site development to go forward as proposed would severely set back the Spring Lake community, its parks, schools, and neighborhood amenities, and deprive existing City residents of the basic benefits for which they paid.

The Mall Expansion site development would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on homeowners in the Spring Lake Mello Roos financing district will result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

During this crucial planning process, the City should not proceed with review of proposed projects, such as the recently resubmitted Prudler Tentative Map, that unfairly expect existing City residents to subsidize their basic infrastructure costs; are fundamentally inconsistent with the City's planning history, existing General Plan, and voter-approved policies regarding land use,

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<sup>1</sup> / See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

**Letter 2  
Cont'd**

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
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Page 3

sustainability, infrastructure financing, and inclusionary housing, among others; and will be detrimental to and interfere with the General Plan Update. At a minimum, if the City determines the Mall Expansion site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

Thank you in advance for the City's careful consideration of these issues and concerns.

Very truly yours,

PIONEER LAWGROUP, LLP



ANDREA A. MATARAZZO

AAM:jis  
Enclosure

cc: Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member  
Paul Navazio, City Manager  
Ken Hiatt, Community Development Director

# EXHIBIT C

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

Blair W. Will  
Of Counsel

September 18, 2013

*Via Electronic and U.S. Mail*  
[cindy.norris@cityofwoodland.org](mailto:cindy.norris@cityofwoodland.org)

Cindy Norris, Principal Planner  
Community Development Department  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Ms. Norris:

This letter follows up on our previous correspondence to the City dated May 14, 2013, on behalf of property owners in the Spring Lake Specific Plan. The comments in those letters are incorporated by reference as if fully set forth herein. (Attachments A and B.)

We remain concerned that the City's proposed General Plan Update fails to adequately evaluate the existing and potential uses of key parcels in order to advance the City's goals and implement the community's vision. The City's Housing Element reflects a severe lack of housing options for the City's diverse population, and the proposed Update will perpetuate these deficiencies. In addition, while the City's description of the project characterizes the Update as merely "technical," the proposal and accompanying Negative Declaration show that the City is overlooking and understating this General Plan Update's significant short-term and long-term consequences.

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**Letter 2  
Cont'd**

Ms. Cindy Norris, Principal Planner  
Community Development Department  
September 18, 2013  
Page 2

Many of the fundamental defects in the City's proposed General Plan Update have been outlined in detail by housing experts, whose comments we incorporate by reference as if fully set forth herein. (Attachment C.) For example, the City's Housing Element fails to identify enough sites for higher density residential development to accommodate the community's housing needs. Although the Update outlines a conceptual program to rezone sites to meet those needs, it is unclear from the plan documents and the accompanying Negative Declaration whether and how the City will successfully implement the program. In particular, the proposed Update and Negative Declaration recognize that the City must "identify a minimum of 22 acres of land within the City for rezoning to allow 20 units per acre or higher residential development," and that the City still has not done so. (Negative Declaration, p. 3-17.) According to the Negative Declaration, "The City will be considering sites as a part of the General Plan Update process that is already underway," and the impacts of rezoning and development of specific parcels, once identified, will be analyzed in an environmental impact report ("EIR"). (*Ibid.*)

The City's deferral approach underscores the importance of sensible timing in order for community-building efforts to be effective. When a local government fails to adopt an adequate updated housing element, the general plan is invalid. Because all planning and development approval decisions must be consistent with the general plan, a local government may not proceed to make land use decisions and approve development until it has adopted a valid housing element. As noted in our previous comments, the City is in the process of making planning decisions that will have short-term and long-term consequences for the City in relation to virtually every element of its General Plan. The City should not allow review of individual development proposals to outpace or sidestep efforts to identify and appropriately zone sufficient acreage in the City to ensure housing needs are met in a manner that promotes the overall success of the Woodland community.

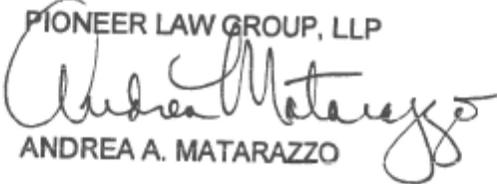
We appreciate the opportunity to provide these comments as the City strives to ensure that its General Plan will function as it should to enhance the quality of life in the City's existing and future neighborhoods.

**Letter 2  
Cont'd**

Ms. Cindy Norris, Principal Planner  
Community Development Department  
September 18, 2013  
Page 3

Pursuant to Public Resources Code section 21092.2, please continue to send all notices for the City's General Plan Update to me at the above address.

Very truly yours,

PIONEER LAW GROUP, LLP  
  
ANDREA A. MATARAZZO

AAM:jis  
Enclosures

cc: Heidi Tschudin, General Plan Project Manager  
Ken Hiatt, Community Development Director  
Paul Navazio, City Manager  
Marlin H. "Skip" Davies, Mayor  
Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member

# ATTACHMENT A

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Mayor Davies:

Thank you for the City of Woodland's ongoing efforts to seek input from a variety of stakeholders and the public at large to ensure that its General Plan will function as it should to enhance the quality of life in the City's existing and future neighborhoods. On behalf of property owners in the Spring Lake Specific Plan, we submit the attached comments for the City's consideration.

In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The recently resubmitted Prudler Tentative Map proposes a subdivision that will rely on services and infrastructure funded and constructed by the developers and residents of Spring Lake – indeed, the Project would not be possible but for the backbone infrastructure provided by Spring Lake – yet the developer's proposed impact fee structure is far less than the project's fair share. In essence, the developer expects Spring Lake homeowners to provide backbone infrastructure to the Mall Expansion site at no cost. The proposal flies in the face of the City's commitments to, and investment in, Spring Lake and its residents, who deserve the City's continued support and assurance that all members of the community stand on equal footing.

Like all others in the City, the Mall Expansion site developer must "pay its own way" and bear the project's fair share of the true cost of its infrastructure and public facilities. The current fee proposal is arbitrary and unfair, and wholly

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**Letter 2  
Cont'd**

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
May 14, 2013  
Page 2

contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. Spring Lake homeowners cannot reasonably be required to subsidize a residential project on the Mall Expansion site, especially when that subsidy would substantially delay public services in Spring Lake. Allowing the Mall Expansion site development to go forward as proposed would severely set back the Spring Lake community, its parks, schools, and neighborhood amenities, and deprive existing City residents of the basic benefits for which they paid.

The Mall Expansion site development would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on homeowners in the Spring Lake Mello Roos financing district will result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

During this crucial planning process, the City should not proceed with review of proposed projects, such as the recently resubmitted Prudler Tentative Map, that unfairly expect existing City residents to subsidize their basic infrastructure costs; are fundamentally inconsistent with the City's planning history, existing General Plan, and voter-approved policies regarding land use,

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<sup>1</sup> / See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

**Letter 2  
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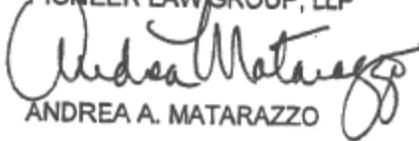
Marlin H. "Skip" Davies, Mayor  
City of Woodland  
May 14, 2013  
Page 3

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Thank you in advance for the City's careful consideration of these issues and concerns.

Very truly yours,

PIONEER LAWGROUP, LLP



ANDREA A. MATARAZZO

AAM:jis  
Enclosure

cc: Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member  
Paul Navazio, City Manager  
Ken Hiatt, Community Development Director

# **ATTACHMENT B**

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Cindy Norris, Principal Planner  
Community Development Department  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Ms. Norris:

Thank you for the opportunity to participate in the City of Woodland's visioning process as it sets out to prepare a General Plan Update and Climate Action Plan. As formulation of these plans begins in earnest, we request, on behalf of property owners in the Spring Lake Specific Plan, that the following critical issues be considered. In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The proposal would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities.

The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on Spring Lake homeowners will

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
May 14, 2013  
Page 2

result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

**I. Existing Land Use Patterns, Resources, and Development Opportunity Sites**

**A. Spring Lake Specific Plan**

The Spring Lake Specific Plan guides and control orderly and systematic development of over 1,000 acres located primarily south of Gibson Road and east of SR 113, immediately south of the City limits. The City adopted the Plan in order to create a desirable extension of Woodland's existing character and traditional neighborhoods. All individual development projects (including the issuance of any discretionary land use entitlement) in the area are subject to the requirements of the Plan.

The City's "Implementation Concept" set forth in the Spring Lake Specific Plan states:

New development is expected to "pay its own way", both in terms of capital costs (financing of infrastructure) and ongoing costs (generation of sufficient general fund revenue to support ongoing maintenance and operational costs). The General Plan goal for new development is "fiscal and financial neutrality" to the greatest feasible extent (General Plan Policy 4.B.1 and 4.B.3) in terms of impacts to the general fund, and financing of infrastructure. However, it is also important to note, that typically only "high end" housing would be able to do this assuming a primarily residential community. The clear goal of the General Plan, and the people of Woodland for this new growth area, is a rich, diverse,

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<sup>1/</sup> See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

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Cont'd**

Ms. Cindy Norris, Principal Planner  
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balanced community with a variety of housing and neighborhood opportunities, and a very large school component. As such, the General Plan policies also allow for leniency from the "neutrality rule" for development that generates "significant public benefit" provided an alternative source of funding can be obtained to offset foregone revenues.

As described herein, assuming full implementation of the vision and intent of this Plan, this test would clearly be met in the Specific Plan boundaries. The new community will offer significant housing opportunities for all economic segments with affordability by design as well as by market manipulation. It will also offer responsibly designed neighborhoods that minimize the need for vehicles, emphasize sustainable design, encourage defacto neighborhood policing by increasing activity, and replicate in the modern world the best characteristics of Woodland's favorite original neighborhoods. If adhered to and accomplished, these are significant public benefits.

It is also important to point out that full build-out of the General Plan was determined to be fiscally balanced when the General Plan adoption occurred in 1996, and this Specific Plan is consistent with that Plan. Revenue-generating land uses (e.g. commercial and industrial) designated elsewhere in the City (e.g. the Mall expansion property and the commercial property on the north side of Gibson Road) were found to balance the location of this mixed density, primarily residential community at the subject location. Additionally, the large acreage of public sector and exempt land uses which generate no property taxes, and the high level of development amenities expected from this development are highly relevant factors. Both affect fiscal balance, as well as the ability to finance the Plan.

Therefore, the final determination regarding net fiscal impact must look at how the General Plan balanced land uses overall, and acknowledge as well, the contribution this Plan will make to the livability and social health of the community.

(Spring Lake Specific Plan, p. 8-1.)

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The City's Implementation Concept makes clear that as it evaluates existing land use patterns, resources, and development opportunity sites as part of the General Plan Update, it must carefully consider how a General Plan Amendment for the Mall Expansion Property would affect the balance of land uses and the livability and social health of the community. Further, the City must consider how designating the Mall Expansion Property for residential rather than commercial use would ensure that the new development "pay its own way," without undermining the City's fiscal balance or build-out of the Spring Lake Specific Plan and its significant public benefits.

The City likewise must consider how designating the Mall Expansion Property for residential rather than commercial use would undermine the phasing considerations that were a focus of the Spring Lake Specific Plan. The General Plan Update should discourage development that does not contribute to the sense of an integrated community in accordance with the phasing factors identified by the City, including property owner financial commitment and participation and equity between property owners in order to secure cooperation.

#### **B. "Mall Expansion" Site**

##### **1. Site History**

The 38-acre property commonly known in the City as the "Mall Expansion" site (APN 041-070-42) was excluded from the Spring Lake Specific Plan on the basis of representations at the time that it would "immediately" be developed with big-box commercial uses as an extension of the existing shopping mall, and therefore should not be part of a comprehensively planned community. No logical basis to exclude this parcel from the Spring Lake Specific Plan was presented other than the asserted imminent development of the property to expand the mall, which the City summarized during the 1998-2000 proceedings essentially as follows:

- a) The 38-acre parcel south of the existing mall (one-half of the original parcel) was already designated for commercial use in the 1996 General Plan and earlier in City policies supporting the mall.

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- b) Public services for the 38-acre site would be provided through existing mall infrastructure.
- c) The site developer had identified commercial tenants ready to move into the mall expansion.
- d) Projected sales tax revenue from the mall expansion would not be credited to the Spring Lake Specific Plan for the purpose of determining neutrality, because the commercial development would proceed well before Spring Lake and was not contingent on a Spring Lake residential development.

The site thus was excluded from the Spring Lake Specific Plan, which the City adopted in December 2001. No commercial development of the Mall Expansion site materialized, however. In the years that followed, several proposals for development of the site have come forward, but none have come to fruition. The rationale for excluding the site from the Spring Lake Specific Plan no longer exists, and indeed, there is none. As the City updates its General Plan (of which the Spring Lake Specific Plan is a crucial part), alternative scenarios for the Mall Expansion site should be considered. If residential uses are appropriate for the Mall Expansion site and will use services and infrastructure funded by development of the Spring Lake Specific Plan, then the site should be included in Spring Lake, subject to the same obligations as homeowners in the Spring Lake Mello Roos financing district.

## **2. Current Development Proposal**

The Mall Expansion site, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is proposed for residential development. The proposed subdivision will rely on services and infrastructure funded and constructed by the developers and homeowners of Spring Lake, however the impact fee structure proposed by the developer is far less than the project's fair share and undermines the basic assumptions in the nexus study the City used to establish development impact fees imposed on the Spring Lake community.

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The revised Mall Expansion project seeks a General Plan Amendment and rezone from General Commercial (GC) to Low Density Residential (LDR) (as well as other significant discretionary land use approvals, including a conditional use permit and amendment to the Spring Lake Specific Plan) in order to develop approximately 204 conventional single-family units on about 38 acres (5.37 du/ac) in the City of Woodland. The proposed development will rely on infrastructure funded and constructed pursuant to the Spring Lake Specific Plan. The developer proposes to make a pro-rata reimbursement for the Spring Lake infrastructure based on its capacity of use, which results in a fee differential to the proposed project's advantage of approximately \$14,280 per unit. The developer proposes to pay half of that difference (approximately \$7,140 per unit) as a voluntary contribution to the City, for unrestricted use by the City to fund public improvements or services. The developer's pro-rata calculation fails to satisfy the City's requirement that new development "pay its own way," because it does not reflect the revised Mall Expansion project's fair share of the true cost of its infrastructure and public facilities. The funding proposal is arbitrary and contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. The developer's proposed "voluntary contribution" is insufficient to reflect the project's fair share contribution, even if it was properly characterized as an impact fee and not improperly "unrestricted."

In addition to the elements of the revised Mall Expansion proposal that undermine the economics of the City's comprehensive planning efforts, the project raises a host of other significant policy concerns. Among them are the mischaracterization of the proposal as "infill" and the fundamental inconsistency of the currently proposed General Plan Amendment and rezone with the City's planning framework and policies regarding sustainability and housing, among others.

In prior discussions of a proposed General Plan Amendment and rezone for the Mall Expansion site, City staff has characterized the project site as "infill." Although the site does not represent "leapfrog" development, it does not satisfy any contemporary definition of infill and conflicts with the urban development policy adopted by Woodland's voters. For example, the project conflicts with the City's existing General Plan, which designates the Mall Expansion site as General Commercial ("GC"). The revised Mall Expansion project seeks a General Plan Amendment to Low Density Residential ("LDR"). As such it

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conflicts with the sustainable communities strategy set forth in the regional "Blueprint" adopted by the Sacramento Area Council of Governments ("SACOG"), which designates the Mall Expansion site for retail use and designates the surrounding areas for high-density residential and mixed uses to promote transit-oriented development. Because it conflicts with the sustainability and smart growth principles embodied in the City's zoning regulations as well as the SACOG Blueprint, the revised Mall Expansion project is not properly characterized as infill.

As currently proposed, the revised Mall Expansion project would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies.

## II. Alternative Growth and Development Scenarios

From a land use policy and community sustainability perspective, the appropriateness of an LDR designation (already abundant in the City) for the Mall Expansion site is highly questionable. Particularly in light of the new grocery store opening at the County Fair Mall this summer, which will provide a neighborhood market as well as at least 75 jobs, the City should carefully evaluate whether the Mall Expansion site should retain its commercial designation, and if not, whether it is more suitable for higher-density residential development. The City's General Plan Update process should consider alternative development scenarios for the site that are more consistent with the City's vision, sustainability goals, and policies regarding land use, housing, transportation, and public services.

From an economic development perspective, the City cannot promote and sustain growth consistent with its vision if developers and homeowners who invest in the City's comprehensive planning efforts, such as the Spring Lake

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Cont'd**

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Specific Plan, then face arbitrary and fundamentally inequitable treatment. Rather, the City must ensure that its development policies and fee structure are consistent with the constitutional principles of equal protection and substantive due process as well as nexus and rough proportionality.

**III. Conclusion**

The City's General Plan Update process must evaluate the existing and potential uses of key parcels in order to advance the City's goals and implement the community's vision. The process thus should include a meaningful evaluation of the Mall Expansion Site and alternatives for its development as primarily a commercial or residential project. If the City determines the Mall Expansion Site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion Site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Specific Plan and its Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

Thank you in advance for the City's careful consideration of these issues and concerns, which play an important role in the City's evaluation and update of virtually every element of its General Plan, including but not limited to Land Use and Community Design; Housing; Public Facilities and Services; Recreational, Educational, and Community Services; Environmental Resources; and Economic Development.

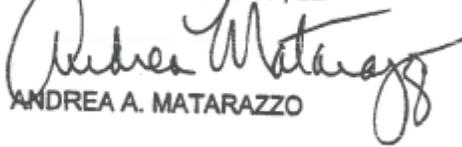
**Letter 2  
Cont'd**

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Pursuant to Public Resources Code section 21092.2, please send all notices for the City's General Plan Update to me at the above address.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

AAM:jis

cc: Heidi Tschudin, General Plan Project Manager  
Ken Hiatt, Community Development Director  
Paul Navazio, City Manager  
Marlin H. "Skip" Davies, Mayor  
Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member

# ATTACHMENT C



Yolo County Office  
819 North Street  
Woodland, CA 95695  
Phone: (530) 862-1085  
Fax: (530) 862-7941  
West Sacramento: (916) 447-5798  
woodland-office@lsnc.net

July 29, 2013

**Robin Huntley**  
Department of Housing and Community Development  
Division of Housing Policy Development  
1800 Third Street, Room 430  
P.O. Box 952052  
Sacramento, CA 94252-2052

Sent via email

Re: City of Woodland's Draft Housing Element

Dear Ms. Huntley,

Legal Services of Northern California provides civil legal assistance to low income households throughout Yolo County. We submit the following comments regarding the City of Woodland's Draft Housing Element ("Draft"). We did not have the opportunity to meet with City staff to discuss our comments but have copied the City on this correspondence.

These comments are intended to strengthen the commitment Woodland has made to affordable housing in its previous planning period and assure the Housing Element's compliance with state law.

#### **Statement of Goals, Quantified Objectives and Programs**

##### **1. Quantified Objectives**

Quantified objectives designate how many units in each income category the housing element policies and programs are expected to create during the planning period through new construction, rehabilitation or preservation. The City's draft Programs and Policies do not quantify any units. Instead, the City lists the quantified objectives in Table 1-1, stating their objective to construct 75 extremely low income units, 80 very low income units, 90 low income units, 349 moderate income units, and 864 above moderate income units. The planned development accounts for the entire Regional Housing Needs Allocation for moderate and above-moderate income units but a deficit of 205 extremely low and low income units and 159 low income units compared to the need. The City has not provided the basis for the conclusion that it can only produce a fraction of the need for extremely low, very low, and low income units. The City should include a quantitative analysis demonstrating its limited capacity based on assessments of current and anticipated economic conditions and available resources.

[www.lsnc.net](http://www.lsnc.net)

A Legal Services Corporation Program The logo for the Legal Services Corporation Program, consisting of the letters "LSLSC" in a bold, sans-serif font.

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## 2. Programs

The City's proposed programs overall represent a watered down version of the previous programs, and contain very few required actions. As mentioned above, the City removed the quantified objectives in most of the proposed programs, which weakens the programs as a whole. The implementation actions also lack specificity. An adequate program should require a specific action by a specific date and have measureable outcomes. The proposed programs lack these important elements. The following is a list of the City's proposed programs and recommended revisions:

- 2.A.1— This program should be strengthened by adding back the higher densities and mixed uses in the innovative approaches consistent with the previous program that the City has indicated it will continue (2.1).
- 2.A.2—The City removed the multi-family language and added "any income group." Land is not zoned by income group, so multi-family zoned land should be included, which is consistent with the previous program that the City said it would continue (2.6).
- 2.A.7—The City should add using financial assistance from the Housing Trust Fund as well as other federal and state sources.
- 2.A.10—The City eliminated contact with non-profit builders and agricultural stakeholders. Since there is no indication that this program is being discontinued, it should be added back to this program consistent with previous program 2.18.
- 2.A.11—The City should use the previous program's language addressing the affordable housing ordinance, as it is much stronger than this scaled back version. (See Previous Program 2.15)
- 2.A.12— This program should be strengthened by adding that the City participate in the County-wide Ten Year Plan to End Homelessness.
- 2.A.13—This program should be strengthened by including language about allocating funds from the Housing Trust Fund.
- 2.A.14— This program should be strengthened by adding that the City contract for the services of the Homeless Coordinator and eliminate the use of the vague term "support," consistent with the previous program (2.13).
- 2.A.15—This program should be strengthened by stating the City will allow residential care homes with more than six mentally disordered or otherwise handicapped persons as a permitted use in the R-M zone. The City states on page 66 of the Draft that the City will need to amend the zoning ordinance to permit such use to remove the constraint but the current proposed program only states the City "shall consider options" to allow such homes.
- 2.B.1—In the evaluation of the previous program, the City indicated it will continue to fund repair and renovation programs. The proposed program, as written, does not require the set aside of funding to support this program.

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- 2.C.3—The proposed program does not require an amendment of the Municipal Code, which was listed in the previous program. The evaluation should indicate whether or not it was amended during the previous planning period.
- 2.D.1—The proposed program uses discretionary language, unlike the previous program that the evaluation says the City will continue. As written, the program does not require the City to apply its energy conservation city-wide.

In addition, the City indicated it will continue program 2.33 but there does not appear to be a similar program in this Draft. The previous program required the City to initiate a change to the General Plan and Zoning Ordinance to allow for additional mobile home park units to be located in a mobile home park. The City also removed program 2.20, which required the City to amend the Municipal Code to allow SROs in certain districts but the City did not provide a rationale for its removal.

#### **Analysis of Need**

##### **1. Disabled Households**

The Draft identified 6,157 disabled households in the City but only 19 units to meet their needs at Summer House, Inc. and New Dimensions. The Draft did not discuss facilitating development or rehabilitation of units to accommodate disabled households, like fast-tracking the permit process for projects or waiving or deferring fees for disabled households since many are on a limited budget. Further, the Draft did not include an analysis of persons with disability by disability type, which is readily available through the County's Alcohol, Drug, and Mental Health Department, which compiles the information for its Mental Health Services Plan. The Draft also omits any viable program for meeting the need. Although the City lists Program 2.A.16, there is no such program in the Draft.

##### **2. Elderly Households**

According to the Draft, 2010 census data indicates a need in Woodland for additional programs to assist senior renters. (Page 32) However, the Draft omits any specific program to assist senior renters, nor does it contain a list of available resources or services addressing senior housing needs. The City cites program 2.A.16, which does not exist, and program 2.B.1, a home rehabilitation program, as an action to address the needs of older adults. The City should address the identified need of senior renters and draft a program or programs specific to the need.

### 3. Large Households

The Draft indicates that there are 439 rental units in the City with 4 or more bedrooms, while there are 1,463 renter occupied households with 5 or more persons. These numbers suggest that there is a deficit in units for large households. We commend the City for approving the Mutual Housing at Spring Lake project, which will provide 61 apartments and townhomes for agricultural workers and include some units for large families. However, the City has not provided any programs to address the need of large families. Further, the needs assessment is incomplete in that it does not include household size by income.

### 4. Farmworkers

The Draft quantifies the number of farmworkers, including seasonal and permanent workers who have different housing needs (3,953 and 1,928 respectively). The City also identified existing resources near Woodland for farmworker housing, including seasonal sites in Madison and Davis accommodating 152 farmworker households. The City did not include its Mutual Housing at Spring Lake multi-family farmworker housing project that will meet some of the need for permanent farmworker housing in Woodland. Full time agricultural workers have their housing needs best met through permanent affordable housing like Mutual Housing at Spring Lake. The program to amend the zoning code to facilitate farmworker housing as required by Health and Safety Code Section 17021.6 is a good start toward meeting the identified need, but the Draft should be strengthened by including other viable programs.

### 5. Homeless Persons

The analysis of special housing needs for families and persons in need of emergency shelter does not include a breakdown of the number of single males, single females, and families, all of which is available from the Homeless Poverty Action Coalition (HPAC), which serves as Yolo County's Continuum of Care. The analysis also omits important information relevant to identifying the needs of homeless persons, including the numbers of homeless persons who identify as mentally ill, substance abusers, victims of domestic violence, developmentally disabled, unaccompanied youth, and disabled. This information is available locally through HPAC and is imperative as the needs of each sub-group vary significantly. Further, the City's staff report covering a proposed Emergency Shelter Ordinance dated February 19, 2013 contains a detailed assessment of unmet need for shelters and bed count plus the sites that could support an emergency shelter by zoning, which should be included in the analysis of need.

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In addition, the inventory of existing resources for homeless persons is incomplete. The information is readily available from HPAC and is divided into resources for emergency housing, transitional housing, and supportive housing by geographic location in the County.

Further, the Draft's programs to meet the needs of homeless persons are insufficient. The City's proposed programs include providing support for the homeless coordinator and considering options for residential care homes with more than six mentally disordered or otherwise handicapped persons or dependent and neglected children as a permitted use in the R-M zone. While supporting the homeless coordinator is commendable and should be continued, other programs should also be implemented to address the needs of homeless persons in Woodland. The City could include the zoning codes allowing emergency shelters, transitional housing and supportive housing as programs to meet the identified need of homeless persons. In addition, programs that address long-term solutions to homelessness, like serving on the County's Ten Year Plan to End Homelessness and participating in HPAC, are also potential programs to address the needs of homeless persons in Woodland. Another recommended program is implementing zoning code provisions that permit SROs, which was a program in the previous housing element (Program 2.20) and omitted in the Draft for this planning period with no explanation of the basis for the omission.

#### **Sites Inventory**

Tables A.1 and A.2 contain the City's parcel inventory of vacant and redevelopable land zoned for residential and commercial use. There are multifamily sites that should be removed from the inventory because they are not available for immediate development and are inadequately sized for multifamily development. Also, neither the map provided nor the inventory identify the Spring Lake Specific Plan sites with sufficient detail to determine if they are available for development for housing affordable to a particular income group.

##### **1. Site Designation**

Most of the sites that are zoned for multi-family housing are in the Spring Lake Specific Plan area. The land inventory at Table A.2 lists the acreage of high density residential and estimated holding capacity of those four sites but does not include a unique reference or the requisite specificity required in order to evaluate the availability of sites for development. The sites map at Page 51 only shows vacant and developable parcels, not their zoning designation. Thus, it is impossible to determine whether the sites are contiguous or interspersed throughout the Spring Lake Specific Plan Area. To the extent possible, multi-family housing should be interspersed with lower density housing, which generates much less community opposition and fosters an *integrated* community.

## 2. Size and Occupied Sites

The City's land inventory by general plan designation and zoning district at Table 2-38 does not provide an accurate assessment of the residential holding capacity for multi-family housing. The City assumed very low and low income housing opportunities were provided by R-M and Spring Lake Specific Plan R-25 zones. (See Draft, Page 53) Yet, to arrive at the residential holding capacity, it appears that the City added up the size of all parcels located in each zone and multiplied by the maximum density, which provides an unrealistic assessment of the actual residential holding capacity. For example, in the ESD zone, the City added all ESD-zoned sites and multiplied the total acreage by 25, arriving at a residential holding capacity of 412. The City committed to not including 41 of the vacant and underutilized sites zoned ESD in its Draft at page 49 because they are not realistically developable during the planning period. The undevelopable parcels include all sites on the first page of Table A.1. Nonetheless, these sites were included in the realistic capacity assessment. Moreover, there are additional sites that should not be included in the sites inventory in the ESD zone. Parcel numbers 066-021-027-000, 063-060-001-000, 066-021-028-000, 066-021-004-000, 063-060-005-000 and 063-060-010-000 are listed as redevelopable but there is no analysis of the development potential of those occupied sites as required. The City must describe the extent to which the existing uses may impede residential development, recent development trends in the area and for similar sites, market conditions affecting development potential, and existing or proposed incentives to encourage residential development on the identified sites in order to count those sites as developable during the planning period. Consequently, there are currently no sites in the ESD zone that could realistically be developed for very low and low income households during the planning period.

The R-M sites should similarly be removed from consideration. As the City states in its Draft, 14 sites with R-M zoning are less than one acre and were removed from consideration, yet it appears that Table 2-38 includes those parcels. The only parcel that could potentially be considered is APN 066-030-033-000, although it is questionable whether it could support multi-family housing given its size of 1.09 acres. Affordable housing developers consider a site of five to ten acres to be ideal for an affordable multi-family development. A site of less than two acres is generally not feasible for development as a rental project. The size of the parcel is important because a project will need an economy of scale in order to be financially sound, especially with the limited funding sources available to support affordable housing projects.

## 3. Deficit in Very-Low and Low Income Sites

Even assuming the 1.09 acre parcel in the R-M zone is developable and adding the four unidentified R-25 sites in the Spring Lake Specific Plan Area, there is still a deficit in land suitable for development of housing for very-low and low income households within the planning period.

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The realistic holding capacity of the R-M and Spring Lake Specific Plan Area sites is 584, leaving a deficit of 244 units for very-low and low income households. The City will need to take steps to address this issue including re-working the relevant tables and narrative in the draft.

**Conclusion**

The City of Woodland, like many jurisdictions, produced very few housing units during the last planning period as a result of economic conditions. Now that the economy, and in particular the housing market, is starting to recover, it is imperative that the City develop a housing element that furthers the goal of providing housing to all income levels in the 2013-2021 planning period. Although we would have appreciated the opportunity to meet with City staff to discuss our concerns prior to the Draft's submission to your office, we appreciate the opportunity to submit comments regarding the Draft Housing Element and thank you for considering them. We also welcome questions or comments from City staff.

With kind regards,

LEGAL SERVICES OF NORTHERN CALIFORNIA



Alysa Meyer  
Managing Attorney

cc: Heidi Tschudin, General Plan Project Manager  
Cindy Norris, Principal Planner  
Ken Hiatt, Community Development Director



# Exhibit B

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Cindy Norris, Principal Planner  
Community Development Department  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Ms. Norris:

Thank you for the opportunity to participate in the City of Woodland's visioning process as it sets out to prepare a General Plan Update and Climate Action Plan. As formulation of these plans begins in earnest, we request, on behalf of property owners in the Spring Lake Specific Plan, that the following critical issues be considered. In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The proposal would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities.

The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on Spring Lake homeowners will

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v. (916) 496-8500 • f. (916) 496-8500 • [www.pioneerlawgroup.net](http://www.pioneerlawgroup.net)

Ms. Cindy Norris, Principal Planner  
Community Development Department  
May 14, 2013  
Page 2

result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

**I. Existing Land Use Patterns, Resources, and Development Opportunity Sites**

**A. Spring Lake Specific Plan**

The Spring Lake Specific Plan guides and control orderly and systematic development of over 1,000 acres located primarily south of Gibson Road and east of SR 113, immediately south of the City limits. The City adopted the Plan in order to create a desirable extension of Woodland's existing character and traditional neighborhoods. All individual development projects (including the issuance of any discretionary land use entitlement) in the area are subject to the requirements of the Plan.

The City's "Implementation Concept" set forth in the Spring Lake Specific Plan states:

New development is expected to "pay its own way", both in terms of capital costs (financing of infrastructure) and ongoing costs (generation of sufficient general fund revenue to support ongoing maintenance and operational costs). The General Plan goal for new development is "fiscal and financial neutrality" to the greatest feasible extent (General Plan Policy 4.B.1 and 4.B.3) in terms of impacts to the general fund, and financing of infrastructure. However, it is also important to note, that typically only "high end" housing would be able to do this assuming a primarily residential community. The clear goal of the General Plan, and the people of Woodland for this new growth area, is a rich, diverse,

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<sup>1</sup> / See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

Ms. Cindy Norris, Principal Planner  
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balanced community with a variety of housing and neighborhood opportunities, and a very large school component. As such, the General Plan policies also allow for leniency from the "neutrality rule" for development that generates "significant public benefit" provided an alternative source of funding can be obtained to offset foregone revenues.

As described herein, assuming full implementation of the vision and intent of this Plan, this test would clearly be met in the Specific Plan boundaries. The new community will offer significant housing opportunities for all economic segments with affordability by design as well as by market manipulation. It will also offer responsibly designed neighborhoods that minimize the need for vehicles, emphasize sustainable design, encourage defacto neighborhood policing by increasing activity, and replicate in the modern world the best characteristics of Woodland's favorite original neighborhoods. If adhered to and accomplished, these are significant public benefits.

It is also important to point out that full build-out of the General Plan was determined to be fiscally balanced when the General Plan adoption occurred in 1996, and this Specific Plan is consistent with that Plan. Revenue-generating land uses (e.g. commercial and industrial) designated elsewhere in the City (e.g. the Mall expansion property and the commercial property on the north side of Gibson Road) were found to balance the location of this mixed density, primarily residential community at the subject location. Additionally, the large acreage of public sector and exempt land uses which generate no property taxes, and the high level of development amenities expected from this development are highly relevant factors. Both affect fiscal balance, as well as the ability to finance the Plan.

Therefore, the final determination regarding net fiscal impact must look at how the General Plan balanced land uses overall, and acknowledge as well, the contribution this Plan will make to the livability and social health of the community.

(Spring Lake Specific Plan, p. 8-1.)

Ms. Cindy Norris, Principal Planner  
Community Development Department  
May 14, 2013  
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The City's Implementation Concept makes clear that as it evaluates existing land use patterns, resources, and development opportunity sites as part of the General Plan Update, it must carefully consider how a General Plan Amendment for the Mall Expansion Property would affect the balance of land uses and the livability and social health of the community. Further, the City must consider how designating the Mall Expansion Property for residential rather than commercial use would ensure that the new development "pay its own way," without undermining the City's fiscal balance or build-out of the Spring Lake Specific Plan and its significant public benefits.

The City likewise must consider how designating the Mall Expansion Property for residential rather than commercial use would undermine the phasing considerations that were a focus of the Spring Lake Specific Plan. The General Plan Update should discourage development that does not contribute to the sense of an integrated community in accordance with the phasing factors identified by the City, including property owner financial commitment and participation and equity between property owners in order to secure cooperation.

#### **B. "Mall Expansion" Site**

##### **1. Site History**

The 38-acre property commonly known in the City as the "Mall Expansion" site (APN 041-070-42) was excluded from the Spring Lake Specific Plan on the basis of representations at the time that it would "immediately" be developed with big-box commercial uses as an extension of the existing shopping mall, and therefore should not be part of a comprehensively planned community. No logical basis to exclude this parcel from the Spring Lake Specific Plan was presented other than the asserted imminent development of the property to expand the mall, which the City summarized during the 1998-2000 proceedings essentially as follows:

- a) The 38-acre parcel south of the existing mall (one-half of the original parcel) was already designated for commercial use in the 1996 General Plan and earlier in City policies supporting the mall.

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- b) Public services for the 38-acre site would be provided through existing mall infrastructure.
- c) The site developer had identified commercial tenants ready to move into the mall expansion.
- d) Projected sales tax revenue from the mall expansion would not be credited to the Spring Lake Specific Plan for the purpose of determining neutrality, because the commercial development would proceed well before Spring Lake and was not contingent on a Spring Lake residential development.

The site thus was excluded from the Spring Lake Specific Plan, which the City adopted in December 2001. No commercial development of the Mall Expansion site materialized, however. In the years that followed, several proposals for development of the site have come forward, but none have come to fruition. The rationale for excluding the site from the Spring Lake Specific Plan no longer exists, and indeed, there is none. As the City updates its General Plan (of which the Spring Lake Specific Plan is a crucial part), alternative scenarios for the Mall Expansion site should be considered. If residential uses are appropriate for the Mall Expansion site and will use services and infrastructure funded by development of the Spring Lake Specific Plan, then the site should be included in Spring Lake, subject to the same obligations as homeowners in the Spring Lake Mello Roos financing district.

## **2. Current Development Proposal**

The Mall Expansion site, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is proposed for residential development. The proposed subdivision will rely on services and infrastructure funded and constructed by the developers and homeowners of Spring Lake, however the impact fee structure proposed by the developer is far less than the project's fair share and undermines the basic assumptions in the nexus study the City used to establish development impact fees imposed on the Spring Lake community.

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The revised Mall Expansion project seeks a General Plan Amendment and rezone from General Commercial (GC) to Low Density Residential (LDR) (as well as other significant discretionary land use approvals, including a conditional use permit and amendment to the Spring Lake Specific Plan) in order to develop approximately 204 conventional single-family units on about 38 acres (5.37 du/ac) in the City of Woodland. The proposed development will rely on infrastructure funded and constructed pursuant to the Spring Lake Specific Plan. The developer proposes to make a pro-rata reimbursement for the Spring Lake infrastructure based on its capacity of use, which results in a fee differential to the proposed project's advantage of approximately \$14,280 per unit. The developer proposes to pay half of that difference (approximately \$7,140 per unit) as a voluntary contribution to the City, for unrestricted use by the City to fund public improvements or services. The developer's pro-rata calculation fails to satisfy the City's requirement that new development "pay its own way," because it does not reflect the revised Mall Expansion project's fair share of the true cost of its infrastructure and public facilities. The funding proposal is arbitrary and contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. The developer's proposed "voluntary contribution" is insufficient to reflect the project's fair share contribution, even if it was properly characterized as an impact fee and not improperly "unrestricted."

In addition to the elements of the revised Mall Expansion proposal that undermine the economics of the City's comprehensive planning efforts, the project raises a host of other significant policy concerns. Among them are the mischaracterization of the proposal as "infill" and the fundamental inconsistency of the currently proposed General Plan Amendment and rezone with the City's planning framework and policies regarding sustainability and housing, among others.

In prior discussions of a proposed General Plan Amendment and rezone for the Mall Expansion site, City staff has characterized the project site as "infill." Although the site does not represent "leapfrog" development, it does not satisfy any contemporary definition of infill and conflicts with the urban development policy adopted by Woodland's voters. For example, the project conflicts with the City's existing General Plan, which designates the Mall Expansion site as General Commercial ("GC"). The revised Mall Expansion project seeks a General Plan Amendment to Low Density Residential ("LDR"). As such it

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conflicts with the sustainable communities strategy set forth in the regional "Blueprint" adopted by the Sacramento Area Council of Governments ("SACOG"), which designates the Mall Expansion site for retail use and designates the surrounding areas for high-density residential and mixed uses to promote transit-oriented development. Because it conflicts with the sustainability and smart growth principles embodied in the City's zoning regulations as well as the SACOG Blueprint, the revised Mall Expansion project is not properly characterized as infill.

As currently proposed, the revised Mall Expansion project would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies.

## **II. Alternative Growth and Development Scenarios**

From a land use policy and community sustainability perspective, the appropriateness of an LDR designation (already abundant in the City) for the Mall Expansion site is highly questionable. Particularly in light of the new grocery store opening at the County Fair Mall this summer, which will provide a neighborhood market as well as at least 75 jobs, the City should carefully evaluate whether the Mall Expansion site should retain its commercial designation, and if not, whether it is more suitable for higher-density residential development. The City's General Plan Update process should consider alternative development scenarios for the site that are more consistent with the City's vision, sustainability goals, and policies regarding land use, housing, transportation, and public services.

From an economic development perspective, the City cannot promote and sustain growth consistent with its vision if developers and homeowners who invest in the City's comprehensive planning efforts, such as the Spring Lake

**Letter 2  
Cont'd**

Ms. Cindy Norris, Principal Planner  
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Specific Plan, then face arbitrary and fundamentally inequitable treatment. Rather, the City must ensure that its development policies and fee structure are consistent with the constitutional principles of equal protection and substantive due process as well as nexus and rough proportionality.

**III. Conclusion**

The City's General Plan Update process must evaluate the existing and potential uses of key parcels in order to advance the City's goals and implement the community's vision. The process thus should include a meaningful evaluation of the Mall Expansion Site and alternatives for its development as primarily a commercial or residential project. If the City determines the Mall Expansion Site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion Site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Specific Plan and its Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

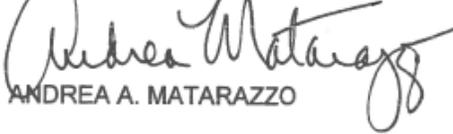
Thank you in advance for the City's careful consideration of these issues and concerns, which play an important role in the City's evaluation and update of virtually every element of its General Plan, including but not limited to Land Use and Community Design; Housing; Public Facilities and Services; Recreational, Educational, and Community Services; Environmental Resources; and Economic Development.

**Letter 2  
Cont'd**

Pursuant to Public Resources Code section 21092.2, please send all notices for the City's General Plan Update to me at the above address.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

AAM:jis

cc: Heidi Tschudin, General Plan Project Manager  
Ken Hiatt, Community Development Director  
Paul Navazio, City Manager  
Marlin H. "Skip" Davies, Mayor  
Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member



**Exhibit C**

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

Blair W. Will  
Of Counsel

September 18, 2013

*Via Electronic and U.S. Mail*  
[cindy.norris@cityofwoodland.org](mailto:cindy.norris@cityofwoodland.org)

Cindy Norris, Principal Planner  
Community Development Department  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Ms. Norris:

This letter follows up on our previous correspondence to the City dated May 14, 2013, on behalf of property owners in the Spring Lake Specific Plan. The comments in those letters are incorporated by reference as if fully set forth herein. (Attachments A and B.)

We remain concerned that the City's proposed General Plan Update fails to adequately evaluate the existing and potential uses of key parcels in order to advance the City's goals and implement the community's vision. The City's Housing Element reflects a severe lack of housing options for the City's diverse population, and the proposed Update will perpetuate these deficiencies. In addition, while the City's description of the project characterizes the Update as merely "technical," the proposal and accompanying Negative Declaration show that the City is overlooking and understating this General Plan Update's significant short-term and long-term consequences.

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**Letter 2  
Cont'd**

Ms. Cindy Norris, Principal Planner  
Community Development Department  
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Many of the fundamental defects in the City's proposed General Plan Update have been outlined in detail by housing experts, whose comments we incorporate by reference as if fully set forth herein. (Attachment C.) For example, the City's Housing Element fails to identify enough sites for higher density residential development to accommodate the community's housing needs. Although the Update outlines a conceptual program to rezone sites to meet those needs, it is unclear from the plan documents and the accompanying Negative Declaration whether and how the City will successfully implement the program. In particular, the proposed Update and Negative Declaration recognize that the City must "identify a minimum of 22 acres of land within the City for rezoning to allow 20 units per acre or higher residential development," and that the City still has not done so. (Negative Declaration, p. 3-17.) According to the Negative Declaration, "The City will be considering sites as a part of the General Plan Update process that is already underway," and the impacts of rezoning and development of specific parcels, once identified, will be analyzed in an environmental impact report ("EIR"). (*Ibid.*)

The City's deferral approach underscores the importance of sensible timing in order for community-building efforts to be effective. When a local government fails to adopt an adequate updated housing element, the general plan is invalid. Because all planning and development approval decisions must be consistent with the general plan, a local government may not proceed to make land use decisions and approve development until it has adopted a valid housing element. As noted in our previous comments, the City is in the process of making planning decisions that will have short-term and long-term consequences for the City in relation to virtually every element of its General Plan. The City should not allow review of individual development proposals to outpace or sidestep efforts to identify and appropriately zone sufficient acreage in the City to ensure housing needs are met in a manner that promotes the overall success of the Woodland community.

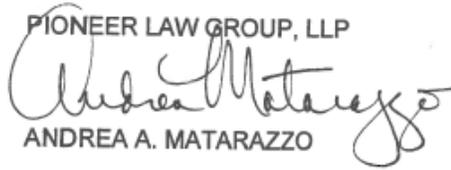
We appreciate the opportunity to provide these comments as the City strives to ensure that its General Plan will function as it should to enhance the quality of life in the City's existing and future neighborhoods.

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Cont'd**

Ms. Cindy Norris, Principal Planner  
Community Development Department  
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Pursuant to Public Resources Code section 21092.2, please continue to send all notices for the City's General Plan Update to me at the above address.

Very truly yours,

PIONEER LAW GROUP, LLP  
  
ANDREA A. MATARAZZO

AAM:jis  
Enclosures

cc: Heidi Tschudin, General Plan Project Manager  
Ken Hiatt, Community Development Director  
Paul Navazio, City Manager  
Marlin H. "Skip" Davies, Mayor  
Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member

# ATTACHMENT A

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner

Joel Patrick Erb  
Partner

Andrea A. Matarazzo  
Partner

May 14, 2013

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Mayor Davies:

Thank you for the City of Woodland's ongoing efforts to seek input from a variety of stakeholders and the public at large to ensure that its General Plan will function as it should to enhance the quality of life in the City's existing and future neighborhoods. On behalf of property owners in the Spring Lake Specific Plan, we submit the attached comments for the City's consideration.

In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The recently resubmitted Prudler Tentative Map proposes a subdivision that will rely on services and infrastructure funded and constructed by the developers and residents of Spring Lake – indeed, the Project would not be possible but for the backbone infrastructure provided by Spring Lake – yet the developer's proposed impact fee structure is far less than the project's fair share. In essence, the developer expects Spring Lake homeowners to provide backbone infrastructure to the Mall Expansion site at no cost. The proposal flies in the face of the City's commitments to, and investment in, Spring Lake and its residents, who deserve the City's continued support and assurance that all members of the community stand on equal footing.

Like all others in the City, the Mall Expansion site developer must "pay its own way" and bear the project's fair share of the true cost of its infrastructure and public facilities. The current fee proposal is arbitrary and unfair, and wholly

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Cont'd**

Marlin H. "Skip" Davies, Mayor  
City of Woodland  
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contrary to the economic analysis supporting the City's nexus findings for the Spring Lake Specific Plan. Spring Lake homeowners cannot reasonably be required to subsidize a residential project on the Mall Expansion site, especially when that subsidy would substantially delay public services in Spring Lake. Allowing the Mall Expansion site development to go forward as proposed would severely set back the Spring Lake community, its parks, schools, and neighborhood amenities, and deprive existing City residents of the basic benefits for which they paid.

The Mall Expansion site development would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on homeowners in the Spring Lake Mello Roos financing district will result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

During this crucial planning process, the City should not proceed with review of proposed projects, such as the recently resubmitted Prudler Tentative Map, that unfairly expect existing City residents to subsidize their basic infrastructure costs; are fundamentally inconsistent with the City's planning history, existing General Plan, and voter-approved policies regarding land use,

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<sup>1/</sup> See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

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Cont'd**

Marlin H. "Skip" Davies, Mayor  
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sustainability, infrastructure financing, and inclusionary housing, among others; and will be detrimental to and interfere with the General Plan Update. At a minimum, if the City determines the Mall Expansion site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

Thank you in advance for the City's careful consideration of these issues and concerns.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

AAM:jis  
Enclosure

cc: Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member  
Paul Navazio, City Manager  
Ken Hiatt, Community Development Director

# ATTACHMENT B

**Letter 2  
Cont'd**



Jeffrey K. Dorso  
Partner  
Joel Patrick Erb  
Partner  
Andrea A. Matarazzo  
Partner

May 14, 2013

Cindy Norris, Principal Planner  
Community Development Department  
City of Woodland  
300 First Street  
Woodland, CA 95695

Re: *City of Woodland General Plan Update and Climate Action Plan*  
Our File No. 5053-001

Dear Ms. Norris:

Thank you for the opportunity to participate in the City of Woodland's visioning process as it sets out to prepare a General Plan Update and Climate Action Plan. As formulation of these plans begins in earnest, we request, on behalf of property owners in the Spring Lake Specific Plan, that the following critical issues be considered. In particular, we urge your careful consideration of issues of policy and fundamental fairness associated with planning for the City's Mall Expansion site. This property, currently zoned for commercial use and located immediately outside the Spring Lake Specific Plan, is now proposed for a low-density residential subdivision. The proposal would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities.

The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies. As the City's staff has recognized, creating residential development opportunities that are not subject to the same standards and requirements imposed on Spring Lake homeowners will

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
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result in unfair competition, while making it more difficult to finance and build out areas in Spring Lake that are inherently better sites for residential development.<sup>1</sup> Based on the City's policies as well as fundamental principles of good faith and fair dealing, any residential development of the Mall Expansion site must pay its true fair share for infrastructure and public facilities and be consistent with fostering the Spring Lake Specific Plan's viability, financing plan, and absorption.

**i. Existing Land Use Patterns, Resources, and Development Opportunity Sites**

**A. Spring Lake Specific Plan**

The Spring Lake Specific Plan guides and control orderly and systematic development of over 1,000 acres located primarily south of Gibson Road and east of SR 113, immediately south of the City limits. The City adopted the Plan in order to create a desirable extension of Woodland's existing character and traditional neighborhoods. All individual development projects (including the issuance of any discretionary land use entitlement) in the area are subject to the requirements of the Plan.

The City's "Implementation Concept" set forth in the Spring Lake Specific Plan states:

New development is expected to "pay its own way", both in terms of capital costs (financing of infrastructure) and ongoing costs (generation of sufficient general fund revenue to support ongoing maintenance and operational costs). The General Plan goal for new development is "fiscal and financial neutrality" to the greatest feasible extent (General Plan Policy 4.B.1 and 4.B.3) in terms of impacts to the general fund, and financing of infrastructure. However, it is also important to note, that typically only "high end" housing would be able to do this assuming a primarily residential community. The clear goal of the General Plan, and the people of Woodland for this new growth area, is a rich, diverse,

<sup>1/</sup> See, e.g., City of Woodland, Planning Commission Staff Report, February 21, 2008, pp. 2-3.)

**Letter 2  
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Ms. Cindy Norris, Principal Planner  
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balanced community with a variety of housing and neighborhood opportunities, and a very large school component. As such, the General Plan policies also allow for leniency from the "neutrality rule" for development that generates "significant public benefit" provided an alternative source of funding can be obtained to offset foregone revenues.

As described herein, assuming full implementation of the vision and intent of this Plan, this test would clearly be met in the Specific Plan boundaries. The new community will offer significant housing opportunities for all economic segments with affordability by design as well as by market manipulation. It will also offer responsibly designed neighborhoods that minimize the need for vehicles, emphasize sustainable design, encourage defacto neighborhood policing by increasing activity, and replicate in the modern world the best characteristics of Woodland's favorite original neighborhoods. If adhered to and accomplished, these are significant public benefits.

It is also important to point out that full build-out of the General Plan was determined to be fiscally balanced when the General Plan adoption occurred in 1996, and this Specific Plan is consistent with that Plan. Revenue-generating land uses (e.g. commercial and industrial) designated elsewhere in the City (e.g. the Mall expansion property and the commercial property on the north side of Gibson Road) were found to balance the location of this mixed density, primarily residential community at the subject location. Additionally, the large acreage of public sector and exempt land uses which generate no property taxes, and the high level of development amenities expected from this development are highly relevant factors. Both affect fiscal balance, as well as the ability to finance the Plan.

Therefore, the final determination regarding net fiscal impact must look at how the General Plan balanced land uses overall, and acknowledge as well, the contribution this Plan will make to the livability and social health of the community.

(Spring Lake Specific Plan, p. 8-1.)

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Ms. Cindy Norris, Principal Planner  
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The City's Implementation Concept makes clear that as it evaluates existing land use patterns, resources, and development opportunity sites as part of the General Plan Update, it must carefully consider how a General Plan Amendment for the Mall Expansion Property would affect the balance of land uses and the livability and social health of the community. Further, the City must consider how designating the Mall Expansion Property for residential rather than commercial use would ensure that the new development "pay its own way," without undermining the City's fiscal balance or build-out of the Spring Lake Specific Plan and its significant public benefits.

The City likewise must consider how designating the Mall Expansion Property for residential rather than commercial use would undermine the phasing considerations that were a focus of the Spring Lake Specific Plan. The General Plan Update should discourage development that does not contribute to the sense of an integrated community in accordance with the phasing factors identified by the City, including property owner financial commitment and participation and equity between property owners in order to secure cooperation.

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Ms. Cindy Norris, Principal Planner  
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- b) Public services for the 38-acre site would be provided through existing mall infrastructure.
- c) The site developer had identified commercial tenants ready to move into the mall expansion.
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Ms. Cindy Norris, Principal Planner  
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In addition to the elements of the revised Mall Expansion proposal that undermine the economics of the City's comprehensive planning efforts, the project raises a host of other significant policy concerns. Among them are the mischaracterization of the proposal as "infill" and the fundamental inconsistency of the currently proposed General Plan Amendment and rezone with the City's planning framework and policies regarding sustainability and housing, among others.

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Ms. Cindy Norris, Principal Planner  
Community Development Department  
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conflicts with the sustainable communities strategy set forth in the regional "Blueprint" adopted by the Sacramento Area Council of Governments ("SACOG"), which designates the Mall Expansion site for retail use and designates the surrounding areas for high-density residential and mixed uses to promote transit-oriented development. Because it conflicts with the sustainability and smart growth principles embodied in the City's zoning regulations as well as the SACOG Blueprint, the revised Mall Expansion project is not properly characterized as infill.

As currently proposed, the revised Mall Expansion project would adversely impact absorption of residential units in the Spring Lake area and thus would adversely affect the Spring Lake community's ability to finance infrastructure and public facilities. The City's planning framework focuses residential development in the Spring Lake Specific Plan area, and all other development not constituting infill must be deferred until Spring Lake is completed. Particularly given the nascent and tentative recovery of the housing market, as well as the complex Spring Lake infrastructure financing plan, it is imperative that the City support its investment in the Spring Lake community and carefully review all other residential proposals for consistency with City plans, codes, and policies.

**II. Alternative Growth and Development Scenarios**

From a land use policy and community sustainability perspective, the appropriateness of an LDR designation (already abundant in the City) for the Mall Expansion site is highly questionable. Particularly in light of the new grocery store opening at the County Fair Mall this summer, which will provide a neighborhood market as well as at least 75 jobs, the City should carefully evaluate whether the Mall Expansion site should retain its commercial designation, and if not, whether it is more suitable for higher-density residential development. The City's General Plan Update process should consider alternative development scenarios for the site that are more consistent with the City's vision, sustainability goals, and policies regarding land use, housing, transportation, and public services.

From an economic development perspective, the City cannot promote and sustain growth consistent with its vision if developers and homeowners who invest in the City's comprehensive planning efforts, such as the Spring Lake

Ms. Cindy Norris, Principal Planner  
Community Development Department  
May 14, 2013  
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Specific Plan, then face arbitrary and fundamentally inequitable treatment. Rather, the City must ensure that its development policies and fee structure are consistent with the constitutional principles of equal protection and substantive due process as well as nexus and rough proportionality.

### **III. Conclusion**

The City's General Plan Update process must evaluate the existing and potential uses of key parcels in order to advance the City's goals and implement the community's vision. The process thus should include a meaningful evaluation of the Mall Expansion Site and alternatives for its development as primarily a commercial or residential project. If the City determines the Mall Expansion Site should be designated for residential use within the General Plan, then the City's policy framework calls for amendment of the Spring Lake Specific Plan to include the Mall Expansion Site, subject to the same development impact fee and infrastructure financing requirements as other homeowners in the Spring Lake Specific Plan and its Mello Roos financing district. This approach would resolve the planning anomalies that occurred based on assumptions for commercial development of the Mall Expansion parcel that never materialized, and would rationally and fairly allocate the burden of financing the infrastructure and public facilities necessary for residential development as required under the City's policies and controlling law.

Thank you in advance for the City's careful consideration of these issues and concerns, which play an important role in the City's evaluation and update of virtually every element of its General Plan, including but not limited to Land Use and Community Design; Housing; Public Facilities and Services; Recreational, Educational, and Community Services; Environmental Resources; and Economic Development.

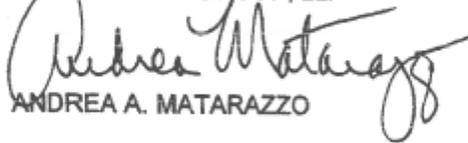
**Letter 2  
Cont'd**

Ms. Cindy Norris, Principal Planner  
Community Development Department  
May 14, 2013  
Page 9

Pursuant to Public Resources Code section 21092.2, please send all notices for the City's General Plan Update to me at the above address.

Very truly yours,

PIONEER LAW GROUP, LLP



ANDREA A. MATARAZZO

AAM:jis

cc: Heidi Tschudin, General Plan Project Manager  
Ken Hiatt, Community Development Director  
Paul Navazio, City Manager  
Marlin H. "Skip" Davies, Mayor  
Tom Stallard, Vice Mayor  
William L. Marble, Council Member  
Jim Hilliard, Council Member  
Sean Denny, Council Member

# ATTACHMENT C



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July 29, 2013

Robin Huntley  
Department of Housing and Community Development  
Division of Housing Policy Development  
1800 Third Street, Room 430  
P.O. Box 952052  
Sacramento, CA 94252-2052

Sent via email

Re: City of Woodland's Draft Housing Element

Dear Ms. Huntley,

Legal Services of Northern California provides civil legal assistance to low income households throughout Yolo County. We submit the following comments regarding the City of Woodland's Draft Housing Element ("Draft"). We did not have the opportunity to meet with City staff to discuss our comments but have copied the City on this correspondence.

These comments are intended to strengthen the commitment Woodland has made to affordable housing in its previous planning period and assure the Housing Element's compliance with state law.

#### Statement of Goals, Quantified Objectives and Programs

##### 1. Quantified Objectives

Quantified objectives designate how many units in each income category the housing element policies and programs are expected to create during the planning period through new construction, rehabilitation or preservation. The City's draft Programs and Policies do not quantify any units. Instead, the City lists the quantified objectives in Table 1-1, stating their objective to construct 75 extremely low income units, 80 very low income units, 90 low income units, 349 moderate income units, and 864 above moderate income units. The planned development accounts for the entire Regional Housing Needs Allocation for moderate and above-moderate income units but a deficit of 205 extremely low and low income units and 159 low income units compared to the need. The City has not provided the basis for the conclusion that it can only produce a fraction of the need for extremely low, very low, and low income units. The City should include a quantitative analysis demonstrating its limited capacity based on assessments of current and anticipated economic conditions and available resources.

---

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A Legal Services Corporation Program LSC

## 2. Programs

The City's proposed programs overall represent a watered down version of the previous programs, and contain very few required actions. As mentioned above, the City removed the quantified objectives in most of the proposed programs, which weakens the programs as a whole. The implementation actions also lack specificity. An adequate program should require a specific action by a specific date and have measureable outcomes. The proposed programs lack these important elements. The following is a list of the City's proposed programs and recommended revisions:

- 2.A.1— This program should be strengthened by adding back the higher densities and mixed uses in the innovative approaches consistent with the previous program that the City has indicated it will continue (2.1).
- 2.A.2—The City removed the multi-family language and added "any income group." Land is not zoned by income group, so multi-family zoned land should be included, which is consistent with the previous program that the City said it would continue (2.6).
- 2.A.7—The City should add using financial assistance from the Housing Trust Fund as well as other federal and state sources.
- 2.A.10—The City eliminated contact with non-profit builders and agricultural stakeholders. Since there is no indication that this program is being discontinued, it should be added back to this program consistent with previous program 2.18.
- 2.A.11—The City should use the previous program's language addressing the affordable housing ordinance, as it is much stronger than this scaled back version. (See Previous Program 2.15)
- 2.A.12— This program should be strengthened by adding that the City participate in the County-wide Ten Year Plan to End Homelessness.
- 2.A.13—This program should be strengthened by including language about allocating funds from the Housing Trust Fund.
- 2.A.14— This program should be strengthened by adding that the City contract for the services of the Homeless Coordinator and eliminate the use of the vague term "support," consistent with the previous program (2.13).
- 2.A.15—This program should be strengthened by stating the City will allow residential care homes with more than six mentally disordered or otherwise handicapped persons as a permitted use in the R-M zone. The City states on page 66 of the Draft that the City will need to amend the zoning ordinance to permit such use to remove the constraint but the current proposed program only states the City "shall consider options" to allow such homes.
- 2.B.1—In the evaluation of the previous program, the City indicated it will continue to fund repair and renovation programs. The proposed program, as written, does not require the set aside of funding to support this program.

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- 2.C.3—The proposed program does not require an amendment of the Municipal Code, which was listed in the previous program. The evaluation should indicate whether or not it was amended during the previous planning period.
- 2.D.1—The proposed program uses discretionary language, unlike the previous program that the evaluation says the City will continue. As written, the program does not require the City to apply its energy conservation city-wide.

In addition, the City indicated it will continue program 2.33 but there does not appear to be a similar program in this Draft. The previous program required the City to initiate a change to the General Plan and Zoning Ordinance to allow for additional mobile home park units to be located in a mobile home park. The City also removed program 2.20, which required the City to amend the Municipal Code to allow SROs in certain districts but the City did not provide a rationale for its removal.

#### **Analysis of Need**

##### **1. Disabled Households**

The Draft identified 6,157 disabled households in the City but only 19 units to meet their needs at Summer House, Inc. and New Dimensions. The Draft did not discuss facilitating development or rehabilitation of units to accommodate disabled households, like fast-tracking the permit process for projects or waiving or deferring fees for disabled households since many are on a limited budget. Further, the Draft did not include an analysis of persons with disability by disability type, which is readily available through the County's Alcohol, Drug, and Mental Health Department, which compiles the information for its Mental Health Services Plan. The Draft also omits any viable program for meeting the need. Although the City lists Program 2.A.16, there is no such program in the Draft.

##### **2. Elderly Households**

According to the Draft, 2010 census data indicates a need in Woodland for additional programs to assist senior renters. (Page 32) However, the Draft omits any specific program to assist senior renters, nor does it contain a list of available resources or services addressing senior housing needs. The City cites program 2.A.16, which does not exist, and program 2.B.1, a home rehabilitation program, as an action to address the needs of older adults. The City should address the identified need of senior renters and draft a program or programs specific to the need.

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### 3. Large Households

The Draft indicates that there are 439 rental units in the City with 4 or more bedrooms, while there are 1,463 renter occupied households with 5 or more persons. These numbers suggest that there is a deficit in units for large households. We commend the City for approving the Mutual Housing at Spring Lake project, which will provide 61 apartments and townhomes for agricultural workers and include some units for large families. However, the City has not provided any programs to address the need of large families. Further, the needs assessment is incomplete in that it does not include household size by income.

### 4. Farmworkers

The Draft quantifies the number of farmworkers, including seasonal and permanent workers who have different housing needs (3,953 and 1,928 respectively). The City also identified existing resources near Woodland for farmworker housing, including seasonal sites in Madison and Davis accommodating 152 farmworker households. The City did not include its Mutual Housing at Spring Lake multi-family farmworker housing project that will meet some of the need for permanent farmworker housing in Woodland. Full time agricultural workers have their housing needs best met through permanent affordable housing like Mutual Housing at Spring Lake. The program to amend the zoning code to facilitate farmworker housing as required by Health and Safety Code Section 17021.6 is a good start toward meeting the identified need, but the Draft should be strengthened by including other viable programs.

### 5. Homeless Persons

The analysis of special housing needs for families and persons in need of emergency shelter does not include a breakdown of the number of single males, single females, and families, all of which is available from the Homeless Poverty Action Coalition (HPAC), which serves as Yolo County's Continuum of Care. The analysis also omits important information relevant to identifying the needs of homeless persons, including the numbers of homeless persons who identify as mentally ill, substance abusers, victims of domestic violence, developmentally disabled, unaccompanied youth, and disabled. This information is available locally through HPAC and is imperative as the needs of each sub-group vary significantly. Further, the City's staff report covering a proposed Emergency Shelter Ordinance dated February 19, 2013 contains a detailed assessment of unmet need for shelters and bed count plus the sites that could support an emergency shelter by zoning, which should be included in the analysis of need.

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In addition, the inventory of existing resources for homeless persons is incomplete. The information is readily available from HPAC and is divided into resources for emergency housing, transitional housing, and supportive housing by geographic location in the County.

Further, the Draft's programs to meet the needs of homeless persons are insufficient. The City's proposed programs include providing support for the homeless coordinator and considering options for residential care homes with more than six mentally disordered or otherwise handicapped persons or dependent and neglected children as a permitted use in the R-M zone. While supporting the homeless coordinator is commendable and should be continued, other programs should also be implemented to address the needs of homeless persons in Woodland. The City could include the zoning codes allowing emergency shelters, transitional housing and supportive housing as programs to meet the identified need of homeless persons. In addition, programs that address long-term solutions to homelessness, like serving on the County's Ten Year Plan to End Homelessness and participating in HPAC, are also potential programs to address the needs of homeless persons in Woodland. Another recommended program is implementing zoning code provisions that permit SROs, which was a program in the previous housing element (Program 2.20) and omitted in the Draft for this planning period with no explanation of the basis for the omission.

#### **Sites Inventory**

Tables A.1 and A.2 contain the City's parcel inventory of vacant and redevelopable land zoned for residential and commercial use. There are multifamily sites that should be removed from the inventory because they are not available for immediate development and are inadequately sized for multifamily development. Also, neither the map provided nor the inventory identify the Spring Lake Specific Plan sites with sufficient detail to determine if they are available for development for housing affordable to a particular income group.

##### **1. Site Designation**

Most of the sites that are zoned for multi-family housing are in the Spring Lake Specific Plan area. The land inventory at Table A.2 lists the acreage of high density residential and estimated holding capacity of those four sites but does not include a unique reference or the requisite specificity required in order to evaluate the availability of sites for development. The sites map at Page 51 only shows vacant and developable parcels, not their zoning designation. Thus, it is impossible to determine whether the sites are contiguous or interspersed throughout the Spring Lake Specific Plan Area. To the extent possible, multi-family housing should be interspersed with lower density housing, which generates much less community opposition and fosters an integrated community.

## 2. Size and Occupied Sites

The City's land inventory by general plan designation and zoning district at Table 2-38 does not provide an accurate assessment of the residential holding capacity for multi-family housing. The City assumed very low and low income housing opportunities were provided by R-M and Spring Lake Specific Plan R-25 zones. (See Draft, Page 53) Yet, to arrive at the residential holding capacity, it appears that the City added up the size of all parcels located in each zone and multiplied by the maximum density, which provides an unrealistic assessment of the actual residential holding capacity. For example, in the ESD zone, the City added all ESD-zoned sites and multiplied the total acreage by 25, arriving at a residential holding capacity of 412. The City committed to not including 41 of the vacant and underutilized sites zoned ESD in its Draft at page 49 because they are not realistically developable during the planning period. The undevelopable parcels include all sites on the first page of Table A.1. Nonetheless, these sites were included in the realistic capacity assessment. Moreover, there are additional sites that should not be included in the sites inventory in the ESD zone. Parcel numbers 066-021-027-000, 063-060-001-000, 066-021-028-000, 066-021-004-000, 063-060-005-000 and 063-060-010-000 are listed as redevelopable but there is no analysis of the development potential of those occupied sites as required. The City must describe the extent to which the existing uses may impede residential development, recent development trends in the area and for similar sites, market conditions affecting development potential, and existing or proposed incentives to encourage residential development on the identified sites in order to count those sites as developable during the planning period. Consequently, there are currently no sites in the ESD zone that could realistically be developed for very low and low income households during the planning period.

The R-M sites should similarly be removed from consideration. As the City states in its Draft, 14 sites with R-M zoning are less than one acre and were removed from consideration, yet it appears that Table 2-38 includes those parcels. The only parcel that could potentially be considered is APN 066-030-033-000, although it is questionable whether it could support multi-family housing given its size of 1.09 acres. Affordable housing developers consider a site of five to ten acres to be ideal for an affordable multi-family development. A site of less than two acres is generally not feasible for development as a rental project. The size of the parcel is important because a project will need an economy of scale in order to be financially sound, especially with the limited funding sources available to support affordable housing projects.

## 3. Deficit in Very-Low and Low Income Sites

Even assuming the 1.09 acre parcel in the R-M zone is developable and adding the four unidentified R-25 sites in the Spring Lake Specific Plan Area, there is still a deficit in land suitable for development of housing for very-low and low income households within the planning period.

**Letter 2  
Cont'd**

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July 29, 2013

The realistic holding capacity of the R-M and Spring Lake Specific Plan Area sites is 584, leaving a deficit of 244 units for very-low and low income households. The City will need to take steps to address this issue including re-working the relevant tables and narrative in the draft.

**Conclusion**

The City of Woodland, like many jurisdictions, produced very few housing units during the last planning period as a result of economic conditions. Now that the economy, and in particular the housing market, is starting to recover, it is imperative that the City develop a housing element that furthers the goal of providing housing to all income levels in the 2013-2021 planning period. Although we would have appreciated the opportunity to meet with City staff to discuss our concerns prior to the Draft's submission to your office, we appreciate the opportunity to submit comments regarding the Draft Housing Element and thank you for considering them. We also welcome questions or comments from City staff.

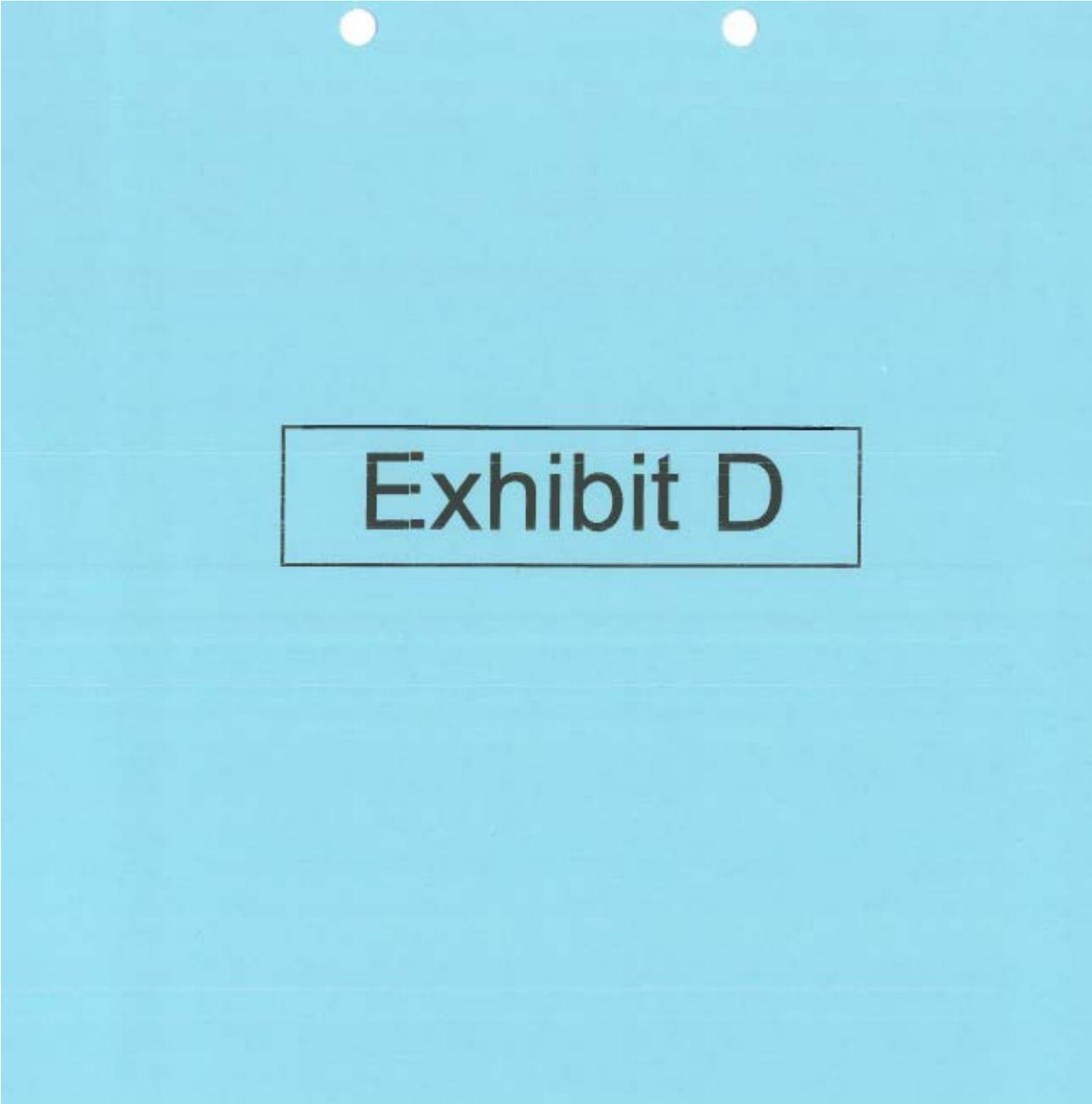
With kind regards,

LEGAL SERVICES OF NORTHERN CALIFORNIA



Alysia Meyer  
Managing Attorney

cc: Heidi Tschudin, General Plan Project Manager  
Cindy Norris, Principal Planner  
Ken Hiatt, Community Development Director



**Exhibit D**

# Transportation and Land Use Toolkit



a guidebook  
for creating  
transit,  
bicycle, and  
pedestrian  
friendly  
communities

Solano Transportation Authority  
Yolo-Solano Air Quality  
Management District  
Yolo County Transportation  
District

April, 2003





**Solano Transportation Authority**

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 Dan Christians, Assistant Executive Director/  
 Director of Planning

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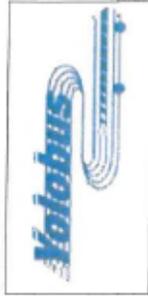
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 Carl Vandagriff, Planning Supervisor

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**Yolo County Transportation District**

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Prepared by:

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**Section 1**

**Introduction**

## 1. INTRODUCTION

### 1.1. Purpose

This toolkit provides techniques and resources to help Solano and Yolo County communities identify, plan, and implement their own land use, transportation, and urban design projects that directly or indirectly encourage the use of alternative modes of transportation. These alternative transportation modes include walking, bicycling, ridesharing, and transit (bus, rail and ferry). This toolkit is not intended to impose any standards or requirements. Guidelines, examples, and references are provided to offer additional information and assistance toward the achievement of successful projects. Rather than propose a blueprint for land use and transportation designed for a wider urban region, this toolkit is intended to support a regional planning effort based on local cities' accomplishments, current and proposed efforts, and specific conditions and opportunities in Solano and Yolo Counties.

The toolkit includes many exciting proposals and current projects in Yolo and Solano Counties that already support Transportation for Livable Communities (TLC) objectives. With examples and references for additional information, the toolkit will help communities identify and secure funding from traditional transportation sources, as well as from new and alternative sources.

### 1.2. Sponsors

The Solano Transportation Authority, the Yolo-Solano Air Quality Management District, and the Yolo County Transportation District jointly sponsored preparation and publication of this toolkit. If you have any questions or would like to request information about the toolkit, consult the inside cover page to contact any one of these agencies.

This toolkit helps to promote policies contained in the Solano Transportation Authority's *Solano Comprehensive Transportation Plan*, as detailed in its *Alternative Modes Element*. The toolkit supports policies contained in the Yolo



A walkable, transit-oriented development in Annapolis, Maryland.  
(photo courtesy of Dan Burden, [www.pedbikeimages.org](http://www.pedbikeimages.org).)



County Transportation District's *Yolo County Transportation and Expenditure Plan*, and the Sacramento Area Council of Governments' *Metropolitan Transportation Plan for 2025*. The Yolo-Solano Air Quality Management District co-sponsored this toolkit because these TLC planning principles are known to benefit air quality. More information on these transportation plan documents is contained in Section 2.6, and in Appendix B on the companion CD-ROM.

#### 1.4. Terms – What is “TLC”?

Many land use planning and transportation terms and concepts share the same basic theme: giving people housing and transportation choices. Most land development and transportation systems built in America since World War II are designed around the automobile, which became the “conventional” design, in contrast to earlier pedestrian and transit-oriented communities. The movement to return to these forms includes the following:

- *Transit-Oriented Development (TOD)* focuses on compact development in close proximity to regional public transit connections.
- *New Urbanism or Neo-Traditional design* espouses a return to the style of pre-WWII era or European communities with pedestrian or transit-oriented downtowns.

The term consistently used in this toolkit is **TLC** which stands for *Transportation for Livable Communities*. TLC is a Bay Area program established by the Metropolitan Transportation Commission (MTC) and is

#### 1.3. Users

This toolkit is intended to be useful to community decision-makers and interested citizens, as well as professional planners, designers, engineers, and developers who are directly responsible for projects and programs. This toolkit provides an overview of the background, benefits, principles, and strategies for creating, preserving, and improving communities that support alternative modes of transportation.

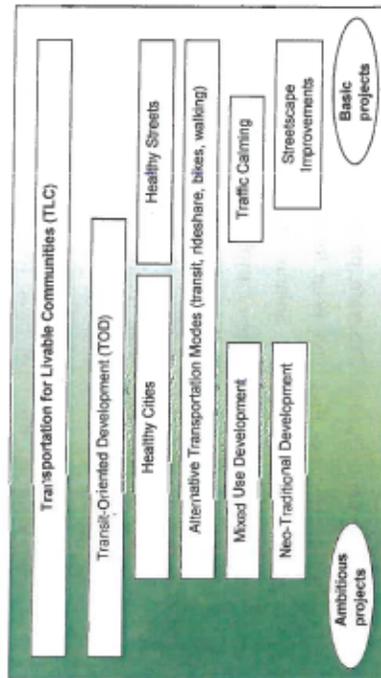


Figure 1: Related Terms and Types of Projects

used for a similar program, the Community Design Program, developed recently by the Sacramento Area Council of Governments (SACOG) to help implement similar principles. The TLC Program, as the name implies, is focused on the transportation system aspects of community planning, and includes incentives for compact housing development. The TLC Program, particularly in the objectives that have been formulated for the program in Solano County, encompasses a wide range of project types and scales, from major new or infill transit-oriented development districts, to extension of bicycle and pedestrian pathways and enhancement of existing downtown sidewalks. Thus, TLC is a broad and flexible term, covering the most basic to the most ambitious projects that encourage and enable alternative modes of transportation.

### 1.5. Toolkit Contents

This toolkit highlights projects from Solano and Yolo Counties that exemplify practical steps toward land use planning, urban development, and circulation system improvements. The measures taken in these projects directly or indirectly facilitate the use of alternative modes of transportation. These projects cover a range of types and scales, from ambitious new transit-oriented development districts to streetscape improvements in existing downtowns. For example, this toolkit presents guiding principles for implementing TLC goals that have been developed in Solano County through extensive public participation on multi-jurisdictional projects, such as the Jepson Parkway Concept Plan, and have been used for the allocation of federal TLC/Enhancement funds. This toolkit also summarizes and references some of the best examples of studies, guides, and standards prepared by other transportation agencies and by experts in the field of transportation planning, land use planning, and urban design. It is not intended to be a comprehensive review of planning, design,



and implementation standards and techniques, but is intended to provide a thorough grounding in the subject of TLC principles, and provide the connections and references to address related technical questions or needs.

**Section 4: Implementing TLC Concepts & Principles.** This section provides guidance for identifying, planning, and implementing projects, as well as coordinating and prioritizing projects between communities. This section contains a checklist of basic steps a community can take to advance TLC objectives on many fronts.

**Section 5: Funding Opportunities for TLC Projects.** Section 5 provides an overview of traditional and alternative funding and assistance sources for TLC and related projects, including program-by-program descriptions.

**Section 6: Toolkit Companion CD-Rom.** This section provides an introduction and table of contents for the CD-Rom included with this toolkit. The CD contains a number of useful reference documents in their entirety, and provides a comprehensive list of other resources, including many web site links.

and implementation standards and techniques, but is intended to provide a thorough grounding in the subject of TLC principles, and provide the connections and references to address related technical questions or needs.

**Toolkit Section 2: Background and Context.** This section covers the background of federal, state, and local laws, policies, and programs that relate to Transportation for Livable Communities and similar concepts.

**Section 3: Strategies for Improving Transportation and Land Use Linkages.** This section describes the current trends and benefits of accommodating alternative transportation modes. It highlights current best practices for land use and transportation planning, programs for reducing the use of single-occupant cars and increasing use of transit, and design concepts and details for bicycle and pedestrian-friendly streets and districts. It includes a discussion of methods for reducing automobile trips through information and coordination, and transit services direct to commuters, and through employers, commonly known as

**TLC STANDOUT :** Vallejo Station Intermodal Terminal, City of Vallejo

**DESCRIPTION**

Vallejo Station is a multimodal waterfront transportation facility which will create the principal transit hub serving the Vallejo area as well as providing a gateway to the North Bay and Solano County. Comprised of an integrated mix of improvements serving water, bus and ultimately rail transit, Vallejo Station is intended to address the City of Vallejo's principal goals of reconnecting the downtown to the waterfront, mixing private investment/redevelopment opportunities with public open space, and strengthening Vallejo's identity through the City's diverse cultural and maritime heritage, as well as the North Bay's unique ecological resources.

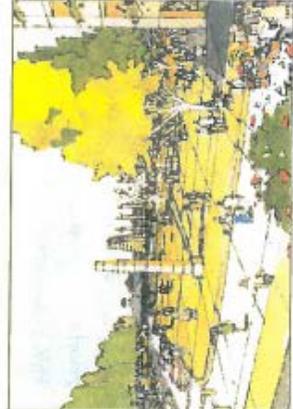
**SUPPORTING TLC PRINCIPLES**

**MIXED USE** The planned uses surrounding the transit hub will mix transportation, retail, office, and a variety of housing opportunities. Residents and commuters alike will have a wide array of services within walking distance.

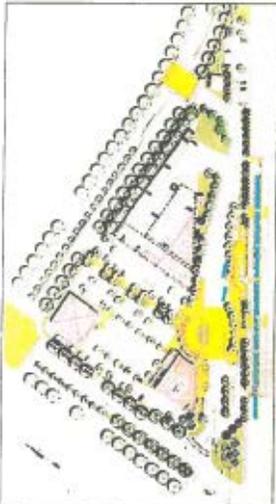
**CONNECTIONS** There will be pedestrian and bicycle connections within the planned improvements. As a regional transit hub, the Vallejo Station Intermodal Terminal will provide connections throughout the Bay Area via bus, ferry, and possibly by a future rail connection.

**CONTACT**

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**TLC STANDOUT :**  
**Fairfield-Vacaville Train Station Transit-Oriented Development**



**DESCRIPTION**

The project is a transit-oriented development associated with the planned Fairfield/Vacaville Train Station between northeast Fairfield and southwest Vacaville. Implementing the vision provided by the Jepson Parkway Concept Plan, it is intended to improve bus, bicycle, and rail integration, serve adjacent residences, and continue the mix of commercial and retail uses south of the site. The phased project calls for the construction of a train station that includes a bus transfer facility, park & ride lot, landscaping, bikeway, and pathway, as well as a number of pedestrian and bicycle enhancements. Later joint development is envisioned to create mixed commercial and retail uses along the block.

**SUPPORTING TLC PRINCIPLES**

**MIXED USE AND HIGHER DENSITY** The plan includes new neighborhoods and commercial districts organized at a walkable distance from the development's core which will feature plazas, landscaping and amenities to make it a popular gathering place.

**CHOICE** Commuters are given a number of transportation choices at the site, including biking, walking, park-and-ride, bus, and rail.

**CONNECTIONS** The site is connected locally via bus routes serving Fairfield and Vacaville. The planned railway station will be served by Amtrak Capitol Corridor trains to connect the site regionally, from San Jose to Auburn, with connections to Oakland, San Francisco, and other Bay Area employment and cultural centers.

**CONTACT**

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## 2. BACKGROUND & CONTEXT

### 2.1 California's Transportation/Land Use Outlook

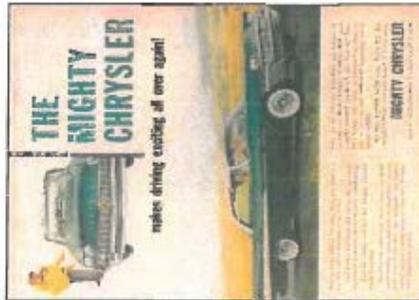
California's love affair with the car is not about to end any time soon. In fact, recent trends show vehicle size is increasing while average gas mileage is decreasing. At the same time, serious environmental, economic, and quality-of-life impacts of a land use pattern and transportation system that is focused almost solely on the automobile have been recognized at every level of government and society. Through choice and necessity, use of alternative forms of transportation is increasing. It has been recognized that people who are unable to drive, such as the young, the elderly, or economically disadvantaged, are often severely constrained, living in an auto-dominated development setting. Market demand for TLC development forms such as

"neo-traditional," compact, mixed-use, and transit-oriented development is increasing. This is the basis for the development of the many federal, state, and local transportation and land use programs and private initiatives that offer other alternatives.

### 2.2. Public Demand for TLC Projects

Market demand for TLC type development is expected to be strongly influenced by two factors: continued population and household growth, and a shortfall in available housing, especially affordable housing for low and moderate-income residents. California is expected to add 11 to 16 million new residents and 4 to 6 million new households over the next 20 years.<sup>1</sup> This

population boom brings a demand for additional housing that cannot be met by the available urban land supply in the major metropolitan areas, such as the inner Bay Area or currently urbanized Sacramento Area. This creates pressures for communities



in rural areas like Solano and Yolo Counties to grow. As a response to this demand for housing, planners, decision-makers, builders, and consumers are examining alternative forms of development and transportation to sustain this area's agricultural heritage and quality of life. Nationwide, support for alternatives to conventional auto-oriented development principles is high. In a September 2000 poll, nearly 8 out of 10 Americans indicated that they support TLC-type principles and the strategies necessary to implement it.<sup>2</sup> Despite the increasing number of cases where the resulting commute has become onerous, many people will still choose a suburban house with yard and to commute alone in their car as long as they can afford it. However, for a growing number of households, the option to own a conventional single-family residence is financially out of reach, or comes with a commute that severely strains household income and quality of life. A growing number of people who can afford the alternative are choosing to live in denser types of development that are within walking distance to jobs, shopping, activities, and access to regional transit because they gain

an improved convenience to destinations than is typical in suburban areas. Whether a preference or an economic necessity, demand for TLC type development is significantly increasing in California, particularly in the Bay Area and Sacramento region.

### 2.3. Origin of the TLC Program

The Metropolitan Transportation Commission (MTC) is the Regional Transportation Planning agency for the nine Bay Area counties. In the fall of 2000, MTC joined forces with four other Bay Area regional agencies to investigate smart growth and sustainable development in the Bay Area. One goal was to develop consensus on a set of "best practices" and financial incentives to spur similar efforts. The agencies sought to work with local governments to identify environmentally important areas that should be preserved or enhanced, as well as to define appropriate land-use patterns for those areas deemed suitable for development.



MTC's TLC Program is a major strategy to implement these practices.

Figure 2: The Increasing Demand for TLC Development

TLC development results in increased property values, as noted in these excerpts from the *Statewide Transit-Oriented Development Study* by the Business, Transportation and Housing Agency of the California Department of Transportation, September 2002, pg. 35:

- Properties in residential communities that have access to San Francisco Bay Area's BART heavy rail service increase \$1.96 to \$2.26 per square foot, on average, for every three feet of proximity to a rail station.
- In Los Angeles, from 1980 to 1990, commercial space within a half-mile of a rail corridor sold for \$31 per square foot more, on average, than comparable space outside the corridor.
- In San Diego, home sale prices increased by \$272 for every decrease of 300 feet from a light rail station.
- In Santa Clara County, office space within in a quarter-mile of a transit station sold for \$4.78 per square foot more, on average, than comparable space more than three-quarters of a mile from a station.

(continued on page 12)



MTC's Transportation for Livable Communities Program is, in turn, based on federal transportation policy that supports land use and development patterns and transportation systems that offer alternatives to the automobile. There are significant financial incentives in the form of state and federal funding for communities to pursue these objectives. There are also potential benefits, such as: increased property values; creation of new jobs; infrastructure and services cost savings; improved public health and safety; conservation of land, natural, and energy resources; and better air quality.

It is important to recognize that the principles of TLC design are being re-discovered after a hiatus of only about 50 to 60 years out of the hundreds of years of land use and urban development patterns in the United States, and thousands of years throughout the world. Nearly all developments built prior to World War II incorporated most or all the principles of design that are being promoted



through TLC and related programs and concepts.

The idealized images of small-town America and the vibrant, diverse big city never lost their appeal, but they became impractical with widespread automobile ownership, an excellent highway system, and an economic paradigm shift to the "just in time" model. The orientation to the automobile has its benefits, such as enjoying quiet residential neighborhoods undisturbed by commercial uses and industrial employment sites. Because of these benefits and the overwhelming reliance on the automobile, some areas of the country inadvertently advanced sprawl, congestion and suburban subsidized growth - not just with transportation dollars but with homeownership, school construction, and other programs. Now through environmental needs, requirements from improved public infrastructure efficiencies, and public demand, TLC-type communities that are compact, interconnected, walkable, bikeable, and that have access to transit are making a big comeback. The practice of incorporating modern transportation and

(continued from page 11)

A study of four new communities, which were designed to promote transit and pedestrian access, found that single-family homebuyers were willing to pay \$20,000 more for these homes compared to similar units in nearby areas.

In addition, according to the Real Estate Research Corporation, real estate values over the next 25 years will rise fastest in 'TLC communities'. A TLC community, by its definition, is one that incorporates traditional characteristics of successful cities by including a mix of residential and commercial uses, combined in a pedestrian-friendly configuration.

The market attractiveness of TLC is particularly important for California, where the high technology sector plays a primary role in state employment. According to a 1998 report prepared by Collaborative Economics, a Silicon Valley 'think tank', workers in the new knowledge-driven, service-oriented economy with its smaller decentralized firms are particularly attracted to places that have walkable downtowns, and a mix of restaurants, offices and housing. These places promote interaction, which is the key to an economy that thrives on accessibility, networking, and creativity.

Although technology now allows firms to locate just about anywhere, businesses continue to highly value proximity to other firms, suppliers, services, labor, and amenities, along with the



**TLC STANDOUT :** Solano County Government Center, Fairfield

**DESCRIPTION**

The new government center will be six stories high with approximately 300,000 sq. ft. of gross floor area. The building will consolidate eighteen county divisions and departments and, at full occupancy, will house over 800 county employees. Also included in the project is a new 43,000 sq. ft. Probation Building, a 1000-vehicle parking garage, and a public plaza.



**SUPPORTING TLC PRINCIPLES**

**MIXED-USE** The new center will provide work space for hundreds of county employees, but will also provide parking in the downtown area and a new public plaza for various community events.

**CONNECTIONS** The center will connect with many existing public buildings as well as many key pedestrian and bicycle routes.

**HUMAN SCALE** The streetscape and public plaza improvements create a welcoming environment for pedestrians.



**CONTACT**

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building technology with the best of traditional community design has become highly refined. There are many examples of projects and communities that embody these principles in Yolo County, Solano County, and around the Central Valley and Bay Area.

**2.4 The Relationship Between Land Use, Transportation and Air Quality**

After World War II, land uses have been arranged in a low-density pattern, fostering almost complete dependence on automobiles for transportation. This pattern has afforded many personal benefits: quieter residential neighborhoods with greater space, privacy and security. Unfortunately, these benefits have come at a great cost, including the erosion of the benefits themselves:

- High infrastructure investments required to serve relatively lightly populated areas consume personal and public resources and raise home prices.
- Land, energy and personal time spent behind the wheel of a car are consumed in unprecedented quantities, with impacts on family and personal quality of life.
- Those unable to drive or to afford a car, including seniors, children, low-income

- groups, and the disabled, have limited mobility and access to needed services.
- Traffic congestion remains a problem throughout much of the area.

There is concern about how these trends could eventually affect future Yolo and Solano Counties' compliance with federal air quality standards. Yolo and Solano Counties are located within two separate air quality basins. The Yolo - Solano Air Quality Management District (YSAQMD) lies within the Sacramento Valley Air Basin. The YSAQMD includes all of Yolo County and the northeast area of Solano County. The southwest area of Solano County lies within the Bay Area air quality basin. The Bay Area Air Quality Management District is responsible for air quality compliance of this area.

The YSAQMD lies within an area designated by the U.S. Environmental Protection Agency as the Sacramento Federal Ozone Nonattainment Area. Although YSAQMD's monitoring stations show attainment of federal standards, the nonattainment area does not meet the federal ozone standard.



Certain populations, such as seniors, children, and the disabled, do not have access to automobiles and depend on alternative transportation modes.

(photo courtesy of Dan Burden, www.pedbikeimages.org)

This is because monitoring stations record exceedences of the federal health standards for ozone (smog) in other air districts of the nonattainment area. Not only does the area fail to meet the federal ozone standard, it also has the twelfth worst ozone air quality in the nation.<sup>3</sup>

Southwestern Solano County is included in the San Francisco Bay Area Air Basin and is within the jurisdiction of the Bay Area Air Quality Management District. The U. S. Environmental Protection Agency has designated the Bay Area as a nonattainment area for the 1-hour national ambient air quality standard. Bay Area monitoring records for 2000, 2001, and 2002 indicate that the region has an attainment record. While Bay Area air quality is improving overall, one-hour ozone levels continue to exceed federal standards at a small number of monitoring stations in the region on a few days during the summer, mainly on hot afternoons in the inland sections of the Bay Area. The BAAQMD is continuing to work toward decreasing ozone levels in the region in order to attain the more stringent California 1-hour ambient air quality standard, to ensure continued attainment of the national standard, and to reduce transport of pollutants to downwind areas.

Mobile source emissions, which include on-road and off-road vehicles, are responsible for a majority of regional smog-forming emissions. Although off-road vehicles are recognized as part of the mobile source emissions, this toolkit focuses on on-road sources and includes measures to reduce the number of vehicle trips and vehicle miles traveled, which constitutes one of the few remaining opportunities for large emission reductions.

In addition to the obvious health and aesthetic impacts of poor air quality, these conditions are of concern to Yolo and Solano County residents and businesses. This is because failure to meet federal air quality standards could result in significant consequences that range from the imposition of financial penalties (i.e., loss or delay of federal funding for transportation projects) to the adoption of even more stringent air emission control requirements. The standard was set by the EPA to help achieve one of the

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primary federal Clean Air Act goals – to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.”<sup>4</sup>

**Reasons for Addressing Vehicle Use Locally.** Over the past 20 years the average vehicle miles traveled in Solano and Yolo Counties has risen at a far greater rate than the rate of population increase. This reflects the fact that more recent Solano and Yolo residents are workers in the San Francisco and Sacramento metropolitan areas who have been attracted by lower housing prices.

Many measures to reduce motor vehicle use are best implemented locally under the jurisdiction of cities and counties. This is because municipal governments control factors critical in transportation mode choice such as the land use pattern, site design, and transportation infrastructure. Rather than restrictive measures, this toolkit proposes alternative strategies that offer a different approach for local municipalities to use to help achieve air quality standards – accepting that growth will occur, and planning and

building in a way that current and future residents can make some of their trips by means other than the automobile.

More information on the problems and solutions associated with air quality can be found in Appendix A of the CD-Rom contained in this toolkit.

### 2.5 Solano and Yolo County Conditions and Trends

One of the impacts of population growth and limited housing supply is that people have been forced to commute longer distances from their work place in order to find affordable housing. Relatively affordable housing is a big part of the reason that Solano County is projected to be the fastest-growing county in the nine-county Bay Area through 2025.<sup>5</sup> The Solano County population is expected to grow by 45% between 2000 and 2025, while the number of jobs is expected to increase by 52%. According to the Sacramento Area Council of Governments, Yolo County is experiencing even greater growth and commute pressures, as county population is projected to increase by 62% between 2000 and 2025, while jobs are

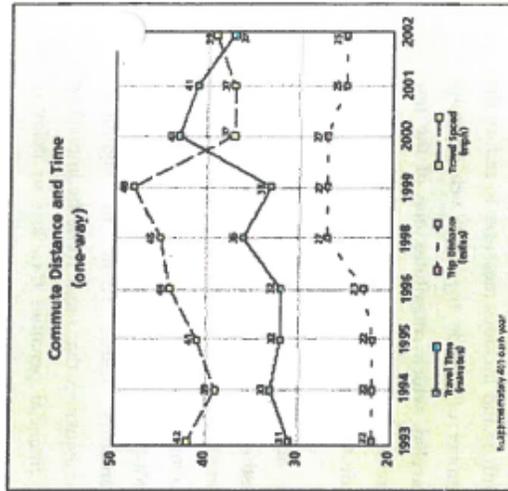


Figure 3: Commute trends in Solano County (Source: Commute Profile 2002)

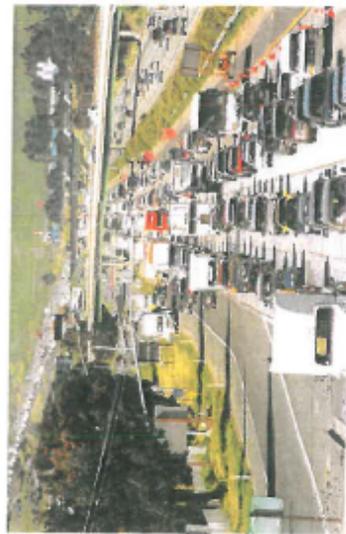
expected to increase by 54%. This indicates that Yolo County cities' will increase their role as bedroom communities for employment centers in Sacramento County, and to some extent in the Bay Area.

**Commute Patterns.** Commuting conditions have a bearing on the need and demand for transit-oriented development, and development that is friendly to local alternative transportation options. Among the nine Bay Area counties, Solano County is tied with Contra Costa County as having the lowest percentage of commuters who live and work in the same county (53%). Solano County commuters have the highest average commute distance of any of the Bay Area counties by a significant margin. The average distance has increased from 23 miles one-way to 25 miles one-way between 1996 and 2002. Between 1993 and 2002 the percentage of drive-alone commuters has fluctuated between 66% to 73% in Solano County.<sup>6</sup>

73% of Yolo County commuters drive alone, while 10% ride share, 5% use transit, and 12% use non-motorized transportation (walking or bicycling). This last figure probably

reflects the high percentage of bicycle use in Davis, as other Sacramento area counties have non-motorized commute statistics of only 1% to 6%.<sup>7</sup> In a voter survey conducted for the 2001 *Yolo County Transportation and Expenditure Plan*, 54% of the respondents gave a higher priority to expanding alternative modes, while 40% gave a higher priority to expanding roads and highways. 62% gave a higher priority to maintaining existing transportation systems, while 35% gave a higher priority to expanding existing transportation systems.

**Congestion.** Solano County freeways and highways have been experiencing increasing congestion over the past few decades. Major routes and interchanges that regularly experience severe commute hour and weekend backups include SR 12, SR 37, I-80 in Vallejo, the approaches to the Carquinez and Benicia-Martinez Bridges, I-80 from Fairfield through Vacaville, and particularly the I-80/I-680/SR 12 Interchange. In a recent survey of Solano County commuters, 52% responded that their commute had gotten worse than last year. This percentage is higher than the average for the Bay Area.<sup>8</sup>



Commuter traffic on the I-80/I-680 interchange in Solano County



While Caltrans projects are underway to add new bridges, improve SR 12 and 37, and make other capacity improvements to the highway system, the overall daily vehicle travel demand is projected to increase by 33% between 2000 and 2025, while the capacity will increase by only 3%, based on currently funded projects.<sup>9</sup> In addition to increased road capacity, significant measures are needed to reduce single occupant vehicle trips and provide other alternatives.

Yolo County freeways and highways have also seen dramatic changes in traffic levels. During the period from 1989 to 1999, average daily traffic volumes on major freeway and highway interchanges increased by 22% (at Highway 16 toward Madison from the I-505 interchange), 28% (at Richards Boulevard off I-80, headed toward Davis), and 31% (at County Road 102 from I-5 headed toward Woodland).<sup>10</sup> With the projected 62% increase in population in Yolo County by 2025, these freeways and highways are likely to experience levels of congestion over the next two decades that were previously seen only in highly urbanized areas.

**Transit Options and Trends.** Due to the geographic distance and dispersion of most commuters, and lack of transit options, only about 5% of the commuters in Solano County use transit and only 3% bike or walk to work – among the lowest rates in the nine Bay Area counties. Solano County transit options include the Capitol Corridor rail line, the Vallejo Baylink ferry service, and inter-city bus service. Although Solano County has a high percentage of commuters in single-occupant vehicles, it also has a high rate of car/vanpooling. For all but one of the past ten years, Solano has had the highest rate of car/vanpooling (20% average) in the Bay Area. This includes Solano's high rate of vanpooling, which at 2%, is the highest in the region.

In Yolo County during 2000, 5% of commuters used transit, which is the highest level in the six county Sacramento Area region. The more rural/suburban counties of Placer, El Dorado, Sutter and Yuba each had 1% or less transit use, while the more urban Sacramento County experienced 4% transit use.<sup>11</sup>



Solano County vanpool riders



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Among the options for improving transit use and providing true transit-oriented development, the Capitol Corridor line could have the greatest impact because trains have a high carrying capacity and efficiency in moving people long distances. This provides the greatest opportunities for the communities of Dixon and Suisun City, which have their downtown cores on or near the line. For other communities, the greatest opportunity to provide full transit-oriented development may be through the development of inter-city bus transit service to expand on the nine current routes. This could occur in conjunction with improved pedestrian and bus access to freeway interchanges. The goal by 2025 of the *STA Transit Element* is to expand the current ten formal park-and-ride lots in Solano County by thirteen new park-and-ride lots along the I-80, I-680, I-780 and Highway 12 corridors. Six expansions of current park-and-ride lots are also planned by 2025.

SACOG's *Metropolitan Transportation Plan 2025* makes the Capitol Corridor intercity and regional rail service a high priority, including funding for double tracking on the



Amtrak station in Suisun City

Yolo Causeway. The *Transportation and Expenditure Plan for Yolo County* identified priority transit projects, including expanding the level of service on the existing Capitol Corridor rail line between Sacramento and the Bay Area, including more stops in Davis; expanding the Yolobus intercity bus service; developing commuter light rail connections beyond Sacramento to Auburn and to West Sacramento and Davis, and/or light rail extensions from the Sacramento system to Davis via the West Capitol corridor and to West Sacramento/Southport via Jefferson Boulevard or West Capitol.

Bus rapid transit (BRT), or express bus service, is an emerging technology that provides an opportunity to capitalize on many of the advantages of rail with the lower cost and flexibility of buses. The advantage of



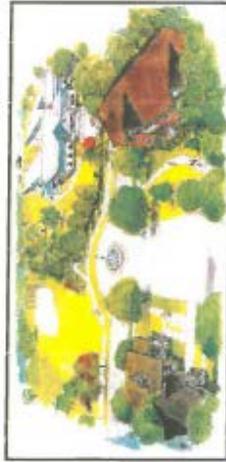
Cordelia area in Fairfield



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bus service is that it can be ubiquitous – it can serve an entire community with routes and service levels that are more flexible than rail. However, the advantages of bus service can also be disincentives for private investment in transit-oriented development. Because bus routes and stops are not fixed or permanent, there is greater risk in investing in a project that depends on its relationship to bus service. It may be possible to address this barrier in the design and political/financial commitment to bus rapid transit.<sup>12</sup>



**Opportunities in Solano and Yolo Counties.**

This region has advantages in planning for alternatives to conventional development patterns because it has been buffered by prime agricultural land, and is a long distance from major growth centers in the inner Bay Area and Sacramento. The cities within Solano and Yolo counties have been

able to preserve more of their older city cores than most urban areas. A key factor in the land use/transportation connection in Solano County is the protection established for rural land in the Solano County General Plan. Adopted in 1980 and reaffirmed by voters in 1984, Measure A requires a vote of the people to amend agricultural land use policies prior to December 31, 2010.

Though conventional auto-oriented development has dominated, Solano and Yolo Counties still feature large areas of undeveloped land within urban growth limits on which other land use patterns may be established. Solano and Yolo County communities have more opportunities to add to this original urban core, or create new templates, than more built-out communities in the inner Bay Area, or faster-sprawling areas in the Central Valley.



**Promenade mixed-use infill development under construction in Suisun City**



**2.6 Related Policies, Programs, and Plans**

**State Programs**

A number of federal, state, regional, and countywide policies and programs indirectly or directly support TLC objectives, and are the cornerstones of policies and incentives for local development supporting alternative transportation modes:

- **The Transit Villages Act of 1994** is probably the most important step the state has taken in support of transit-oriented development; however, the Act had limited impact because it carried no funding.<sup>13</sup>
- **Transportation Congestion Relief Program (TCRP) and State Proposition 42.** Governor Davis' 2000 TCRP provided significant new funds for transportation by dedicating all state gasoline sales tax revenues, though the program has been recommended for elimination by the Governor due to the state's current budget crunch.

□ **California Department of Transportation (Caltrans) Programs.** Caltrans manages several grant programs (generated by gas tax revenue and federal funds) to support alternative transportation modes projects.

□ **The California Department of Housing and Community Development (HCD)** manages grant and loan programs that support TLC principles in land use planning and development.

**Regional Programs and Plans**

□ **Metropolitan Transportation Commission Transportation for Livable Communities (TLC) Program.** Funded through the federal Congestion Mitigation and Air Quality Improvement program (CMAQ), the TLC program provides direct financial incentives

□ **The Intermodal Surface Transportation Efficiency Act (ISTEA),** was a landmark Federal Program passed in 1991. For the first time, significant portions of the federal transportation budget were set aside for projects and enhancements to the highway system in an effort to mitigate its impact on the quality of life, or to support alternative means of transportation.

**Federal Programs**

□ **Transportation Equity Act for the 21st Century (TEA-21)** Signed into law in 1998, TEA-21 continued the integration of alternative modes into the transportation mainstream, and enhanced the ability of communities to invest in projects that can improve the safety and practicality of bicycling and walking for everyday travel.

□ **Federal Community Planning Programs.** Primarily through the Department of Housing and Urban Development (HUD), the federal government provides grants, loans, and technical assistance for planning, improving, and preserving communities.



**Congestion on a local Solano County Road**



**TLC STANDOUT :**  
**Downtown and Waterfront Improvement Projects, City of Rio Vista**

**DESCRIPTION**

The City of Rio Vista has one partially funded TLC project underway and one candidate project under design that complement each other. Together, they will significantly enhance the City's downtown and waterfront areas. The Downtown Revitalization Project includes streetscape and landscape improvements, and pedestrian and bicycle amenities. The Main Street streetscape portion of the project has recently been completed.

The Waterfront Plan and Improvement Project is designed to beautify the waterfront and link it to downtown. Project goals include a public walkway along the river from City Hall to the Highway 12 Bridge, streetscape improvements to create a memorable entry into Downtown and to preserve views of the river from Front Street, and building designs that respect the character of Downtown.

**SUPPORTING TLC PRINCIPLES**

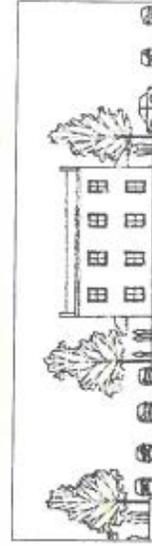
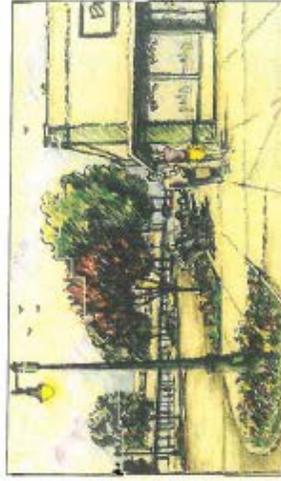
**MIXED-USE AND HIGHER DENSITY** The Downtown and Waterfront Improvement projects will enhance and reinforce an existing higher density mixed-use district. They will encourage infill development that is compatible with historic buildings and uses.

**CONNECTIONS** The Waterfront Plan and Improvement Project includes improved waterfront access with park-like landscape, as well as pedestrian access to downtown and the City's civic buildings.

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|   |  |
|---|--|
| <b>TLC STANDOUT :</b> First Street Streetscape Project, City of Benicia             |  |
|  | <p><b>DESCRIPTION</b></p> <p>Benicia's First Street Streetscape Project is designed to revitalize the City's downtown and waterfront areas. The project started with the development of its Downtown Plan. Current plans include rehabilitation of the corridor from the waterfront turnaround up to K Street. Identified improvements include:</p> <ol style="list-style-type: none"> <li>1. Sidewalks</li> <li>2. Curb and Gutter</li> <li>3. Decorative Lighting</li> <li>4. Landscaping</li> <li>5. Pedestrian Amenities</li> </ol> <p><b>SUPPORTING TLC PRINCIPLES</b></p> <p><b>CONNECTIONS</b> The improvements connect the popular tourist and shopping destinations along First Street to the waterfront to the south and various civic buildings and anchor stores to the north.</p> <p><b>HUMAN SCALE</b> The streetscape improvements are geared toward repairing and insuring the functionality of existing pedestrian facilities on First Street as well as to add new amenities that enhance the pedestrian experience.</p> <p><b>CONTACT</b></p> <p>Brenda Gillarde, Principal Planner<br/>                 250 East L Street<br/>                 Benicia, CA 94510<br/>                 brenda.gillarde@benicia.ci.ca.us<br/>                 707.746.4280</p> |

for cities, counties, and community-based organizations to support projects that encourage pedestrian, transit and/or bicycle trips, and spur the compact development of housing, downtowns and regional activity centers. In November of 2000, the program was expanded to include a Housing Incentive Program (HIP). The HIP Program awards TLC capital grants to cities or counties that build high-density housing within walking distance of a major transit station or transit corridor. In the 2001 Regional Transportation Plan (RTP), MTC allocated \$27 million a year for regional TLC/HIP projects throughout the Bay Area as part of the re-authorization of TEA-21.

□ **SACOG Metropolitan Transportation Plan for 2025.** The Sacramento Regional Council of Governments (SACOG) is the regional planning and coordinating body for the area including Yolo County. In July 2002, the SACOG Board of Directors adopted the Metropolitan Transportation Plan for 2025. In this 23-year plan, \$500 million was reserved for a Community Design Funding Program. A related study of the transportation/land use connection is the *Sacramento Region Blueprint*, published by SACOG, which illustrates regional trends and plans.

□ **SACOG ABC Guide.** In 2000, SACOG published the ABC Guide - A Resource for Transportation Planning. This is a unique alphabetical listing of general terms and region-specific programs and agencies, including a detailed glossary of "transportationese."

□ **Yolo County Transportation and Expenditure Plan.** In October 2001, the Yolo County Transportation District adopted this countywide transportation plan with the goal of using it as a tool to secure additional funding, and to help member jurisdictions use available resources more efficiently. The plan establishes a transportation vision for Yolo County over a 20 year period.

□ **Solano Comprehensive Transportation Plan.** In May 2002, Solano Transportation Authority (STA) adopted the Solano Comprehensive Transportation Plan (CTP), establishing a vision, providing direction, and setting priorities for funding to meet the transportation needs of Solano County through the year 2025. The CTP identifies overall transportation policies for three key plan elements: the Transit Element; the Arterials, Highways, and Freeways Element; and, the Alternative Modes Element. The Alternative Modes Element contains more

transit use in the greater Sacramento area. \$12 million has been reserved by SACOG for Community Design projects, starting in 2003-04.

□ **SACOG Community Design Program.** SACOG is in the process of initiating an incentive program supporting infrastructure projects that increase walking, biking, and

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transit use in the greater Sacramento area. \$12 million has been reserved by SACOG for Community Design projects, starting in 2003-04.

□ **SACOG Community Design Program.** SACOG is in the process of initiating an incentive program supporting infrastructure projects that increase walking, biking, and



detailed goals, policies, and plans that support alternative modes of transportation to the prevalent single-occupant automobile, including bicycling, walking, ridesharing, park-and-ride, high-occupancy vehicle systems, projects that enhance pedestrian, bicycle, and transit experience and connections, and air quality and alternative fuels infrastructure projects. The STA Comprehensive Transportation Plan Transit Element includes plans and concepts for improving intercity transit service. The Arterials, Highways, and Freeways Element identifies various needs on routes of regional significance and proposes various improvements to corridors, highways, and major arterials. Please see the STA's website for additional information on the CTP at: <http://www.solanolinks.com/plans.html>.

□ **Solano County Measure A** is an important growth control measure passed by voters that sets a limit on urbanization of agricultural land.

More information on these laws, policies, and programs is contained in Appendix B of the CD-Rom contained in this toolkit.



References Cited

- <sup>1</sup> Elizabeth Doakin, et. al. "Twelve Trends for Consideration in California's Transportation Plan Overview," for the California Department of Transportation, University of California, Transportation Center, May, 2001.
- <sup>2</sup> U.S. Environmental Protection Agency, Smart Growth America, at [www.smartgrowthamerica.com](http://www.smartgrowthamerica.com).
- <sup>3</sup> American Lung Association, The State of the Air 2001, "People at Risk in America's 25 Most Ozone-Polluted Cities"
- <sup>4</sup> 42 U.S.C.S. § 7401, subs. (b)(1).
- <sup>5</sup> according to the Association of Bay Area Governments
- <sup>6</sup> *Commuter Profile 2002*, A survey of San Francisco Bay Area Commute Patterns, RIDES for Bay Area Commuters, Inc., October 2002.
- <sup>7</sup> *Facts and Figures*, Sacramento Area Council of Governments newsletter, June 2002.
- <sup>8</sup> *Commuter Profile 2002*, p. 98.
- <sup>9</sup> *Solano Comprehensive Transportation Plan*, May 2002, pg. 26.
- <sup>10</sup> *Facts and Figures*, Sacramento Area Council of Governments newsletter, February 2001.
- <sup>11</sup> *Facts and Figures*, Sacramento Area Council of Governments newsletter, June 2002
- <sup>12</sup> *Statewide Transit-Oriented Development Study* by the Business, Transportation and Housing Agency of the California Department of Transportation, September 2002, pg. 77.
- <sup>13</sup> *Statewide Transit-Oriented Development Study*, Business, Transportation and Housing Agency of the California Department of Transportation, September 2002, pg. 75.

**Section 3**

**STRATEGIES FOR  
IMPROVING  
TRANSPORTATION  
AND LAND USE  
LINKAGES**



### 3- STRATEGIES FOR IMPROVING TRANSPORTATION & LAND USE LINKAGES

#### 3.1. The Benefits of the Transportation for Livable Communities Program

Numerous benefits can be realized through the implementation of the concepts and practices outlined in the Transportation for Livable Communities Program. Studies have shown that jurisdictions implementing compact, mixed-use development with a variety of alternative transportation modes can save money on infrastructure and services, increase property values, create new jobs, enhance existing downtown commercial and mixed-use districts, improve public health and safety, conserve land, natural and energy resources, and improve air quality.

**Financial.** Compact, mixed-use, and transit-oriented development is a more efficient use of land and resources. Transit-oriented development helps to defray infrastructure costs because it is localized and compact, reducing the length and quantity of expensive infrastructure improvements in utilities, water, sewers, and roadways. In

fact, local governments and their residents stand to save as much as 25% in infrastructure costs.<sup>1</sup> Furthermore, three independent studies found that compact development has the potential to save as much as 25% in roadway costs, 5% in cost for schools, and 15% in utility costs.<sup>2</sup>

In addition to infrastructure savings, compact transit-oriented developments aid in the economic development of the cities and neighborhoods in which they are built. The impacts of suburban commercial development on downtown economies are well documented. Well-planned compact development near a city's core reverses disinvestment by retaining pedestrian traffic and by bolstering local retail and services. Additionally, studies have shown that residences built in TLC or new urban communities sell for an additional \$5,000-\$30,000 over conventional homes of similar size.<sup>3</sup>

**Jobs and Economic Incentives.** TLC/Enhancement type projects have helped to stimulate additional private development, business and job growth in downtown cores



and along TLC corridors. This has occurred recently in cities such as Suisun City, Vacaville and West Sacramento. The number and types of businesses often increase as infrastructure and transportation improvements are provided. Increased retail sales and property values directly benefit the local municipality. Chambers of commerce and downtown associations often see increases in membership, along with more special events and joint marketing activities that help attract more general public to an area.

TLC/Enhancement funding also helps to form partnerships by augmenting local redevelopment and/or federal Community Development Block Grant (CDBG) funds with TLC funds, such as those that have occurred in the cities of Suisun City, Dixon, Fairfield, and Vallejo.

TLC-type downtown, mixed use, and higher density projects focus on creating or enhancing places where people like to gather, such as restaurants, theaters, specialty shops, galleries, and other entertainment venues. These types of businesses are often a special

market niche that is in addition to conventional auto-oriented mall and franchise businesses. In particular they offer the opportunity for small, independent local business. These activity centers are often sought by new residents, especially those from more urban areas such as the inner Bay Area, who are accustomed to a variety of options for dining and entertainment, or who would rather live in walking distance to such amenities. TLC-type downtowns and mixed use developments provide attractive housing, shopping, and entertainment options for many prospective new employees. Therefore, larger employers recognize their values in attracting employees, see them and as an incentive to locating new facilities in the region.

**Quality of Life.** The same compact, mixed-use, and transit-oriented development that saves cities and their residents' money can improve their quality of life as well. These benefits can be realized through increased health and public safety, decreased congestion and commute length, and an overall improved "sense of place."



**TLC projects contribute to an active downtown, creating a number of economic benefits and opportunities**

(photo courtesy of Dan Burden, [www.pedbikeimages.org](http://www.pedbikeimages.org))



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TLC-type development helps to reduce commute traffic, especially when it is adjacent to major regional transit stops. In addition, a broader benefit of TLC and similar development is a reduction in local "convenience" trips. People take advantage of safe, attractive walking and biking routes that provide close access (within ¼ to ½ mile) to pedestrian-oriented shopping districts, parks, schools, community centers, and other activity centers. These short walking or bike trips to the store, for casual dining, for family activities, to school, or to the park reduce the traffic on local and arterial roads. Perhaps more importantly, these local trips help people know and appreciate the place where they live, and to meet other people who live in the community. This "sense of place" leads to better participation in civic and cultural affairs, and generally healthier communities.

Increases in transportation choices such as bicycling, walking, or riding public transit, are directly related to improved public health. One study has demonstrated that the incidences of heart disease, obesity, and diabetes could be cut in half if all sedentary people nationwide walked or cycled 30

minutes per day. In return, improved public health benefits the economy as well. In California, improved public health from biking and walking could translate to an annual savings of \$528 million in healthcare costs.<sup>4</sup>

Transit-oriented development or TLC provides for safer residents, pedestrians, and bicyclists as well. Such pedestrian and bicycle safety has been tested and proven to be successful in European countries, such as Germany and the Netherlands. In these countries, where pedestrian and bicycle needs are taken into account, pedestrian fatality rates are 1/10<sup>th</sup> as high as in the U.S., and bicycle related fatalities are 1/4<sup>th</sup> as high.<sup>5</sup>

Other sources have found that communities and developments built according to TLC principles increase access to convenient housing, jobs, and services, thereby reducing traffic congestion. Overall, the California Department of Transportation has cited a 20 to 40 percent decrease in vehicle miles traveled per year by implementing these measures.<sup>6</sup>



Suisun City Waterfront — TLC projects can create a sense of place



**TLC STANDOUT :**  
**Metro Place, West Sacramento**



**DESCRIPTION**

The Metro Place at Washington Square project is on 3 acres in the historical riverfront Washington neighborhood in the City of West Sacramento and consists of 44 single family homes, 10 live/work lofts, and 4 apartment units. The site previously hosted a corporation yard and a health clinic. The West Sacramento project is groundbreaking as it is the first major "infill" housing development in the vicinity of downtown Sacramento that has not required a significant infusion of public money. This project compliments the nearby new River Walk Park.

**SUPPORTING TLC PRINCIPLES**

**MIXED USE** The development at Metro Place meets a variety of housing needs. It also provides a mix of living and working quarters, which is a good example of how to reduce commute traffic.

**CONNECTIONS** As an infill development, Metro Place has immediate ties to downtown West Sacramento, as well as River Walk Park and other viable destinations.

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**Sense of place.** Less tangible than financial, quality of life and health benefits, but no less significant, transit-oriented growth can help create or preserve the types of unique places that people enjoy. Older, established mixed use neighborhoods are commonly associated with the lively 24-hour activity patterns where daily work, shopping, and social life often converge on the same streets and sidewalks. These areas help to make each community unique and each individual feel a part of the community. This vitality can be enhanced or recreated through new transit-oriented, mixed-use development.<sup>7</sup>

**Environmental.** Creating compact, mixed-use developments and offering more alternative transportation choices reduces the amount of vehicle miles traveled and minimizes the number of vehicle trips per day. A reduction in automobile use reduces the need for automobile infrastructure, thereby reducing energy consumption and reduced encroachment onto farmland and other fragile and ecologically significant lands. This reduction in vehicle miles traveled has air quality benefits as well. In a 1994 study, the San Diego Association of

Governments found that by implementing transit and pedestrian oriented development patterns and practices, annual transportation energy consumption could be reduced 10.5%, resulting in a cost savings of \$207 million per year in that region.



TLC and similar projects can benefit the environment — a meandering path at the UC Davis Arboretum.



### 3.2. Basic TLC Principles

Many studies and plans include general principles and more specific goals and standards for TLC-type projects and numerous related terms and concepts. A set of 'Fundamental Principles' was specifically tailored for a 12-mile corridor in Solano County as part of the Jepson Parkway Concept Plan. This plan was adopted in May 2000 by the cities of Fairfield, Suisun City, Vacaville, and Solano County, and coordinated by the Solano Transportation Authority with funding from a Metropolitan Transportation Commission's TLC Program planning grant. These TLC principles are:

- **Safety and Convenience:** Alternative transportation modes must be safe and comfortable, and should connect directly to key origins and destinations to achieve popularity.
- **Density:** To support transit and pedestrian use, densities should be higher near transit centers and stops, along major arterials and at key intersections.
- **Clustered or Mixed Use:** Locating residential, commercial and job-oriented uses in reasonably close proximity to each other can reduce lengthy trips for work or

shopping. By locating parks, schools, and neighborhood shopping near residential zones, and by providing adequate and safe connections between them, one can reduce car trips and encourage social interaction. More flexible zoning that encourages live-work spaces or mixed use within structures can promote fewer external trips.

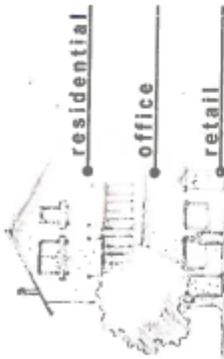
- **Choice:** Providing multiple convenient travel choices between uses by transit, bicycle or car can encourage alternative modes as build-out occurs and density increases. The designs and layout of roadways can foster choice and also reduce congestion and the need to unnecessarily widen roads. For example, a grid or modified grid offers numerous road options to avoid channeling vehicles into one or several large intersections.

- **Connections:** Safe, attractive and convenient pathways and linkages between buildings, between adjacent uses (such as schools and housing) and within a planned development, such as an office park, can increase pedestrian and bicycle use.

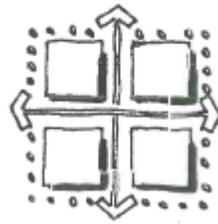
- **Human Scale:** By designing at a human scale, bicycling, walking, and the community itself are perceived as safer,



(photo courtesy of Dan Burden, www.pedbikeimages.org)



Uses can be mixed vertically (shown above), or horizontally



TLC projects foster connections

more attractive, and interesting. Attention to details regarding the relationship between buildings, sidewalks, streets, parking areas, and landscaping can enhance urban design quality and increase pedestrian comfort.



**TLC projects are human scale and accommodate pedestrians**

### 3.3 TLC Standouts: Transportation for Livable Communities Program In Action.

Some benefits of implementing Transportation for Livable Communities principles have already been realized and are being pursued through various projects and studies in Solano and Yolo Counties. The projects printed in **bold type** are highlighted in profiles contained throughout this toolkit to illustrate some real life examples of TLC principles. The following TLC-type projects are under way or have been built in Yolo County:

1. **Metro Place**, West Sacramento (pg. 31)
2. **Southport Framework Plan**, West Sacramento
3. **Riverwalk**, West Sacramento (pg. 43)
4. **Spring Lake Specific Plan**, Woodland (pg. 61)
5. **Aggie Village**, Davis
6. **Village Homes**, Davis
7. **Davis Commons**, Davis

The following projects are underway or have been completed in Solano County:

- |   |  |
|---|--|
| 1. <b>First Street Streetscape Improvements Project, Benicia</b> (pg. 23)                             |  |
| 2. <b>Intermodal Train Station and Transit Hub, Benicia</b>   |  |
| 3. <b>Streetscape Revitalization Project, Dixon</b>   |  |
| 4. <b>Multi-Modal Rail Station, Dixon</b> (pg. 69)  |  |
| 5. <b>North Connector TLC Improvements, Fairfield</b>   | 13. <b>Promenade Live-Work Subdivision, Suisun City/Miller-Sorg Group, Inc.</b> (pg. 59) |
| 6. <b>County Government Center, Solano County/Fairfield</b> (pg. 13)                                  | 14. <b>Downtown Street Improvements Phase I, Suisun City</b>                             |
| 7. <b>Fairfield/Vacaville Train Station Transit Oriented Development, Fairfield/Vacaville</b> (pg. 7) | 15. <b>Driftwood Drive Waterfront Pedestrian Plaza, Suisun City</b>                      |
| 8. <b>Downtown/Jefferson Corridor Improvements, Fairfield</b>   | 16. <b>Main Street Streetscape (Downtown Street Improvements, Phase II), Suisun City</b> |
| 9. <b>Intermodal Train Station, Fairfield/Vacaville</b>   | 17. <b>Davis Street Streetscape Project, Vacaville</b> (pg. 42)                          |
| 10. <b>Downtown Revitalization Project, Rio Vista</b> (pg. 22)  | 18. <b>Vacaville Bus Terminal &amp; Transfer Point, Vacaville</b>                        |
| 11. <b>Waterfront Improvement Project, Rio Vista</b> (pg. 22)   | 19. <b>Vacaville Downtown Conceptual Plan, Vacaville</b>                                 |
| 12. <b>Old Cordelia Improvement Project, Solano County</b>  | 20. <b>Mare Island Redevelopment Project, Vallejo</b>                                    |
|   | 21. <b>Georgia Street Extension, Vallejo</b>   |
|   | 22. <b>Waterfront Improvement Project, Vallejo</b>                                       |
|   | 23. <b>Wilson Avenue Improvement Project, Vallejo</b>                                    |
|   | 24. <b>Downtown Pedestrian Improvement Project, Vallejo</b>                              |
|   | 25. <b>Sereno Transit Center, Vallejo</b>  |
|   | 26. <b>Jepson Parkway Project, Multi-Jurisdictional</b> (pg. 53)                         |



### 3.4 Components of Successful TLC Development and Improvement

#### The Transit-Oriented Development Model.

The most ambitious approach to creating communities that support alternative modes of transportation is Transit-Oriented Development (TOD). This is a development model based on a mix of land uses with pedestrian, bicycle, and local transit circulation within close proximity to a train station, ferry terminal or other inter-regional transit hub. Several TOD projects are well underway, planned, or under study in Solano and Yolo Counties.

Three key principles for successful transit-oriented development are transit system planning, mixed land uses, and circulation which that facilitate pedestrian and bicycle access and transit connections within the development core:

- **Transit System Planning.** Successful TOD begins with identifying or developing transportation corridors and routes that make it possible for people to use transit for medium to long distance trips to major employment, cultural, educational and service centers. Transit systems are often

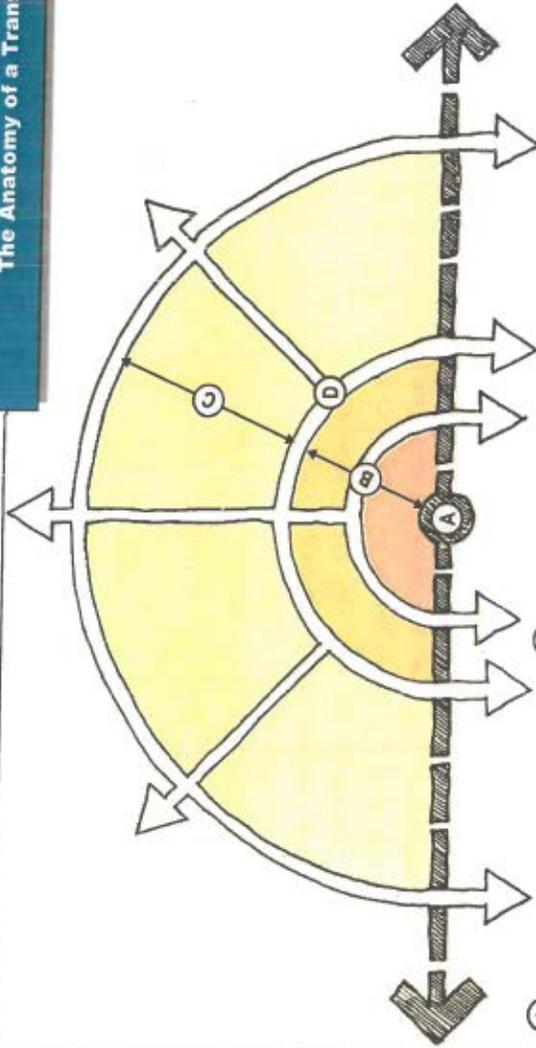
added in existing developed districts based on need and opportunity, such as existing rail corridors or major bus routes. Transit hubs and corridors provide the opportunity for increased density in land use. TOD is often planned in conjunction with new transit infrastructure, or in Solano and Yolo counties, along the Capitol Corridor rail line. Transit-oriented development should occur within ½-mile of a major transit stop. The transit infrastructure upon which a successful TOD is based should match the scale of the development; a major TOD requires a major inter-regional transit connection to support the intensity of mixed commercial and housing to create a relatively self-contained district. However, the transit focus of most TODs is supplementary to automobile connections, and in some cases, there is no major transit connection other than bus routes.

- **Mixed-Use.** The uses within the TOD should be a mixture of housing, retail, jobs, and services so that residents and workers can meet most of their basic needs without using a car. TODs can be thought of as self-contained units in which housing is provided within walking and biking distance of the necessary retail spaces, workplaces, civic services, and transit connections to other regional destinations. TOD housing densities are usually higher than traditional suburbs. A desirable



**The Anatomy of a Transit Oriented Development**

Transit Oriented Developments are characterized by their mixed-use, walkable developments with convenient and direct connections to express transit service. TOD's occur as infill development within existing cities or as new developments within urban growth boundaries. As such, they are built along either existing or planned transit routes that afford residents convenient access to local and regional destinations without the use of an automobile.



**A TRANSIT HUB.** TOD's are built around a viable transit hub, with express transit service in 10-15 minute intervals. Alternatively, TOD transit hubs can be served by a feeder bus line within 10 minutes of express transit service.



**B PRIMARY / CORE TOD AREA.** The mixed-use primary area has an approximately 1/4 mile extent to facilitate a comfortable 5-10 minute walk from the transit hub to its outer edges. The higher residential densities (about 12 units or more per acre) and wealth of commercial activities and retail spaces support the transit hub and create a vibrant community.



**C SECONDARY AREA.** Secondary areas should complement and help support the TOD core. The uses found in this surrounding area may be lower density housing, employment centers, park-and-ride lots, schools, and community parks. Uses that may compete with and subtract from primary area uses are generally discouraged.



**D CIRCULATION ROUTES.** Circulation within the primary and secondary areas should be direct and uninterrupted. Bicycle and pedestrian circulation is emphasized in the primary area, and auto traffic is accommodated in the secondary area.



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minimum density is approximately 12 dwelling units per acre, but any increase in density over suburban standards is beneficial. This higher dwelling unit density provides the foot traffic and market for goods and services to make the local commercial establishments economically viable.

- **Circulation.** The core of a TOD should be centered on the transit hub and/or route, and extend approximately ¼-mile to ½ mile (or a 10 to 20 minute walk for the average person) in all directions. Pedestrian and bicycle circulation within the TOD should be direct, interconnected, and have at least equal priority with auto traffic to facilitate the movement of people to and from housing, jobs, and transit without the use of the automobile.

**Local & Regional Circulation Connection and Coordination.** Two of the most important aspects of TLC improvements to encourage alternatives to the car are connection and coordination between local alternative mode transportation systems and regional systems. Transit must be accessible in order to be widely used. In conventional suburbs and other auto-intensive settings where transit corridors are not readily accessible, access to transit can be provided

through the use of connecting bus or shuttle routes, and other inter-modal facilities such as park-and-ride lots and parking structures. Local transit access places should serve as jump-off points to regional destinations and connections to other systems. The local pedestrian, bike, and transit circulation and transfer points must be carefully coordinated and connected with inter-regional services, such as rail, bus, ferry, and shuttles. Transit connectivity and coordination will maximize the use of transit while helping to minimize the use of the automobile.

**Infrastructure Improvements for Incorporating & Enhancing Transit.** Transit infrastructure takes many forms and occurs at various scales: from bike racks and bus stops at the site-specific scale to rail and ferry connections and bus priority lanes at a regional scale.

- **Amenities for Transit Connection Routes and Stops.** When provided with a safe, attractive walking and biking environment, many people are willing to walk or bike further to transit stops.<sup>8</sup> In order to encourage alternative transportation modes, transit stops (e.g. bus, rail, ferry) should feature attractive and comfortable

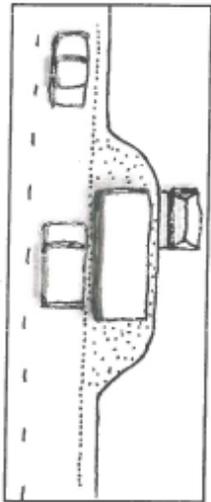


Transit amenities such as this bus stop encourage and accommodate ridership



shelters designed for pedestrians, including people in wheelchairs and other types of disabilities, and bicycle storage at major stops and hubs. Public transit should feature bike racks or space for bicycle commuters. Information on tickets, timetables, and connections should be readily available at each stop.

- **Bus Priority Measures.** There are five specific measures that can help to make bus service more efficient and reliable: bus priority lanes, clearways, bus bypasses, signal preemption, and bus turnouts. *Bus priority lanes* are lanes dedicated to buses, thereby separating them from auto traffic and congestion. Priority lanes shorten travel times, making bus travel more efficient and enabling buses to maintain an accurate timetable. Priority lanes are often city-bound during peak morning traffic and outbound during peak afternoon and evening traffic. Priority lanes should be clearly striped and signed, and should integrate physical separation elements at bus stops to keep bus patrons safe from automobile traffic. *Clearways* are much like priority lanes, but accommodate automobile traffic during off-peak hours. Again, clear signage and demarcation is important. Since they are shared between automobile traffic and buses, their degree of separation should be less than the separation found in priority lanes. *Bus bypasses* are special lanes or zones located



Bus turn outs accommodate bus traffic and improve safety while minimizing impact on surrounding traffic patterns



Transit hub — Fairfield Transportation Center

at intersections that allow buses to move around stopped traffic to the front of the stop bar. These zones are often striped to prevent auto traffic. *Signal preemption* is an electronic system that allows traffic lights and buses to communicate with one another. Depending on how these systems are engineered and programmed, buses are equipped with signal preemption devices can extend green-light times and/or change red lights to green. *Bus turnouts*, usually located on an arterial roadway, provide separate areas for buses to stop to pick up and drop off passengers without affecting traffic flow.

- **Transit Hubs.** Transit hubs are necessary to achieve the ultimate level of accessibility and connectivity. Ideally, a transit hub connects one or more major, regionally dispatched transit modes such as air travel, rail, and ferry with local automobile, transit, pedestrian, and bicycle traffic. Successful transit hubs are readily accessed, often established near the center of an urbanized or TOD area, and emphasize connections to alternative transportation modes over automobiles.
- **Ridesharing.** Ridesharing is defined as two or more people traveling to work together in a carpool or vanpool. Because of its outlying relationship to the inner Bay Area, average length of commute trips,



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segments of the population are increasing in numbers and percentage.

In addition to providing paths and connections to encourage the use of alternative transportation modes, "Healthy Streets" often devote less room for cars and more room for people in order to achieve a greater density and more efficient use of urban land resources. A good local example of a "Healthy Streets" design standard is contained in the City of Rio Vista's General Plan 2001, in Chapter 8, Circulation and Mobility. Figure 8 – 12 on page 8 – 64 defines characteristics for an alleyway that makes efficient use of space and yet encourages pedestrian and bicycle circulation.

Besides making more efficient use of urban land resources, allowing more space for pedestrian amenities and circulation, and encouraging people to get out of their cars and walk, the objective in narrowing streets and constraining traffic is to reduce traffic speed. Bicyclist and pedestrian safety increases exponentially in relation to decreased traffic speed. The average distance for a motorist to see a bike or pedestrian and

proximity to toll bridges and defined congested corridors, Solano County has the highest carpooling and vanpooling rate (20%) of all nine Bay Area counties. The Solano Napa Commuter Information Program (SNCI) promotion of supporting services for carpools and vanpools is a major factor in this high rate. Park-and-Ride lots and High Occupancy Vehicle (HOV) lanes are key infrastructure elements to support ridesharing. These elements are described in greater detail in Section 3.7, Transportation Demand Management.

### 3.5 Healthy Streets: Pedestrian and Bicycle-Friendly Design

Whether considered as part of a new planned TOD district, or as improvements to an existing downtown or neighborhood, design of streets is key to encouraging transportation choices and lifestyles that reduce dependence on the car. Streets provide the means for motor vehicle, bike, and pedestrian movement, as well as a locale for everyday social and commercial activity. Children, the elderly, people with disabilities, and the economically disadvantaged tend to rely more on walking and bicycling as their primary mode of transportation. These



**Bicyclists and pedestrians often feel safer on narrow streets**

(photo courtesy of Dan Burden, [www.pedbikeimages.org](http://www.pedbikeimages.org))



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stop is 107 feet at 20 mph, 196 feet at 30 mph, and 320 feet at 40 mph. In alleys, lanes, and streets, where speeds are kept at 15 – 20 mph, bicycles mix comfortably with cars and trucks. Bike lanes should be provided on avenues, boulevards, and some main streets.<sup>9</sup>

Bicyclists and pedestrians are much safer when their transportation needs are carefully considered and when they are given high priority in the design of the transportation system. In Germany and the Netherlands, pedestrian fatality rates are 10% less than the rates in the U.S., and fatality rates for bicyclists are only 25% of the U.S. rates.<sup>10</sup>

In addition to the general transportation, safety, and quality-of-life benefits of TLC-type development and circulation, safety for children is a significant factor. Children need and want to get around without being driven everywhere, and separated trails and pathways, and areas with reduced traffic speeds make it possible for them to do so safely. Similarly, these accommodations benefit the elderly, people with disabilities, and others who do not drive.

Providing bicycle and pedestrian-friendly development and access attracts users. In cities that have installed extensive bicycle facilities, cyclists account for 15 – 20% of all trips.<sup>11</sup> The National Cycling and Walking Study, published by the U.S. Department of Transportation in 1994, translated a renewed interest in non-motorized travel into two specific goals: to double the percentage of trips made by foot and bicycle while simultaneously reducing the number of crashes involving bicyclists and pedestrians by 10 percent.

There are numerous ways to adapt existing roadways to make them more appealing and safe for bikers and pedestrians. This section provides an overview of pedestrian and bicycle-friendly design principles.

The Center for Livable Communities has identified five indicators of healthy streets that support pedestrian and bicycle-friendly design principles:<sup>12</sup>

1. **Movement Choices.** Healthy streets provide a variety of pedestrian, bicycle, and transit choices to allow movement from one place to another.



**Pedestrian safety is affected most by traffic speed and volume**



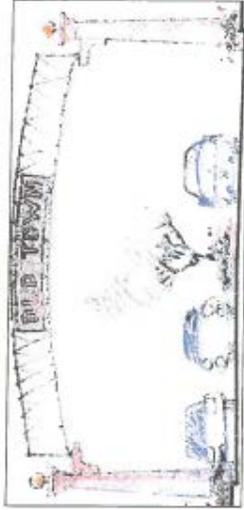
**Sidewalk corridors should be functional for all, including those with disabilities**

(photos courtesy of Dan Burden, [www.pedbikeimages.org](http://www.pedbikeimages.org))

**TLC STANDOUT :** Davis Street Entrance Way Project, City of Vacaville

**DESCRIPTION**

The Davis Street Entrance Way Project proposes improvements between two vital areas: a freeway frontage recently converted to a commercial and entertainment center, and a historic main street district. The phased improvements include colored/textured crosswalks and street corners, landscape pop-outs, and a number of pedestrian amenities such as pedestrian-scale street lights, water features, historic plaques, benches, kiosks, and a grand entry arch over the street. The TLC funds will also be used to implement a number of infrastructure improvements/upgrades to the street, sidewalk, irrigation, and electrical components.



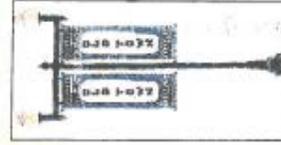
**SUPPORTING TLC PRINCIPLES**

**SAFETY & CONVENIENCE** The proposed improvements will help calm traffic and add pedestrian amenities, making Davis Street safer, more comfortable, and convenient.

**CONNECTIONS** The proposed improvements will provide a vital link between the office space, 16-screen movie theater, ice rink, and restaurants in the converted freeway frontage, and the numerous shops, restaurants, and Ulatis Creek Walk and Plaza found in the historic Main Street district.



**HUMAN SCALE** The proposed lamp posts, benches, water features, and other improvements fit pedestrian dimensions, and are comforting to those traveling by foot.



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**TLC STANDOUT :**  
**River Walk Park, City of West Sacramento**

**DESCRIPTION**

West Sacramento's River Walk Park is a partially-completed 3.5-mile linear park located along the banks of the Sacramento River, directly opposite of Downtown Sacramento and the State Capitol. Improvements include a meandering brick promenade, grand stairway, active and passive recreation areas and trails, landscaping, and lighting.

**SUPPORTING TLC PRINCIPLES**

**CONNECTIONS** River Walk Parks occurs within West Sacramento's Triangle Specific Plan, and has strong connections to key residential and office development. Additionally, the park offers a direct connection to the Sacramento River.

**CHOICE** For trips along the Sacramento River, River Walk Park offers residents a viable and enjoyable alternative to using a car.

**HUMAN SCALE** The design of the park is geared towards pedestrians and includes

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2. **Connectivity.** Healthy streets get people to where they want to go. These streets take people from their homes and jobs and provide direct connections to important destinations and services. Connectivity also lends itself to a variety of choices – people in wheelchairs, cyclists, and pedestrians are not limited to only one route.
  3. **Number of People.** Healthy streets contain more people, which can make streets safer and provide a greater sense of place.
  4. **Diversity of People & Activity.** Healthy streets have a high degree of diversity in people and activity. A wide array of people, from children to senior citizens and disabled persons, can be found on healthy streets since they are more accessible, have more connections, and offer a variety of land uses and transportation choices.
  5. **Creating a Civic Stage.** Healthy streets are destinations on their own. People go to such streets to see, to be seen, and to experience a variety of activities.
- Accommodating Pedestrians.** According to the Federal Highway Administration, there are three typical pedestrian needs that should be addressed when designing, planning, or retrofitting pedestrian thoroughfares: *safety, function, and pleasure.*<sup>13</sup>
1. **Safety.** Pedestrian safety concerns are both real and perceived. In either instance, safety concerns influence the frequency and the behavior of pedestrian traffic. High traffic *volumes* are most commonly associated with perceived pedestrian safety concerns, while high traffic *speed* is the more critical element concerning actual pedestrian safety.
  2. **Function.** Pedestrian functionality is directly impaired when sidewalks are absent, in disrepair, or lacking proper ADA elements (curb cuts, ramps, etc.). Additional, indirect effects on pedestrian functionality are long walking distances and the lack of a destination within a reasonable walking distance. Connectivity and relevancy of destinations are paramount when planning sidewalk and trail alignments.
  3. **Pleasure.** Pedestrian pleasure is largely achieved by mitigating the pedestrian needs mentioned above. Additionally, pedestrian pleasure can be greatly enhanced by providing amenities such as benches at regular intervals, street lighting, landscaping, and unique paving patterns that set the pedestrian realm apart from the automobile.

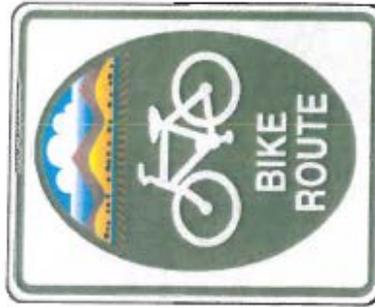


A pedestrian friendly, healthy street—West Texas Street in Fairfield



Additionally, it is important for local agencies to keep in mind that designating preferred bicycle routes assumes a level of responsibility for that agency to maintain the route in a manner "consistent with the needs of bicyclists."<sup>17</sup>

**□ Bike Lanes.** Bicycle lanes use roadway striping and signage to delineate the right-of-ways for automobiles and the right-of-way for bicyclists. There are numerous advantages to clearly marking these separate right-of-ways: they make the movement of both automobiles and bikes more predictable and less haphazard; they increase the total carrying capacity of roadways by mixing transportation modes; and, they often connect to key destinations, and/or transfer points to other modes of travel. As with signed-shared roadways, local agencies assume a degree of responsibility when constructing bike lanes: catch basins should be covered with bicycle-safe drainage inlet grates, pavement surfaces should be smooth, bicycle-friendly intersection signals should be employed, and bike lanes should be regularly maintained to keep them free of debris and potential bike obstructions.<sup>18</sup>



**Accommodating Bicyclists.** Bicycle transportation happens in four different settings: *shared roadways, signed shared roadways, bike lanes, and shared use paths.*<sup>14</sup>

**□ Shared Roadways.** Most bicycle travel in the U.S. occurs on shared roadways (i.e. streets and highways) where no bike lane or shared use designation is in effect.<sup>15</sup> Roadway width is the most important factor in accommodating bike traffic. For example, developing and maintaining a minimum 4'-wide paved shoulder with a 4" edge stripe dramatically increases the safety of bicyclists and motorists.

**□ Signed-Shared Roadways.** These routes are shared roadways that are designated by 'bike route' or similar signage. According to the American Association of State Highway and Transportation Officials (AASHTO), signed-shared roadways either serve to "provide continuity to other bicycle facilities (usually bike lanes)" or to "designate preferred routes through high-demand corridors."<sup>16</sup> The AASHTO recommends that signage indicate such signed-shared roadways as preferred routes for bicyclists.



Separated trails and pathways facilitate safer movement for special populations such as children and the elderly — Cordelia area bike path in City of Fairfield



Shared roadways lack any designated bike lane or signage

(photo courtesy of SGA, [www.smartgrowthamerica.org](http://www.smartgrowthamerica.org))



□ **Shared Use Paths.** Shared use paths are useful for providing access along corridors that are not sufficiently served by existing roadways. Generally, shared use paths are created within and/or between existing publicly owned lands or previous railroad right-of-ways. Shared use paths are excellent recreation opportunities for cyclists, and also serve well as alternative commute routes when they are direct and relatively unbroken by automobile cross traffic. In addition to bikes, consideration should be given to accommodate walkers, joggers, strollers, wheelchairs, and inline skaters. One of the most important considerations for shared use paths is continuity – paths that have many street crossings can increase the opportunities and potential for bicycle-auto collisions.

Further information regarding the design and planning of bike lanes is included in Appendix C on the toolkit companion CD-ROM.

**Traffic Calming.** Traffic calming is the use of barriers, diversions, narrowed lanes, signs, and/or other devices to decrease the speed and volume of vehicle traffic. Traffic calming is used to create pedestrian, bicycle, and transit-friendly communities. Traffic calming

devices are important elements in neighborhood design because pedestrians, bicycles, and those waiting at public transit stops often feel exposed and in danger when faced with speeding traffic. Such real or perceived senses of hazard can reduce pedestrian and bike traffic and could generally make the street an uncomfortable place to be. The main objective of traffic calming is to slow the speed of traffic, thereby providing more safety for other street users. However, these other benefits are often directly or indirectly realized through traffic calming as well:<sup>19</sup>

- an improved 'feel' of the street
- enhanced aesthetic value of the street
- reduced crime due to increased public presence
- equitable balance among transportation modes
- improved air quality and noise levels
- decreased fuel consumption

There are numerous forms of traffic calming devices, which can be grouped into the following general categories:<sup>20</sup>



**Bike lanes are clearly marked to set them apart from automobile traffic**

(photo courtesy of Dan Burden, [www.pedbikeimages.org](http://www.pedbikeimages.org))



**Shared use path — Benicia State Recreation Area**



one of the most widely practiced traffic calming principles. It operates on the basic tenet of creating physical barriers that automobiles must slow down to go around. Examples of these devices include traffic circles, chicanes, and curb extensions. Meandering or serpentine roads that prevent vehicles from traveling in a straight, rapid line are also part of this category.

□ **Surface Textures & Visual Devices.** These devices include signage, pavement markings, colored pavement textured pavement, and rumble strips (textured pavement that vibrates the automobile when driven over). While these devices do not directly or forcibly slow traffic, they provide important visible and audible cues that one is driving within a traffic-calmed zone. Surface textures and visual devices are often most effective when combined with other traffic calming devices.

**Issues Associated with TLC Street Design**  
 "Healthy Streets" are narrower than conventional streets. Their dimensions are constrained to reduce the speed of automobile traffic and the net amount of space devoted to cars. Such street design may raise issues regarding traffic safety, emergency access, and legal liability. These issues have been addressed over many years

□ **Raised pavement areas.** Such devices include raised crosswalks and raised intersections. These elevation changes in the roadway force drivers to slow down in order to avoid damage to vehicles, an uncomfortable jolt or even spilled coffee while driving. Raised pavement areas are sometimes considered the undisputed champions at slowing traffic speeds, but they are not always considered acceptable engineering solutions for public streets by city traffic engineers who must also consider liability and other issues such as adopted street standards.

□ **Devices for Reducing Street Area.** These devices include 'slow points', medians, curb extensions, corner radius treatments, and narrow traffic lanes. All of these reduce the effective area designated for auto traffic, and often dedicate these 'reclaimed' areas to other uses such as landscaping, pedestrian amenities, and parking. These practices are often used in downtown revitalization projects.

□ **Street Closures.** Complete or partial street closures are sometimes undertaken on residential streets. In either case the main objectives of street closures are usually to reduce the volume of traffic and to prevent shortcuts in order to mitigate unsafe traffic conditions in residential areas.

□ **Traffic Diversion.** Traffic diversion is



Roadway narrowed at a pedestrian crossing

(photo courtesy of Dan Burden, www.pedbikeimages.org)



Traffic circle in Davis

of experience in communities across the U.S. In a survey of nearly 50 cities and counties, including every major traffic calming program in the U.S., only 2 lawsuits against traffic calming programs were successful, and one of these is under appeal.<sup>21</sup>

The California state legislature has excluded traffic calming measures from the definition of traffic control devices, and thus from state regulation. This statutory exclusion applies to islands, curbs, traffic barriers, and roadway design features.

Access for emergency vehicles on narrower than conventional streets must be carefully planned. Streets at or near a fire station should be of conventional width, but there is greater flexibility for other streets because emergency vehicles may be able to drive or park on areas that are otherwise reserved for pedestrians. Laying out proposed access dimensions with cones and practicing with the local fire department will help to ensure that access is feasible and acceptable.

### 3.6 Pedestrian, Bicycle, and Transit-Friendly Design Information

The information provided above is intended as a general overview of the tools available to planners and designers to create and sustain neighborhoods and communities that are more conducive to walking, bicycling, and transit ridership. The list is by no means complete, and many other factors must be explored when planning, designing, and implementing these measures. Appendix C, Pedestrian, Bicycle, and Transit-Friendly Design Information, contained on the toolkit's companion CD-ROM, provides additional pedestrian, bicycle, and transit planning principles and resources. The CD-ROM also contains a number of additional reference documents in digital form.

### 3.7 Transportation Demand Management

There are a number of strategies that can be employed in conjunction with the workplace or directly with commuters to encourage the use of alternative transportation modes. These strategies originate in part from the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), passed in 1998. TEA-21



Crosswalk with unique texture and color announces a pedestrian crossing in Davis



Traffic calming can be emergency vehicle-friendly, as shown by the raised surface above

(photo courtesy of Dan Burden, www.pestalkimages.org)



extended tax breaks and incentives to employers and employees to provide for greater freedom in commute choices. These strategies take the form of public services, incentives, information, physical improvements to the worksite, and employer programs and policies.

Carpooling and vanpooling are popular means of commuting in Solano and Yolo Counties, and provide significant congestion relief benefits along key travel corridors. For at least the past 10 years, about 20% of Solano residents carpool or vanpool to work. This compares to the next highest alternative mode, transit, with an approximate 5% mode split. Solano County has the highest rate of car/vanpooling in the Bay Area. Nearly 300 vanpools operate in/out of Solano, which represents a significant portion of the approximately 800 vanpools in the entire Bay Area. With an average of 12 passengers per vanpool, vanpools carry about 3600 individuals and eliminate nearly 6600 daily one-way trips. The vast majority of these are run entirely by private individuals. The

challenge for the future is to maintain this high level of car/vanpool usage as Solano and Yolo counties grow.

There has been relatively little public investment for car/vanpooling programs since vehicle purchase, operating, and maintenance costs are typically borne by individuals and driver duties are shared by "volunteers" who are also on their way to work. Carpools are personal in nature; family, friends, and co-workers set up most of the carpools without institutional assistance. Rideshare agencies such as STA's Solano Napa Commuter Information (SNCI) program assists remaining individuals who are unable to locate a carpool partner through their own means. Commuter vanpools tend to be more structured, and the larger ones in particular need to comply with State Vehicle Code standards. Vanpools typically utilize rideshare agency services to a higher degree.



Vanpools succeed in long-distance commutes, of which there are many for Solano residents. The vast majority of



Solano-based vanpools travel to San Francisco or South San Francisco, with other vanpool destination concentrations in Oakland and Sacramento. With the advantage of self-determination and flexibility, vanpools travel to a variety of other locations such as Sunnyvale, Napa, San Ramon, Berkeley, etc. There has been increasing interest in vanpools destined to Solano and Yolo Counties from other counties.

**Worksite Strategies & Physical Improvements.** Employers can encourage and facilitate carpool, vanpool, and other alternative modes of ridership in the following ways:

- ❑ *Commuter information display or distribution systems.* Employers can provide a clearinghouse in the form of a bulletin board, through internal distribution, or website link for commuters to sign up for or volunteer for carpools and vanpools.
- ❑ *Carpool/Vanpool preferential parking.* Employers can offer guaranteed parking, parking closest to a building's entrance, free parking, or other forms of preferential parking to encourage ridesharing. Employers may also be able to work with

local governments to relax parking restrictions for their carpools and vanpools.

- ❑ *Bike racks and lockers.* Providing bike racks and bike/gear lockers gives cyclists a place to secure their bikes and other cycling gear, making bicycle transportation more convenient and efficient.
- ❑ *Pedestrian linkages to rideshare pick-up and transit stops.* In an ongoing effort to facilitate the use of alternative modes, pedestrians should be provided direct pathways and trails to rideshare and transit access points. To create a safe and comfortable pedestrian experience, these pathways and access points should be well lit, landscaped, sheltered from the weather, and have other amenities such as benches.
- ❑ *On-site amenities or pedestrian linkages to nearby amenities.* To reduce the need for midday trips and a vehicle to travel to them, access to food services, automatic teller machines, mail, and other personal services is of value.

**Employer Programs & Policies.** There are numerous ways an employer can encourage and assist employees to make use of ridesharing and alternative modes. For example, employers can provide incentives, promotions, provide commute coordination services, and allow flexible work hours.



**Solano County vanpool waiting for passengers**



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- *Commuter coordinators.* Employers can also appoint an 'Employee Transportation (or Commute) Coordinator' (ETC). This coordinator serves as the point person for collecting, disseminating, and coordinating pertinent commute information, ridesharers, and commuters. For most ETCs this is a part time duty that is one element of a full time job.
- *Promotions.* Promote commute alternatives through on-site efforts or participation in regional promotions, including the Air Districts' "Spare the Air" Programs.
- *Monetary and tax benefits.* Employers can extend monetary benefits to their employees in the form of tax benefits and commuter rewards programs. The advantage of extending tax benefits to employees is that they are tax-deductible for the employer, and can save the company money over time.<sup>2</sup> If unable to pay for the employee transportation benefit directly, employers can help employees pay for transportation benefits through a pre-tax salary deduction.
- *Fleet vehicles and company-sponsored vanpools/shuttles.* Company fleet vehicles can be provided to employees for work related trips. This enables employees to leave their cars at home even though they may need to drive to other destinations throughout the day. In addition, employers can sponsor vanpools or provide shuttles to get their employees to and from home or to key transit stops.
- *Guaranteed Ride Home.* In order to afford greater security to ridesharers, they should be provided with a Guaranteed Ride Home (GRH). GRH services provide a free taxi or rental car to employees in the case of emergency (illness, family crisis, or unscheduled overtime). SSCI is currently in the process of developing a Solano GRH program (funded jointly by the Y-S AQMD and BAAQMD clean air programs), expected to be implemented in 2003.
- *Flextime and telecommuting.* Lastly, employers can promote and accommodate flextime and telecommuting options to help get employees off the roads during peak commute hours as well as to meet transit and rideshare arrival and departure times to reduce the number of vehicle trips per day.
- **Commuter Information Services and Programs.** Since 1979, Solano County has had the benefit of a rideshare program located within the county to assist local carpoolers and vanpoolers. The task of STA's Solano Napa Commuter Information (SNCI) Program is to provide and promote car/vanpool services to Solano and Napa Counties' residents in an effort to improve

mobility through better roadway management, improve air quality through reduced emissions, and reduce energy consumption. In Yolo County, similar services are provided by the Yolo Transportation Management Association (TMA), a nonprofit partnership of public and private employers working together to address local transportation and air quality issues. The Yolo TMA provides innovative solutions to reduce the number of cars traveling to the worksite, while improving the commute for employees. At the University of California at Davis, The Division of Transportation and Parking Services (TAPS) facilitates the access and mobility needs of the campus community through the coordination of efforts among TAPS units and with other campus departments and non-university entities.

STA's SNCI program provides a wide array of services and programs to support existing carpools and vanpools, to assist in the formation of new ones, and to promote other alternative modes:

- Transportation alternatives information and assistance services, locally and regionally
- Employer Commute Assistance Program
- Vanpool Formation and Support Services
- Local Campaign Coordination such as California Rideshare Week and California Bike to Work Week
- Incentive Programs for vanpooling, carpooling, bicycling, etc.
- Guaranteed Return Trip Program (expected to be implemented later in 2003)
- Employer Commuter Incentive Information
- Community Outreach

Additional background information, including current incentive programs and resources for Transportation Demand Management can be found in Appendix D of this toolkit, contained on the companion CD-ROM.

Figure 4: Solano-Napa Commuter Information

The resource is a public agency program providing free information and services concerning alternative transportation within and beyond Napa and Solano Counties. The program provides a toll-free phone number and a website address to access various free services:

- Car/ Vanpool Referrals and Formation Assistance
- Individual Commuter Assistance
- Employer Relocation Assistance
- Vanpool Leasing Company Referrals
- Employee Commuter Surveys
- Personalized Matchlist

The resource also has information regarding: ferry service, local and regional transit systems; FasTrak; Capitol Corridor (Amtrak) Passenger Rail Service, diamond (HOV) lanes; Airporters to SFO, OAK and SAC; bicycle information; lots and lanes; and vanpool facts and quiz.



Toll Free:  
1-800-53-KMUTE

Online:

[www.solanolinks.com/commuterinfo.html](http://www.solanolinks.com/commuterinfo.html)



**TLC STANDOUT :** Jepson Parkway Plan, Cities of Fairfield, Suisun City, Vacaville and Solano County

**DESCRIPTION**

The Jepson Parkway Project is a multi-jurisdictional project being developed by the three cities above and Solano County. As proposed in the Jepson Parkway Concept Plan, approved by the STA in April 2000, the Plan includes elements for: transit, with local and express bus and a future multi-modal rail station; bicycles and pedestrians, with a 10-foot wide bike path along most of the entire 12-mile length of the planned Parkway; a landscape element; a guide to transit-compatible land use and design, and roadway phasing and management. Portions of the pedestrian and bike path improvements are already completed, while planning for the Fairfield-Vacaville multi-modal train station and transit-oriented development is underway, as highlighted in a separate TLC project profile.

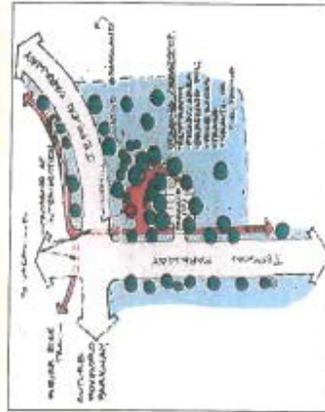
**SUPPORTING TLC PRINCIPLES**

**MIXED-USE** The multi-use path is supported by four "activity" nodes or staging areas that can serve as rest stops and recreational starting points. Each staging area would feature bicycle parking, rest rooms, special landscaping, parking for autos, picnic areas, and other amenities.

**CONNECTIONS** Three of the staging areas are located to provide a connection between Jepson Parkway and other planned or existing bikeways, while the fourth offers an important non-motorized connection to the Fairfield/Vacaville Multi-modal Train Station.

**CONTACT**

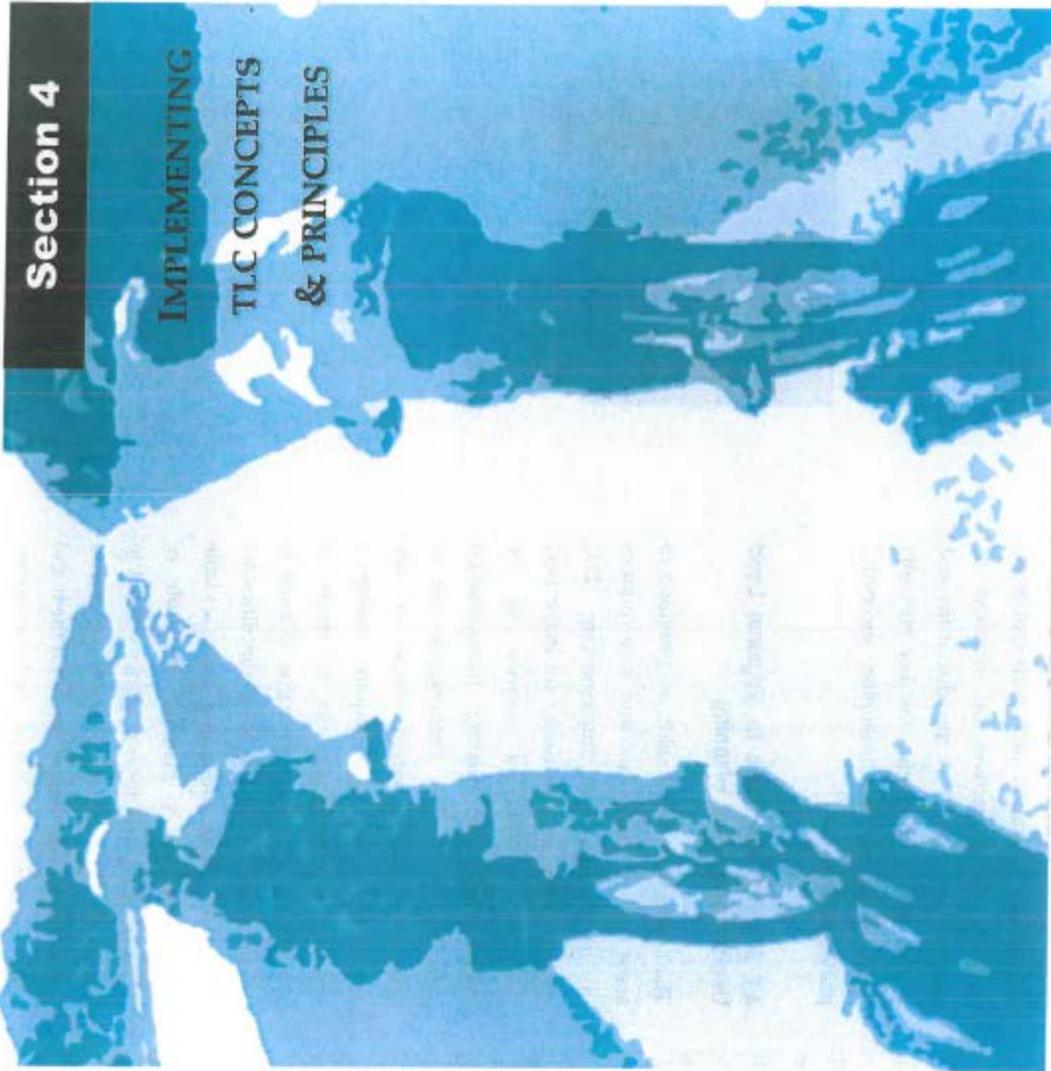
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- <sup>3</sup> *Ibid*, pg. 4
- <sup>4</sup> *The Importance of Biking and Walking* Fact Sheet, California Alliance for Transportation Choices, <http://www.californians.org/resource/biking.pdf>, pg. 2.
- <sup>5</sup> *Statewide Transit-Oriented Development Study*, Business, Transportation and Housing Agency of the California Department of Transportation, September 2002, pg. 38.
- <sup>6</sup> *Ibid*, pg. 6.
- <sup>7</sup> *Ibid*, pg. 25-26.
- <sup>8</sup> *FHWA Course on Pedestrian and Bicycle Transportation*, Federal Highway Administration, pg. 9-3.
- <sup>9</sup> *Street Design Guidelines for Healthy Neighborhoods*, Dan Burden for the Center for Livable Communities, January 2002, pg. 37.
- <sup>10</sup> *Ibid*, pg. 35
- <sup>11</sup> *Ibid*, pg. 37
- <sup>12</sup> *Street Design Guidelines for Healthy Neighborhoods*, Dan Burden for the Center for Livable Communities, January 2002, pg. 18.
- <sup>13</sup> *FHWA Course on Pedestrian and Bicycle Transportation* by the Federal Highway Administration, pg. 5-2.
- <sup>14</sup> *Guide for the Development of Bicycle Facilities* by the American Associate of State Highway and Transportation Officials, 1999, pg. 15.
- <sup>15</sup> *Ibid*, pg. 7.
- <sup>16</sup> *Ibid*, pg. 7.
- <sup>17</sup> *Ibid*, pg. 7.
- <sup>18</sup> *Guide for the Development of Bicycle Facilities* by the American Associate of State Highway and Transportation Officials, 1999, pg. 7.
- <sup>19</sup> *FHWA Course on Pedestrian and Bicycle Transportation* by the Federal Highway Administration, pg. 11-1 to 11-2.
- <sup>20</sup> *Ibid*, pg. 11-4 to 11-22.
- <sup>21</sup> *Traffic Calming. State of the Practice*, Institute of Transportation Engineers for U.S. Department of Transportation, Federal Highway Administration, August 1999.
- <sup>22</sup> TDM Toolkit, pg. 1-4.



## 4. IMPLEMENTING TLC CONCEPTS & PRINCIPLES

discussed, the importance of political support and public education and participation is outlined, and objectives or measures of success are reviewed. A checklist at the end of this section highlights the key elements that are critical to developing successful plans and projects.

### 4.1 Introduction

Gaining public and decision-maker support to implement TLC projects is perhaps the most challenging aspect of creating transit, bicycle, and pedestrian friendly communities. While implementation is ultimately the responsibility of local governments, it is both encouraged and supported by: federal and state incentives and funding sources; regional planning, visioning, and projected needs; opportunities for housing, transportation, and demographics; and local plans and policies such as general plans, zoning codes, and design guidelines. The successful implementation of TLC planning and design therefore requires knowledge and consideration of these intervening forces.

This section provides an overview of the planning steps and elements involved in the implementation of the TLC concepts and principles found in this toolkit. The role of local and regional plans and policies is



Cyclists riding along Fairfield's Linear Park

### 4.2 A Local Approach to Regional Land Use/Transportation Planning

The concepts in this toolkit are provided to assist cities within Solano and Yolo counties in developing and implementing TLC projects. They may be useful for major new or infill development projects, or for enhancements to existing transportation systems or districts. Encouraging use of alternative transportation modes to the automobile does not require sweeping change. Improvements can be made in appropriate places where traffic calming is required, pedestrian and bicycle facilities are needed, or a new community along a viable transit corridor is planned. The role of regional, state, and federal agencies is not to impose TLC principles on local governments, but to encourage and partner with them and offer guidance, resources, and incentives.



Additionally, regional or countywide coordination is often essential to achieve the intercity and interregional connectivity necessary to create viable TLC communities.

### 4.3 Building Public Support for TLC Principles and Projects

Although TLC type concepts have been around for years, they often remain unknown or misunderstood by the public. Many myths persist regarding the alternative forms of development or circulation system enhancements. For example, citizens often contend that development with mixed-use and higher density housing will reduce property values. However, many homes in TOD communities consistently outsell their suburban counterparts, thereby raising property values. Local governments should make every effort to build community understanding and support for TLC principles as part of any implementation effort. There are many references and resources to support these efforts. The "VTA Community Design & Transportation Program: A Manual of Best Practices for Integrating Transportation & Land Use,"



Early and frequent public input is an important step toward building public support for TLC projects

recommends the following strategies for building community support:<sup>1</sup>

- *Support the 'Big Picture' Decision-Making Process.* Allow citizens to provide input early on in the process regarding larger, planning-related issues. Citizen input is often restricted to specific project details rather than broader reaching planning concerns.
- *Early and Frequent Public Input.* Build trust by holding visioning, scoping, and introductory project meetings while the project is still in its infancy. This is a much stronger trust-building exercise than waiting until the last minute to present final drawings for public review.
- *Design Charrettes.* Build community consensus by including citizens in the design process.
- *Design Competitions.* Holding design competitions can help build community excitement and support for a project. Design competitions – especially for public projects – can also be an effective means to save public funds.
- *Offer TLC Courses.* Education will help dispel some of the common myths surrounding TLC-type development. A better educated citizenry will provide more useful and relevant public input down the line.
- *Form Partnerships.* Forming partnerships



with various community groups will encourage help and promote input from minority groups, churches, business or trade associations, and neighborhood associations.

- *Use Image Surveys.* Many related terms, such as TOD, walkable neighborhoods, and mixed use, cannot be readily envisioned by laypeople. Providing visual case studies of these terms and concepts will help the public understand their meanings and envision the future of their own community. Having the public vote on these images will help predict public support for and identify potential problems with various TLC concepts.

- *Create Photosimulations.* Photosimulations will help the public understand how TLC concepts will work in their community.

- *Conduct Field Trips.* Nothing compares to seeing the finished product. Tours with an educated guide can help citizens envision a final as-built project in their own community.

#### 4.4 Local Policies & Plans

Change begins with the fundamental policies that shape local communities, including documents such as the general plan, specific plans, zoning codes, transit village plans,

subdivision regulations, and design guidelines. Bicycle, pedestrian, and transit-friendly communities are best achieved by revising these planning instruments to include specific policies that accommodate and promote TLC principles and that strike-out policies that inhibit or prohibit the principles found in this Toolkit.

**General Plan.** As an adopted document that guides the formation of city policies and practices, and that ultimately guides the physical formation of the city, the general plan can implement TLC policies throughout its seven required elements: *Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety.* Each element provides opportunities to establish specialized goals, objectives, and implementation measures that foster TLC principles. The general plan serves as the origin of and basis for most other city planning-related policies, and these policies must be consistent with the general plan as required by state law. Therefore, it is essential that the general plan set the stage for TLC-supportive policies. TLC policies that are poorly defined, or altogether absent, from the general plan could hinder future



**TLC STANDOUT :** Promenade Live-Work Subdivision, Suisun City

**DESCRIPTION**

Promenade is a "live-work" subdivision of 23 single-family homes, ranging in size from 2,700 to 2,800 square feet in two-story, turn of the century style architecture. The project developer is the Suisun City based Miller-Sorg Group, a major custom home developer in Solano County. Each home will contain approximately 400 square feet for "commercial activity", such as a professional office (attorney, architect, etc.) retail or service sector business. Prices for the homes at Promenade will begin around \$365,000 to the high \$400,000's. The Promenade development is adjacent to and within walking distance of downtown Suisun City. In addition, the development is within walking distance of an Amtrak rail station with Capitol Corridor rail service, which runs daily from San Jose to Auburn/Colfax with connections to Oakland and San Francisco.

**SUPPORTING TLC PRINCIPLES**

**MIXED-Use** The subdivision mixes housing with retail and service-based uses. This allows people to live and work in the same place, and reduces the need to travel by car.

**CONNECTIONS** The homes are adjacent to downtown and are regionally connected through the Capitol Corridor rail line. A planned trail will connect this part of Suisun City to sections north of Highway 12, including Fairfield.

**CONTACT**

Mike Rice, President  
 Miller-Sorg Group  
 710 Kellogg  
 Suisun City, CA  
 707.427.6790



efforts to implement effective zoning, specific plans, or TODs. General plan policies may require or create incentives for developers or employers to provide Transportation Demand Management (TDM) programs and/or improvements. Incentives could include a density bonus or reduction in required parking.

**Specific Plans.** Specific plans are useful because they combine policy statements with development regulations.<sup>2</sup> Transit corridors, hubs, mixed-use districts, government and/or commercial centers and other areas naturally suited for TLC principles can be identified in specific plans. In addition, their growth can be carefully guided in the specific plan by establishing development standards and criteria that support TLC principles.

**Zoning Code.** With its specific standards and requirements, the ordinances found within the zoning code should a) provide for flexibility in parking, a mixed range of uses, higher densities allowable and conditional uses, and floor area ratios and other minimum standards that sometimes can impede TLC planning; and, b) establish

minimum standards that support TLC elements. For example, in order to remain viable, a TOD should consist of higher densities – high enough to provide the foot traffic and intensity of continuous use that support the retail and other services within the TOD. Therefore, the zoning code should establish minimum densities for TOD areas, or areas that have high TOD potential. Besides land use densities, the zoning code should target other standards in the zoning sections of parking, allowable and conditional uses, and floor area ratios. Policies regarding Transportation Demand Management (TDM) programs may be contained in the zoning code. This could include requirements or incentives for developers or employers to provide TDM programs and/or improvements enabling conditions of approval for specific projects. Conditions of project approval could include physical improvements at the site to support alternative transportation modes, such as carpool spaces, bike racks or lockers, outlets for the dissemination of information and the coordination of services, and shuttle services for commuters.



**TLC STANDOUT :** Spring Lake Specific Plan, City of Woodland

**DESCRIPTION**

The Spring Lake Specific Plan establishes specific development policies, land use designations, development regulations, and design standards for the future development of 1,097 acres in the City of Woodland. The plan features a range of housing densities with neighborhoods built around neighborhood centers with small-scale commercial services and parklands. Other key features include: a modified grid system; pedestrian, bicycle, and transit friendly planning; traditional neighborhood design; and an off-street pedestrian and bicycle looped path through the Plan area.

**SUPPORTING TLC PRINCIPLES**

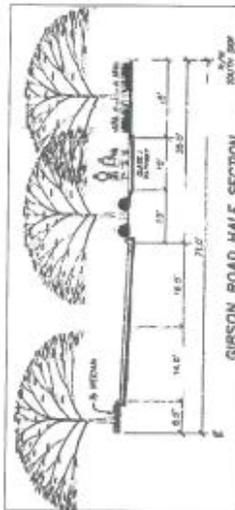
**DENSITY** The range of housing densities provides for the comforts of single family neighborhoods while combining the intensities of use found in multifamily zones. The mix of densities will contribute to a diverse and viable populace, and the higher densities will support transit and other alternative modes in the Plan area.

**MIXED USE** The neighborhood commercial centers at the core of each neighborhood will allow residents to access small-scale commercial uses by walking.

**CONNECTIONS** Walkable streets, convenient transit stops, and an off-street pedestrian/bike path allows residents to travel within the Plan area, and provides

**CONTACT**

Ronald Pinegar, Senior Planner  
 City of Woodland  
 300 First Street  
 Woodland, CA 95695  
 530.661.5820



**Transit Village Plans.** In 1994 the State passed the Transit Village Development Planning Act, authorizing cities and counties to prepare and adopt 'transit village plans'. These transit village plans incorporate the TLC or TOD principles discussed in this toolkit, thereby encouraging higher-density pedestrian oriented development centered around transit stops. The "General Plan Guidelines" document from the Governor's Office of Planning and Research states: "To encourage the adoption of transit village plans, the Act provides that a city or county adopting a plan will be eligible for State transportation funds, will receive priority help from the Office of Permit Assistance in establishing a streamlined permitting process, and may be excluded from conformance with county Congestion Management Plan level of service standards with the approval of the Congestion Management Agency."<sup>3</sup>

comply with the TLC principles, objectives and policies found in the general plan. This includes the authority to "approve and design street alignments, street grades and widths, drainage and sanitary facilities, lot size and configuration, traffic access, and other measures as may be necessary or convenient to insure consistency with, or implementation of the general plan."<sup>4</sup> Flexible or specific standards that support TOD/TLC street, sidewalk, bicycle, and transit circulation features should be considered. In addition, local governments can require dedications of public improvements or in-lieu of payments for infrastructure improvements. The scope of improvement requirements is outlined in Figure 5.

**Design Guidelines.** Design guidelines are useful for guiding the design form of proposed developments and improvements within a city or county, and for directing a local government's discretionary review process. TLC-supportive design guidelines can provide specific standards for: creating streets and their parking connections; accommodations for pedestrians, cyclists,

Figure 5: Types of dedications allowed via Subdivision Regulations

1. Streets, alleys, drainage, public utility easements, and public easements (§66475.1);
2. Bicycle paths (limited to subdivisions containing 200 or more parcels) (§66475.1);
3. Local transit facilities, such as bus turnouts, benches, shelters, and landing pads (applies to subdivisions with 200 dwelling units or more, or 100 acres or more) (§66475.2);
4. Parks and recreational facilities if the city's general plan or specific plan contains policies and standards for park and recreation facilities (Quimby Act – §66477);
5. School sites (this is actually a reservation with a right to purchase at a later date) (§66478);
6. Access to waterways, rivers, and streams (§66478.11);
7. Access to coastline or shoreline (§66478.11);
8. Access to public lakes and reservoirs (§66478.12);
9. Drainage and sanitary sewer facilities (§66483); and
10. Bridges and major thoroughfares (§66484).

Source: General Plan Guidelines, Antero Rivesplata and Gregg McKenzie for State of California Governor's Office, November 1998, pg. 115.



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are some key specific measures of success that reflect how these places are planned, how they are used, and how they function. These measures of success can also be used as objectives for planning policies, standards, and design guidelines:<sup>4</sup>

and transit riders; and building site planning, massing, and design. Specific guidelines can range from infrastructure improvements and pedestrian-scale building design, to landscape design and site amenities. Sacramento County has developed an 86-page Transit-Oriented Development Design Guidelines' document that guides the planning and design of TODs in the subjects of location criteria, site characteristics, mix of uses, residential densities and commercial intensities, building siting and design, street and circulation system, pedestrian and bicycle system, transit stops, parking, open space, and parks. The Sacramento TOD Design Guidelines document is a good example of how resources for creating TLC principles can be wrapped into an agency's general plan.<sup>5</sup>

❑ *Allied Public Support.* The first step towards success is for local governments to gain public support and partnership. Such a partnership fosters understanding and mutual goal-building toward creating a successful community that everyone will like.

❑ *Movement Choices.* TODs and other communities built on TLC principles offer a variety of transportation choices: on foot, bicycle, transit, and automobile.

❑ *Connectivity.* Local, convenient connections are provided to and from homes, work, retail, and civic services such as schools and libraries. In addition, regional destinations are connected to local origins through transit hubs.

❑ *Diversity of People and Activity.* TLC communities contain a wide range of users at all times – from young to old, and rich to poor. Activity in these areas is diverse and occurs throughout most hours of the day – with people walking, biking, sitting in cafes, waiting for buses, and stopping to talk on sidewalks. An increased presence of

#### 4.5. Measures of Success

Successful implementation of TLC planning, principles, and design can be measured in many ways. Overall, successful TLC communities are vibrant, economically viable, and aesthetically pleasing places. Underlying these general surface qualities,



people creates a sense of security with more 'eyes' on the street.

- *Creating A Civic Stage.* The end result of a successful TLC principles community is a community that has a rich sense of place. In these communities, the public arena is no longer an area to drive through quickly, but a place to stop and participate in an unfolding civic 'drama'.



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#### 4.6 TLC Principles Planning Checklist

The checklist below is provided to help guide the TLC planning process. It highlights the key principles and best practices covered in this toolkit, for use in conceiving and adopting new policies and plans, and to assist in the discretionary review process of individual projects to achieve TLC principles, and related transit, bicycle, and pedestrian design objectives.

and frequent participation opportunities on specific proposals?

##### PLANNING & POLICY

- Are policy makers creating new policies or revising old policies that accommodate TLC principles?
  - o Do policies promote more compact and orderly development in designated infill or urban areas?
  - o Have urban design guidelines and standards been drafted to support TLC principles?
  - o Have zoning codes been revised and upgraded to support TLC principles?

##### PLANNING, POLICY, AND PUBLIC OUTREACH MEASURES

##### BUILDING PUBLIC SUPPORT & UNDERSTANDING

- Have measures been taken to build public support and understanding?
  - o Are the public, elected officials, and staff knowledgeable and active participants in the process?
  - o Are staff, council, and commission members actively reviewing projects located in key transit areas using TLC principles?
  - o Have local government officials performed a community outreach and visioning process?
  - o Has the public been afforded early

- Has the permitting process been revised in order to emphasize & streamline TLC projects?
  - o Do policies create greater certainty for projects that conform to TLC criteria?
  - o Do policies allow streamlined environmental review for qualifying infill projects?
  - o Do policies allow focused EIRs that need not address project alternatives or growth inducing or cumulative effects.



**LAND USE MEASURES**

- Have specific target areas (e.g. zones, corridors, and hubs) been identified and have specific plans been drafted to guide TLC principles in these areas?
  - ... to add shared use paths that are separate from roadways?
  - ... to add bus service along key underserved routes?
  - ... to provide safe pedestrian and bicycle linkages across major highways and rail lines?
  - ... to connect neighborhoods, districts, and activity corridors that are otherwise only safely accessible by car?
- Do planning policies accommodate or encourage mixed-use development?
  - Are Transportation Demand Management (TDM) provisions incorporated into conditions of approval for larger office, industrial, commercial, or mixed-use housing developments?
- Do proposals contain a mix of uses that are complementary and mutually supportive?
  - Does the array of uses encourage all-day activity?
- Are uses that encourage pedestrian traffic concentrated within walking distance of transit (approximately 1/4 mile)?
  - Are basic services (i.e. restaurants, drug stores, grocery, hardware, etc.) located within walking distance of homes, jobs, and transit?
- Are policies in effect that promote the retrofitting of existing auto-oriented suburbs?
  - Do overarching standards and guidelines or individual project proposals provide for spaces, landscape areas, and amenities that encourage public gathering (e.g. public plazas, courtyards, greens, squares)?
  - ... to add bike lanes?

**SITE PLANNING & URBAN DESIGN**

- Have standards been established for floor area ratios, structure setbacks, massing, façade window and door openings and articulation to encourage pedestrian- and village-scale design while maintaining the maximum degree of design freedom?
- Do overarching standards and guidelines or individual project proposals provide for spaces, landscape areas, and amenities that encourage public gathering (e.g. public plazas, courtyards, greens, squares)?



**TRANSIT MEASURES**

- Are major transit hubs planned or in place in areas of concentrated population and activity?
  - Do pedestrian, bicycle, bus, and other alternative modes of transportation connect these central hubs to outlying areas?
- Are higher residential densities encouraged in areas adjacent to transit?
  - Does the level of traffic and concentration of people support the proposed mix and extent of uses?
- Is transit information (e.g. schedules, bus stops, routes) readily accessible to the public?
- Are transit origins and destinations fully connected? (i.e. do they connect people with places they want to go, such as housing, jobs, shopping, and other services)
- Are buses and shuttles given priority in major activity zones, transportation corridors, and hubs?
- Are there local and/or project-specific shuttle services?

**PEDESTRIAN & BICYCLE MEASURES**

- Does transit integrate with and accommodate pedestrians, bicycles, and the disabled? (i.e. are bus stops outfitted with shelters)?
- Are auto-oriented uses discouraged (e.g. drive-through, tract housing, big-box retail) and/or disallowed near transit?
- Does transit accommodate automobiles (where appropriate) in the form of ridesharing infrastructure and park-and-ride lots?
- Are pedestrians and bicycle riders safe from real and perceived dangers?
  - ... from high traffic volumes?
  - ... from high traffic speeds?
- Are bicycle and pedestrian circulation routes and areas functional?
  - Are they in good repair?
  - Are they accessible for the disabled?
  - Are they connected to other modes of transportation?
  - Do they connect with relevant and desirable destinations?
- Are sidewalk corridor widths sufficient enough for the intensity of uses and foot traffic?



- Is pedestrian pleasure optimized?
  - Are street trees provided at frequent distances to provide shade and separation from the street?
  - Is there a favorable mixture of pedestrian amenities (i.e. benches at regular intervals, pedestrian-scale street lighting, and textured paving at intersections)?
  - Do sidewalk corridors connect with plazas, courtyards, squares, and other places of activity?
- Are bike routes well marked and signed?
- Are there enough places along bicycle routes to lock bikes?
- Do bike routes connect with transit stops, such as buses, trains, and ferries?
- Are bikes welcome on buses, trains, or ferries?
  - Are bike lockers and racks provided?
- Are on-road routes safe for bicycling?
  - Are traffic volumes/speeds reasonable?
  - Is there enough shoulder room for cyclists?
- Are off-road routes optimized for safe bicycling?
  - Is the number of street crossings minimized?
  - Is the route relatively straight, without any excessively sharp turns or steep downhill?
  - Are these routes well lit?
  - Is the riding surface in good repair?
  - Is the riding surface smooth, well maintained, and free of hazardous disrepairs?
  - Are bicycle-friendly drain grates provided?



**TLC STANDOUT :** Dixon Multi-Modal Transfer Station, City of Dixon

**DESCRIPTION**

The Dixon Multi-Modal Transfer Station is being developed in three phases. The project includes amenities for commuters, and a new bicycle and pedestrian crossing on the southeast corner of the project at B Street, to create a new connection for commuters between the station and downtown. Phase I, which was completed in early 2002, included parking and landscape improvements adjacent to the transfer station on the northwest side of the tracks. Future improvements include: future multi-modal train and transfer station at Jefferson & B Streets (Phase II), transit services, additional park-and-ride spaces (Phase III), a new bike/pedestrian link to downtown, adjacent open space, and a mini-park.

**SUPPORTING TLC PRINCIPLES**

**CONNECTIONS** The planned streetscape improvements provide vital links between the proposed station and downtown. The proposed station provides a regional linkage between the City of Dixon and its surroundings.

**HUMAN-SCALE** The proposed streetscape improvements will make the connections between the station and downtown more pedestrian friendly. The pedestrian amenities planned for the station and its surroundings are human in scale and will foster a more walking and biking-friendly environment.

**CONTACT**

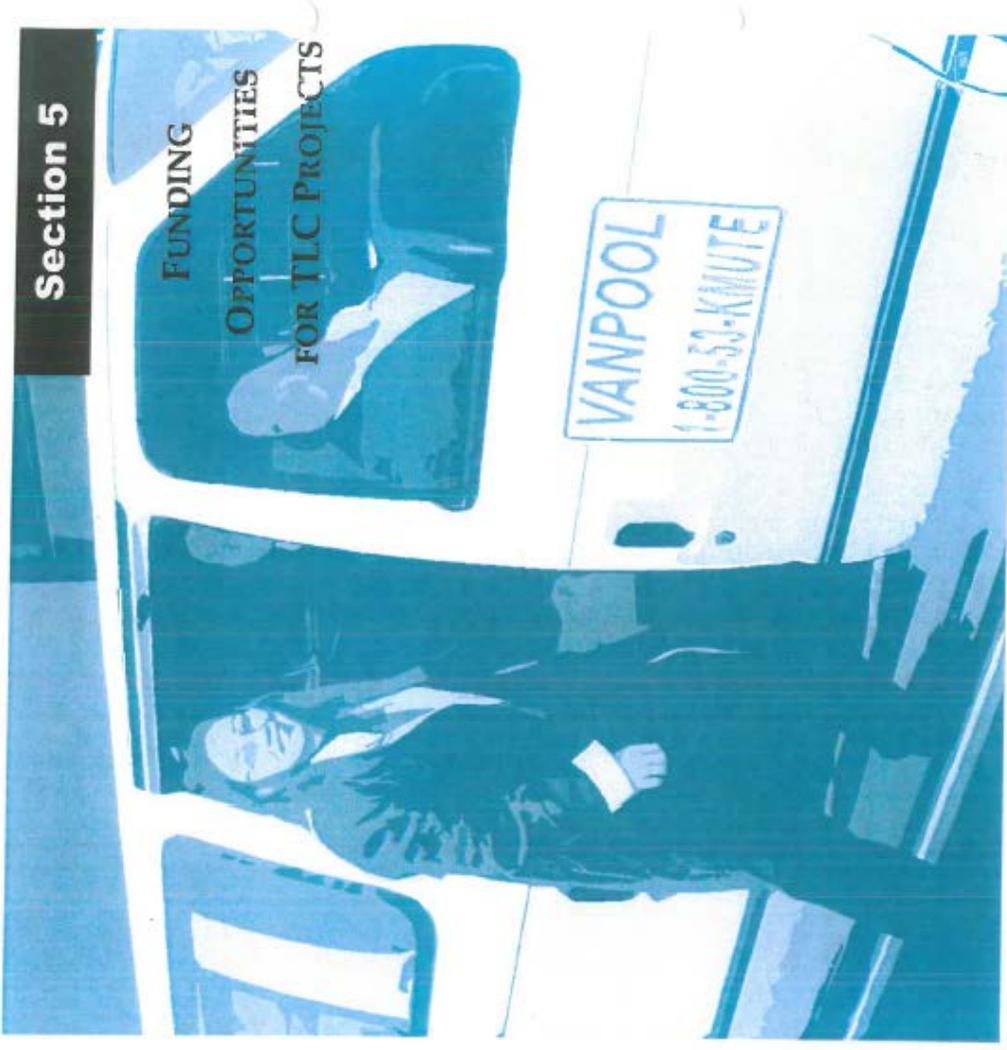
Janet Koster, Senior Management Analyst  
 City of Dixon Public Works Department  
 600 East A Street  
 Dixon, CA 95620

707.678.7030



References Cited

- <sup>1</sup> *Community Design & Transportation: A Manual of Best Practices for Integrating Transportation & Land Use*, Valley Transportation Authority, October 2002, pg. 3-5.
- <sup>2</sup> *General Plan Guidelines*, Antero Rivasplata and Gregg McKenzie for State of California Governor's Office, November 1998, pg. 17.
- <sup>3</sup> *General Plan Guidelines*, Antero Rivasplata and Gregg McKenzie for State of California Governor's Office, November 1998, pg. 115.
- <sup>4</sup> *Ibid*, pg. 116
- <sup>5</sup> The document is available in .PDF format online at: <http://www.seccounty.net/general-plan/gp-home.html>.
- <sup>6</sup> Adopted from *Street Design Guidelines for Healthy Neighborhoods*, Dan Burden for the Center for Livable Communities, January 2002, pg. 18.



## 5. FUNDING OPPORTUNITIES FOR TLC PROJECTS

implementation of the TLC concepts and principles found in this toolkit. The role of local and regional plans and policies is discussed, the importance of political support and public education and participation is outlined, and objectives or measures of success are reviewed.

### 5.1 Introduction

There are numerous funding sources to support TLC plans, projects and programs. Some of these are specifically targeted to these objectives, while others are focused on bicycle or pedestrian trails, or trails in association with parks, open space, or habitat protection that can also function as TLC transportation system enhancements. By including information on funding sources that are not directly associated with land use and transportation, this section intends to encourage project proponents to think about the relationship of their land use and transportation planning efforts to other projects and objectives, such as historic preservation, environmental restoration, parks and open space. Coordinating planning and developing joint projects between agencies will also enhance funding opportunities and project effectiveness.

This section provides an overview of the planning steps and elements involved in the



## 5.2 Regional Funds

### A. MTC Transportation for Livable Communities (TLC) and SACOG Community Design Program

*Approximate Annual Amount:* For the past six years, between \$9 and \$18 million has been available per year for the TLC/HIP program for Bay Area counties and approximately \$12 million has been reserved for community design projects in the Sacramento Region starting in 2003-2004.

*Funding Background:* Federal Surface Transportation Program (STP) and Congestion Mitigation and Air Quality (CMAQ) Improvement Program

*Administering Agency:* Metropolitan Transportation Commission (MTC). The Sacramento Area Council of Governments (SACOG) is currently developing a similar program called the Community Design Program.

*Types of eligible projects:* The TLC program provides funding for planning projects, capital projects, and incentives for land use projects. Planning and capital funding are for projects that include transportation-related improvements such as streetscapes, transit villages, bicycle facilities, and pedestrian plazas. The HIP program funds compact dense housing developments to be constructed in the next two years and are within a 1/3-mile walk of a major transit service. The Community Design Program is expected to have similar eligibility criteria developed later this year.

*Typical funding cycles:* TLC Planning grants are generally offered in the fall of each year. TLC Capital and HIP grants are typically offered in the spring of each year. Funding cycles for SACOG's Community Design Program have not yet been established.

*For more information:* Contact Ashley Nguyen, MTC TLC Project Manager, 510.464.7809 or view MTC's website at [www.mtc.ca.gov](http://www.mtc.ca.gov).

Contact Nancy Kays, SACOG, 916.733.3223 or view SACOG's website at [www.sacog.org](http://www.sacog.org).



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**B. Bay Area Air Quality Management District (BAAQMD) Transportation For Clean Air (TFCA) Program- Program Manager Funds and Regional TFCA Program**

*Approximate Annual Amount:* Approximately \$20 million is available per year. 40% TFCA Program Manager Funds are distributed by each County Congestion Management Agency at their discretion based on BAAQMD guidelines. The remaining 60% is 'taken off the top' for TFCA regional competitive grant program administered by the BAAQMD. Total annual amounts will differ for each county depending on the total registered car owner population.

*Funding Background:* TFCA Funds are generated from a \$4 vehicle registration fee specifically used for implementing clean air projects aimed at reducing air pollution from motor vehicles.

*Local Administering Agency:* BAAQMD and County Congestion Management Agencies

*Types of eligible projects:* Ridesharing promotion and program activities, clean fuel buses, alternative fuel vehicle demonstrations, shuttles, traffic management, rail/bus integration, regional transit information and bicycle projects.

*Typical funding cycles:* TFCA applications each year are generally due in spring each year for Program Manager Funds (40%), and early summer for Regional Funds (60%).

*For more information:* Contact the Liz Berdugo from BAAQMD at 415.749.4946 or your County Congestion Management Agency. More information is available at [www.baaqmd.gov/planning/plntrns/tfcpage.htm#TFCA](http://www.baaqmd.gov/planning/plntrns/tfcpage.htm#TFCA)



### C. Bay Area Conservancy Program

*Approximate Annual Amount:* Approximately \$10,000,000 is available for Solano County (Yolo County is not eligible).

*Funding Background:* The total budget depends on annual appropriation of Park Bond.

*Local Administering Agency:* State Coastal Conservancy

*Types of eligible projects:* Acquisition of wetlands, riparian corridors, trail connections and wetland and riparian restoration. A portion of the project has funded the Bay Area Ridge Trail Council, a non-profit group that may be willing to partner on projects in Solano County.

*Typical funding cycles:* Applications are due every year on September 15.

*For more information:* Contact Nadine Hitchcock with the SCC at 510.286.4176 or visit the website at [www.ceres.ca.gov/wetlands/agencies/coastal\\_con.com](http://www.ceres.ca.gov/wetlands/agencies/coastal_con.com).



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**D. Yolo Solano Air Quality Management District (YSAQMD) Clean Air Fund**

*Approximate Annual Amount:* Approximately \$480,000 available for agencies from Yolo and eastern Solano Counties annually.

*Funding background:* Clean Air funds are generated from a \$4 vehicle registration fee and property tax revenues.

*Local Administering Agency:* YSAQMD

*Types of eligible projects:* Ridesharing promotion and program activities, clean fuel buses, alternative fuel vehicle demonstrations, shuttles, traffic management, rail/bus integration, regional transit information and bicycle projects.

*Typical funding cycles:* Clean Air applications are generally due to the Air District in early spring. Solano County applications for Clean Air funds are reviewed by a pre-screening committee before the actual YSAQMD Clean Air Application due date.

*For more information:* Contact the Jim Antone from YSAQMD at 530.757.3653 or view the website at [www.ysaqmd.org](http://www.ysaqmd.org).



### 5.3 Federal Funding Sources- California Cities and County Public Agencies

#### A. Congestion Mitigation and Air Quality Improvement (CMAQ) Program

*Approximate Annual Amount:* Approximately \$57 million per year in the Bay Area.

*Funding Background:* CMAQ funds are federal funds established from the Federal reauthorization of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). The current program is referred to as TEA-21 for Transportation Efficiency Act of the 21st Century. A re-authorization bill is expected to be acted upon by U.S. Congress in 2003.

*Local Administering Agency:*

For Solano County: Metropolitan Transportation Commission (MTC) and STA. For Yolo County: SACOG and Yolo County Transportation District (YCTD).

*Types of eligible projects:*

Public transit improvements; high occupancy vehicles (HOV) lanes; Intelligent Transportation Infrastructure (ITI); traffic management and traveler information systems (i.e., electric toll collection systems -- ETC); employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); fringe parking facilities serving multiple occupancy vehicles; shared ride services; bicycle and pedestrian facilities; flexible work-hour programs; outreach activities establishing Transportation Management Associations (TMAs); and fare/fee subsidy programs.

*Typical funding cycles:*

Funding cycles and obligation criteria vary statewide, a new reauthorization bill is expected in 2003. Contact STA or YCTD to verify schedule.

*For more information:*

Contact Mike Duncan from STA at 707.424.6075 or Martie Dote from YCTD at 530.661.0816, or view MTC's website link at: [www.mtc.ca.gov/whats\\_happening/STPCMAQ/stp-cmaq.htm](http://www.mtc.ca.gov/whats_happening/STPCMAQ/stp-cmaq.htm).



## **B. Federal Community Development Block Grant Program**

*Approximate Annual Amount* \$4.6 billion is available nationally on an annual basis, 70% is allocated to CDBG Entitlement Communities, and the remaining 30% is allocated through grant opportunities for housing and community improvement type programs.

*Program makeup:* CDBG funding is the largest federal grant program.

*Local Administering Agency:* Contact local Community Development Department or Planning Office.

*Types of eligible projects:* Grantees may use CDBG funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets sidewalks, sewers, water systems, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a Consolidated Plan and managing CDBG funds; education and job training, welfare to work activities; provide public services for youths, seniors, or the disabled (these might include day care centers, youth services and meals on wheels for the elderly); initiatives such as neighborhood watch programs; down payment assistance to low-income homebuyers; enforcing local building codes to reverse housing deterioration and other signs of blight.

*Typical funding cycles:* The CDBG program is an annual grant program. CDBG applicants must have an approved Consolidated Plan (further described on the U.S. Department of Housing and Urban Development website), which fulfills the application and reporting requirements for entitlement communities and contains an action plan describing how the jurisdiction will use its CDBG funds.

*For more information:* For complete detailed information refer to the CDBG website at [www.hud.gov/progrdes/cdbgent.cfm](http://www.hud.gov/progrdes/cdbgent.cfm), for further assistance call HUD's office of Community Planning and Development at 202.708.1577.



### C. Transportation Enhancements Activities Program

*Approximate Annual Amount* Approximately \$4 million per year is available to the Bay Area.

*Program makeup:* The Transportation Enhancements Program is funded with federal funds made available through the Federal Transportation Enhancement Activities (TEA) program. Regional Transportation Planning Agencies receive 75% of TEA dollars by formula; the remaining 25% percent is programmed by Caltrans for statewide projects.

*Local Administering Agency:* Regional Transportation Planning Agencies (i.e. MTC and SACOG), Congestion Management Agencies, and local project sponsors.

*Types of eligible projects:* Pedestrian and/or bicycle facilities and related signage, safety activities for pedestrians and/or bicycles, acquisition of historic sites, historic/scenic highway programs (including tourist and welcome centers), landscaping, streetscapes, and other scenic beautification, historic preservation, rehabilitation of historic transportation buildings, structures or facilities, preservation of abandoned railway corridors (including the conversion for use as bicycle and pedestrian trails), transit shelter or amenities related to a transit village or pedestrian oriented development, establishment of transportation museums.

*Typical funding cycles:* The Transportation Enhancements Program is contingent upon the TEA-21 reauthorization expected in fall 2003. Contact the appropriate agency in your area for more information.

*For more information:* Contact Caltrans District Local Assistance Engineers at:  
Caltrans District 3 (Yolo/Sacramento Counties) 530.741.5450  
Caltrans District 4 (Bay Area Counties) 510.286.5226



## 5.4 Statewide Funding Sources- California City and County Public Agencies

### A. State Transportation Improvement Program (STIP)

*Approximate Annual Amount:* Varies by region based on a population formula. Solano County jurisdictions received approximately \$30 million in new regional STIP in 2002. Yolo County jurisdictions received about \$16.4 million last year.

*Program makeup:* STIP funding is generated from State gas tax (and partially by Federal gas tax). The funding is split by 25% towards the Interregional Transportation Improvement Program (ITIP) and 75% towards the Regional Transportation Improvement Program (RTIP). ITIP projects are nominated by Caltrans, whereas RTIP projects are nominated by regional agencies such as STA and YCID.

*Local Administering Agency:* MTC, SACOG, STA, YCID, and Caltrans.

*Types of eligible projects:* STIP is specifically for capital projects that improve transportation. STIP also can be used for project development costs. Eligible projects funded by STIP can include improving State highways, local roads, public transit (including buses), intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, sound walls, intermodal facilities, safety, and environmental enhancement and mitigation.

*Typical funding cycles:* The STIP operates on a 5-year cycle and is updated every two years; projects are included in each STIP cycle based on available funding or program capacity.

*For more information:* Contact Caltrans District 3 (Yolo/Sacramento Counties) at 530.741.5450, or YCID at 530.661.0816, Caltrans District 4 (Bay Area Counties) at 510.286.5226, or Mike Duncan at STA at 707.424.6075. Online: [www.dot.ca.gov/hq/transpor/stip/stipguid/2000guid.pdf](http://www.dot.ca.gov/hq/transpor/stip/stipguid/2000guid.pdf)



## B. Environmental Enhancement and Mitigation Program (EEM)

*Approximate Annual Amount:* \$10 million available annually statewide.

*Program makeup:* EEM funding is generated directly from State gas tax. The purpose of EEM is to mitigate environmental impacts from new or modified public transportation facilities beyond the mitigation level required by the project's environmental document.

*Local Administering Agency:* Caltrans

*Types of eligible projects:* All projects must demonstrate a direct or indirect relationship with the environmental impact of modifying an existing transportation facility or construction of a new facility after January 1, 1990. Eligible projects must be applicable to one of the following three categories:

- (1) Highway Landscape and Urban Forestry- Projects designed to offset vehicular emissions of carbon dioxide through the planting of trees and other suitable plants;
- (2) Resource Lands- Projects that include the acquisition, restoration or enhancement of resource lands to mitigate the loss of, or the detriment to, resource lands lying within or near the right of way acquired for proposed transportation improvements;
- (3) Roadside Recreational- Projects which provide roadside recreational opportunities, including roadside rests, scenic overlooks, trails, trailheads, snow-parks and parks.

*Typical funding cycles:* Applications are available in July and are due to Caltrans in November.

*For more information:* Contact Caltrans District Local Assistance Engineers at Caltrans District 3 (Yolo/ Sacramento Counties) 530.741.5450  
Caltrans District 4 (Bay Area Counties) 510.286.5226  
or view Caltrans Local Assistance Website at: [www.dot.ca.gov/hq/LocalPrograms/](http://www.dot.ca.gov/hq/LocalPrograms/)



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### C. Bicycle Transportation Account (BTA)

*Approximate Annual Amount:* Approximately \$7.2 million is available annually statewide. Applicants must provide at least a 10% local match for the total cost of the project.

*Program makeup:* BTA funding is generated directly from state tax on gasoline.

*Local Administering Agency:* Caltrans

*Types of eligible projects:* Bicycle capital transportation projects are eligible for BTA funding. Applicants must have a Bicycle Transportation Plan approved by Caltrans Bicycle Facilities Unit.

*Typical funding cycles:* Applications are available in October and are due to Caltrans in December.

*For more information:* Contact Caltrans District Local Assistance Engineers at

Caltrans District 3 (Yolo/ Sacramento Counties)  
530.741.5450

Caltrans District 4 (Bay Area Counties)  
510.286.5226

or view Caltrans Local Assistance Website at:  
[www.dot.ca.gov/hq/LocalPrograms/](http://www.dot.ca.gov/hq/LocalPrograms/)

*For more information:* San Francisco Bay Area:

Contact Craig Goldblatt at MTC 510.464.7332 or view MTC's website at:  
[www.mtc.ca.gov/funding.htm](http://www.mtc.ca.gov/funding.htm)

Sacramento Region:

Contact Jim Brown, SACOG at (916) 733-3221 or view the TDA

*Guidelines on SACOG's website at:* [www.sacog.org/transit/tda.pdf](http://www.sacog.org/transit/tda.pdf)



#### **D. Transportation Development Act (TDA) Program- Bay Area and Sacramento Region**

*Approximate Annual Amount:* Varies by county based on population, funding amounts generated by region's retail sales tax.

*Program makeup:* TDA funding is generated from a 1/4-cent sales tax on retail by county. Funds are collected and administered by the MTC in the San Francisco Bay Area and SACOG in the Sacramento Region. County Transportation and Congestion Management Agencies also assist SACOG and MTC in administering TDA funds.

*Local Administering Agency:* Congestion Management Agencies and County Transportation Agencies.

*Types of eligible projects:* There are three types of TDA funding categories in the Bay Area: (1) TDA Article 4 & 8 - Transit operating assistance and capital projects; if there are no unmet transit needs, then local street and road maintenance and rehabilitation projects are eligible; (2) TDA Article 4.5 - Paratransit operating assistance and capital projects; (3) TDA Article 3 - Bicycle and pedestrian facilities, safety programs, bicycle/pedestrian planning.

*Typical funding cycles:* Estimated apportionments are published yearly in February and are based on each county auditors preliminary estimate of the available TDA for the next fiscal year. Based on this fund estimate, MTC and SACOG estimates the apportionments to jurisdictions based on current population figures provided by the California Department of Finance. Estimates are finalized in late spring and adopted by MTC. Since these funds are based on estimates, changes in economic conditions over the course of a year can change ultimate sales tax revenues, which could affect funding.

*For more information:* San Francisco Bay Area:  
Craig Goldblatt at MTC 510.464.7332 or view MTC's website at:  
[www.mtc.ca.gov/funding.htm](http://www.mtc.ca.gov/funding.htm)  
Sacramento Region:  
Contact Jim Brown, SACOG at (916) 733-3221 or view the TDA Guidelines on SACOG's website, [www.sacog.org/transit/tda.pdf](http://www.sacog.org/transit/tda.pdf)

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## E. State Transportation Enhancements Activities Program

*Approximate Annual Amount:* \$40 million was available to California in the 6-Year Transportation Equity Act for the Twenty-first Century. (TEA-21)

*Program makeup:* The State Transportation Enhancements Program is funded through the federal TEA-21 program. 25% of the TEA dollars is set-aside for Caltrans to program funds statewide. The remaining 75% is set-aside for Regional Transportation Planning Agencies such as SACOG and MTC.

*Local Administering Agency:* Caltrans District 4 (San Francisco Bay Area) and Caltrans District 3 (Sacramento Region)

*Types of eligible projects:* Pedestrian and/or bicycle facilities and related signage; safety activities for pedestrians and/or bicycles; acquisition of historic sites; historic/scenic highway programs (including tourist and welcome centers); landscaping, streetscapes, and other scenic beautification; historic preservation; rehabilitation of historic transportation buildings, structures or facilities; preservation of abandoned railway corridors (including the conversion for use as bicycle and pedestrian trails); transit shelter or amenities related to a transit village or pedestrian oriented development; establishment of transportation museums.

*Typical funding cycles:* The State Transportation Enhancements Program is contingent upon the TEA-21 reauthorization. State Enhancement Program applications are submitted in conjunction with the State Highway Operations and Protection Program (SHOPP), updated every 2 years. Last update completed and approved by the CTC in 2002.

*For more information:* Rich Monroe Caltrans District 4 at (510) 286-5226 or Howard Reynolds at Caltrans Headquarters at (916) 654-2477.



## 5.5 Special Recreational Grant Sources

### A. San Francisco Bay Trail Project

*Approximate Annual Amount:* Up to \$7.5 million available for the Bay Area in previous year 2000 cycle (not available to Yolo County).

*Program makeup:* Bay Trail development funds are appropriated from the State Coastal Conservancy. Funding is part of money generated from the parks and open space bond passed by voters in March 2000.

*Local Administering Agency:* Association of Bay Area Governments (ABAG)

*Types of eligible projects:* Planning and construction projects of undeveloped segments, and improvement projects to existing Bay Trail.

*Typical funding cycles:* Upon authorization by the Coastal Conservancy Board, applications are available in February and due to ABAG in April.

*For more information:* Laura Thompson, ABAG Bay Trail Coordinator, (510) 464-7935 or view the San Francisco Bay Trail website at: [www.abag.ca.gov/bayarea/baytrail/baytrail.html](http://www.abag.ca.gov/bayarea/baytrail/baytrail.html)



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**B. National Recreational Trails Program**

*Approximate Annual Amount:* California receives approximately \$3.2 million available for trail projects annually.

*Program makeup:* The National Recreational Trails Program is provided by federal funds generated from fuel taxes provided by each state.

*Local Administering Agency:* California State Parks, Local Assistance Section

*Types of eligible projects:* The National Recreational Trails Program is divided into two categories: non-motorized trail projects and motorized trail projects. Non-motorized trail projects include bicycle and pedestrian trail projects; motorized trail projects include off-road, ATV, snowmobiles vehicle trail usage projects. This funding source is primarily for recreational type trails, however, urban trails are also acceptable under the National Recreational Trails Act.

*Typical funding cycles:* Applications are available in January of each year and are due in the fall of the same year.

*For more information:* Contact Odel King from California State Parks at 916.653.8758



## 5.6 Recommended Funding Publications

### A. Moving Costs: A Transportation Guide for the San Francisco Bay Area

*Copies Available At:* Metropolitan Transportation Commission  
Joseph P. Bort MetroCenter  
101 Eight Street  
Oakland, CA 94607-4700  
*or Online At:* <http://www.mtc.ca.gov/funding.htm>

### B. Transportation Funding Opportunities Guidebook

*Copies Available At:* Caltrans  
Local Assistance Program  
1120 N Street, Room 2400, MS-1  
Sacramento, CA 95814

*or Online At:* [www.dot.ca.gov/hq/LocalPrograms/](http://www.dot.ca.gov/hq/LocalPrograms/)



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## 6. TOOLKIT COMPANION CD-ROM

resources for Transportation Demand Management (Appendix D).

### *Reference Documents*

More than 20 useful reference documents are included on the CD. The topics range from transit-oriented development, and pedestrian and bicycle design, to general plan guidelines and a slideshow on TLC.

### *Useful Web Links*

A number of web links included on the CD will connect users to dozens of pertinent and useful websites.

### *Application Forms*

Access and print TLC and various funding application forms.

A companion CD-ROM is included in a pocket at the back of this toolkit. It is formatted to run on any Windows-compatible personal computer. A number of useful resources are included on the CD to provide greater detail for the topics found in the toolkit. The following sections are included in the CD-ROM:

### *Digital Transportation & Land-Use Toolkit*

Access the entire text of this toolkit on the CD-ROM. This enables users to search for key terms, and reproduce key sections of the toolkit.

### *Toolkit Appendices*

More detailed information is provided on the subjects of air quality issues in the Yolo-Solano Air Quality Management District (Appendix A); TLC-related laws, policies, programs, and plans (Appendix B); pedestrian, bicycle and transit-friendly design (Appendix C); and incentives and





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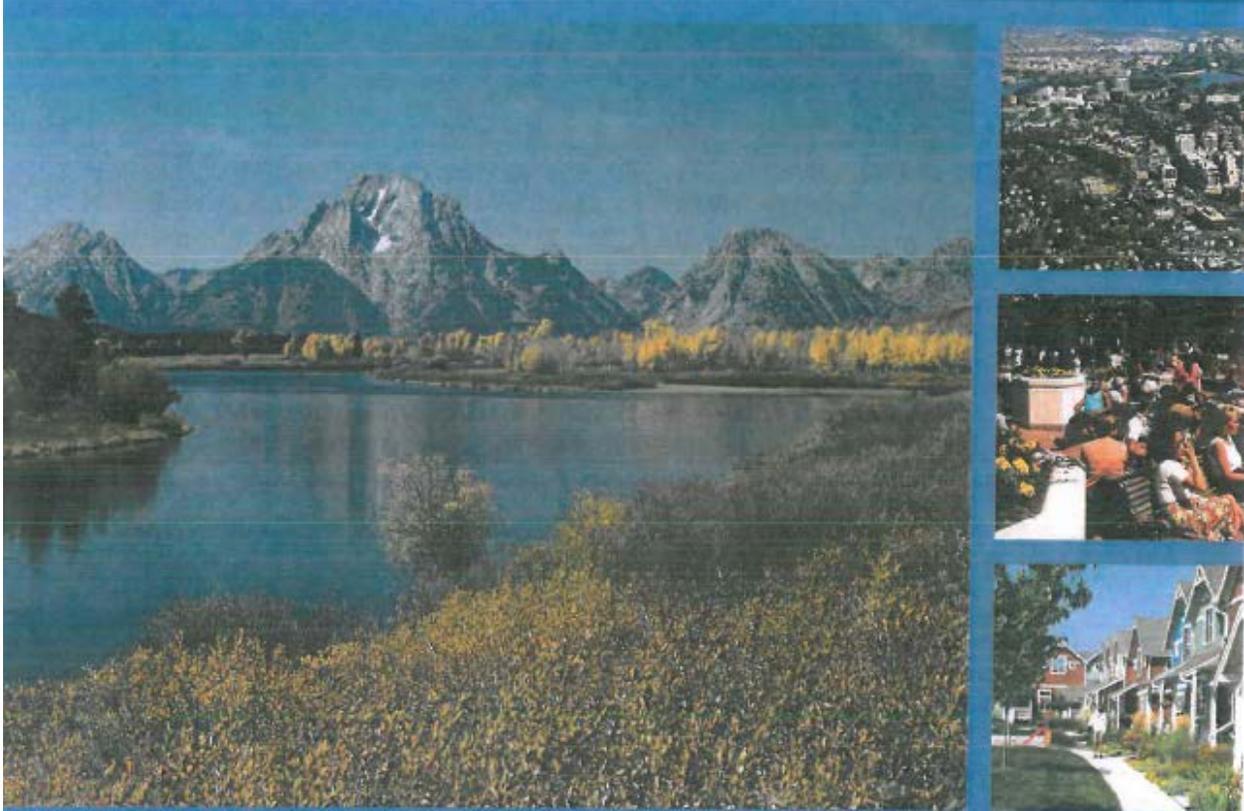
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# Exhibit E



EPA 231-R-06-001  
January 2006  
[www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth)



# PROTECTING WATER RESOURCES WITH HIGHER-DENSITY DEVELOPMENT

Office of Sustainable Communities  
Smart Growth Program

## Acknowledgements

The principal author, Lynn Richards, from the U.S. Environmental Protection Agency's Development, Community, and Environment Division, would like to recognize people who contributed insights and comments on this document as it was being developed: Chester Arnold, University of Connecticut—Non-Point Source Education for Municipal Officials; John Bailey, Smart Growth America; Deron Lovaas, Natural Resources Defense Council; Bill Matuszeski, formerly with EPA Chesapeake Bay Program; Philip Metzger, EPA Office of Water; Rosemary Monahan, EPA Region 1; Betsy Otto, American Rivers; Joe Persky, University of Illinois at Chicago; Milt Rhodes, formerly with the North Carolina Department of Environment and Natural Resources; and William Shuster, EPA Office of Research and Development. Additional recognition is extended to EPA staff from Office of Water (Robert Goo, Jamal Kadri, and Stacy Swartwood) as well as staff at EPA's Development, Community, and Environment Division (Geoffrey Anderson, Mary Kay Bailey, and Megan Susman).

To request additional copies of this report, contact EPA's National Service Center for Environmental Publications at 800-490-9198 or by email at [ncepimal@one.net](mailto:ncepimal@one.net) and ask for publication number 231-R-06-001.

To access this report online, visit [www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth) or [www.smartgrowth.org](http://www.smartgrowth.org).

### Front cover photos:

**Left:** The Snake River flows outside Jackson, Wyoming. Photo courtesy of USDA NRCS.

**Top right:** Rosslyn-Ballston Corridor, Arlington County, Virginia. Arlington County Department of Community Planning, Housing, and Development received a 2002 National Award for Smart Growth Achievement in the Overall Excellence category for its planning efforts in the Rosslyn-Ballston Corridor. Photo courtesy of Arlington County.

**Middle right:** People gather at Pioneer Square in Portland, Oregon. Photo courtesy of US EPA.

### Back cover photos:

**Top left:** This hillside in Northern California is covered by wildflowers. This open space provides habitat to wildlife as well as serving important watershed services. Photo courtesy of USDA NRCS.

**Middle left:** A family enjoys open space in central Iowa. Photo courtesy of USDA NRCS.

**Bottom left:** A stream flows through western Maryland. Photo courtesy of USDA NRCS.

**Right:** This redevelopment site in Arlington, Virginia, which includes stores, apartments townhomes, single family homes, parking garages, and a one-acre public park, was formerly a large department store surrounded by surface parking. Photo courtesy of US EPA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

Dear Colleague:

We are excited to share with you the enclosed report, *Protecting Water Resources with Higher-Density Development*. For most of EPA's 35-year history, policymakers have focused on regulatory and technological approaches to reducing pollution. These efforts have met with significant success. But, the environmental challenges of the 21st century require new solutions, and our approach to environmental protection must become more sophisticated. One approach is to partner with communities to provide them with the tools and information necessary to address current environmental challenges. It is our belief that good environmental information is necessary to make sound decisions. This report strives to meet that goal by providing fresh information and perspectives.

Our regions, cities, towns, and neighborhoods are growing. Every day, new buildings or houses are proposed, planned, and built. Local governments, working with planners, citizen groups, and developers, are thinking about where and how this new development can enhance existing neighborhoods and also protect the community's natural environment. They are identifying the characteristics of development that can build vibrant neighborhoods, rich in natural and historic assets, with jobs, housing, and amenities for all types of people. They are directing growth to maintain and improve the buildings and infrastructure in which they have already invested.

In addition to enjoying the many benefits of growth, communities are also grappling with growth's challenges, including development's impact on water resources. In the face of increasing challenges from non-point source pollution, local governments are looking for, and using, policies, tools, and information that enhance existing neighborhoods and protect water resources. This report gives communities a different perspective and set of information to address the complex interactions between development and water quality.

*Protecting Water Resources with Higher-Density Development* is intended for water quality professionals, communities, local governments, and state and regional planners who are grappling with protecting or enhancing their water resources while accommodating growing populations. We hope that you find this report informative as your community strives to enjoy the many benefits of growth and development and cleaner water.

For additional free copies, please send an e-mail to [ncepimal@one.net](mailto:ncepimal@one.net) or call (800) 490-9198 and request EPA publication 231-R-06-001. If you have any questions concerning this study, please do not hesitate to contact Lynn Richards at (202) 566-2858.

Sincerely,

Handwritten signature of Ben Grumbles.

Ben Grumbles  
Assistant Administrator  
Office of Water

Handwritten signature of Brian F. Mannix.

Brian F. Mannix  
Associate Administrator  
Office of Policy, Economics, and  
Innovation

Internet Address (URL) • <http://www.epa.gov>

# PROTECTING WATER RESOURCES WITH HIGHER-DENSITY DEVELOPMENT

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## Executive Summary

Growth and development expand communities' opportunities by bringing in new residents, businesses, and investments. Growth can give a community the resources to revitalize a downtown, refurbish a main street, build new schools, and develop vibrant places to live, work, shop, and play. However, with the benefits come challenges. The environmental impacts of development can make it more difficult for communities to protect their natural resources. Where and how communities accommodate growth has a profound impact on the quality of their streams, rivers, lakes, and beaches. Development that uses land efficiently and protects undisturbed natural lands allows a community to grow and still protect its water resources.

The U.S. Census Bureau projects that the U.S. population will grow by 50 million people, or approximately 18 percent, between 2000 and 2020. Many communities are asking where and how they can accommodate this growth while maintaining and improving their water resources. Some communities have interpreted water-quality research to mean that low-density development will best protect water resources. However, some water-quality experts argue that this strategy can backfire and actually harm water resources. Higher-density development, they believe, may be a better way to protect water resources. This study intends to help guide communities through this debate to better understand the impacts of high- and low-density development on water resources.

To more fully explore this issue, EPA modeled three scenarios of different densities at three scales—one-acre level, lot level, and watershed level—and at three different time series build-out examples to examine the premise that lower-density development is always better for water quality. EPA examined stormwater runoff from different development densities to determine the comparative difference between scenarios. This analysis demonstrated:

- The higher-density scenarios generate less stormwater runoff per house at all scales—one acre, lot, and watershed—and time series build-out examples;
- For the same amount of development, higher-density development produces less runoff and less impervious cover than low-density development; and
- For a given amount of growth, lower-density development impacts more of the watershed.

Taken together, these findings indicate that low-density development may not always be the preferred strategy for protecting water resources. Higher densities may better protect water quality—especially at the lot and watershed levels. To accommodate the same number of houses, denser developments consume less land than lower density developments. Consuming less land means creating less impervious cover in the watershed. EPA believes that increasing development densities is one strategy communities can use to minimize regional water quality impacts. To fully protect water resources, communities need to employ a wide range of land use strategies, based on local factors, including building a range of development densities, incorporating adequate open space, preserving critical ecological and buffer areas, and minimizing land disturbance.

## Introduction

Growth and development expand communities' opportunities by bringing in new residents, businesses, and investments. Growth can give a community the resources to revitalize a downtown, refurbish a main street, build new schools, and develop vibrant places to live, work, shop, and play. However, with the benefits come challenges. The environmental impacts of development can make it more difficult for communities to protect their natural resources. Where and how communities accommodate growth has a profound impact on the quality of their streams, rivers, lakes, and beaches. Development that uses land efficiently and protects undisturbed natural lands allows a community to grow and still protect its water resources.

The U.S. Census Bureau projects that the U.S. population will grow by 50 million people, or approximately 18 percent, between 2000 and 2020. Many communities are asking where and how they can accommodate this growth while maintaining and improving their water resources. Some communities have interpreted water-quality research to mean that low-density development will best protect water resources. However, some water-quality experts argue that this strategy can backfire and actually harm water resources. Higher-density development, they believe, may be a better way to protect water resources. This study intends to help guide communities through this debate to better understand the impacts of high- and low-density development on water resources.

Virtually every metropolitan area in the United States has expanded substantially in land area in recent decades. According to the U.S. Department of Agriculture's National Resources Inventory (NRI), between 1954 and 1997, urban land area almost quadrupled, from 18.6 million acres to about 74 million acres in the contiguous 48 states (USDA, 1997b). From 1982 to 1997, when population in the contiguous United States grew by about 15 percent, developed land increased by 25 million acres, or 34 percent. Most of this growth is taking place at the edge of developed areas, on greenfield sites, which can include forestland, meadows, pasture, and rangeland (USDA, 1997a). Indeed, in one analysis of building permits in 22 metropolitan areas between 1989 and 1998, approximately 95 percent of building permits were on greenfield sites (Farris, 2001).

According to the American Housing Survey, 35 percent of new housing is built on lots between two and five acres, and the median lot size is just under one-half acre (Census, 2001). Local zoning may encourage building on relatively large lots, in part because local governments often believe that it helps protect their water quality. Indeed, research has revealed that more impervious cover can degrade water quality. Studies have demonstrated that at 10 percent imperviousness, a watershed is likely to become impaired and grows more so as imperviousness increases (Arnold, 1996; Schueler, 1994). This research has prompted many communities to adopt low-density zoning and site-level imperviousness limits, e.g., establishing a percentage of the site, such as 10 or 20 percent, that can be covered by

Which is a better strategy to protect water quality: low- or high-density development?

Between 1954 and 1997, urban land area almost quadrupled, from 18.6 million acres to about 74 million acres in the contiguous 48 states.

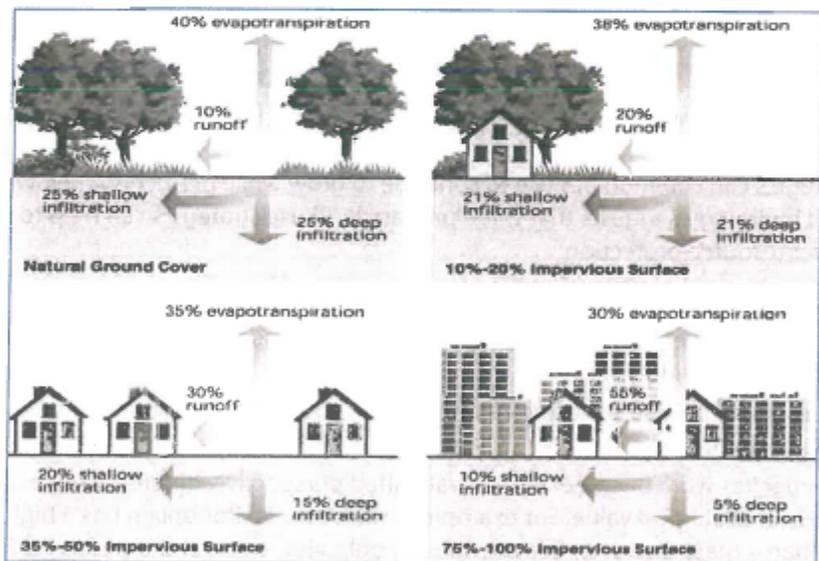
impervious surfaces such as houses, garages, and driveways. These types of zoning and development ordinances are biased against higher-density development because it has more impervious cover. But do low-density approaches protect our water resources?

This study examines the assumption that low-density development is always better for water quality.<sup>1</sup> EPA modeled stormwater runoff from different development densities at the site level and then extrapolated and analyzed these findings at the watershed level. Modeling results were used to compare stormwater runoff associated with several variations of residential density.

## Impacts from Development on Watershed Functions

A watershed is a land area that drains to a given body of water. Precipitation that falls in the watershed will either infiltrate into the ground, evapotranspire back into the air, or run off into streams, lakes, or coastal waters. This dynamic is described in Exhibit 1.

**EXHIBIT 1: Watershed Services**



As land cover changes, so does the amount of precipitation that absorbs into the ground, evaporates into the air, or runs off.

A watershed may be large or small. The Mississippi River, for example, drains a one-million-square-mile watershed made up of thousands of smaller watersheds, such as the drainage basins of the creeks that flow into tributaries of the Mississippi. In smaller watersheds, a few acres of land may drain into small streams, which flow into larger streams or rivers; the lands drained by these streams or rivers make up a larger watershed. These streams support

<sup>1</sup> Stormwater runoff was used as a proxy for overall water quality. In general, the more stormwater runoff a region experiences, the more associated pollutants, such as total nitrogen, phosphorus, and suspended solids, will enter receiving waterbodies.

diverse aquatic communities and perform the vital ecological roles of processing the carbon, sediments, and nutrients upon which downstream ecosystems depend. Healthy, functioning watersheds naturally filter pollutants and moderate water quality by slowing surface runoff and increasing the infiltration of water into soil. The result is less flooding and soil erosion, cleaner water downstream, and greater ground water reserves.

Land development directly affects watershed functions. When development occurs in previously undeveloped areas, the resulting alterations to the land can dramatically change how water is transported and stored. Residential and commercial development create impervious surfaces and compacted soils that filter less water, which increases surface runoff and decreases ground water infiltration. These changes can increase the volume and velocity of runoff, the frequency and severity of flooding, and peak storm flows.

Moreover, during construction, exposed sediments and construction materials can be washed into storm drains or directly into nearby bodies of water. After construction, development usually replaces native meadows, forested areas, and other natural landscape features with compacted lawns, pavement, and rooftops. These largely impervious surfaces generate substantial runoff. For these reasons, limiting or minimizing the amount of land disturbed and impervious cover created during development can help protect water quality.

## **Critical Land Use Components for Protecting Water Quality for Both Low- and High-Density Development**

What strategies can communities use to continue to grow while protecting their water quality? Watershed hydrology suggests that three primary land use strategies can help to ensure adequate water resource protection:

- Preserve large, continuous areas of absorbent open space;
- Preserve critical ecological areas, such as wetlands, floodplains, and riparian corridors; and
- Minimize overall land disturbance and impervious surface associated with development.

These approaches work because, from a watershed perspective, different land areas have different levels of ecological value. For example, a nutrient-rich floodplain has a higher ecological value than a grass meadow. Communities should view these strategies as basic steps to preserve watershed function and as the framework within which all development occurs.

### **PRESERVING OPEN SPACE**

Preserving open space is critical to maintaining water quality at the regional level. Large, continuous areas of open space reduce and slow runoff, absorb sediments, serve as flood control, and help maintain aquatic communities. To ensure well-functioning watersheds, regions should set aside sufficient amounts of undisturbed, open space to absorb, filter, and store rainwater. In most regions, this undeveloped land comprises large portions of a watershed, filtering

out trash, debris, and chemical pollutants before they enter a community's water system. Open space provides other benefits, including habitat for plants and animals, recreational opportunities, forest and ranch land, places of natural beauty, and community recreation areas.

To protect these benefits, some communities are preserving undeveloped parcels or regional swaths of open space. One of the most dramatic examples is the New York City Watershed Agreement. New York City, New York State, over 70 towns, eight counties, and EPA signed the agreement to support an enhanced watershed protection program for the New York City drinking water supply. The city-funded, multi-year, \$1.4-billion agreement developed a multi-faceted land conservation approach, which includes the purchase of 80,000 acres within the watershed as a buffer around the city's drinking water supply. This plan allows the city to avoid the construction of filtration facilities estimated to cost six to eight billion dollars (New York City, 2002).

### **PRESERVING ECOLOGICALLY SENSITIVE AREAS**

Some types of land perform watershed functions better than others do. Preserving ecologically important land, such as wetlands, buffer zones, riparian corridors, and floodplains, is critical for regional water quality. Wetlands are natural filtration plants, slowing water flow and allowing sediments to settle and the water to clarify. Trace metals bound to clay carried in runoff also drop out and become sequestered in the soils and peat at the bed of the marsh instead of entering waterbodies, such as streams, lakes, or rivers. Preserving and maintaining wetlands are critical to maintain water quality.



Photo courtesy of USGS NRCIS

Wetlands, such as this one in Butte County, California, provide critical watershed services for the region.

runoff, giving the sediment time to settle and water time to percolate, filter through the soil, and recharge underlying ground water. Research has shown that wetlands and buffer zones, by slowing and holding water, increase ground water recharge, which directly reduces the potential for flooding (Schueler, 1994). By identifying and preserving these critical ecological areas, communities are actively protecting and enhancing their water quality.

In addition, strips of vegetation along streams and around reservoirs are important buffers, with wooded buffers offering the greatest protection. For example, if soil conditions are right, a 20- to 30-foot-wide strip of woodland removes 90 percent of the nitrates in stormwater runoff (Trust for Public Land, 1997). These buffer zones decrease the amount of pollution entering the water system. Tree and shrub roots hold the bank in place, preventing erosion and its resulting sedimentation and turbidity. Organic matter and grasses slow the flow of

## MINIMIZING LAND DISTURBANCE AND IMPERVIOUS COVER

Minimizing land disturbance and impervious cover is critical to maintaining watershed health. The amount of land that is converted, or “disturbed,” from undeveloped uses, such as forests and meadows, to developed uses, such as lawns and playing fields, significantly affects watershed health. Research now shows that the volume of runoff from highly compacted lawns is almost as high as from paved surfaces (Schueler, 1995, 2000; USDA, 2001). This research indicates that lawns and other residential landscape features do not function, with regard to water, in the same way as nondegraded natural areas. In part, the difference arises because developing land in greenfield areas involves wholesale grading of the site and removal of topsoil, which can lead to severe erosion during construction, and soil compaction by heavy equipment. However, most communities focus not on total land disturbed, but on the amount of impervious cover created.

Research has revealed a strong relationship between impervious cover and water quality (Arnold, 1996; Schueler, 1994; EPA, 1997). Impervious surfaces collect and accumulate pollutants deposited from the atmosphere, leaked from vehicles, or derived from other sources. During storms, accumulated pollutants are quickly washed off and rapidly delivered to aquatic systems. Studies have demonstrated that at 10 percent imperviousness,<sup>2</sup> a watershed is likely to become impaired (Schueler, 1996; Caraco, 1998; Montgomery County, 2000), the stream channel becomes unstable due to increased water volumes and stream bank erosion, and water quality and stream biodiversity decrease. At 25 percent imperviousness, a watershed becomes severely impaired, the stream channel can become highly unstable, and water quality and stream biodiversity are poor<sup>3</sup> (Schueler, 2000). The amount of impervious cover is an important indicator of watershed health, and managing the degree to which a watershed is developed is critical to maintaining watershed function.



Current construction practices generally disturb the entire development site, as shown by this site in Des Moines, Iowa.

Although the 10 percent threshold refers to overall imperviousness within the watershed, municipalities have applied it to individual sites within the watershed, believing that lower densities better protect watershed functions. Indeed, as mentioned earlier, some localities have gone so far as to create strong incentives for, or even require, low densities—with water resource protection as an explicit goal. These communities are attempting to minimize hard

<sup>2</sup> The 10 percent figure is not an absolute threshold. Recent studies have indicated that in some watersheds, serious degradation may begin well below 10 percent. However, the level at which watershed degradation begins is not the focus of this study. For purposes of our analysis, EPA uses the 10 percent threshold as an indicator that water resources might be impacted.

<sup>3</sup> There are different levels of impairment. In general, when the term is used in EPA publications, it usually means that a waterbody is not meeting its designated water quality standard. However, the term can also imply a decline or absence of biological integrity; for example, the waterbody can no longer sustain critical indicator species, such as trout or salmon. Further, there is a wide breadth of levels of impairment, from waterbodies that are unable to support endangered species to waterbodies that cannot support any of the beneficial-use designations.

surfaces at the site level. They believe that limiting densities within particular development sites limits regional imperviousness and thus protects regional water quality. The next section examines this proposition and finds that low-density development can, in fact, harm water quality.

## Low-Density Development—Critiquing Conventional Wisdom

As discussed, studies have demonstrated that watersheds can suffer impairment at 10 percent impervious cover and that at 25 percent imperviousness, the watershed is typically considered severely impaired. Communities have often translated these findings into the notion that low-density development at the site level results in better water quality. Such conclusions often come from analysis such as: a one-acre site has one or two homes with a driveway and a road passing by the property. The remainder of the site is lawn. Assuming an average housing footprint of 2,265 square feet<sup>4</sup> (National Association of Home Builders, 2001), the impervious cover for this one-acre site is approximately 35 percent (Soil Conservation Service, 1986). By contrast, a higher-density scenario might have eight to 10 homes per acre and upwards of 85 percent impervious cover (Soil Conservation Service, 1986). The houses' footprints account for most of the impervious cover. Thus, low-density zoning appears to create less impervious cover, which ought to protect water quality at the site and regional levels. However, this logic overlooks several key caveats.

1. *The "pervious" surface left in low-density development often acts like impervious surface.*  
In general, impervious surfaces, such as a structure's footprint, driveways, and roads, have higher amounts of runoff and associated pollutants than pervious surfaces. However, most lawns, though pervious, still contribute to runoff because they are compacted. Lawns are thought to provide "open space" for infiltration of water. However, because of construction practices, the soil becomes compacted by heavy equipment and filling of depressions (Schueler, 1995, 2000). The effects of this compaction can remain for years and even increase due to mowing and the presence of a dense mat of roots. Therefore, a one- or two-acre lawn does not offer the same infiltration or other water quality functions as a one- or two-acre undisturbed forest. Minimizing impervious surfaces by limiting the number of houses but allowing larger lawns does not compensate for the loss of watershed services that the area provided before development (USDA, 2001).  
**Lawns still contribute to runoff because they are compacted and disturbed.**
2. *Density and imperviousness are not equivalent.* Depending on the design, two houses may actually create as much imperviousness as four houses. The impervious area per home can vary widely due to road infrastructure, housing design (single story or multistory), or length and width of driveways. To illustrate, a three-story condominium building of 10 units on one acre can have less impervious surface than four single-family homes on the same acre. Furthermore, treatment of the remaining undeveloped land on that acre can

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<sup>4</sup>The average house built in 2001 included three or more bedrooms, two and a half baths, and a two-car garage.

vary dramatically between housing types. For example, in some dispersed, low-density communities, such as Fairfax County, Virginia, some homeowners are paving their front lawns to create more parking for their cars (Rein, 2002).

3. *Low-density developments often mean more off-site impervious infrastructure.* Development in the watershed is not simply the sum of the sites within it. Rather, total impervious area in a watershed is the sum of site developments plus the impervious surface associated with infrastructure supporting those sites, such as roads and parking lots. Lower-density development can require substantially higher amounts of this infrastructure per house and per acre than denser developments. Recent research has demonstrated that on sites with two homes per acre, impervious surfaces attributed to streets, driveways, and parking lots can represent upwards of 75 percent of the total site imperviousness (Cappiella, 2001). That number decreases to 56 percent on sites with eight homes per acre. This research indicates that low densities often require more off-site transportation-related impervious infrastructure, which is generally not included when calculating impervious cover.

Water quality suffers not only from the increase in impervious surface, but also from the associated activities: construction, increased travel to and from the development, and extension of infrastructure.

Furthermore, water quality suffers not only from the increase in impervious surface, but also from the associated activities: construction, increased travel to and from the development, extension of infrastructure, and chemical maintenance of the areas in and surrounding the development. Oil and other waste products, such as heavy metals, from motor vehicles, lawn fertilizers, and other common solvents, combined with the increased flow of runoff, contribute substantially to water pollution. As imperviousness increases, so do associated activities, thereby increasing the impact on water quality.

4. *If growth is coming to the region, limiting density on a given site does not eliminate that growth.* Density limits constrain the amount of development on a site but have little effect on the region's total growth (Pendall, 1999, 2000). The rest of the growth that was going to come to the region still comes, regardless of density limits in a particular place. Forecasting future population growth is a standard task for metropolitan planning organizations as they plan where and how to accommodate growth in their region. They project future population growth based on standard regional population modeling practices, where wage or amenity differentials, such as climate or culture (Mills, 1994)—and not zoning practices such as density limits—account for most of a metropolitan area's population gain or loss.<sup>5</sup> While estimates of future growth within a particular time frame are rarely precise, a region must use a fixed amount of growth to test the effects of adopting

Growth is still coming to a region, regardless of density limits in a particular place.

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<sup>5</sup> The most widely-used such model—the REMI® Policy Insight™ model—uses an amenity variable. However, even this is implemented as an additional change in the wage rate. See Remi Model Structure. <[www.remi.com/Overview/Evaluation/Structure/structure.html](http://www.remi.com/Overview/Evaluation/Structure/structure.html)>. The in-house model used by the San Diego Association of Governments is an advanced example of the type used by councils of governments around the country. <[www.sandag.cog.ca.us/resources/demographics\\_and\\_other\\_data/demographics/forecasts/index.asp](http://www.sandag.cog.ca.us/resources/demographics_and_other_data/demographics/forecasts/index.asp)>.

different growth planning strategies because it still must understand the economic, social, and environmental impacts of accommodating a growing population. Absent regional coordination and planning, covering a large part of a region with density limits will likely drive growth to other parts of the region. Depending on local conditions, water quality may be more severely impaired than if the growth had been accommodated at higher densities on fewer sites.

## Testing the Alternative: Can Compact Development Minimize Regional Water Quality Impacts?

To more fully understand the potential water quality impacts of different density levels, this section compares three hypothetical communities, each accommodating development at different densities—one house per acre, four houses per acre, and eight houses per acre.<sup>6</sup> To assess regional water quality impacts, EPA modeled the stormwater impacts from different development densities. In general, the more stormwater runoff generated within a region, the more associated pollutants, such as total nitrogen, phosphorus, and suspended solids, will enter receiving waterbodies. The three density levels capture some of the wide range of zoning practices in use throughout the country. All of these densities are consistent with single-family, detached housing. EPA examined the stormwater impacts from each density scenario at various scales of residential development<sup>7</sup>—one-acre, lot, and watershed levels—and through a 40-year time series build-out analysis.

### The Model and Data Inputs

The model used to compare the stormwater impact from the scenarios is the Smart Growth Water Assessment Tool for Estimating Runoff (SG WATER), which is a peer-reviewed sketch model that was developed specifically to compare water quantity and quality differences among different development patterns (EPA, 2002). SG WATER's methodology is based on the Natural Resources Conservation Service (NRCS) curve numbers (Soil Conservation Service, 1986), event mean concentrations, and daily rainfall data.<sup>8</sup> The model requires the total number of acres developed at a certain development density. If density is unknown, total percent imperviousness can be used. The model was run using overall percent imperviousness.

EPA believes that the results presented here are conservative. SG WATER uses a general and simple methodology based on curve numbers. One limitation of curve numbers is that they tend to underestimate stormwater runoff for smaller storms (less than one inch). This underestimate

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<sup>6</sup> Densities at one, four, and eight residential units per acre are used here for illustrative purposes only. Many communities now are zoning for one unit per two acres at the low-density end of the spectrum. Low-density residential zoning exists in places as diverse as Franklin County, Ohio, which requires no less than two acres per unit (<[www.co.franklin.oh.us/development/franklin\\_co/LDR.html#304.041](http://www.co.franklin.oh.us/development/franklin_co/LDR.html#304.041)>) to Cobb County, Georgia, outside of Atlanta, which requires between one and two units per acre in its low-density residential districts (<[www.cobb-county.org/community/plan\\_bza\\_commission.htm](http://www.cobb-county.org/community/plan_bza_commission.htm)>). By comparison, some communities are beginning to allow higher densities, upwards of 20 units per acre. For example, the high-density residential district in Sonoma County, California permits between 12 and 20 units per acre (<[www.sonoma-county.org/prmd/Zoning/article\\_24.htm](http://www.sonoma-county.org/prmd/Zoning/article_24.htm)>), and the city of Raleigh, North Carolina, allows up to 40 units per acre in planned development districts.

<sup>7</sup> This example and others throughout this study compare residential units, but a similar comparison including commercial development could also be done.

<sup>8</sup> Daily time-step rainfall data for a 10-year period (1992-2001, inclusive) were used.

can be significant since the majority of storms are small storms. In addition, the curve numbers tend to overestimate runoff for large storms. However, curve numbers more accurately predict runoff in areas with more impervious cover.<sup>9</sup> For the analysis here, the runoff from the low-density site is underestimated to a larger degree than the runoff from the higher-density site because the higher-density site has more impervious cover. Simply put, because of methodology, the difference in the numbers presented here is conservative—it is likely that the comparative difference in runoff between the sites would be greater if more extensive modeling were used.

To isolate the impacts that developing at different densities makes on stormwater runoff, EPA made several simplifying assumptions in the modeling:

- EPA modeled only residential growth and not any of the corresponding commercial, retail, or industrial growth that would occur in addition to home building. Moreover, EPA assumed that all the new growth would occur in greenfields (previously undeveloped land). Infill development, brownfield redevelopment, and other types of urban development were not taken into consideration, nor were multifamily housing, apartments, or accessory dwelling units.<sup>10</sup>
- The modeling did not take into account any secondary or tertiary impacts, such as additional stormwater benefits, that may be realized by appropriately locating the development within the watershed. For example, siting development away from headwaters, recharge areas, or riparian corridors could better protect these sensitive areas. Denser development makes this type of protective siting easier since less land is developed. However, these impacts are not captured or calculated within the modeling.
- Whether developed at one, four, or eight houses per acre, when one acre is developed, EPA assumed the entire acre is disturbed land (e.g., no forest or meadow cover would be preserved), which is consistent with current construction practices.
- All the new growth is assumed to be single-family, detached houses.<sup>11</sup> Whether developed at one, four, or eight houses per acre, each home has a footprint of 2,265 square feet, roughly the current average size for new houses (National Association of Home Builders, 2001).

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<sup>9</sup> Most existing stormwater models incorrectly predict flows associated with small rains in urban areas. Most existing urban runoff models originated from drainage and flooding evaluation procedures that emphasized very large rains (several inches in depth). These large storms contribute only very small portions of the annual average discharges. Moderate storms, occurring several times a year, are responsible for the majority of the pollutant discharges. These frequent discharges cause mostly chronic effects, such as contaminated sediment and frequent high flow rates, and the inter-event periods are not long enough to allow the receiving water conditions to recover.

<sup>10</sup> Single-family, detached housing dominates many low-density residential developments. However, higher-density developments support a range of housing types, including townhouses, apartments, and other forms of multifamily housing. These housing types generally have a smaller footprint per house than 2,265 square feet. Therefore, a more realistic situation for the higher-density scenarios would either be a smaller housing footprint or an increase in the number of homes accommodated on one acre. In either case, including these different housing types in the analysis would produce less overall stormwater runoff and less per house runoff for the higher-density scenarios.

<sup>11</sup> It is possible that when additional land uses, such as commercial, transportation, or recreation, are included in the analysis, the low-density scenarios become relatively less dense while the higher-density scenarios become relatively more dense. In general, low-density residential development tends to be associated with low-density commercial development, characterized by large retail spaces, wide roads, large parking lots, and minimal public transportation. Higher-density residential areas are more likely to have high-density commercial options, with smaller retail spaces, mixed land uses, narrower streets, parking garages, on-street parking, and sometimes a well-developed public transportation system, which can reduce parking needs.

- The same percentage of transportation-associated infrastructure, such as roads, parking lots, driveways, and sidewalks, is allocated to each community acre, based on the curve number methodology from the NRCS. For example, each scenario has the same width of road, but because the higher-density scenario is more compact, it requires fewer miles of roads than the lower-density scenarios. So while the same percentage is applied, the amounts differ by scenario. Collector roads or arterials that serve the development are not included.
- The modeled stormwater runoff quantity for each scenario is assumed to come from one hypothetical outfall.
- The model does not take into account wastewater or drinking water infrastructure, slope, or other hydrological interactions that the more complex water modeling tools use.

## Summary of Scenarios

Example 1 examines the stormwater runoff impacts on a one-acre lot that accommodates one house (Scenario A), four houses (Scenario B), or eight houses (Scenario C). Example 2 expands the analysis to examine stormwater runoff impacts within a lot-level development that accommodates the same number of houses. Because of different development densities, this growth requires different amounts of land. Scenario A requires eight acres for eight houses, Scenario B requires two acres for eight houses, and Scenario C requires one acre for eight houses.

Examples 3, 4, and 5 explore the relationship between density and land consumption by building in a watershed at different densities. Again, different amounts of land are required to support the same amount of housing. Examples 6, 7, and 8 examine how the hypothetical community grows over a 40-year timeframe with different development densities.

The scenarios and scales of development are summarized in Exhibit 2. EPA expects to capture the differences in stormwater runoff associated with different development densities by using these three scenarios (Scenarios A, B, and C) at four different scales (one acre, lot, watershed, and build-out).

**EXHIBIT 2: Summary of Scenarios**

| Scale of Analysis  | Scenario A:<br>One house per<br>acre | Scenario B:<br>Four houses<br>per acre | Scenario C:<br>Eight houses<br>per acre |
|--|--------------------------------------|--|---|
| Example 1: One acre  | 1 house per acre                     | 4 houses per acre                      | 8 houses per acre                       |
| Example 2: Lot—Each development lot accommodates the same number of houses | 8 houses built on 8 acres            | 8 houses built on 2 acres              | 8 houses built on 1 acre                |

|   |  |  |  |
|---|--|--|--|
| Example 3: Watershed—<br>Each 10,000-acre watershed accommodates the same number of houses    | 10,000 houses built on 10,000 acres                  | 10,000 houses built on 2,500 acres or ¼ of the watershed | 10,000 houses built on 1,250 acres or ⅛ of the watershed |
| Example 4: Watershed—<br>Each 10,000-acre watershed is fully built out at different densities | 10,000 houses built on 10,000 acres                  | 40,000 houses built on 10,000 acres                      | 80,000 houses built on 10,000 acres                      |
| Example 5: Watershed—<br>Each scenario accommodates the same number of houses                 | 80,000 houses consume 8 watersheds                   | 80,000 houses consume 2 watersheds                       | 80,000 houses consume 1 watershed                        |
| Example 6: Hypothetical build-out in the year 2000  | 10,000 houses built on 10,000 acres                  | 10,000 houses built on 2,500 acres                       | 10,000 houses built on 1,250 acres                       |
| Example 7: Hypothetical build-out in the year 2020  | 20,000 houses built on 20,000 acres, or 2 watersheds | 20,000 houses built on 5,000 acres, or ½ of 1 watershed  | 20,000 houses built on 2,500 acres, or ¼ of 1 watershed  |
| Example 8: Hypothetical build-out in the year 2040  | 40,000 houses built on 40,000 acres, or 4 watersheds | 40,000 houses built on 10,000 acres, or 1 watershed      | 40,000 houses built on 5,000 acres, or ½ of 1 watershed  |

Before analyzing the impacts of these different scenarios, it is useful to clarify some underlying premises. This analysis assumes that:

1. Metropolitan regions will continue to grow. This assumption is consistent with U.S. Census Bureau projections that the U.S. population will grow by roughly 50 million people by 2020 (Census, 2000). Given this projected population growth, most communities across the country are or will be determining where and how to accommodate expected population increases in their regions.
2. Housing density affects the distribution of new growth within a given region, not the amount of growth. Individual states and regions grow at different rates depending on a variety of factors, including macroeconomic trends (e.g., the technology boom in the 1980s spurring development in the Silicon Valley region in California) and demographic shifts. Distribution and density of new development do not significantly affect these factors.

- The model focuses on the comparative differences in stormwater runoff between scenarios, not absolute values. As discussed, using the curve number and event mean concentration approach can underestimate the total quantity of stormwater runoff for smaller storm events and in areas of lower densities. Because of this and other model simplifications discussed above, the analysis does not focus on the absolute value of stormwater runoff generated for each scenario but instead focuses on the comparative difference, or the delta, in runoff between scenarios.

## Results

The results from the eight examples for all three scenarios are presented below.

### EXAMPLE 1: ONE-ACRE LEVEL

| Scale of Analysis | Scenario A | Scenario B | Scenario C |
|-------------------|------------|------------|------------|
| One Acre          | 1 house    | 4 houses   | 8 houses   |

EPA examined one acre developed at three different densities: one house, four houses, and eight houses. The results are presented in Exhibit 3. As Exhibit 3 demonstrates, the overall percent imperviousness for Scenario A is approximately 20 percent with one house per acre, 38 percent for Scenario B with four houses per acre, and 65 percent for Scenario C with eight houses per acre (Soil Conservation Service, 1986).

### EXHIBIT 3: Total Average Annual Stormwater Runoff for All Scenarios

| Scenario A   | Scenario B   | Scenario C   |
|--|--|--|
|                             | <br> | <br> |
| Impervious cover = 20%<br>Runoff/acre = 18,700 ft <sup>3</sup> /yr<br>Runoff/unit = 18,700 ft <sup>3</sup> /yr | Impervious cover = 38%<br>Runoff/acre = 24,800 ft <sup>3</sup> /yr<br>Runoff/unit = 6,200 ft <sup>3</sup> /yr  | Impervious cover = 65%<br>Runoff/acre = 39,600 ft <sup>3</sup> /yr<br>Runoff/unit = 4,950 ft <sup>3</sup> /yr  |

Examining the estimated average annual runoff at the acre level, as illustrated in Exhibit 4, the low-density Scenario A, with just one house, produces an average runoff volume of 18,700 cubic feet per year (ft<sup>3</sup>/yr). Scenario C, with eight houses, produces 39,600 ft<sup>3</sup>/yr, and Scenario B falls between Scenarios A and C at 24,800 ft<sup>3</sup>/yr. In short, looking at the comparative differences between scenarios, runoff roughly doubles as the number of houses increases from one house per acre to eight houses per acre. Scenario C, with more houses on the acre, has the greatest amount of impervious surface cover and thus generates the most runoff at the acre level.

Looking at the comparative difference of how much runoff each individual house produces, in Scenario A, one house yields 18,700 ft<sup>3</sup>/yr, the same as the per acre level. In the denser Scenario C, however, each house produces 4,950 ft<sup>3</sup>/yr average runoff. The middle scenario, Scenario B, produces considerably less runoff—6,200 ft<sup>3</sup>/yr—per house than Scenario A, but more than Scenario C. Each house in Scenario B produces approximately 67 percent less runoff than a house in Scenario A, and each house in Scenario C produces 74 percent less runoff than a house in Scenario A. This is because the houses in Scenarios B and C create less impervious surface per house than the house in Scenario A. Therefore, per house, each home in the higher-density communities results in less stormwater runoff.

Each house in Scenario B produces approximately 67 percent less runoff than a house in Scenario A, and each house in Scenario C produces 74 percent less runoff than a house in Scenario A.

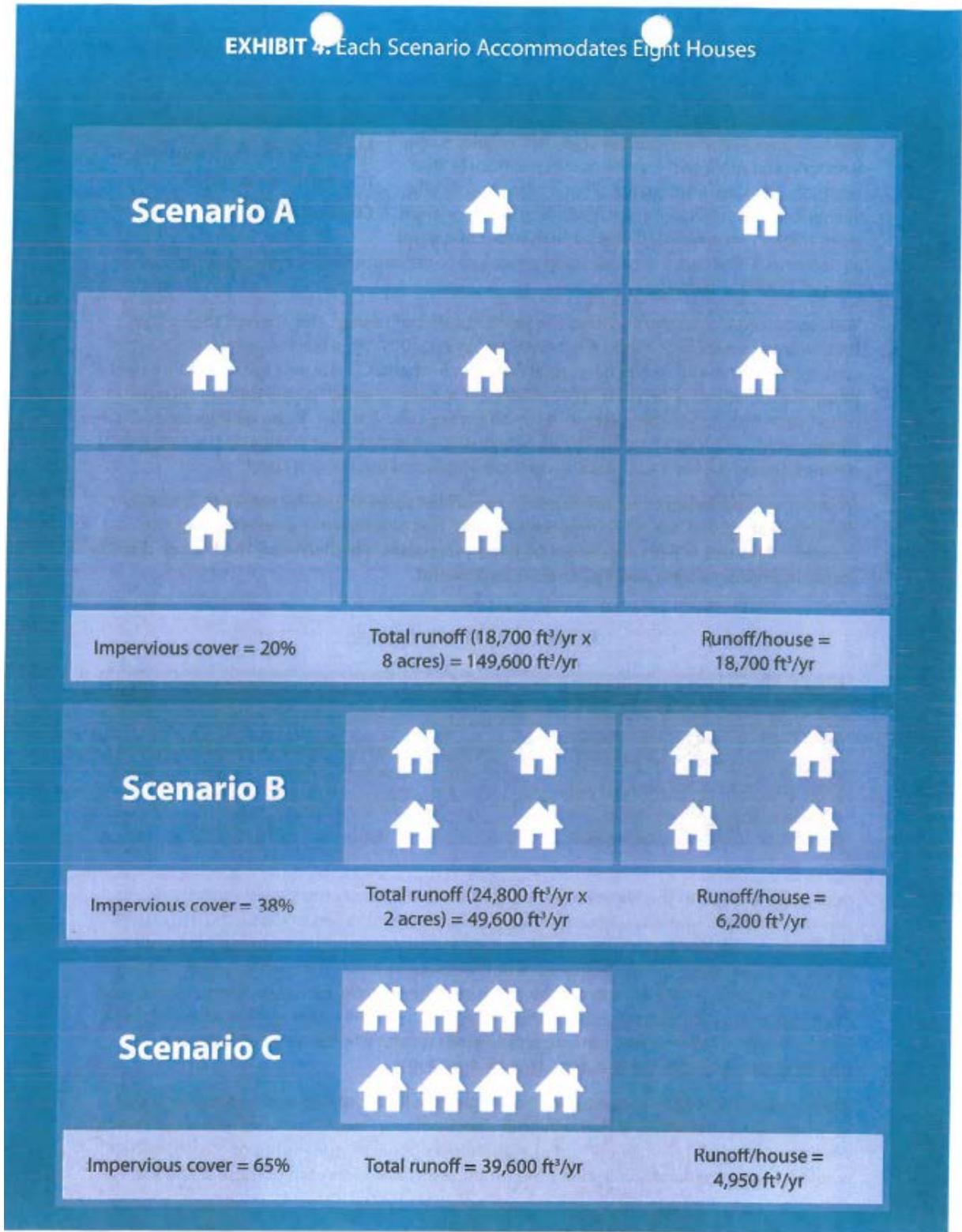
Modeling at the acre level demonstrates that, in this example, when density is quadrupled (from one house to four houses), stormwater runoff increases by one-third per acre, but decreases by two-thirds per house. Moreover, when density increases by a factor of eight—from one house to eight houses—stormwater runoff doubles per acre, but decreases by almost three-quarters per house.

**These results indicate when runoff is measured by the acre, limiting density does minimize water quality impacts compared to the higher-density scenarios. However, when measured by the house, higher densities produce less stormwater runoff.**

#### EXAMPLE 2: LOT LEVEL

| Scale of Analysis | Scenario A                | Scenario B                | Scenario C               |
|-------------------|---------------------------|---------------------------|--------------------------|
| Lot               | 8 houses built on 8 acres | 8 houses built on 2 acres | 8 houses built on 1 acre |

**EXHIBIT 4. Each Scenario Accommodates Eight Houses**



For each development to accommodate the same number of houses, the lower-density scenarios require more land to accommodate the same number of houses that Scenario C has accommodated on one acre. Specifically, Scenario A must develop seven additional acres, or eight acres total, to accommodate the same number of houses as Scenario C. Scenario B must develop two acres to accommodate the same number of houses. Exhibit 4 illustrates.

**The increase in runoff for Scenario A is due to the additional land consumption.**

With each scenario accommodating the same number of houses, this analysis shows that total average runoff in Scenario A is 149,600 ft<sup>3</sup>/yr (18,700 ft<sup>3</sup>/yr x 8 acres), which is a 278 percent increase from the 39,600 ft<sup>3</sup>/yr total runoff in Scenario C. Total average runoff from eight houses in Scenario B is 49,600 ft<sup>3</sup>/yr (24,800 ft<sup>3</sup>/yr x 2 acres), which is a 25 percent increase in runoff from Scenario C. The increase in runoff for Scenario A is due to the additional land consumption and associated runoff. The impervious cover for Scenario A remains the same at 20 percent, but now, seven additional acres have 20 percent impervious cover.

**Examining the comparative difference in runoff between scenarios shows that lower densities can create less total impervious cover, but produce more runoff when the number of houses is kept consistent between scenarios. Furthermore, the higher-density scenario produces less runoff per house and per lot.**

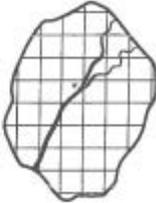
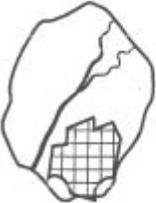
**EXAMPLE 3: WATERSHED LEVEL**

| Scale of Analysis   | Scenario A                          | Scenario B                         | Scenario C                         |
|---|-------------------------------------|------------------------------------|------------------------------------|
| Watershed—Each 10,000-acre watershed accommodates the same number of houses | 10,000 houses built on 10,000 acres | 10,000 houses built on 2,500 acres | 10,000 houses built on 1,250 acres |

Taking the analysis to the watershed level, EPA examined the comparative watershed stormwater runoff impacts from accommodating growth at different densities. The watershed used in this analysis is a hypothetical 10,000-acre watershed accommodating only houses. As discussed, the modeling does not include retail, business centers, farms, or any other land uses typically seen in communities, nor does it take into consideration where the development occurs within the watershed. Research has shown that upper sub-watersheds, which contain smaller streams, are generally more sensitive to development than lower sub-watersheds (Center for Watershed Protection, 2001).

Accommodating 10,000 houses at one house per acre in the 10,000-acre watershed would fully build out the watershed. At the higher density of four houses per acre, one-quarter of the watershed would be developed, and at eight houses per acre, one-eighth of the watershed would be developed. Exhibit 5 shows the runoff associated with each of these scenarios.

**EXHIBIT 5: 10,000-Acre Watershed Accommodating 10,000 Houses**

| Scenario A   | Scenario B   | Scenario C   |
|--|--|--|
|   |   |   |
| <p>10,000 houses built on 10,000 acres produce:<br/>                     10,000 acres x 1 house x 18,700 ft<sup>3</sup>/yr of runoff =<br/> <b>187 million ft<sup>3</sup>/yr of stormwater runoff</b><br/> <b>Site: 20% impervious cover</b><br/> <b>Watershed: 20% impervious cover</b></p> | <p>10,000 houses built on 2,500 acres produce:<br/>                     2,500 acres x 4 houses x 6,200 ft<sup>3</sup>/yr of runoff =<br/> <b>62 million ft<sup>3</sup>/yr of stormwater runoff</b><br/> <b>Site: 38% impervious cover</b><br/> <b>Watershed: 9.5% impervious cover</b></p> | <p>10,000 houses built on 1,250 acres produce:<br/>                     1,250 acres x 8 houses x 4,950 ft<sup>3</sup>/yr of runoff =<br/> <b>49.5 million ft<sup>3</sup>/yr of stormwater runoff</b><br/> <b>Site: 65% impervious cover</b><br/> <b>Watershed: 8.1% impervious cover</b></p> |

As Exhibit 5 illustrates, if development occurs at a lower density, e.g., one house per acre, the entire watershed will be built out, generating 187 million ft<sup>3</sup>/yr of stormwater runoff. Scenario B, at four houses per acre, consumes less land and produces approximately 62 million ft<sup>3</sup>/yr of stormwater runoff, while Scenario C, at the highest density, consumes the least amount of land and produces just 49.5 million ft<sup>3</sup>/yr of stormwater runoff. Looking at the comparative differences, Scenario A generates approximately three times as much runoff from development as Scenario B, and approximately four times as much stormwater runoff as Scenario C.

Exhibit 5 also illustrates that, in this example, overall impervious cover for the watershed decreases as site density increases. Scenario C, which has a lot-level imperviousness of 65 percent, has a watershed-level imperviousness of only 8.1 percent, which is lower than the 10

Overall impervious cover for the watershed decreases as site density increases.

percent threshold discussed earlier. Scenario B, with a density of four houses per acre, has a site-level impervious cover of 38 percent, but a watershed imperviousness of 9.5 percent, which is still lower than the 10 percent threshold. Finally, Scenario A, at a lot-level imperviousness of 20 percent, has the same overall imperviousness at the watershed level. **Both of the higher-density scenarios consume less land and maintain below-the-threshold imperviousness.**

This simplistic illustration demonstrates a basic point of this analysis—higher-density developments can minimize stormwater impacts because they consume less land than their lower-density counterparts. For example, imagine if Manhattan, which accommodates 1.54 million people on 14,720 acres (23 square miles) (Census, 2000), were developed not at its current density of 52 houses per acre, but at one or four houses per acre. At one house per acre, Manhattan would need approximately 750,000 more acres, or an additional 1,170 square miles, to accommodate its current population at two people per household.

At one house per acre, Manhattan would need approximately 750,000 more acres, or an additional 1,170 square miles, to accommodate its current population at two people per household.

That’s approximately the size of Rhode Island. At four houses per acre, Manhattan would need approximately 175,000 more acres, or an additional 273 square miles.

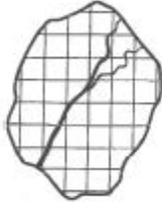
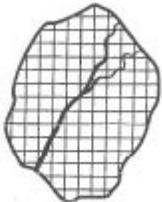
Reducing land consumption is crucial to preserving water quality because, as discussed previously, preserving large, continuous areas of open space and sensitive ecological areas is critical for maintaining watershed services. In addition, because of their dense development pattern, Scenarios B and C may realize additional stormwater benefits if the developed land is appropriately sited in the watershed to protect sensitive ecological areas, such as headwaters, wetlands, riparian corridors, and floodplains.

**EXAMPLE 4: REMAINING LAND IN THE WATERSHED DEVELOPED**

What happens if the remaining undeveloped parts of the watershed in Scenarios B and C are developed? Exhibit 6 considers this situation.

| Scale of Analysis  | Scenario A                          | Scenario B                          | Scenario C                          |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| Watershed—Each 10,000-acre watershed is fully built out at different densities | 10,000 houses built on 10,000 acres | 40,000 houses built on 10,000 acres | 80,000 houses built on 10,000 acres |

**EXHIBIT 6: 10,000-Acre Watershed Accommodating Different Numbers of Houses**

| Scenario A  | Scenario B   | Scenario C   |
|---|--|--|
|    |   |   |
| <p>The watershed is fully built out at <i>1 house per acre</i>. 10,000 acres accommodates <b>10,000 houses</b>, translating to:<br/> <math>10,000 \text{ acres} \times 1 \text{ house} \times 18,700 \text{ ft}^3/\text{yr of runoff} =</math><br/> <b>187 million ft<sup>3</sup>/yr stormwater runoff</b><br/> <b>Site: 20% impervious cover</b><br/> <b>Watershed: 20% impervious cover</b></p> | <p>The watershed is fully built out at <i>4 houses per acre</i>. 10,000 acres accommodates <b>40,000 houses</b>, translating to:<br/> <math>10,000 \text{ acres} \times 4 \text{ houses} \times 6,200 \text{ ft}^3/\text{yr of runoff} =</math><br/> <b>248 million ft<sup>3</sup>/yr stormwater runoff</b><br/> <b>Site: 38% impervious cover</b><br/> <b>Watershed: 38% impervious cover</b></p> | <p>The watershed is fully built out at <i>8 houses per acre</i>. 10,000 acres accommodates <b>80,000 houses</b>, translating to:<br/> <math>10,000 \text{ acres} \times 8 \text{ houses} \times 4,950 \text{ ft}^3/\text{yr of runoff} =</math><br/> <b>396 million ft<sup>3</sup>/yr stormwater runoff</b><br/> <b>Site: 65% impervious cover</b><br/> <b>Watershed: 65% impervious cover</b></p> |

Each watershed is fully built out, and the watershed developed at the highest density (Scenario C) is generating approximately double the total stormwater runoff of Scenario A. Scenario B is generating approximately one-third more runoff than Scenario A. Similar to the acre-level and lot-level results, Scenario C has the highest degree of impervious cover at 65 percent, while Scenario A maintains the lowest level at 20 percent.

Scenarios A and B accommodate only a small portion of the expected growth. The rest will have to be built in other watersheds.

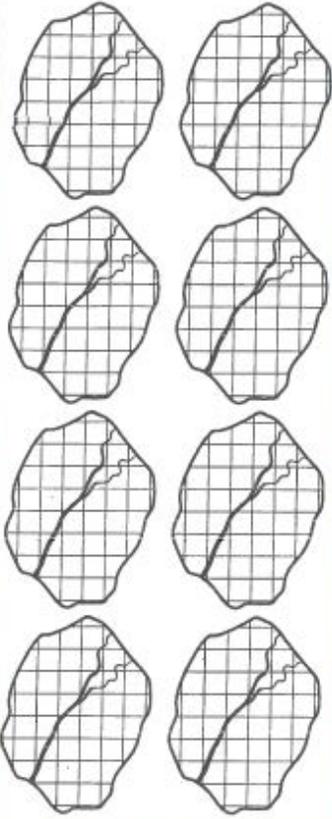
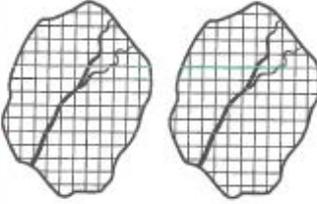
The higher densities found in Scenario B and C are degrading their watershed services to a greater extent than Scenario A. However, the number of houses accommodated in each community is not the same. Scenario B is accommodating **30,000 more houses** (four times the number of Scenario A), and Scenario C is accommodating **70,000 more houses** (eight times the number of Scenario A). Recall that density limits shift growth and do not generally affect the total amount of growth in a given time period. Therefore, this is not a fair comparison. Scenarios A and B accommodate only one-eighth and one-half, respectively, of the 80,000 houses accommodated in Scenario C. Where do the other houses, households, and families go? To get a true appreciation for the effects of density, Scenarios A and B must also show where those homes will be accommodated. It is likely that they would be built in nearby or adjacent watersheds. Our hypothetical community that develops at one house per acre (Scenario A) is able to accommodate only 10,000 houses. For the community that develops at that density to accommodate the same number of houses that Scenario C contains, it must disturb and develop land from nearby or adjacent watersheds.

**EXAMPLE 5: ACCOMMODATING THE SAME NUMBER OF HOUSES**

| Scale of Analysis  | Scenario A  | Scenario B   | Scenario C  |
|--|---|--|---|
| Watershed—Each scenario accommodates the same number of houses | 1 house per acre—80,000 houses consume 8 watersheds | 4 houses per acre—80,000 houses consume 2 watersheds | 8 houses per acre—80,000 houses consume 1 watershed |

As discussed, the U.S. population will increase by an estimated 50 million people by 2020. Different areas of the country will grow at different rates in the future. Whether a region anticipates 1,000 or 80,000 new households to come to the region over the next 10 years, comparisons between build-out scenarios must keep the number of homes consistent. In this case, if Scenario C is developed so that its entire watershed is built out to 80,000 houses, then for a fair comparison, Scenarios A and B must also include 80,000 houses. Exhibit 7 illustrates this situation.

**EXHIBIT 7: 80,000 Houses Accommodated**

| Scenario A  | Scenario B   | Scenario C   |
|---|--|--|
|   |   |   |
| <p>At 1 house per acre, 80,000 houses require 80,000 acres, or 8 watersheds, translating to:</p> <p>80,000 acres x 1 house x 18,700 ft<sup>3</sup>/yr of runoff =</p> <p><b>1.496 billion ft<sup>3</sup>/yr of stormwater runoff</b></p> <p><b>8 watersheds at 20% impervious cover</b></p> | <p>At 4 houses per acre, 80,000 houses require 20,000 acres, or 2 watersheds, translating to:</p> <p>20,000 acres x 4 houses x 6,200 ft<sup>3</sup>/yr of runoff =</p> <p><b>496 million ft<sup>3</sup>/yr of stormwater runoff</b></p> <p><b>2 watersheds at 38% impervious cover</b></p> | <p>At 8 houses per acre, 80,000 houses require 10,000 acres, or 1 watershed, translating to:</p> <p>10,000 acres x 8 houses x 4,950 ft<sup>3</sup>/yr of runoff =</p> <p><b>396 million ft<sup>3</sup>/yr of stormwater runoff</b></p> <p><b>1 watershed at 65% impervious cover</b></p> |

When the number of houses is kept consistent, Scenario A would need to develop an *additional seven watersheds* (assuming the same size watersheds) and Scenario B would need to develop *one additional watershed* to accommodate the same growth found in Scenario C.

As Exhibit 7 demonstrates, for Scenario A to accommodate the additional 70,000 homes already accommodated in Scenario C, it must develop another seven watersheds. This generates 1.496 billion ft<sup>3</sup>/yr of stormwater runoff. Scenario C, with a development density of eight houses per acre, has still developed just one watershed and is generating approximately 74 percent less stormwater runoff than Scenario A—or 396 million ft<sup>3</sup>/yr. Scenario B, at four houses per acre, is generating 496 million ft<sup>3</sup>/yr runoff, or two-thirds less runoff than Scenario A, but 100 million ft<sup>3</sup>/yr more than Scenario C.

Scenario A would need to develop an *additional seven watersheds* and Scenario B would need to develop *one additional watershed* in order to accommodate the same growth found in Scenario C.

**EXAMPLE 6: TIME SERIES BUILD-OUT ANALYSIS: BUILD-OUT IN 2000**

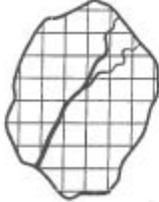
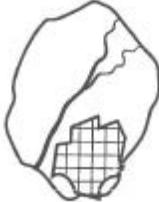
| Scale of Analysis                       | Scenario A                          | Scenario B                         | Scenario C                         |
|---|-------------------------------------|------------------------------------|------------------------------------|
| Hypothetical build-out in the year 2000 | 10,000 houses built on 10,000 acres | 10,000 houses built on 2,500 acres | 10,000 houses built on 1,250 acres |

Another way to examine this issue is to look at what happens to build-out of the three scenarios over time. A basic assumption for EPA’s modeling is that growth is coming to the hypothetical community, and that growth will be accommodated within a fixed time horizon. But what happens to growth in the hypothetical community over several, sequential time horizons?

Given the dynamic nature of population growth, what will build-out look like in the hypothetical community in 2000, 2020, and 2040 at different development densities? The next several examples examine the amount of land required to accommodate increasing populations within a watershed that develops at different densities. The purpose of this time series build-out is to examine how much land is consumed as the population grows in 20-year increments.

Starting in the year 2000, the three watersheds each begin with 10,000 homes. The only difference between the watersheds is the densities at which the building occurs. In 2000, they might look something like Exhibit 8.

**EXHIBIT 8: Time Series Build-out Analysis: Build-out in 2000**

| Scenario A   | Scenario B   | Scenario C   |
|--|--|--|
|           |         |       |
| 10,000 houses on 10,000 acres at a density of 1 house per acre consume 1 entire watershed. | 10,000 houses on 2,500 acres at a density of 4 houses per acre consume ¼ of 1 watershed. | 10,000 houses on 1,250 acres at a density of 8 houses per acre consume ⅛ of 1 watershed. |

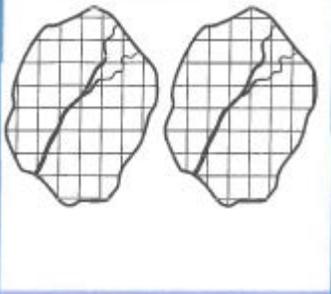
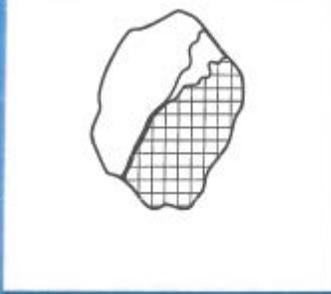
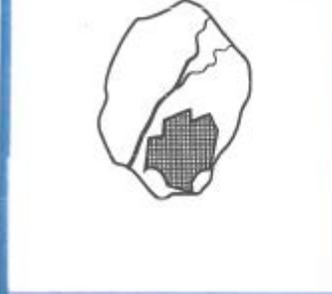
As previously demonstrated in Example 3, building at higher densities consumes, or converts, less land within the watershed. Scenario A, developing at one unit per acre, requires the entire 10,000-acre watershed to accommodate 10,000 houses. Scenario C, on the other hand, developing at eight units an acre, requires significantly less land to accommodate the same amount of development.

**EXAMPLE 7: TIME SERIES BUILD-OUT ANALYSIS: BUILD-OUT IN 2020**

| Scale of Analysis                       | Scenario A   | Scenario B  | Scenario C  |
|---|--|---|---|
| Hypothetical build-out in the year 2020 | 20,000 houses built on 20,000 acres, or 2 watersheds | 20,000 houses built on 5,000 acres, or ½ of 1 watershed | 20,000 houses built on 2,500 acres, or ¼ of 1 watershed |

Fast-forwarding 20 years, the population in the hypothetical community has doubled from 10,000 houses to 20,000 houses. Each scenario must accommodate this additional growth at different development densities. Exhibit 9 demonstrates how this development might look.

**EXHIBIT 9: Time Series Build-out Analysis: Build-out in 2020**

| Scenario A  | Scenario B  | Scenario C  |
|---|---|---|
|                              |                                  |                                     |
| <p>20,000 houses accommodated on 20,000 acres at a density of 1 house per acre will consume 2 watersheds.</p> | <p>20,000 houses accommodated on 5,000 acres at a density of 4 houses per acre will consume ½ of 1 watershed.</p> | <p>20,000 houses accommodated on 2,500 acres at a density of eight houses per acre will consume ¼ of 1 watershed.</p> |

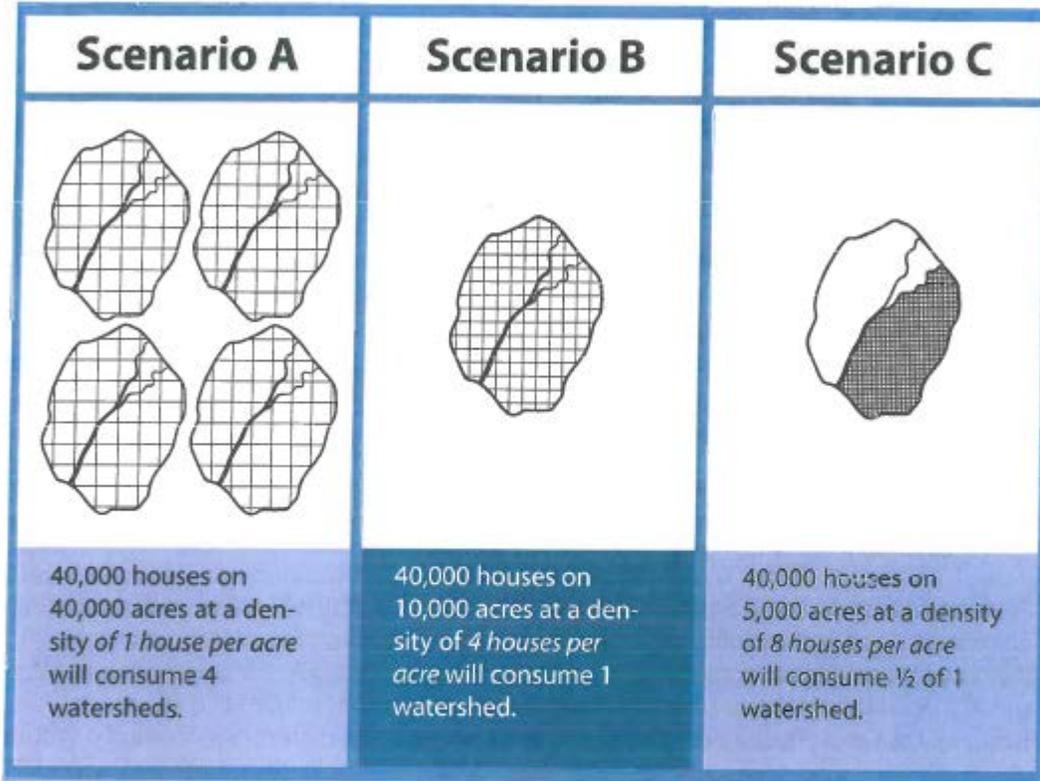
As Exhibit 9 demonstrates, Scenario A, developing at one house per acre, requires another whole watershed to accommodate the additional growth. Scenarios B and C, developing at higher densities, can accommodate the additional growth within the same watershed. Moreover, by developing at higher densities within the watershed, ample open space or otherwise undeveloped land remains to perform critical watershed functions. No such land exists in Scenario A, and, as previously discussed, lawns typically associated with one house per acre are not able to provide the same type of watershed services as forests, meadows, or other types of unconverted land.

**EXAMPLE 8: TIME SERIES BUILD-OUT ANALYSIS: BUILD-OUT IN 2040**

| Scale of Analysis                              | Scenario A  | Scenario B   | Scenario C   |
|--|---|--|--|
| <p>Hypothetical build-out in the year 2040</p> | <p>40,000 houses built on 40,000 acres, or 4 watersheds</p> | <p>40,000 houses built on 10,000 acres, or 1 watershed</p> | <p>40,000 houses built on 5,000 acres, or ½ of 1 watershed</p> |

The hypothetical community continues to grow and, in another 20 years, population has doubled again, requiring each scenario to accommodate 20,000 more homes at different development densities. Exhibit 10 demonstrates how this development might look.

**EXHIBIT 10:** Time Series Build-out Analysis: Build-out in 2040



As Exhibit 10 demonstrates, Scenario A, developing at one house per acre, must develop land in four watersheds, or 40,000 acres, to accommodate all its houses. Scenario B, developing at a slightly higher density, uses its remaining land to accommodate the additional growth. Scenario C is still developing within the same watershed and still has additional land available to provide watershed services. Scenario A and B do not. Any land for watershed services would need to come from additional watersheds.

Lower-density development always requires more land than higher densities to accommodate the same amount of growth.

**This build-out analysis can continue indefinitely with the same result: lower-density development always requires more land than higher densities to accommodate the same amount of growth. Because more land is required, more undeveloped land is converted.**

## Findings/Discussion

The results indicate when runoff is measured *by the acre*, limiting density does produce less stormwater runoff when compared to the higher-density scenarios. However, when measured *by the house*, higher densities produce less stormwater runoff. So, which is the appropriate measure?

Typically, a planning department analyzes the projected stormwater runoff impacts of a developer's proposal based on the acreage, not the number of houses being built. Based on the results from the one-acre level example, communities might conclude that lower-density development would minimize runoff. Runoff from one house on one acre is roughly half the runoff from eight houses. However, where did the other houses, and the people who live in those houses, go? The answer is almost always that they went somewhere else in that region—very often somewhere within the same watershed. Thus, those households still have a stormwater impact. To better understand the stormwater runoff impacts from developing at low densities, the impacts associated with those houses locating elsewhere need to be taken into account. This approach has two advantages:

- It acknowledges that the choice is not whether to grow by one house or eight but is instead where and how to accommodate the eight houses (or whatever number by which the region is expected to grow).
- It emphasizes minimization of total imperviousness and runoff within a region or watershed rather than from particular sites—which is more consistent with the science indicating that imperviousness within the watershed is critical.

To more fully explore this dynamic, EPA modeled scenarios at three scales—one acre, lot, and watershed—and at three different time series build-out examples to examine the premise that lower-density development better protects water quality. EPA examined stormwater runoff from different development densities to determine the comparative difference between scenarios. The higher-density scenarios generated less stormwater runoff per house at all scales and time series build-out examples. Exhibit 11 summarizes these findings.

**EXHIBIT 11: Summary of Findings**

| Scenario | Number of Acres Developed | Impervious Cover (%) | Total Runoff (ft <sup>3</sup> /yr) | Runoff Per Unit (ft <sup>3</sup> /yr) | Savings Over Scenario A: runoff per unit (%) |
|----------|---------------------------|----------------------|------------------------------------|---------------------------------------|--|
|----------|---------------------------|----------------------|------------------------------------|---------------------------------------|--|

*One-Acre Level: Different densities developed on one acre*

|                      |   |      |        |        |    |
|----------------------|---|------|--------|--------|----|
| A: One house/acre    | 1 | 20.0 | 18,700 | 18,700 | 0  |
| B: Four houses/acre  | 1 | 38.0 | 24,800 | 6,200  | 67 |
| C: Eight houses/acre | 1 | 65.0 | 39,600 | 4,950  | 74 |

*Lot Level: Eight houses accommodated at different density levels*

|            |   |      |         |        |    |
|------------|---|------|---------|--------|----|
| Scenario A | 8 | 20.0 | 149,600 | 18,700 | 0  |
| Scenario B | 2 | 38.0 | 49,600  | 6,200  | 67 |
| Scenario C | 1 | 65.0 | 39,600  | 4,950  | 74 |

*Watershed Level: 10,000 houses accommodated in one 10,000-acre watershed*

|            |        |      |        |        |    |
|------------|--------|------|--------|--------|----|
| Scenario A | 10,000 | 20.0 | 187 M  | 18,700 | 0  |
| Scenario B | 2,500  | 9.5  | 62 M   | 6,200  | 67 |
| Scenario C | 1,250  | 8.1  | 49.5 M | 4,950  | 74 |

**Scenario Summary of Build-out Examples**

*Watershed Level: Time Series Build-out Analysis: Build-out in 2000*

|            |  |
|------------|--|
| Scenario A | 10,000 houses built on 10,000 acres: 1 watershed is consumed       |
| Scenario B | 10,000 houses built on 2,500 acres: ¼ of 1 watershed is consumed   |
| Scenario C | 10,000 houses built on 1,250 acres: 1/8 of 1 watershed is consumed |

*Watershed Level: Time Series Build-out Analysis: Build-out in 2020*

|            |  |
|------------|--|
| Scenario A | 20,000 houses built on 20,000 acres: 2 watersheds are consumed   |
| Scenario B | 20,000 houses built on 5,000 acres: ½ of 1 watershed is consumed |
| Scenario C | 20,000 houses built on 2,500 acres: ¼ of 1 watershed is consumed |

*Watershed Level: Time Series Build-out Analysis: Build-out in 2040*

|            |  |
|------------|--|
| Scenario A | 40,000 houses built on 40,000 acres: 4 watersheds are consumed   |
| Scenario B | 40,000 houses built on 10,000 acres: 1 watershed is consumed     |
| Scenario C | 40,000 houses built on 5,000 acres: ½ of 1 watershed is consumed |

Specifically, this analysis demonstrates:

- With more dense development (Scenario C), runoff rates per house decrease by approximately 74 percent from the least dense scenario (Scenario A);
- For the same amount of development, denser development produces less runoff and less impervious cover than low-density development; and
- For a given amount of growth, lower-density development uses more of the watershed.

EPA found that the higher-density scenarios generate less stormwater runoff per house at all scales—one acre, lot, watershed—and time series build-out examples.

Taken together, these findings indicate that low-density development may not always be the preferred strategy for reducing stormwater runoff. In addition, the findings indicate that higher densities may better protect water quality—especially at the lot and watershed levels. Higher-density developments consume less land to accommodate the same number of houses as lower density. Consuming less land means less impervious cover is created within the watershed. To better protect watershed function, communities must preserve large, continuous areas of open space and protect sensitive ecological areas, regardless of how densely they develop.

However, while increasing densities on a regional scale can, on the whole, better protect water resources at a regional level, higher-density development can have more site-level impervious cover, which can exacerbate water quality problems in nearby or adjacent waterbodies. To address this increased impervious cover, numerous site-level techniques are available to mitigate development impacts. When used in combination with regional techniques, these site-level techniques can prevent, treat, and store runoff and associated pollutants. Many of these practices incorporate some elements of low-impact development techniques (e.g., rain gardens, bioretention areas, and grass swales), although others go further to include changing site-design practices, such as reducing parking spaces, narrowing streets, and eliminating cul-de-sacs.

Incorporating these techniques can help communities meet their water quality goals and create more interesting and enjoyable neighborhoods.

A University of Oregon study, *Measuring Stormwater Impacts of Different Neighborhood Development Patterns* (University of Oregon, 2001), supports this conclusion. The study, which included a study site near Corvallis, Oregon, compared stormwater management strategies in three common neighborhood development patterns. For example, best management practices, such as disconnecting



Photo courtesy of the City of Portland, Oregon

The city of Portland, Oregon, is developing urban stormwater strategies, such as these curb extensions that can absorb the street's runoff from large storm events.

residential roofs and paved areas from the stormwater system, introducing swales and water detention ponds into the storm sewer system, and strategically locating open space, considerably reduced peak water runoff and improved infiltration. The study concluded that “some of the most effective opportunities for reducing stormwater runoff and decreasing peak flow are at the site scale and depend on strategic integration with other site planning and design decisions.” The study also found that planting strips and narrower streets significantly reduced the amount of pavement and, as a result, runoff in developed areas.

A development in Tacoma, Washington, demonstrates that increasing densities and addressing stormwater at the site level can work effectively. The Salishan Housing District was built on Tacoma’s eastern edge in the 1940s as temporary housing for ship workers. It is currently a public housing community with 855 units.

Redevelopment of Salishan will increase densities to include 1,200 homes (public housing, affordable and market rate rentals, and for-sale units), local retail, a farmers market, a senior housing facility, a daycare center, a health clinic, commercial office space, and an expanded community center. Among the most important priorities for the redevelopment is restoring the water quality of Swan Creek, which forms the eastern edge of Salishan. The creek is a spawning ground for indigenous salmon populations that feed into the Puyallup River and Puget Sound. The site plan seeks to restore 65 percent of the land to forest and pervious landscape. In addition, the streets will be narrowed to reduce impervious surfaces and also make the neighborhood more inviting for walking. Some streets may be eliminated and replaced with pedestrian paths. The remaining streets will be bordered by rain gardens that would accept, filter, and evapotranspire runoff. Most existing street surfaces would be reused, although some may be replaced with pervious pavers.

Salishan Housing District is replacing 855 public housing units with 1,200 units. Numerous site-level strategies, such as integrating uses, narrowing the streets, installing rain gardens, and daylighting a stream, are used to restore the water quality of Swan Creek and revitalize an existing neighborhood.

Communities can enjoy a further reduction in runoff if they take advantage of underused properties, such as infill, brownfield, or greyfield<sup>12</sup> sites. For example, an abandoned shopping center (a greyfield property) is often almost completely impervious cover and is already producing high volumes of runoff (Sobel, 2002). If this property were redeveloped, the net runoff increase would likely be zero since the property was already predominately impervious cover. In many cases, redevelopment of these properties breaks up or removes some portion of the impervious cover, converting it to pervious cover and allowing for some stormwater infiltration. In this case, redevelopment of these properties can produce a net improvement in regional water quality by decreasing total runoff. Exhibit 12 illustrates this opportunity.

## EXHIBIT 12: Redevelopment of a Greyfield Property



Redevelopment of a former shopping mall in Boca Raton, Florida, provides an example of this type of opportunity. The Mizner Park shopping mall was redesigned from its original pattern of a large retail structure surrounded by surface parking lots; the 29-acre site now includes 272 apartments and townhouses, 103,000 square feet of office space, and 156,000 square feet of retail space. Most parking is accommodated in four multistory parking garages. Designed as a village within a city, the project has a density five times higher than the rest of the city and a mix of large and small retailers, restaurants, and entertainment venues (Cooper, 2003). Most significantly, the final build-out of Mizner Park decreased overall impervious surface on the site by 15 percent through the addition of a central park plaza, flower and tree planters, and a large public amphitheater.

Redeveloping brownfield and greyfield sites can reduce regional land consumption. A recent George Washington University study found that for every brownfield acre that is redeveloped, 4.5 acres of open space are preserved (Deason, 2001). In addition to redeveloping brownfield sites, regions can identify underused properties or land, such as infill or greyfield sites, and target those areas for redevelopment. For example, a recent analysis by King County, Washington, demonstrated that property that is vacant and eligible for redevelopment in the county's growth areas can accommodate 263,000 new houses—enough for



The redevelopment of Mizner Park, a former shopping mall, decreased impervious cover by 15 percent through the addition of this central plaza.

500,000 people (Pryne, 2002). Redeveloping this property is an opportunity to accommodate new growth without expanding into other watersheds. As Kurt Zwikl, executive director of the Pottstown, Pennsylvania-based Schuylkill River Greenway Association, said, "Certainly, if we can get redevelopment going in brownfields and old industrial sites in older riverfront boroughs like Pottstown and Norristown, that's a greenfield further out in the watershed that has been preserved to absorb more stormwater" (Brandt, 2004).

**Redeveloping brownfield and greyfield sites can reduce regional land consumption.**

## Other Research

Current research supports the findings of this study. Several site-specific studies have been conducted across the United States and in Australia that examine stormwater runoff and associated pollutants in relation to different development patterns and densities. Several case studies approach the research question with varying levels of complexity. Studies of Highland Park, Australia; Belle Hall, South Carolina; New Jersey; Chicago, Illinois; and the Chesapeake Bay each analyze the differences in runoff and associated water pollution from different types of development patterns.

Queensland University of Technology, Gold Coast City Council, and the Department of Public Works in Brisbane, Australia, examined the relationship between water quality and six different land uses to offer practical guidance in planning future developments. When comparing monitored runoff and associated pollutants from six areas, they found the most protective strategy for water quality was high-density residential development (Goonetilleke, 2005).

The Belle Hall study, by the South Carolina Coastal Conservation League, examined the water quality impacts of two development alternatives for a 583-acre site in Mount Pleasant, South Carolina. The town planners used modeling to examine the potential water quality impacts of each site design. In the "Sprawl Scenario," the property was analyzed as if it developed along a conventional suburban pattern. The "Town Scenario" incorporated traditional neighborhood patterns. In each scenario, the overall density and intensity (the number of homes and the square feet of commercial and retail space) were held constant. The results found that the "Sprawl Scenario" consumed eight times more open space and generated 43 percent more runoff, four times more sediment, almost four times more nitrogen, and three times more phosphorous than the "Town Scenario" development (South Carolina Coastal Conservation League, 1995).

These findings hold at a larger, state scale. New Jersey's State Plan calls for increasing densities in the state by directing development to existing communities and existing infrastructure. Researchers at Rutgers University analyzed the water quality impacts from current development trends and compared them to water quality impacts from the proposed compact development. The study found that compact development would generate significantly less water pollution than current development patterns, which are mostly characterized by low-density development, for all categories of pollutants (Rutgers University, 2000). The reductions ranged from over 40 percent for phosphorus and nitrogen to 30 percent for runoff. These conclusions supported a similar statewide study completed in 1992 that

concluded that compact development would result in 30 percent less runoff and 40 percent less water pollution than would a lower-density scenario (Burchell, 1995).

Researchers at Purdue University examined two possible project sites in the Chicago area (Harbor, 2000). The first site was in the city; the second was on the urban fringe. The study found that placing a hypothetical low-density development on the urban fringe would produce 10 times more runoff than a higher-density development in the urban core.

Finally, a study published by the Chesapeake Bay Foundation in 1996 comparing conventional and clustered suburban development on a rural Virginia tract found that clustering would convert 75 percent less land, create 42 percent less impervious surface, and produce 41 percent less stormwater runoff (Pollard, 2001). These studies suggest that a low-density approach to development is not always the preferred strategy for protecting water resources.

## Conclusions

Our regions, cities, towns, and neighborhoods are growing. Every day, new buildings or houses are proposed, planned, and built. Local governments, working with planners, citizen groups, and developers, are thinking about where and how this new development can enhance existing neighborhoods and also protect the community's natural environment. They are identifying the characteristics of development that can build vibrant neighborhoods, rich in natural and historic assets, with jobs, housing, and amenities for all types of people. They are directing growth to areas that will maintain and improve the buildings and infrastructure in which they have already invested. In addition to enjoying the many benefits of growth, communities are also grappling with growth's challenges, including development's impact on water resources.

Many communities assume that low-density development automatically protects water resources. This study has shown that this assumption is flawed and that pursuit of low-density development can in fact be counterproductive, contributing to high rates of land conversion and stormwater runoff and missing opportunities to preserve valuable land within watersheds.

The purpose of this study is to explore the effects of development density on stormwater runoff and to illustrate the problems with the assumption that low-density development is automatically a better strategy to protect water quality. To that end, three different development densities were modeled at the one-acre, lot, and watershed levels, as well as in the time series build-out examples. The modeling results suggest that low-density development is not always the preferred strategy for protecting water resources. Furthermore, the results seem to suggest that higher-density development could better protect regional water quality because it consumes less land to accommodate the same number of homes.

However, while this study shows that low-density development does not automatically better protect water resources, it does not conclude that high-density development is therefore necessarily more protective. This study has not considered all factors, such as location of development within the watershed, varying soil types, slope, advanced post-construction controls (and their performance over time), and many other factors. In that sense, this study concludes that there

are good reasons to consider higher-density development as a strategy that can better protect water resources than lower-density development. However, any bias toward either is inappropriate from a water perspective. A superior approach to protect water resources locally is likely to be some combination of development densities, based on local factors, incorporating adequate open space, preserving critical ecological and buffer areas, and minimizing land disturbance.

These conclusions have implications for how communities can enjoy the benefits of growth and development while also protecting their water quality. Additional relevant information can be found in other resources, such as *Protecting Water Resources with Smart Growth* and *Using Smart Growth Techniques as Stormwater Best Management Practices*.<sup>13</sup> Both publications draw on the experience of local governments, which has shown that regional and site-specific strategies are most effective when implemented together. In addition, *Creating Great Neighborhoods: Density in Your Community*, by the Local Government Commission and the National Association of Realtors, can provide information on some of the other benefits from density that communities can enjoy.

Nationwide, state and local governments are considering the environmental implications of development patterns. As low-density development and its attendant infrastructure consume previously undeveloped land and create stretches of impervious cover throughout a region, the environment is increasingly affected. In turn, these land alterations are not only likely to degrade the quality of the individual watershed, but are also likely to degrade a larger number of watersheds. EPA believes that increasing development densities is one strategy communities can use to minimize regional water quality impacts.

Additional relevant information can be found in these resources:

- *Protecting Water Resources with Smart Growth*, available at: [www.epa.gov/smart-growth/pdf/waterresources\\_with\\_sg.pdf](http://www.epa.gov/smart-growth/pdf/waterresources_with_sg.pdf).
- *Creating Great Neighborhoods: Density in Your Community*, available at: [www.epa.gov/smart-growth/pdf/density.pdf](http://www.epa.gov/smart-growth/pdf/density.pdf).

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<sup>13</sup> Forthcoming EPA publication.

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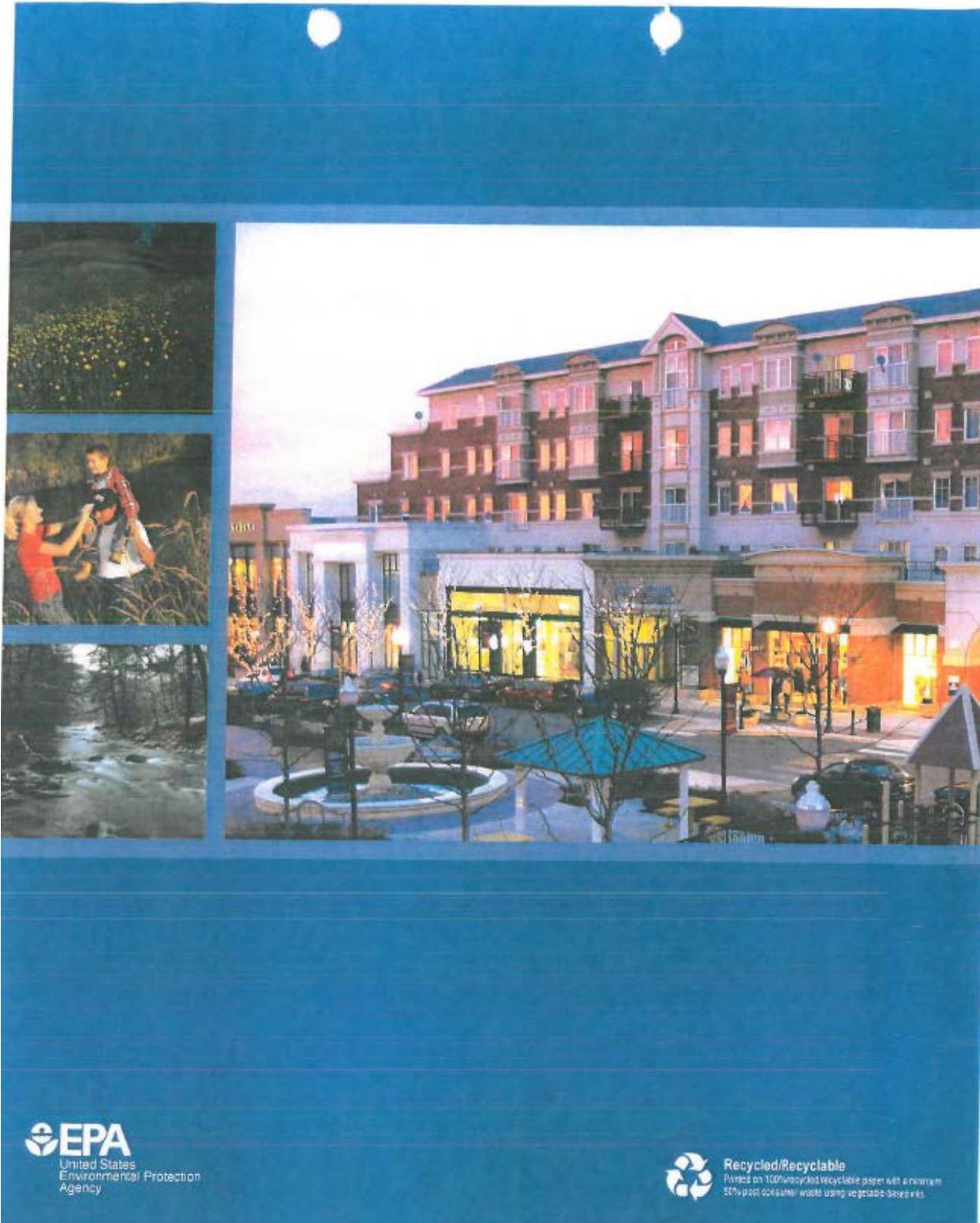
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**LETTER 2: ANDREA MATARAZZO, PIONEER LAW GROUP**

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**Response to Comment 2-1**

The comment is an introductory statement that does not address the adequacy of the Draft EIR.

**Response to Comment 2-2**

The comment fails to identify the specific goals and policies of the General Plan and voter-approved community policies that are believed to contradict the proposed project. As detail is not provided, further response is not possible.

As required by Mitigation Measure XVII-1 of the Initial Study, the project applicant would be required to contribute the project's fair share contribution (consistent with the Spring Lake Specific Plan [SLSP] Capital Improvement Program [CIP], updated for residential zoning) toward downstream wastewater and drainage facilities impacts. In addition, Mitigation Measures XVII-2 and XVII-3 of the Initial Study require the applicant to pay the City-wide wastewater, water, and surface water impact fees (consistent with the 2008 Major Projects Financing Plan). In addition, the project conditions of approval and the proposed development agreement will further address the project's fair share contribution.

**Response to Comment 2-3**

See Response to Comment 2-2. The project site is not within the SLSP area and, thus, is not subject to payment of fees under the SLSP CIP, except as described above with respect to drainage and wastewater. The comment does not provide evidence to support the conclusion that approval and implementation of the project would involve a subsidy of project-related infrastructure by Spring Lake homeowners or any delay of provision of public services to the SLSP, which are adequately funded by the SLSP CIP and assessments within the SLSP area.

In addition, multiple policies within the General Plan (e.g., 1.A.3, 1.A.6, 1.B.5) support infill development that is consistent with the needs of the community, reflective of existing neighborhood character, and consistent with efforts to maintain a positive fiscal balance for the City. The project will be subject to a fiscal analysis and will be required to pay any necessary fiscal impact fee consistent with the goals and policies contained within Chapter 4, Public Facilities and Services, of the General Plan.

**Response to Comment 2-4**

The *CEQA Guidelines* require an EIR to contain "[a] statement of the objectives sought by the proposed project," but they do not impose any substantive limitations on those objectives. *CEQA Guidelines*, §15124(b). The courts may not interpret the statutory or regulatory provisions regarding the required content of an EIR "in a manner which imposes procedural or substantive requirements beyond those explicitly stated in [CEQA] or in the [Guidelines]." Public Resources Code §21083.1; see *Western Placer Citizens for an Agricultural & Rural Environment v. County of Placer* (2006) 144 Cal.App.4th 890, 899 ["When interpreting CEQA, courts are not authorized to impose

requirements not present in the statute."]. Hence, "CEQA does not restrict an agency's discretion to identify and pursue a particular project designed to meet a particular set of objectives." *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227. The CEQA statute does not set forth requirements for a statement of project objectives, much less require a statement of project objectives to explicitly contain a reference to smart growth or sustainability. Under CEQA, project objectives are not ends in themselves; they are means to the end of creating an EIR that "give[s] the public and government agencies the information needed to make informed decisions, thus protecting "not only the environment but also informed self government." See *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1162. Project objectives facilitate reaching this end by "help[ing] the lead agency develop a reasonable range of alternatives to evaluate in the EIR" and by "aid[ing] the decision makers in preparing findings or a statement of overriding considerations, if necessary." *CEQA Guidelines*, §15124. Thus, whether an agency proceeds as required by law depends on whether in pursuing its objectives the agency satisfies its obligations under CEQA and the CEQA Guidelines to prepare an EIR that allows for informed decision-making by giving meaningful consideration to project alternatives with reduced environmental impacts. The statement of project objectives in the Draft EIR is not defective in this regard.

### **Response to Comment 2-5**

The analyses included in the Initial Study and the Draft EIR are consistent with the checklist questions set forth in Appendix G of the CEQA Guidelines and City of Woodland General Plan Environmental Impact Report, including those resource areas listed in the comment. For example, impacts related to land use, public facilities, utilities services, recreation, and population and housing were analyzed beginning on pages 38, 60, 66, 63, and 58 of the Initial Study, respectively. Any potentially significant impacts related to the aforementioned resources areas have been addressed by mitigation measures included in the Initial Study. Similarly, impacts related to air quality, greenhouse gas emissions, and climate change were analyzed on pages 4.1-31 through 4.1-44 of Chapter 4.1, Air Quality and Greenhouse Gas Emissions (Including Energy), of the Draft EIR. All project-level and cumulative impacts related to air quality, greenhouse gas emissions, and climate change were determined to be less than significant. The comment fails to identify any specific environmental issues believed to be "thorny" or to provide specific examples of areas in which the analysis in the EIR is believed to be deficient.

As noted beginning on page 6-4 of Chapter 6, Alternatives, of the Draft EIR, an Off-Site Alternative and an Existing Zoning Alternative were considered but dismissed as alternatives to the proposed project. As noted beginning on page 6-6 of Chapter 6, a No Project (No Build) Alternative, a Reduced Intensity Alternative, and a Mixed-Use Alternative were considered in detail. An Increased Density Alternative was not analyzed because increasing the residential density of the proposed project would result in greater impacts as compared to the proposed project.

An Increased Density Alternative would result in development of the proposed project at an increased density. An Increased Density Alternative would require a General Plan Amendment of the project site from General Commercial (GC) to High-Density Residential (HDR). Per the Woodland General Plan, the allowable density for the HDR land uses shall be in the range of

16.0 to 25.0 units per gross acre. In addition, an Increased Density Alternative would require a rezone of the project site from General Commercial (C-2) to Multiple Family Residential Zone (R-M). Per the Woodland Municipal Code, Section 25-11-20, buildings in the R-M zone shall not exceed 40 feet in height. Although the maximum allowable unit amount for the site would be 950 dwelling units per the RM zoning, due to the surrounding uses and the presence of mainly single-family residential to the northeast, east, west, and northwest, a maximum density of 20 dwelling units per acre is assumed for the following analysis. The aforementioned density would result in 760 dwelling units on the 38-acre project site.

According to Kittelson & Associates, Inc., an Increased Density Alternative would result in approximately 4,729 daily trips, 376 AM peak hour trips, and 436 PM peak hour trips. The proposed project would result in approximately 2,024 daily trips, 153 AM peak hour trips, and 200 PM peak hour trips. As such, an Increased Density Alternative would result in substantially greater impacts related to transportation and circulation. Specifically, the impacts to the Matmor Road and Gibson Road intersection would be further exacerbated by an Increased Density Alternative. In addition, the intersections that would be impacted by implementation of an Increased Density Alternative could differ from those impacted by the proposed project. Due to the substantially higher number of vehicle trips generated by an Increased Density Alternative, the mobile air pollutant emissions would also increase. Therefore, impacts related to air quality, climate change, and noise would be greater than anticipated for the proposed project.

Due to the substantial increase in residences resulting from an Increased Density Alternative as compared to the proposed project, an Increased Density Alternative could increase the demand for public services and utilities. For example, the increase in dwelling units from 186 under the proposed project to 760 under an Increased Density Alternative would likely increase demand for water, wastewater, and other utilities as compared to the proposed project.

An Increased Density Alternative would not meet all of the project objectives. For example, objective #1 aims to develop a single-family residential project to contribute to the City's overall housing stock and respond to the regional demand for residential uses. By increasing the density, an Increased Density Alternative would result in multi-family residential units and thus would not meet objective #1. Consistent with CEQA, primary consideration was given to alternatives that could reduce significant impacts, while still meeting the basic project objective. Therefore, development of an Increased Density Alternative would be expected to result in greater impacts, when compared to the proposed project.

In terms of the characterization of the project as not providing for "smart growth," it should be noted that the project is located on an infill site within the City limits, and would place new residents in immediate proximity to employment and commercial opportunities at the County Fair Mall and to recreational uses to the south.

### **Response to Comment 2-6**

The comment does not address the adequacy of the Draft EIR.

### **Response to Comment 2-7**

The comment letters previously submitted by the Pioneer Law Group, LLP on January 30, 2015, May 14, 2013, and September 18, 2013 were included as Appendix B to the Draft EIR. The issues raised in the aforementioned comment letters were addressed throughout the Draft EIR, to the extent that they raised issues pertinent to CEQA requirements for the analysis of environmental impacts.

### **Response to Comment 2-8**

See Response to Comment 2-4.

CEQA does not state a requirement that the lead agency and the applicant form separate and distinct statements of project objectives, or that a statement of project objectives represent some sort of “unity” of mutual objectives or project purposes. The CEQA guidelines require a statement of project objectives to “help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and to “aid the decision makers in preparing findings or a statement of overriding considerations, if necessary.” CEQA Guidelines § 15124(b). Whether an agency proceeds as required by law is determined not by *who* defines the project objectives, but whether the lead agency analyzes a reasonable range of alternatives based on those objectives.

In each of the cases identified in the Comment, the alleged improper action was not who defined the project objectives. Rather, the alleged CEQA violations occurred when the lead agency rejected alternatives as infeasible without providing substantial evidence for the rejection. None of the cases cited concern which party defined the project’s objectives. Moreover, the courts have upheld an EIR’s inclusion of project objectives defined by the applicant. In *Sierra Club v. County of Napa*, the court rejected the claim that a project’s applicant-defined objectives impermissibly limited the lead agency’s discussion of alternatives. *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490. In that case, Beringer sought to develop a wine facility in the county, and the EIR contained Beringer’s project objectives. The court held that the EIR was not inadequate for failing to identify and analyze alternatives that would not meet Beringer’s objectives. “The EIR was not required to analyze the effects of a project that Beringer did not propose or to analyze the effects of an alternative that would not feasibly attain most of the basic objectives of the project.” *Id.* at 1509.

The statement of project objectives on page 3-4 of the Draft EIR adequately frames the purposes of this project and does not unduly restrict the ability of the Draft EIR to evaluate a reasonable range of alternatives, as CEQA requires. The City, as lead agency, will apply its independent judgment in deciding whether to certify the EIR, and separately, whether to approve the project.

### **Response to Comment 2-9**

The project site was originally a portion of a larger 78-acre parcel, and created as a separate 38-acre parcel through a lot split approved by the County of Yolo in 1999. The property, including the remaining 40-acre parcel (now known as the Parkside at Spring Lake parcel), was annexed to the City of Woodland in July 1999. The annexation was more than three years before Local Agency Formation Commission (LAFCo) approval of the Spring Lake annexation in January 2003. At the time of annexation, the project site was pre-zoned for commercial uses, while the Parkside parcel

was accorded an interim Agricultural designation with the intent that the parcel be included in the SLSP. The commenter offers no support for the statement that the project site was only excluded from the SLSP in 2003 due to potential development with commercial uses, a circumstance that, whether true or not, is irrelevant to the proposed project or its environmental impacts.

The Draft EIR analyzed potential impacts as a result of the project as compared to the baseline under CEQA. The baseline for the proposed project was established during the release of the Notice of Preparation (NOP) for the project. It should be noted that Chapter 6, Alternatives Analysis, includes a discussion regarding the Existing Zoning Alternative. The Existing Zoning Alternative represents the previously envisioned commercial development for the project site.

### **Response to Comment 2-10**

See Response to Comments 2-4 and 2-8. The comment fails to identify the specific City plans, codes, and policies in which the project is not consistent or to identify the goals or policies of the General Plan and voter-approved community policies that are believed to contradict the proposed project. As detail is not provided, further response is not possible.

### **Response to Comment 2-11**

Several definitions for “infill” exist. A specific definition for infill does not exist within the City’s General Plan or Municipal Code. Section 21061.3 of the CEQA statute contains the following definition for “infill”:

“Infill site” means a site in an urbanized area that meets either of the following criteria:

(a) The site has not been previously developed for urban uses and both of the following apply:

- (1) The site is immediately adjacent to parcels that are developed with qualified urban uses, or at least 75 percent of the perimeter of the site adjoins parcels that are developed with qualified urban uses and the remaining 25 percent of the site adjoins parcels that have previously been developed for qualified urban uses.
- (2) No parcel within the site has been created within the past 10 years unless the parcel was created as a result of the plan of a redevelopment agency.

(b) The site has been previously developed for qualified urban uses.

As described in the Draft EIR, the site has not been previously developed for urban uses. A majority of the site supports leveled cropland that was planted in corn and has been farmed on an annual basis. In addition, the site is bordered by County Fair Mall to the north, Low Density Residential (LDR) and Medium Low Density Residential (MLDR) currently existing and under construction to the east, multi-family residential on the other side of East Street to the west, and Sports Park Drive/CR 24A and the Woodland Community and Senior Center and Woodland Sports Park to the south. Furthermore, the parcel was not created within the past 10 years (the parcel was created by a land division approved by the County in 1999). Therefore, the project qualifies as “infill” under criteria (a) of Public Resources Code §21061.3. The City considers the project site to be an “infill site” because the site is within City limits and is vacant commercial land with limited viability for

commercial development. The comment does not specifically address the adequacy of the Draft EIR nor does the comment identify a significant environmental effect

### **Response to Comment 2-12**

All of the Appendix G checklist questions, including the resources areas listed in the comment, were analyzed within the Initial Study and the Draft EIR. Impacts related to land use and planning and population and housing were analyzed beginning on pages 38 and 58 of the Initial Study, respectively. All impacts related to land use and planning and population and housing were determined to be less than significant or negligible. In addition, impacts related to air quality, greenhouse gas emissions, and climate change were analyzed on pages 4.1-31 through 4.1-44 of Chapter 4.1, Air Quality and Greenhouse Gas Emissions (Including Energy), of the Draft EIR. All project-level and cumulative impacts related to air quality, greenhouse gas emissions, and climate change were determined to be less than significant.

### **Response to Comment 2-13**

CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566.) The statute requires an EIR to include a detailed statement describing alternatives that would substantially lessen the significant environmental impacts of the proposed project. *Public Resources Code* §§ 21002, 21100(b)(4). The *CEQA Guidelines* are more specific:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Therefore, "an EIR for any project subject to CEQA review must consider a reasonable range of alternatives to the project [...] which: (1) offer substantial environmental advantages over the project proposal [citation]; and (2) may be 'feasibly accomplished in a successful manner' considering the economic, environmental, social and technological factors involved." *Citizens of Goleta Valley v. Board of Supervisors*, (1990) 52 Cal.3d 553, 566. The agency's selection of alternatives will be upheld unless the alternatives "are manifestly unreasonable and [...] do not contribute to a reasonable range of alternatives." *Federation of Hillside & Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1265. The Draft EIR identifies only two impact areas with potentially significant impacts: (1) Air Quality and Greenhouse Gas Emissions, and (2) Transportation and Circulation. As described in the Draft EIR, the only impacts that are determined to be significant and unavoidable are impacts to certain identified intersections and roadway segments. These significant and unavoidable impacts are largely the

result of right-of-way constraints that preclude the expansion of these roadway facilities to accommodate traffic under future cumulative conditions. These impacts would be significant and unavoidable under any of the alternative scenarios, for the reasons cited in the Draft EIR. See Chapter 6 of the Draft EIR.

The City currently utilizes Level of Service (LOS) standards in order to determine traffic impacts. The City does not currently provide a standard related to vehicle miles traveled (VMT). Therefore, LOS is the only logical standard in which to analyze impacts from the proposed project. It should be noted that an analysis was performed in regard to trip generation information specific to an Increased Density Alternative. The analysis concluded that an Increased Density Alternative would result in an increase in the number of daily vehicle trips by 2,705 trips as compared to the proposed project. The comment is not specific enough about the adequacy of the analysis to respond in further detail. The EIR does not contain an analysis of Vehicle Miles Traveled (VMT) because the State Office of Planning and Research (OPR) has not yet adopted final guidelines to implement Senate Bill 743, and the requirements of Senate Bill 743 to analyze traffic impacts in terms of VMT will not take effect until the final OPR guidelines are adopted. See *Public Resources Code* § 21099(d).

#### **Response to Comment 2-14**

Please refer to Response to Comment 2-5. Although an Increased Density Alternative could potentially slightly reduce impacts related to water quality as compared to the proposed project, an Increased Density Alternative would result in greater impacts in several other resource areas and, thus, would not be a superior alternative to the proposed project. The increase in dwelling units from 186 under the proposed project to 760 under an Increased Density Alternative would likely increase demand for water, wastewater, and other utilities as compared to the proposed project. It should be noted that, regardless of the density of the project, the City will require compliance with all water quality standards.

#### **Response to Comment 2-15**

Alternatives to the proposed project were analyzed in Chapter 6, Alternatives Analysis, of the Draft EIR. Two alternatives, the Off-Site Alternative and the Existing Zoning Alternative, were considered but dismissed. The Off-Site Alternative was dismissed because other lands located in the vicinity would likely have equal or greater impacts compared to the proposed project site. The CEQA Guidelines state that, by definition, an alternative should avoid or substantially lessen one or more of the environmental effects of the project. Although the maximum allowable square footage for the site would be 1.3 million square feet (sf) per the existing zoning, due to the surrounding uses and the presence of the County Fair Mall to the north of the site, two commercial buildings totaling 400,000 square feet (sf) is assumed for the Existing Zoning Alternative. The Existing Zoning Alternative was dismissed because the alternative would not avoid or substantially lessen one or more of the significant environmental impacts of the proposed project.

A No Project (No Build) Alternative, Reduced Intensity Alternative, and Mixed-Use Alternative were considered and evaluated in detail. The analysis on pages 6-6 through 6-15 concludes that the No Project (No Build) Alternative would increase impacts in one resource area, while the Reduced Intensity Alternative would result in fewer impacts than the proposed project in two resource areas.

The Mixed-Use Alternative would result in greater impacts in three resource areas. Therefore, the Reduced Intensity Alternative would be considered the Environmentally Superior Alternative. The basis for dismissing the alternatives relies on whether the alternatives would avoid or substantially lessen one or more of the environmental effects of the project. As noted in Response to Comment 2-5, an Increased Density Alternative would not meet all of the project objectives and would be expected to result in greater impacts when compared to the proposed project.

#### **Response to Comment 2-16**

See Response to Comment 2-5. Because an Increased Density Alternative would result in substantially greater vehicle trips as compared to the proposed project, the alternative would also result in greater impacts to noise and air quality. Therefore, an Increased Density Alternative has been rejected as an alternative to the proposed project, consistent with CEQA Guidelines Section 15126.6(c).

#### **Response to Comment 2-17**

See Response to Comment 2-5. Because an Increased Density Alternative would result in substantially greater vehicle trips as compared to the proposed project, the alternative would also result in greater impacts to noise and air quality. In addition, due to a substantial increase in residences that would result from an Increased Density Alternative, as compared to the proposed project, an Increased Density Alternative could increase the demand for public services and utilities. For example, the increase in dwelling units from 186 under the proposed project to 760 under an Increased Density Alternative would likely increase demand for water, wastewater, and other utilities as compared to the proposed project. Therefore, an Increased Density Alternative would not be considered an environmentally superior alternative to the proposed project.

#### **Response to Comment 2-18**

The comment is a conclusionary statement that does not address the adequacy of the Draft EIR.

#### **Response to Exhibit A**

Exhibit A of the comment letter contains the comment letter and enclosures previously submitted by the commenter on January 30, 2015. To the extent that they implicate CEQA concerns, the issues raised in Exhibit A have been addressed throughout the Initial Study, Draft EIR, and within the Responses to Comments 2-2, 2-3, 2-4, 2-5, 2-9, 2-11, 2-14, and 2-15. The January 30, 2015 letter contains three separate exhibits (Exhibit A [letter dated May 14, 2013], Exhibit B [letter dated May 14, 2013] and Attachment C [Letter dated July 29, 2013 from Legal Services of Northern California.]). The letters were submitted to the City prior to the date of the Notice of Preparation, and do not address environmental issues under the purview of CEQA. A response to the issues raised by these letters is not required as part of this Final EIR.

**Response to Exhibit B**

Exhibit B of the comment letter contains the letter and enclosures previously submitted by the commenter on May 14, 2013. See Response to Exhibit A.

**Response to Exhibit C**

Exhibit C of the comment letter contains the letter and enclosures previously submitted by the commenter on September 18, 2013. See Response to Exhibit A.

**Response to Exhibit D**

Exhibit D contains a copy of the “Transportation and Land Use Toolkit” document in support of the concerns raised in Comment 2-11. The exhibit itself does not address the adequacy of the Draft EIR. See Response to Comment 2-11. The document is included in the record for the consideration of the decision makers.

**Response to Exhibit E**

Exhibit E contains a copy of the “Protecting Water Resources with Higher-Density Development” document in support of the concerns raised in Comment 2-14. The exhibit itself does not address the adequacy of the Draft EIR. See Response to Comment 2-14. The document is included in the record for the consideration of the decision makers.

Letter 3

October 19, 2015; 6 pages, Items (a) - (h)

Bobby Harris, 23 Pershing Avenue, Woodland CA 95695  
Email (is preferred, please reply to): [yolosun@gmail.com](mailto:yolosun@gmail.com)

City of Woodland, Community Development Department  
300 First Street, Woodland CA 95695  
Re: Prudler Project Draft EIR

I raise the following objections to the Prudler Project Draft EIR:

(a) The mixed-use alternative is obviously unreasonable, appearing to be simply a – “straw-man” -- used to leverage exclusion from consideration of a higher density alternative -- which it is absolutely essential to examine.

3-1

A prominent “project objective” is not to compete with County Fair Mall, which has submitted a letter in support of the proposed project (and would not have done so if there was any valid reason (via City Hall) to believe that commercial zoning would become any significant aspect of it).

Truly -- the **actual** mixed-use character of this **overall situation** is readily seen: County Fair Mall is the commercial element, while its (equal, former) expansion area occupies the residential component of a mixed-use format.

The pivotal question is: What level of residential zoning density is optimal?

Mall owners will swiftly say: The formula for basic success is maximization of residential densities nearby their location. Higher residential densities at the relevant site would be supportive -- if not transformative -- of the actual, realistic success of County Fair Mall, the future of which remains clouded.

3-2

Environmental effects upon County Fair Mall of adopting some higher-density residential alternative at the site of the proposed project have not been addressed, analyzed or considered by the Prudler Project Draft EIR; they must be. Environmental effects regarding future viability of County Fair Mall must be examined in relation to potential zoning decisions involving a range of residential density alternatives of the proposed project.

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CITY CLERK'S OFFICE

**Letter 3  
Cont'd**

Prudler Project Draft EIR; October 19, 2015; page 2 of 6

3-3

(b) Environmental effects / impacts of the proposed project upon phased build-out of Spring Lake Specific Plan must be carefully delineated and considered, including its influences regarding basic financial elements of the Plan. Declining rates of housing build-out and sales within the Plan will adversely affect the city's economic planning and bonded indebtedness, as well as affecting the Plan's capabilities to provide intended aspects of public infrastructure and facilities. Adverse environmental effects / impacts upon Spring Lake Specific Plan will result from the proposed project; these effects / impacts remain unaddressed and unanalyzed by the Draft EIR.

3-4

(c) Processing the proposed project as an amendment to the existing General Plan, in the face of the General Plan Update process, appears to be predicated on an erroneous perception that the site constitutes "infill," in planning jargon.

This project does not represent legitimate "infill;" rather, it sits distinctly upon the utter municipal periphery (although possessing important urban significance, totally denigrated by the proposed, low-density style of this project). Only the city's civic facilities separate it from undeveloped land.

As well, the SACOG "Blueprint" for sustainable communities in this region does not recognize this site as representing proper "infill," ("... does not include capacity projects within the vicinity of the [proposed] project;" please see Draft EIR, p. 229).

3-5

Also, the proposed project abruptly conflicts with key sustainability percepts of basic city planning policies, such as represented within its Climate Action Plan (please see pages 23 and 24 of document, regarding land use topics – Strategy T/LU-2: Infill Development, Redevelopment, and Repurposing; Strategy T/LU-3: Smart Growth in New Development).

Strategy T/LU-2 indicates that the city's Urban Line Ordinance (see below) clearly applies to the irreversible environmental effects / impacts of the proposed project; yet, there is no evidence that it has been applied. Implementing a (2006) ballot-based ordinance, it would seem justified that such city process / policies should not be occurring under-the-floorboards. Formal, comprehensive address to contexts of the proposed project, within the city's planning ambit of the Urban Limit Line Ordinance, is imperative.

**Letter 3  
Cont'd**

Prudler Project Draft EIR; October 19, 2015; page 3 of 6

(d) Not yet implemented (apparently, until the new 2015-35 General Plan), an Urban Limit Line Ordinance was adopted by Woodland voters in June of 2006. It would seem plain that local voters did not intend a near decade-long delay in implementation of such basic planning law.

*This ordinance establishes that: "[T]he City shall continually reevaluate residential land use densities, housing policies and zoning to determine the potential for increased residential densities for both infill sites and undeveloped land within the permanent urban limit line. The City shall continually review existing non-residential zoning to determine potential for conversion to higher density residential uses within the permanent urban line."*

There has apparently yet been no municipal planning process, at all, related to implementing this ballot-based ordinance, regarding the proposed project, which is intended for location upon a unique and key peripheral site. And of course, both prongs of this voter-installed planning ordinance have been fully relevant to this site, since it has for decades been zoned as commercial.

"[C]ontinually reevaluate" would seem to indicate that such determination would occur at least upon each successive project concept / application pertaining to such a unique and key site as the proposed project. This legally-binding municipal ordinance, however, has apparently never been implemented for purposes of: "[D]etermin[ing] the potential for increased residential densities," regarding the land involved with proposed project. As noted in (c), above, basic city policy demands such implementation / application, involving irreversible environmental impacts.

Foreseeable environmental consequences of the proposed project, such as its irreversible impacts / effects regarding present, future implementation of the city's Urban Limit Line Ordinance, alongside a range of (reasonable and relevant) alternative developmental scenarios, are obviously intended to be included within CEQA analyses. The city's Urban Limit Line Ordinance makes (lawfully) imperative such inclusion and analysis within the Draft EIR, of an increased density alternative for the Prudler Project.

3-6

Prudler Project Draft EIR; October 19, 2015; page 4 of 6

3-7

(e) As outlined within objections (already within the Draft EIR, p. 230) by Legal Services of Northern California to the proposed project, the city has a glut of low density zoning / housing and a dearth of higher density zoning opportunities. Objections to this project by Legal Services indicate that:

"The proposed Prudler Subdivision would add to the very large surplus of above-moderate and moderate income units, while failing to address the City's obligation to rezone land to accommodate very low and low income housing units. The City should be encouraging higher density development to address the significant shortfall, as required by housing element law. The proposed project is inconsistent with the city's Housing Element, further exacerbating the surplus of above-moderate income units, and its negative impact cannot be mitigated."

Continuation of such vast imbalance between low and higher density zoning, within the proposed project, clearly contains various environmental effects / impacts remaining unaddressed and unanalyzed by the Draft EIR.

These critical / key, local housing issues, should properly become topics within the current process of General Plan Update, rather than allowing the proposed project to side-step / circumvent such profound matters, using an amendment to the decades-old, existing General Plan. Prematurely acting (with no good civic reason) to consider / approve the proposed project, also results in environmental effects / impacts within that fundamental process; these effects / impacts remain unaddressed and unanalyzed.

3-8

(f) City of Woodland's General Plan Update (2015-2035) is presently being accomplished. The relevant site is located on a principally urban, developmental and transit corridor, southern East Street. This corridor has its own City Specific Plan, environmental effects / impacts upon which, by the proposed project, remain unaddressed, unanalyzed and unconsidered.

The relevant site is adjacent to: County Fair Mall, YoloBus' city transit-hub, Woodland Community & Senior Center (and Sports Park) and Spring Lake Specific Plan. Adverse environmental effects will result from prematurely acting to approve the proposed project, prior to completion and adoption of the new City General Plan, within which this site must become integrated.

Prudler Project Draft EIR; October 19, 2015; page 5 of 6

- 3-8  
Cont'd
- The existing General Plan and Spring Lake Specific Plan are based upon planning assumptions of the relevant site being zoned for commercial uses (please see Spring Lake Specific Plan, p. 8-1).
- Alteration of such key zoning must be consolidated within comprehensive processes of the current General Plan Update, not prematurely addressed through such a proposed, tardy amendment to the existing General Plan.
- 3-9
- Various alternatives for future development of this important site must be comprehensively identified, analyzed, evaluated and considered within the current General Plan Update. Adverse environmental effects / impacts will flow from premature action upon the proposed project, considering and approving it, while these effects / impacts of such premature approval upon the General Plan Update process remain unaddressed and unanalyzed.
- (g) Park space within the proposed project is a subject of serious shame.
- City standards require 3.35 acres of park. However, this project will provide only 1.38 acres, expecting to mitigate this huge deficiency by providing the remaining – required park space – somewhere else, outside of the project.
- 3-10
- Such a mitigation scheme is totally unreasonable. Park space is relevantly meaningful to inhabitants of this proposed project – only to the extent that it is properly sized and convenient. Buying park space somewhere else, likely so these developers can expand profit margins within this project -- will not serve to satisfy serious needs of this projects' dwellers for properly sized park space; such residents will plainly be sorely distressed by a park less than half of the size it should be (according to city standards).
- Mitigation is not reasonably applied in this circumstance, leaving the great majority of park space required by the proposed project, to be located at an unknown and likely, greatly inconvenient distance from the persons who need to use it. Are folk supposed to jump into motor vehicles and drive to park space being provided through such an adverse mitigation scheme?
- 3-11
- A point of support(?) has been raised, that this park will also be used by residents of the nearby portion of Spring Lake Specific Plan. A special "pass-through" element has been included within the proposed project, to expedite use of this already far too small park, by Spring Lake residents.

**Letter 3  
Cont'd**

Prudler Project Draft EIR; October 19, 2015; page 6 of 6

- 3-12 The proposed project's entire park space scenario is wholly unreasonable, with a cumulative nature of environmental effects / impacts which have not been addressed, analyzed or considered within the Draft EIR.
- 3-13 Park space of 3 acres, while deferring a third of an acre to another location, might have been reasonable – given good cause; but, the present situation of park space within the proposed project is obviously unreasonable, untenable and must be rejected.
- 3-14 (h) I incorporate by reference, as if fully set forth herein, prior *Yolo Sun* articles available on the internet (Jan. 24, 2014; Feb. 2, 2015; Sept. 28, 2015; Oct. 14, 2015) about the proposed project.

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BOBBY HARRIS

**LETTER 3: BOBBY HARRIS, RESIDENT**

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**Response to Comment 3-1**

See Response to Comment 2-5. The comment does not specifically address the adequacy of the Draft EIR. It should be noted that a representative of the County Fair Mall submitted a letter to the City in support of the development on December 23, 2014. The commenter's preference for a rezoning of the project site to support higher density development is noted.

**Response to Comment 3-2**

The comment states that the impacts of a higher density project on the County Fair Mall have not been addressed. CEQA requires impacts of the proposed project to be analyzed, which is a 186-unit single-family subdivision. According to CEQA Guidelines Section 15131(a), fiscal concerns are generally not required to be addressed under CEQA. Nevertheless, the commenter's concerns regarding future viability of the County Fair Mall will be forwarded to the City decision-makers for their consideration. See Response to Comment 2-5 regarding discussion of an Increased Density Alternative. The commenter has not provided substantial evidence in support of an assertion that development of the proposed project will have an adverse impact on the County Fair Mall.

**Response to Comment 3-3**

See Response to Comment 2-2. Questions related to the buildout of the approved Spring Lake Specific Plan (SLSP) are not environmental issues under the ambit of CEQA. The comment will be passed on to City decision-makers for their consideration.

**Response to Comment 3-4**

See Response to Comment 2-11.

**Response to Comment 3-5**

The comment does not address the adequacy of the Draft EIR and will be forwarded to the City decision-makers for their consideration.

**Response to Comment 3-6**

Policy T/LU-2 of the City's Climate Action Plan identifies that the City should "Recognize and implement the City's Urban Limit Line (ULL) ordinance by reevaluating residential land use densities, housing policies, and zoning to determine the potential for increased residential densities for infill sites, undeveloped land, and land zoned for commercial uses within the permanent ULL." The policy does not compel either the City or the applicant to develop the project site at a higher density than proposed by the project. The project site lies within the City's Urban Limit Line and the City has evaluated higher densities for the project site. As stated above, the Draft EIR discusses the fact that an increased density development at this location would

increase environmental impacts compared to the proposed project, a factor that the City decision-makers may consider alongside of the commenter's stated preferences.

**Response to Comment 3-7**

See Response to Comment 1-2.

**Response to Comment 3-8**

The Initial Study notes that the current General Plan is undergoing an update process merely to provide background information to the reader. In addition, the law does not require that the City complete the General Plan update process prior to approving the proposed project, as the City has not adopted a moratorium on development applications. The comment does not address the adequacy of the Draft EIR and will be forwarded to the City decision-makers for their consideration.

**Response to Comment 3-9**

See Response to Comment 3-8. The comment does not address the adequacy of the Draft EIR. The proposed project will require approval of a General Plan Amendment to redesignate the project site from the existing General Commercial to Low Density Residential.

**Response to Comment 3-10**

As required by Mitigation Measure XIV-1 of the Initial Study, the applicant/developer shall dedicate the required acreage of parkland or pay the appropriate Quimby Act fee, subject to approval by the City Community Development Department. Should the developer provide additional parkland, the parkland would be located on-site. Should the developer pay the appropriate Quimby Act fee, as permitted by City Ordinance, the fees would be used to provide or enhance parkland elsewhere within the City. The project site is located directly north of the Community and Senior Center and the Woodland Sports Park. The commenter's preference for on-site parks will be forwarded to the decision-makers for their consideration.

**Response to Comment 3-11**

The comment does not address the adequacy of the Draft EIR.

**Response to Comment 3-12**

See Response to Comment 3-10.

**Response to Comment 3-13**

See Response to Comment 3-10.

**Response to Comment 3-14**

The comment is a conclusionary statement that does not address the adequacy of the Draft EIR.

**Letter 4**



October 23, 2015; Page 1 of 4

From: Bobby Harris ([yolosun@gmail.com](mailto:yolosun@gmail.com))

To: City of Woodland, Community Development Department, 300 First Street, Woodland CA 95695

Re: Prudler Project Draft EIR (Supplementary Objections)

I'll raise several supplementary objections to append with my commentary document filed on October 21, 2015:

The site of the proposed project is the expansion site for County Fair Mall.

Though no longer perceived as expandable, County Fair Mall remains intrinsically connected to this site, currently because its future growth space has since evolved into a prominent, potential element of its conservation.

4-1

This relationship must be recognized and applied within land use decisions regarding this (expansion) site, especially in the contemporary moment, while the future viability / nature of the Mall is quite tenuous / uncertain, with existence of very substantial / significant environmental consequences related to these evolving conditions.

As indicated within my prior document of objections, there exists a genuinely valuable mixed-use contour / relationship between County Fair Mall and its former growth site. Such vital recognition / expression triggers the imperative need for a comprehensive analysis and evaluation of the potential influence of increased residential densities within this (expansion) site, alongside an examination regarding improved / intensified physical connectivity between these two, long associated parcels.

4-2

Limiting (to low) residential densities on this (expansion) site would result in significant and irreversible environmental effects, related to the future nature and viability of County Fair Mall. Increased density alternatives for any residential development of the proposed project site must thus be examined, analyzed and considered within the Draft EIR.

**Letter 4  
Cont'd**

October 23, 2015; Prudler Project (Supplementary Note); Page 2 of 4

- 4-3 Adjacent to the city's East Street Corridor Specific Plan (and should have been included within in it; why it is not, is strange), future development of this site has huge and undeniable effects upon such city planning efforts; these effects must be addressed, examined, analyzed and considered within the proposed project's Draft EIR.
- 4-4 Efficient, attractive and environmentally sustainable (pedestrian, etc.) access between County Fair Mall and increased density residential development upon this site would create a stronger 'neighborhood focus and identity,' presently lacking from the Mall's profile. Such a key dynamic would naturally reach into the nearby portion of Spring Lake Specific Plan.
- 4-4 North of the Mall, there exists state property (the county fairgrounds) which eliminates any creation of such a key commercial dynamic: close proximity.
- County Fair Mall (and by some good measure, civic interests) would greatly benefit from its ability to enhance its commercial scope through such a dynamic of 'neighborhood focus and identity,' since its days of being at the cutting edge of major local commerce have long waned / been eclipsed.
- 4-5 Accomplishing such important and comprehensive public and private benefits, demands that increased density residential alternatives to the proposed project be examined, analyzed and considered in a draft EIR; the current EIR entirely fails to address these fundamental city planning issues.
- 4-6 It seems that this 40 acre site was oddly (erroneously) left aside as irrelevant, when composition of the relevant (urban corridor) city specific plan was created, leaving it to crazily fall through the planning-cracks and appear in the distinctly unsuitable posture of now being proposed as the same sort of low density residential zoning, of which the city has quite tremendous oversupply -- as contrasted with the unique civic and private values clearly achievable (one way or another) upon this particular site.
- 4-7 Another example of this site falling through planning-cracks (of various sorts) is reflected by the fact that so much of my comment is directly relevant to basic issues of implementation of the city's Urban Limit Line Ordinance, consideration of which is unlawfully absent from this Draft EIR.

October 23, 2015; Prudler Project (Supplementary Note); Page 3 of 4

- 4-8 Persons eventually residing within this site are at walking distance from **both**, responsive commercial access **and** access to regional Yolo bus service (eliminating need to transfer from feeder-routes). Higher density residential development is obviously an **authentic value** for these specific planning circumstances and such value extends to environmental effects that are not addressed, examined, analyzed or considered in this Draft EIR.
- 4-9 When SACOG updates its "Blueprint" for sustainable regional communities, it might well be expected that this specific site would easily be targeted for the sort of higher-density transportation / commercial hub, which is so widely promulgated by "smart-growth" planning principles. Of course, presently, this site is not even considered by SACOG as legitimate "infill."
- 4-9 Something is plainly wrong with planning of the proposed project site being processed as "infill" -- outside of the contemporaneous General Plan (2015-2035) Update -- while it clearly represents such potential and important values, in terms of city sustainability policies of its Climate Action Plan (noted in initial document of objections), environmental values and options likely to become recognized by the updated SACOG "Blueprint."
- 4-10 These particular circumstances are environmentally pivotal; yet, because the proposed project's Draft EIR lacks a higher residential density alternative, there is within it no address, examination, analyses or consideration of these key environmental circumstances or effects; this Draft EIR is starkly deficient, attempting to circumvent adopted public environmental policy and processes at local, regional and state levels.
- 4-10 Dovetailed into these serious problems are general issues regarding the city's vast imbalance between low residential density housing / zoning and higher residential density zoning opportunities (noted at item (e) of document of objections). Continuation of this adverse housing density imbalance by the proposed project, surely means that higher residential density opportunities must eventually become located within other (perhaps less desirable or less environmentally sustainable) locations.
- 4-11 This circumstance illustrates the sound-planning reasoning adopted by local voters (2006) within the city's Urban Limit Line Ordinance, (lawful) reasoning which is being recklessly (unlawfully) ignored by this Draft EIR.

**Letter 4  
Cont'd**

October 23, 2015; Prudler Project (Supplementary Note); Page 4 of 4

**4-11  
Cont'd**

Environmental effects / impacts certainly occur as a result of contrasting / differential locations of lower and higher density residential developments.

This Draft EIR fails to address, examine, analyze or consider these serious, cumulative and irreversible environmental effects / impacts, caused by the proposed project's perpetuation / extension of an enormous disparity between low and high density residential development.

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BOBBY HARRIS

**LETTER 4: BOBBY HARRIS, RESIDENT**

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**Response to Comment 4-1**

See Response to Comment 3-2.

**Response to Comment 4-2**

See Response to Comments 2-16 and 3-2.

**Response to Comment 4-3**

The proposed project site, including the area containing both the off-site and on-site improvements, is not located within the East Street Corridor Specific Plan area. Therefore, the proposed land use amendment and rezone would not be bound by the planning efforts outlined in the East Street Corridor Specific Plan. In addition, the East Street Corridor Specific Plan does not provide guidance for the portion of East Street which would be modified as part of the proposed project. The aforementioned modifications are addressed by the proposed amendment to the Spring Lake Specific Plan.

**Response to Comment 4-4**

The comment does not address the adequacy of the Draft EIR. The commenter's preferences regarding the planning issues cited in the comment will be provided to the City's decision makers.

**Response to Comment 4-5**

See Response to Comment 2-16.

**Response to Comment 4-6**

The comment does not address the adequacy of the Draft EIR. See Response to Comment 4-4.

**Response to Comment 4-7**

See Response to Comment 3-6.

**Response to Comment 4-8**

See Response to Comment 2-16.

**Response to Comment 4-9**

See Response to Comment 2-11.

**Response to Comment 4-10**

See Response to Comment 2-5. In regards to low density housing and zoning, see Responses to Comments 1-2, 1-3, and 1-4.

**Response to Comment 4-11**

The comment summarizes prior concerns which have been addressed in the above responses.

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### 3. MITIGATION MONITORING AND REPORTING PLAN

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**3**

**MITIGATION MONITORING  
AND REPORTING PLAN**

**3.0 INTRODUCTION**

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Section 15097 of the California Environmental Quality Act (CEQA) requires all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a “mitigated negative declaration” or specified environmental findings related to environmental impact reports.

The following is the Mitigation Monitoring and Reporting Plan (MMRP) for the Prudler Tentative Subdivision Map Project. The intent of the MMRP is to prescribe and enforce a means for properly and successfully implementing the mitigation measures as identified within the Environmental Impact Report (EIR) for this project. Unless otherwise noted, the cost of implementing the mitigation measures as prescribed by this MMRP shall be funded by the applicant.

**3.1 COMPLIANCE CHECKLIST**

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The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the EIR for the Prudler Tentative Subdivision Map project prepared by the City of Woodland. This MMP is intended to be used by City staff and mitigation monitoring personnel to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the EIR prepared for the proposed project.

The Prudler Tentative Subdivision Map Project EIR presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation is defined by CEQA as a measure that:

- Avoids the impact altogether by not taking a certain action or parts of an action;
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or
- Compensates for the impact by replacing or providing substitute resources or environments.

The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of

construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by the City of Woodland. The table attached to this report identifies the mitigation measure, the monitoring action for the mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. The applicant will be responsible for fully understanding and effectively implementing the mitigation measures contained within the MMRP. The City of Woodland will be responsible for ensuring compliance.

During construction of the project, the City will assign an inspector who will be responsible for field monitoring of mitigation measure compliance. The inspector will report to the City Planning Division and will be thoroughly familiar with permit conditions and the MMRP. In addition, the inspector will be familiar with construction contract requirements, construction schedules, standard construction practices, and mitigation techniques. In order to track the status of mitigation measure implementation, field-monitoring activities will be documented on compliance monitoring report worksheets. The time commitment of the inspector will vary depending on the intensity and location of construction. Aided by the attached table, the inspector will be responsible for the following activities:

- On-site, day-to-day monitoring of construction activities;
- Reviewing construction plans and equipment staging/access plans to ensure conformance with adopted mitigation measures;
- Ensuring contractor knowledge of and compliance with the MMRP;
- Verifying the accuracy and adequacy of contract wording;
- Having the authority to require correction of activities that violate mitigation measures, securing compliance with the MMRP;
- Acting in the role of contact for property owners or any other affected persons who wish to register observations of violations of project permit conditions or mitigation. Upon receiving any complaints, the inspector shall immediately contact the construction representative. The inspector shall be responsible for verifying any such observations and for developing any necessary corrective actions in consultation with the construction representative and the City of Woodland;
- Obtaining assistance as necessary from technical experts in order to develop site-specific procedures for implementing the mitigation measures; and
- Maintaining a log of all significant interactions, violations of permit conditions or mitigation measures, and necessary corrective measures.

### **3.2 MITIGATION MONITORING AND REPORTING PLAN**

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The following table indicates the mitigation measure number, the impact the measure is designed to address, the measure text, the monitoring agency, implementation schedule, and an area for sign-off indicating compliance.

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |   |   |   |          |
|---|---|---|---|---|----------|
| Impact Number   | Impact  | Mitigation Measure  | Monitoring Agency   | Implementation Schedule                           | Sign-off |
| <b>4.2 Transportation and Circulation</b>   |   |   |   |   |          |
| 4.2-3   | Alternative transportation facilities.  | 4.2-3 <i>Prior to approval of Improvement Plans, the project applicant shall contribute the fair share fee towards providing transit service to the project site. The applicant's fair share contribution shall be determined by the City of Woodland and YCTD.</i>   | Community Development Department<br><br>Yolo County Transportation District | Prior to approval of Improvement Plans            |          |
| 4.2-6   | Alternative transportation facilities under cumulative conditions.  | 4.2-6 <i>Implement Mitigation Measure 4.2-3</i>   | See Mitigation Measure 4.2-3  | See Mitigation Measure 4.2-3                      |          |
| <b>Initial Study</b>  |   |   |   |   |          |
| I-d   | Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | I-1 <i>A detailed lighting plan shall be submitted for the review and approval by the Community Development Department and the Engineering Department in conjunction with the project improvement plans. The plan shall show, at minimum, the locations (both ground and wall mounted), height, and design of shielded light fixtures ensuring that all on-site lighting is directed within the project site and does not illuminate adjacent properties. A photometric plan shall also be submitted to the Community Development Department for review and approval.</i> | Community Development Department<br><br>Engineering Department              | In conjunction with the project Improvement Plans |          |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |  |                                  |   |                 |
|---|---|--|----------------------------------|---|-----------------|
| <b>Impact Number</b>  | <b>Impact</b>   | <b>Mitigation Measure</b>  | <b>Monitoring Agency</b>         | <b>Implementation Schedule</b>  | <b>Sign-off</b> |
| IV-a,b  | Have a substantial adversely effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | <p><i>IV-1 If construction is expected to occur during the raptor nesting season (January 1 to October 31), then no later than 30 days prior to the initiation of construction activities, a pre-construction survey shall be performed by a qualified biologist to determine if active raptor nests are present within the boundaries of the site or within 500 feet of said boundaries. The survey shall be conducted on-site as well as in any off-site improvement areas. If active raptor nests are not found on or within 500 feet of the phase area, further mitigation is not necessary. In addition, if construction activities are proposed to occur during the non-breeding season (November 1 to December 31), a survey is not required and further studies are not necessary. However, if active raptor nests are found on or within 500 feet of the project site, construction activities shall not occur within 500 feet of any active raptor nests until the young have fledged or until the biologist has determined that the nest is not active any longer. The results of the pre-construction surveys must be submitted to the Community Development Department prior to initiation of construction.</i></p> <p><i>It should be noted that extensive buffers, such as those recommended for nesting raptors, are not necessary for nesting avian species</i></p> | Community Development Department | No later than 30 days prior to the initiation of construction activities, if construction is expected to occur during the raptor nesting season (January 1 to October 31) |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |  |   |                                  |                                |                 |
|---|--|---|----------------------------------|--------------------------------|-----------------|
| <b>Impact Number</b>  | <b>Impact</b>  | <b>Mitigation Measure</b>   | <b>Monitoring Agency</b>         | <b>Implementation Schedule</b> | <b>Sign-off</b> |
|   |  | <i>protected by the Migratory Bird Treaty Act. Depending on the bird species, site conditions, and the proposed construction activities near an active nest, a smaller buffer could be prescribed, as determined by the biologist.</i>  |                                  |                                |                 |
| IV-e  | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <p>IV-2 <i>Prior to grading permit, the applicant shall prepare and submit a tree mitigation plan for review and approval by the Community Development Department. The plan shall include, but not be limited to the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Grade cuts within the drip line of a tree shall be maintained at less than 20% of the critical root zone area. Grade cuts should be supervised by the Project Arborist;</i></li> <li>• <i>If grade fills exceed 1 foot in depth up to 20% of the critical root zone area aeration systems may serve to mitigate the presence of fill materials;</i></li> <li>• <i>If grade fills are built on two or three sides of a tree drainage away from the critical root zone of the tree shall be provided;</i></li> <li>• <i>Structural encroachments shall be evaluated and the appropriate measures taken;</i></li> <li>• <i>Where possible, dry utilities should be routed on the opposite side of the street from tree locations;</i></li> </ul> | Community Development Department | Prior to grading permit        |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |               |   |                                  |                                |                 |
|---|---------------|---|----------------------------------|--------------------------------|-----------------|
| <b>Impact Number</b>  | <b>Impact</b> | <b>Mitigation Measure</b>   | <b>Monitoring Agency</b>         | <b>Implementation Schedule</b> | <b>Sign-off</b> |
|   |               | <ul style="list-style-type: none"> <li>• <i>Wet utility locations shall be carefully considered and boring may be an option to reduce impact on trees from wet utilities; and</i></li> <li>• <i>Street and hardscape construction shall be evaluated and aeration systems shall be used, where appropriate, to mitigate impacts.</i></li> </ul> <p>IV-3 <i>The applicant shall comply with the Tree Plan approved by the Parks and Recreation Commission and the Urban Forestry Subcommittee, which includes the following conditions:</i></p> <ul style="list-style-type: none"> <li>• <i>The applicant is required to provide 301, 15-gallon size replacement trees based on the removal of 35 trees within the proposed right-of-way along East Street, resulting in a total of 904 inches at diameter breast height (DBH) of trees removed and a replacement requirement of two trees for every 6 inches of trees removed. This may be modified if the removal of trees not previously identified in the Tree Report is required.</i></li> <li>• <i>The replacement trees are in addition to those trees required as part of project approval per the City's Landscaping Ordinance and</i></li> </ul> | Community Development Department | During construction            |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>         PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |               |  |   |                                |                 |
|--|---------------|--|---|--------------------------------|-----------------|
| <b>Impact Number</b>   | <b>Impact</b> | <b>Mitigation Measure</b>  | <b>Monitoring Agency</b>                | <b>Implementation Schedule</b> | <b>Sign-off</b> |
|  |               | <p><i>Community Design Standards.</i></p> <ul style="list-style-type: none"> <li>• <i>The Tree Plan shall be approved upon approval of the project, including the proposed roadway alignment included in the Tree Plan;</i></li> <li>• <i>Should the roadway alignment for the project change in a manner that affects additional trees, the applicant shall submit a revised Tree Plan for recommendation by the City staff;</i></li> <li>• <i>A final tree planting plan shall be submitted that specifies the exact location of all replacement trees, or in-lieu fees shall be submitted;</i></li> <li>• <i>Trees proposed for removal shall not be removed until the project has been approved by the City and a grading permit has been issued; and</i></li> <li>• <i>The applicant shall conduct a public relations effort, including professionally-prepared signage to announce the planned tree removal and replacement. The signs shall include the tree removal and replacement information, a schedule, and an artist's rendering of the final East Street design.</i></li> </ul> |   |                                |                 |
|  |               | <p><i>IV-4 Tree preservation and/or removal must be in compliance with Woodland City Code 20A.</i></p>   | <p>Community Development Department</p> | <p>During construction</p>     |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |  |   |                                    |                 |
|---|---|--|---|------------------------------------|-----------------|
| <b>Impact Number</b>  | <b>Impact</b>   | <b>Mitigation Measure</b>  | <b>Monitoring Agency</b>                                    | <b>Implementation Schedule</b>     | <b>Sign-off</b> |
| V-b-d   | Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature? Disturb any human remains, including those interred outside of formal cemeteries. | <i>V-1(a) Prior to Improvement Plan approval, the plans shall indicate (via notation on the improvement plans) that if historic and/or cultural resources, or human remains are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the Applicant/Developer shall immediately notify the Community Development Department of the discovery. In such case, the Applicant/Developer shall be required, at their expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery shall not be allowed until the proceeding steps have been taken, per the approval by the Community Development Department.</i> | Community Development Department                            | Prior to Improvement Plan approval |                 |
|   |   | <i>V-1(b) Pursuant to State Health and Safety Code §7050.5 (c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Yolo County Coroner shall be contacted</i>  | Community Development Department<br><br>Yolo County Coroner | During construction                |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |  |  |   |                 |
|---|---|--|--|---|-----------------|
| <b>Impact Number</b>  | <b>Impact</b>   | <b>Mitigation Measure</b>  | <b>Monitoring Agency</b>                           | <b>Implementation Schedule</b>                    | <b>Sign-off</b> |
|   |   | <i>immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place within the immediate vicinity of the find until the identified appropriate actions have been implemented.</i>  | Native American Heritage Commission                |   |                 |
| VI-ai-iii,c,d   | Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:<br>Rupture of a known earthquake fault as delineated on the most recent Alquist - Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | VI-1<br><i>All grading and foundation plans for the development designed by the project Civil and Structural Engineer must be reviewed and approved by the City Engineer and Community Development Department prior to issuance of grading and building permits. The Plans shall ensure that UBC standards and all geotechnical recommendations specified in the geotechnical report for the project site are properly incorporated and utilized in design, including, but not limited to, the following:</i><br><br><ul style="list-style-type: none"> <li>• <i>Site preparation shall include the clearance and appropriate removal of any underground structures such as irrigation piping and agricultural wells, any utilities to be relocated and abandoned, debris, trees, and</i></li> </ul> | City Engineer and Community Development Department | Prior to issuance of grading and building permits |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |   |                          |                                |                 |
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| <b>Impact Number</b>  | <b>Impact</b>   | <b>Mitigation Measure</b>   | <b>Monitoring Agency</b> | <b>Implementation Schedule</b> | <b>Sign-off</b> |
|   | Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <p><i>vegetation. Site preparation should be accomplished in accordance with the recommendations of the geotechnical report as well as the Earthwork Specifications provided in Appendix B of the report and a representative from the geotechnical consultant's office should be present during site preparation and grading operations to observe and test the fill to verify compliance with the recommendations;</i></p> <ul style="list-style-type: none"> <li>• <i>Strippings shall not be used in general fill construction, but may be used in landscaped areas (such as backyards), provided they are kept at least five feet from the building pads and pavements, moisture conditioned and compacted;</i></li> <li>• <i>Due to the relatively loose nature of the soils, the processed soils shall be moisture conditioned to at least the optimum moisture content and uniformly compacted to at least 90 percent of the ASTM D1557 maximum dry density;</i></li> <li>• <i>Native soils shall be used as backfill for utility trenches located within the building footprint and extending at least five feet beyond the perimeter foundations to minimize water</i></li> </ul> |                          |                                |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>                 PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |               |   |                          |                                |                 |
|--|---------------|---|--------------------------|--------------------------------|-----------------|
| <b>Impact Number</b>   | <b>Impact</b> | <b>Mitigation Measure</b>   | <b>Monitoring Agency</b> | <b>Implementation Schedule</b> | <b>Sign-off</b> |
|  |               | <p><i>transmission beneath the structure. In addition, trench backfill materials and compaction requirements shall conform to current City of Woodland and/or County of Yolo Standards, latest edition;</i></p> <ul style="list-style-type: none"> <li>• <i>All continuous foundations shall maintain a minimum width of 12 inches, and spread foundations shall be at least 18 inches in plan dimension;</i></li> <li>• <i>Areas to receive exterior concrete flatwork (i.e., sidewalks, patios, etc.) should be uniformly compacted and moisture conditioned to at least the optimum moisture, immediately prior to the placement of the concrete. Proper moisture conditioning of the subgrade soils is considered essential to the performance of exterior flatwork;</i></li> <li>• <i>The ground adjacent to the buildings should be sloped away from the structures at a gradient no less than two percent for a distance of at least five feet, where possible;</i></li> <li>• <i>Materials quality and construction of the structural section of the pavement shall conform to the applicable provisions of the Caltrans Standard Specifications and the City of</i></li> </ul> |                          |                                |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |  |   |                          |                                       |                 |
|---|--|---|--------------------------|---------------------------------------|-----------------|
| <b>Impact Number</b>  | <b>Impact</b>  | <b>Mitigation Measure</b>   | <b>Monitoring Agency</b> | <b>Implementation Schedule</b>        | <b>Sign-off</b> |
|   |  | <p><i>Woodland Standard Specifications and Details, latest editions; and</i></p> <ul style="list-style-type: none"> <li>• <i>Geotechnical testing and observation during construction shall be obtained to verify compliance with the geotechnical report and the project plans and specifications.</i></li> </ul>  |                          |                                       |                 |
| VI-b  | Result in substantial soil erosion or the loss of topsoil? | <p>VI-2 <i>Prior to issuance of a grading permit, the project applicant shall submit, for the review and approval by the City Engineer, an erosion control plan that will utilize standard construction practices to limit the erosion effects during construction of the proposed project. Measures could include, but are not necessarily limited to the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Hydro-seeding;</i></li> <li>• <i>Placement of erosion control measures within drainageways and ahead of drop inlets;</i></li> <li>• <i>The temporary lining (during construction activities) of drop inlets with “filter fabric” (a specific type of geotextile fabric);</i></li> <li>• <i>The placement of straw wattles along slope contours;</i></li> <li>• <i>Directing subcontractors to a single designation “wash-out” location (as opposed to allowing them to wash-out in any location they desire);</i></li> <li>• <i>The use of siltation fences; and</i></li> </ul> | City Engineer            | Prior to issuance of a grading permit |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |  |  |                   |                                       |          |
|---|--|--|-------------------|---------------------------------------|----------|
| Impact Number   | Impact   | Mitigation Measure   | Monitoring Agency | Implementation Schedule               | Sign-off |
|   |  | <ul style="list-style-type: none"> <li>• <i>The use of sediment basins and dust palliatives.</i></li> </ul>  |                   |                                       |          |
| IX-a,f  | Violate any water quality standards or waste discharge requirements?<br>Otherwise substantially degrade water quality?   | <i>IX-1 Prior to the issuance of a grading permit, the developer shall obtain and comply with the NPDES general construction permit, including the submittal of a Notice of Intent (NOI) and associated fee to the SWRCB, and the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which includes construction BMPs, consistent with the Stormwater Control Plan, to be submitted to the City Engineer for review.</i>  | City Engineer     | Prior to issuance of a grading permit |          |
| XI-c-e  | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner | <i>IX-2 Prior to the recordation of final maps, the applicant/developer shall demonstrate to the satisfaction of the City that discharge of peak flow from the project site for the two-year frequency storm event will maintain or reduce predevelopment downstream erosion potential and protect stream habitat. The applicant shall provide the appropriate calculations and site-specific design-measures pursuant to the requirements of the City's MS4 permit and the Stormwater Management Program.</i> | City Engineer     | Prior to recordation of final maps    |          |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |  |   |   |                 |
|---|---|--|---|---|-----------------|
| <b>Impact Number</b>  | <b>Impact</b>   | <b>Mitigation Measure</b>  | <b>Monitoring Agency</b>  | <b>Implementation Schedule</b>                                | <b>Sign-off</b> |
|   | which would result in flooding on- or off-site?<br>Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to control? |  |   |   |                 |
| XIII-b  | Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?  | <p><i>XII-1 During construction, the property owner/contractor shall designate a disturbance coordinator and conspicuously post this person's phone number around the project site. The disturbance coordinator will receive all public complaints about construction vibration disturbances and will be responsible for determining the cause of the complaint, and implement feasible measures to be taken to alleviate the problem. The disturbance coordinator shall immediately report all complaints and corrective measures taken to the Community Development Department.</i></p> <p><i>XII-2 The pre-existing condition of buildings within a 100-foot radius will be recorded in order to evaluate damage from construction activities. Fixtures and finishes within a 100-foot radius of construction activities will be documented (photographically and in writing) prior to construction. If there is any documented</i></p> | <p>Community Development Department</p> <p>Community Development Department</p> | <p>During any construction</p> <p>During any construction</p> |                 |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |   |  |                                  |                                    |          |
|---|---|--|----------------------------------|------------------------------------|----------|
| Impact Number   | Impact  | Mitigation Measure   | Monitoring Agency                | Implementation Schedule            | Sign-off |
|   |   | <p><i>damage resulting from project construction activities, the project proponent will be required to repair it back to its pre-existing condition to the satisfaction of the Community Development Department.</i></p> <p><b>XII-3</b> <i>Should damage occur despite the above mitigation measures, construction operations shall be halted and the problem activity shall be identified. A qualified engineer shall establish vibration limits based on soil conditions and the types of buildings in the immediate area. The contractor shall monitor the buildings throughout the remaining construction period and follow all recommendations of the qualified engineer to repair any damage that has occurred to the pre existing state, to the satisfaction of the Community Development Department, and to avoid any further structural damage</i></p> | Community Development Department | During any construction            |          |
| XII-d   | A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <p><b>XII-4</b> <i>Construction activities shall adhere to the requirements of the City of Woodland with respect to hours of operation, muffling of internal combustion engines, and other factors which affect construction noise generation and the effects on noise-sensitive land uses.</i></p>  | Community Development Department | During any construction            |          |
| XIV-d   | Would the project result in substantial adverse physical impacts associated with the  | <p><b>XIV-1</b> <i>Prior to the recordation of final maps, the applicant/developer shall be required to dedicate the required acreage of parkland or pay the appropriate Quimby Act, subject to</i></p>  | Community Development Department | Prior to recordation of final maps |          |

| <b>MITIGATION MONITORING AND REPORTING PLAN<br/>         PRUDLER TENTATIVE SUBDIVISION MAP PROJECT</b> |  |  |                              |                                |                 |
|--|--|--|------------------------------|--------------------------------|-----------------|
| <b>Impact Number</b>   | <b>Impact</b>  | <b>Mitigation Measure</b>                                | <b>Monitoring Agency</b>     | <b>Implementation Schedule</b> | <b>Sign-off</b> |
|  | provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks? | <i>approval by the Community Development Department.</i> |                              |                                |                 |
| XV-a,b   | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Does the project include recreational facilities or require the construction or expansion of recreational facilities           | <i>XV-1 Implement Mitigation Measure XIV-1.</i>          | See Mitigation Measure XIV-1 | See Mitigation Measure XIV-1   |                 |



