Yolo County General Plan

Alternatives evaluation

The County of Yolo | December 6, 2006

DESIGN, COMMUNITY & ENVIRONMENT

TABLE OF CONTENTS

Appendices

List of Figures

List of Tables

EXECUTIVE SUMMARY

This report evaluates the four alternatives and other development scenarios under consideration for the Yolo County General Plan Update with respect to the following issues:

- Economics
  - Market Viability
  - Community Services
  - Fiscal Impacts
- Infrastructure
  - Water
  - Wastewater
  - Storm Drainage
  - Flooding
- Transportation
  - Proximity to Freeways
  - Freeways and Regional Roadways
  - Transit Service
  - Bicycle and Pedestrian Circulation
- Environment
  - Agriculture
  - Biological Resources
  - Proximity to Airports
- Smart Growth
  - Preservation of Open Space
  - Compact Development and Healthy Design

The following tables summarize the evaluation for each location in the county where development would occur under the four alternatives and the other development scenarios. Evaluation of each issue is scored on a five-point scale:

- a double negative (ΘΘ) indicates the greatest negative ranking.
- a single negative (Θ) indicates a negative ranking.
- neutral (Ø) indicates neither positive nor negative ranking.

- a positive (⊕) indicates a positive ranking.
- a double positive (⊕⊕) indicates the greatest positive ranking.

The methodology used in the evaluation, including the scoring criteria, are described in detail in Appendix B.

TABLE I **ALTERNATIVES EVALUATION SUMMARY -- CLARKSBURG**

Issue	Explanation	Alternatives			
		1	2	3	4
Economics					
Market Viability	Considering the regional housing pressures, 22 units and 1 acre of local-serving retail would be viable.	⊕	⊕	⊕	⊕
Community Services	Existing Clarksburg Library; but not enough growth to support additional community services.	∅	∅	∅	∅
Fiscal Impacts	Above average home values and property tax allocations plus the 1 acre of retail yield fiscal surpluses.	⊕	⊕	⊕	⊕
Infrastructure					
Water	Feasible to continue to serve with private wells.	∅	∅	∅	∅
Wastewater	Feasible to continue to serve with private septic systems.	∅	∅	∅	∅
Storm Drainage	Feasible to serve with roadside ditches.	∅	∅	∅	∅
Flooding	Clarksburg is protected by levees; currently mapped outside of the 100-year floodplain.	Θ	Θ	Θ	Θ
Transportation					
Proximity to Freeways	Clarksburg is within four miles of Interstate 5, via the Freeport Bridge.	⊕	⊕	⊕	⊕
Regional Roadways	No improvements to roadways needed under all alternatives.	∅	∅	∅	∅
Transit Service	The amount of new development projected under the alternatives would not have an effect on transit ridership or require new transit service.	∅	∅	∅	∅
Bicycle and Pedestrian Circulation	Limited facilities exist currently. The small amount of development under the alternatives would have no effect on Clarksburg's bicycle and pedestrian facilities.	∅	∅	∅	∅
Environment					
Agriculture	Clarksburg is surrounded by Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating. Same small amount of infill growth in all alternatives, some on Prime Farmland, but all within the current town boundary on land already designated for development.	∅	∅	∅	∅
Biological Resources	Infill growth would not likely affect habitat.	∅	∅	∅	∅

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE I **ALTERNATIVES EVALUATION SUMMARY – CLARKSBURG CONTINUED**

Issue	Explanation	Alternatives			
		1	2	3	4
Environment					
Airport Land Use Conflicts	Within two miles of Borges-Clarksburg Airport, but only a single daily plane lands there.	⊕	⊕	⊕	⊕
Smart Growth					
Preservation of Open Space	Projected growth to be built on infill parcels, no loss of open space resources.	∅	∅	∅	∅
Compact, Healthy Development	Projected growth to be built on infill parcels, strengthening existing community.	⊕	⊕	⊕	⊕

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 2 **ALTERNATIVES EVALUATION SUMMARY -- DUNNIGAN**

Issue	Explanation	Alternatives				
		1	2	3	4	Proposal
Economics						
Market Viability						
Residential	Due to Dunnigan's location and regional growth, the amount of housing proposed in all alternatives would be feasible from a market prospective (Alt 1 has 173 units; Alt 2 has 1,273 units; Alt 3 has 7,000 units; Alt 4 has 7,000 units). The housing in Dunnigan Hills (10,000 units) would be viable in the market if unincorporated county growth were concentrated in Dunnigan.	⊕⊕	⊕	⊕	⊕	⊕
Commercial	Neither the small population in Alternative 1 and 2, nor freeway drive-by traffic could support the amount of retail in both alternatives. Alternatives 3 and 4 far exceed the market demand. Proposed Dunnigan Hills development over-estimates the market.	Θ	Θ	ΘΘ	ΘΘ	ΘΘ
Industrial	Warehousing and distribution activities would be feasible in Alternatives 1 and 2. Alternative 3 exceeds the market. Alternative 4 would be easily absorbed, but also an under-supply. Proposed Dunnigan Hills development is an over-estimation of market.	⊕	⊕	Θ	∅	Θ
Community Services	Alternatives 1 and 2 include significant growth, but not enough to support new services. Alternatives 3, 4 and the proposed Dunnigan Hills development support new services	Θ	Θ	⊕	⊕	⊕
Fiscal Impacts	Alternatives 3, 4 and the proposed Dunnigan Hills development have the most beneficial fiscal impact.	⊕	⊕	⊕⊕	⊕⊕	⊕⊕
Infrastructure						
Water	Feasible to continue to serve with private wells in Alternative 1. In all other alternatives and the proposed Dunnigan Hills development, feasible to serve with a new community water system.	∅	∅	∅	∅	∅
Wastewater	Feasible to continue to serve with private septic systems in Alternative 1. In all other alternatives and the proposed Dunnigan Hills development, feasible to serve with a new community wastewater system.	∅	∅	∅	∅	∅

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 2 **ALTERNATIVES EVALUATION SUMMARY – DUNNIGAN CONTINUED**

Issue	Explanation	Alternatives				
		1	2	3	4	Proposal
Infrastructure						
Storm Drainage	Feasible to continue to serve with roadside ditches in Alternative 1. In all other alternatives and the proposed Dunnigan Hills development, feasible to serve with a new storm drain system.	∅	∅	∅	∅	∅
Flooding	Risk of some flooding along Dunnigan and Buckeye Creeks in all alternatives; proposed Dunnigan Hills development could, in addition, have flooding from Bird and Oat creeks.	Θ	Θ	Θ	Θ	Θ
Transportation						
Proximity to Freeways	Dunnigan is on Interstate 5 and within four miles of the junction to Interstate 505.	⊕⊕	⊕⊕	⊕⊕	⊕⊕	⊕⊕
Regional Roadways	No improvements needed under Alternatives 1, 2 and 4. Alternative 3 could require widening I-5. Proposed Dunnigan Hills development would require widening I-5.	∅	∅	Θ	∅	ΘΘ
Transit Service	Alternative 1 would rely on existing service. Alternative 2 would meet minimum thresholds for viable intercity fixed route service, but would require substantial investment to do so. Alternatives 3 and 4 would meet minimum thresholds for viable local and intercity fixed route service, but would require substantial investment to do so. Dunnigan Hills development would not meet minimum thresholds for viable local and intercity fixed route service. None of the alternatives including the proposed Dunnigan Hills development project densities that would promote transit ridership.	∅	Θ	Θ	Θ	ΘΘ
Bicycle and Pedestrian Circulation	Alternative 1 would provide limited funding from development. Alternatives 2 and 4 would provide some funding from development. Alternative 4 would provide moderate funding from development. Alternative 3 and the Dunnigan Hills development would provide opportunities for bicycle/pedestrian facilities due to densities and/or total number of units, but the Dunnigan Hills development would require the largest investment compared to the alternatives.	∅	∅	⊕	⊕	⊕

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

×

TABLE 2 **ALTERNATIVES EVALUATION SUMMARY – DUNNIGAN CONTINUED**

Issue	Explanation	Alternatives				
		1	2	3	4	Proposal
Environment						
Agriculture	Flat areas east and south of Dunnigan are Prime Farmland, and Class 2 and 3 soils. Lands in the Dunnigan Hills to the west are of lesser quality, though the county's top ten agricultural commodities are still grown there. Farmland conversion under the four alternatives would range from about 100 acres in Alternative 1 to 1,700 acres in Alternative 3. The proposed Dunnigan Hills development would convert far more than any of the alternatives, about 5,700 acres.	Θ	Θ	ΘΘ	ΘΘ	ΘΘ
Biological Resources	Dunnigan named Critical Habitat for California tiger salamander.	ΘΘ	ΘΘ	ΘΘ	ΘΘ	ΘΘ
Airport Land Use Conflicts	Dunnigan is not within two miles of an airport.	⊕	⊕	⊕	⊕	⊕
Smart Growth						
Preservation of Open Space	All alternatives have some development outside of existing town limits. Alternative 3 is approximately 1,700 acres and the proposed Dunnigan Hills development is approximately 5,770 acres.	Θ	Θ	ΘΘ	Θ	ΘΘ
Compact, Healthy Development	Alternative 1 has low density, but built on infill sites. Alternatives 2, 3 and 4 have moderate densities (eight units per acre) built outside of town limits; Dunnigan Hills development is low density (three units per acre).	Θ	Θ	Θ	Θ	ΘΘ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 3 **ALTERNATIVES EVALUATION SUMMARY – ESPARTO**

Issues	Explanation	Alternatives			
		1	2	3	4
Economics					
Market Viability					
Residential	As evidenced by recent housing construction trends and with continued regional housing pressures, the residential development in all alternatives would be market-feasible.	⊕	⊕	⊕	⊕
Retail	The small local population would not support the amounts of retail development in any of the alternatives, even considering growth in nearby Madison. Esparto does not meet locational criteria for highway-serving retail. A very small amount of opportunistic retail related to agri-tourism could likely be supported.	Θ	Θ	Θ	Θ
Office	The small amount of office space in Alternative 2 would be market-feasible, but not that in Alternatives 1, 3 or 4.	Θ	⊕	Θ	Θ
Lodging	Esparto is not likely to experience much, if any, demand for lodging in Alternative 4, due to its distance from the freeway. Not applicable in Alternatives 1, 2 and 3.	N/A	N/A	N/A	Θ
Industrial	The amount of industrial in Alternatives 1 and 3, likely related to agriculture, would be market-supportable, but not that in Alternatives 2 or 4.	⊕	Θ	⊕	Θ
Community Services	Existing public schools and library, but not enough new growth for new services.	∅	∅	∅	∅
Fiscal Impacts	Higher home values and above average county property tax allocations make residential development in Esparto a net financial loser, which could not be offset by the limited amount of retail space supported by the market. More residential development in Alternatives 2 and 4 would result in greater General Fund deficits.	⊕	⊕	⊕	⊕
Infrastructure					
Water	Feasible to serve with major upgrades to the existing community water system in all alternatives.	∅	∅	∅	∅
Wastewater	Feasible to serve with major upgrades to the existing community sewer system in all alternatives.	∅	∅	∅	∅
Storm Drainage	Feasible to serve with major storm drain system upgrades in all alternatives.	∅	∅	∅	∅
Flooding	The northeast part of Esparto is within the 100-year floodplain. Future growth under all alternatives is mostly outside the 100-year floodplain.	Θ	Θ	Θ	Θ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 3 **ALTERNATIVES EVALUATION SUMMARY – ESPARTO CONTINUED**

Issues		Explanation	Alternatives			
			1	2	3	4
Transportation						
	Proximity to Freeways	Esparto is within four miles of Interstate 505.	⊕	⊕	⊕	⊕
	Regional Roadways	Some intersection improvements needed under Alternatives 1 and 3. SR 16 would need to be widened to four lanes under Alternatives 2 and 4.	Θ	ΘΘ	Θ	ΘΘ
	Transit Service	All alternatives could be accommodated by existing fixed route service. None of the alternatives would promote transit ridership.	∅	∅	∅	∅
	Bicycle and Pedestrian Circulation	The small amount of development under alternatives 1 and 3 would have no effect on Esparto's bicycle and pedestrian facilities. Alternatives 2 and 4 would provide some funding from development.	∅	⊕	∅	⊕
Environment						
	Agriculture	Esparto is surrounded by Prime Farmland, Class 1 and 2 soils and soils with a mix of Grade 1 and Grade 4 Storie Index rating, with lesser quality soils to the southwest. Almonds are grown at the northwest edge of the town. Alternatives 2 and 4, at about 350 acres, would convert considerably more farmland than Alternatives 1 and 3.	Θ	ΘΘ	Θ	ΘΘ
	Biological Resources	Esparto is habitat for special status species, but common throughout the county.	∅	∅	∅	∅
	Airport Land Use Conflicts	Esparto is not within two miles of an airport.	⊕	⊕	⊕	⊕
Smart Growth						
	Preservation of Open Space	A majority of new housing would be built outside of town limits, on open space resources.	ΘΘ	ΘΘ	ΘΘ	ΘΘ
	Compact, Healthy Development	New housing built at moderate densities, from five to eight units per acre	⊕	⊕	⊕	⊕

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 4 **ALTERNATIVES EVALUATION SUMMARY -- KNIGHTS LANDING**

Issue	Explanation	Alternatives			
		1	2	3	4
Economics					
Market Viability					
Residential	With continued housing pressures on Woodland and the regaion and the greater affordability of Knights Landing, the residential development in all alternatives would be market-feasible.	⊕	⊕	⊕	⊕
Retail	The local population would support the small amount of retail development in Alternatives 1 and 3, but is not enough to support the amounts in Alternatives 2 and 4. Knights Landing does not meet locational criteria for highway-serving or opportunistic retail.	⊕	⊖	⊕	⊖
Office	The small amount of office space in Alternatives 1, 2 and 3 would be market-feasible.	⊕	⊕	⊕	n/a
Community Services	Existing public school and library; not enough new growth to support new services	∅	∅	∅	∅
Fiscal Impacts	Lower house values and low county property tax allocations make residential development in Knights Landing a net financial loser, which could not be offset by the limited amount of retail space supported by the market. More residential development in Alternatives 2 and 4 would result in greater General Fund deficits.	⊖	⊖⊖	⊖	⊖⊖
Infrastructure					
Water	Feasible to serve with major upgrades to the existing community water system in all alternatives.	∅	∅	∅	∅
Wastewater	Feasible to serve with major upgrades to the existing community sewer system in all alternatives.	∅	∅	∅	∅
Storm Drainage	Feasible to serve with major upgrades to the existing community storm drainage system in all alternatives.	∅	∅	∅	∅
Flooding	Knights Landing is protected by levees of unknown stability.	⊖	⊖	⊖	⊖
Transportation					
Proximity to Freeways	Knights Landing is farther than four miles from a freeway.	⊖	⊖	⊖	⊖
Regional Roadways	No improvements to roadways needed under all alternatives.	∅	∅	∅	∅
Transit Service	All alternatives would rely on existing fixed route services. None of the alternatives would promote transit ridership.	∅	∅	∅	∅
Bicycle and Pedestrian Circulation	Alternatives 1 and 3 would provide limited funding from development. Alternatives 2 and 4 would provide some funding from development.	∅	⊕	∅	⊕

⊖⊖ Greatest negative ranking ⊖ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 4 **ALTERNATIVES EVALUATION SUMMARY -- KNIGHTS LANDING CONTINUED**

Issue	Explanation	Alternatives			
		1	2	3	4
Environment					
Agriculture	Knights Landing is surrounded by Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating. Alternatives 1 and 3 are mostly infill, with 12 acres of Prime Farmland urbanized. Alternatives 2 and 4 convert 178 and 275 acres of Prime Farmland, respectively.	∅	ΘΘ	∅	ΘΘ
Biological Resources	There has been a known sighting of Swainson's hawk near, but not in, Knights Landing. In Alternatives 1 and 3, development is infill only. Alternatives 2 and 4 have development at the edge of town where it could affect habitat.	∅	Θ	∅	Θ
Airport Land Use Conflicts	Knights Landing is not within two miles of an airport.	⊕	⊕	⊕	⊕
Smart Growth					
Preservation of Open Space	Alternatives 1 and 3 growth would be infill. Alternatives 2 and 4 include growth at the edge of town.	⊕	ΘΘ	⊕	ΘΘ
Compact, Healthy Development	Alternatives 1 and 3 include infill growth, which would is considered "compact growth" for this analysis. Alternatives 2 and 4 include growth at the edge of town, which is not considered "compact growth."	⊕	Θ	⊕	Θ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 5 **ALTERNATIVES EVALUATION SUMMARY -- MADISON**

Issue	Explanation	Alternatives			
		1	2	3	4
Economics					
Market Viability					
Residential	Madison's location near the freeway makes the residential growth in all alternatives market-feasible. 800 additional units in Alternative 2 could be absorbed by current market conditions.	⊕	⊕	⊕	⊕
Retail	Only a small amount of retail, like in Alternatives 1 and 3 is market-feasible, if oriented to the freeway.	⊕	Θ	⊕	Θ
Office	Not applicable.	n/a	Θ	n/a	Θ
Community Services	Not enough new growth to support new community services.	Θ	Θ	Θ	Θ
Fiscal Impacts	Lower home values make residential development in Madison a net fiscal loser, which could not be offset by the small amount of retail supported by the market. The fiscal deficit to the county would be worse with more residential development in Alternative 2.	Θ	ΘΘ	Θ	Θ
Infrastructure					
Water	Feasible to serve with minor expansion of the existing community water system in all alternatives.	∅	∅	∅	∅
Wastewater	Feasible to serve with minor expansion of the existing community sewer system in all alternatives.	∅	∅	∅	∅
Storm Drainage	Feasible to serve with minor expansion of the existing community storm drain system in all alternatives.	∅	∅	∅	∅
Flooding	The entire town of Madison is within in the 100-year floodplain.	ΘΘ	ΘΘ	ΘΘ	ΘΘ
Transportation					
Proximity to Freeways	Madison is less than one mile from Interstate 505.	⊕	⊕	⊕	⊕
Regional Roadways	Some intersection improvements needed under Alternatives 1 and 3. Route16 would need to be widened to four lanes under Alternatives 2 and 4.	Θ	ΘΘ	Θ	ΘΘ
Transit Service	All alternatives could be accommodated by existing fixed route service. None of the alternatives include sufficient densities or numbers of units to accommodate transit ridership.	∅	∅	∅	∅
Bicycle and Pedestrian Circulation	The small amount of development under Alternatives 1, 3, and 4 would have no effect on Madison's bicycle and pedestrian facilities. Alternative 2 would provide opportunities for bicycle and pedestrian facilities.	∅	⊕	∅	∅

TABLE 5 **ALTERNATIVES EVALUATION SUMMARY -- MADISON CONTINUED**

Issue	Explanation	Alternatives			
		1	2	3	4
Environment					
Agriculture	Madison is surrounded by Prime Farmland, Class 1 and 2 soils and soils with a Grade 1 Storie Index rating. Alternatives 1 and 3 would convert one acre of farmland. Alternative 2 would convert the most farmland, 153 acres, and Alternative 4 would convert 27 acres.	∅	ΘΘ	∅	Θ
Biological Resources	While there are known sightings and habitat in Madison, most alternatives are infill. Alternative 2 and 4 has development on the edge of Madison which could affect habitat.	∅	Θ	∅	Θ
Airport Land Use Conflicts	Madison is not located near any airports.	⊕	⊕	⊕	⊕
Smart Growth					
Preservation of Open Space	Alternatives 1 and 3 are built as infill only. Alternative 2 has 800 units projected outside the town limits. Alternative 4 has 27 acres of commercial development projected outside of town limits.	⊕	ΘΘ	⊕	Θ
Compact, Healthy Development	Alternatives 1, 3 and 4 are built as infill only. Alternative 2 puts 90 percent of projected growth outside of town limits.	⊕	Θ	⊕	Θ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 6 **ALTERNATIVES EVALUATION SUMMARY -- MONUMENT HILLS**

Issue	Explanation	Alternatives			
		1	2	3	4
Economics					
Market Viability	Due to an unmet demand for large-lot housing and general regional housing pressures, development in all alternatives would be absorbed.	⊕⊕	⊕	⊕⊕	⊕
Community Services	No existing community services; there is not enough new growth to support new community services.	Θ	Θ	Θ	Θ
Fiscal Impacts	High home prices and above average tax allocation rates would yield fiscal surpluses in all alternatives.	⊕	⊕	⊕	⊕
Infrastructure					
Water	Feasible to serve with individual or shared private wells in all alternatives.	∅	∅	∅	∅
Wastewater	Feasible to serve with private septic systems in all alternatives.	∅	∅	∅	∅
Storm Drainage	Feasible to serve with roadside ditches in all alternatives.	∅	∅	∅	∅
Flooding	100-year floodplain from Cache Creek is contained in drainage canal, but includes a small part of Wild Wings.	Θ	Θ	Θ	Θ
Transportation					
Proximity to Freeways	Monument Hills is within four miles of Interstate 505.	⊕	⊕	⊕	⊕
Regional Roadways	Some intersection improvements needed under Alternatives 1 and 3. Route 16 would need to be widened to four lanes under Alternatives 2 and 4.	Θ	ΘΘ	Θ	ΘΘ
Transit Service	None of the alternatives include densities or numbers of units that would accommodate transit ridership.	∅	∅	∅	∅
Bicycle and Pedestrian Circulation	The amount of development under all alternatives would have no effect on Monument Hill's bicycle and pedestrian facilities.	∅	∅	∅	∅
Environment					
Agriculture	Monument Hills is an area of lesser quality soils, though still capable of growing important crops. There is currently little significant agricultural activity. Under all alternatives, growth would be infill on parcels already committed to development, resulting in a minor agricultural conversion impact.	∅	∅	∅	∅
Biological Resources	While there is known sightings and habit in Monument Hills, the projected growth is infill.	∅	∅	∅	∅
Airport Land Use Conflicts	The Watts-Woodland Airport is located in Monument Hills and new development is in overflight zone.	ΘΘ	ΘΘ	ΘΘ	ΘΘ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 6 **ALTERNATIVES EVALUATION SUMMARY -- MONUMENT HILLS CONTINUED**

Issue	Explanation	Alternatives			
		1	2	3	4
Smart Growth					
Preservation of Open Space	Under all alternatives, all new growth in Monument Hills would be infill, preserving open space.	⊕	⊕	⊕	⊕
Compact, Healthy Development	Low density development projected in each alternative. Alternative 4 has more new growth within the area already committed to development , but is still relatively low density.	ΘΘ	ΘΘ	ΘΘ	ΘΘ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 7 **ALTERNATIVES EVALUATION SUMMARY -- YOLO**

Issue	Explanation	Alternatives			
		1	2	3	4
Economics					
Market Viability	Near Woodland and on Interstate 5, it is very feasible for Yolo to absorb 56 new units.	⊕⊕	⊕⊕	⊕⊕	⊕⊕
Community Services	Existing library; not enough new growth to support new services	∅	∅	∅	∅
Fiscal Impacts	Given below average tax allocation, home prices need to exceed $360,000 per unit for fiscal neutrality.	∅	∅	∅	∅
Infrastructure					
Water	In all alternatives, feasible to serve with addition of one new well to existing community water system.	∅	∅	∅	∅
Wastewater	In all alternatives, feasible to serve with private septic systems or a new public wastewater system.	∅	∅	∅	∅
Storm Drainage	In all alternatives, feasible to serve with extension of existing storm drain system.	∅	∅	∅	∅
Flooding	Yolo is protected from Cache Creek by levees of unknown stability.	⊖	⊖	⊖	⊖
Transportation					
Proximity to Freeways	Yolo is adjacent to Interstate 5.	⊕⊕	⊕⊕	⊕⊕	⊕⊕
Regional Roadways	No improvements to roadways needed under all alternatives. Interchange improvements would be needed under Alternative 4.	∅	∅	∅	∅
Transit Service	All alternatives would rely on existing fixed route service with limited investment needed. None of the alternatives include densities or numbers of units to promote transit ridership or trigger new transit service.	∅	∅	∅	∅
Bicycle and Pedestrian Circulation	The small amount of development under the alternatives would have no effect on Yolo's bicycle and pedestrian facilities.	∅	∅	∅	∅
Environment					
Agriculture	Yolo is surrounded by Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating. Same small amount of growth and farmland conversion, about 51 acres, in all alternatives.	∅	∅	∅	∅
Biological Resources	Yolo is potential habitat for several special status species.	⊖	⊖	⊖	⊖

⊖⊖ Greatest negative ranking ⊖ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 7 **ALTERNATIVES EVALUATION SUMMARY – YOLO CONTINUED**

Issue	Explanation	Alternatives			
		1	2	3	4
Environment					
Airport Land Use Conflicts	Yolo is not within two miles of an airport.	⊕	⊕	⊕	⊕
Smart Growth					
Preservation of Open Space	90 percent of the new development in all alternatives is built on edge of town	ΘΘ	ΘΘ	ΘΘ	ΘΘ
Compact, Healthy Development	Most of the new development built at low densities.	ΘΘ	ΘΘ	ΘΘ	ΘΘ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 8 **ALTERNATIVES EVALUATION SUMMARY – ALTERNATIVE 4 DEVELOPMENTS**

Issue	Explanation	Elkhorn	Spreckels	Winters Industrial	Yolo County Airport
Economics					
Market Viability	The amount of development envisioned at the Elkhorn site would exceed the small, niche market for such uses. The Spreckels site could absorb some agricultural industrial but not the amount foreseen. The amount of agricultural industrial uses assumed for the Winters Industrial Site would be viable. The amounts of industrial and retail space foreseen for the Yolo County Airport would not be market viable, although the office space may be feasible.	Θ	Θ	⊕	Θ
Community Services	For all Alternative 4 developments, non-residential growth could require more fire protection than is currently provided.	Θ	Θ	Θ	Θ
Fiscal Impacts	Due to lack of property value data, Elkhorn fiscal impacts are uncertain but potentially positive. Despite average service costs, below average tax allocations would yield negative fiscal impacts for Spreckels and the Winters Industrial Site. Yolo County Airport development would likely be fiscally neutral.	∅	Θ	Θ	∅
Infrastructure					
Water	Development at Elkhorn, Spreckels, the Winters Industrial Site and Yolo County Airport could be served with new wells and storage and distribution infrastructure.	∅	∅	∅	∅
Wastewater	Elkhorn, Spreckels and the Winters Industrial site could be served by a new private package wastewater system. Yolo County Airport would need a new community system and managing CSA.	∅	∅	∅	∅
Storm Drainage	Elkhorn, Spreckels, the Winters Industrial Site and Yolo County Airport could be served with a new storm drain system.	∅	∅	∅	∅
Flooding	Elkhorn is within the 100-year floodplain; current FEMA maps show Spreckels within the 100-year floodplain; Winters is adjacent to Putah Creek floodplain; Airport inside floodplain, on eastern edge.	ΘΘ	ΘΘ	Θ	ΘΘ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 8 **ALTERNATIVES EVALUATION SUMMARY – ALTERNATIVE 4 DEVELOPMENTS CONTINUED**

Issue	Explanation	Elkhorn	Spreckels	Winters Industrial	Yolo County Airport
Transportation					
Proximity to Freeways	Elkhorn is on I-5. Spreckels is within 1 mile of I-5. Winters is within 1 mile of I-505. Yolo County Airport is 5 miles from I-5.	⊕⊕	⊕	⊕⊕	Θ
Regional Roadways	Elkhorn would contribute to the need for widening I-5 to seven or eight lanes and would require interchange improvements. No improvements to roadways would be needed for Spreckels. Some intersection improvements needed for Winters Industrial site. Some intersection improvements needed for Yolo County Airport.	ΘΘ	∅	Θ	Θ
Transit Service	Expansion of fixed route service to Elkhorn could be made with minimum investment, because there is already service past the site to the Sacramento International Airport. Spreckels would not promote transit ridership. Winters Industrial site would not promote transit ridership. Yolo County Airport would not promote transit ridership; however, existing airport operations could provide additional transit ridership.	⊕	∅	∅	∅
Bicycle and Pedestrian Circulation	Proposed development in Elkhorn and Spreckels could provide enhanced bicycle and pedestrian facilities. Winters Industrial site would have limited funding available. Yolo County Airport would require some investment to enhance existing bicycle and pedestrian facilities with some funding available from proposed development.	⊕	⊕	∅	⊕
Environment					
Agriculture	Elkhorn, Spreckels and the Winters Industrial site are each on Prime Farmland, Class 1 or 2 soils and soils with a Grade 1 Storie Index rating. The Spreckels site, the site of the closed Spreckels sugar plant, is already partially developed and would convert less than 100 acres. The Elkhorn business park would convert 160 acres. Development at the Winters Industrial site would continue Ag Industrial use. Land at the Yolo County Airport is of lesser quality, but development would be on land already zoned for the Airport.	Θ	Θ	∅	∅
Biological Resources	Elkhorn is potential habitat. Spreckels is potential habitat but the site of a former Sugar plant. Winters industrial site is potential habitat. The Yolo County Airport is potential habitat, but land is already zoned for the airport.	Θ	Θ	Θ	∅
Airport Land Use Conflicts	Elkhorn is within two miles of an airport. Spreckels and the Winters Industrial site are both further than two miles from an airport. Most development at the Yolo County Airport require close proximity to the runways, and would be within the Overflight zone.	Θ	⊕	⊕	∅

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 8 **ALTERNATIVES EVALUATION SUMMARY – ALTERNATIVE 4 DEVELOPMENTS CONTINUED**

Issue	Explanation	Elkhorn	Spreckels	Winters Industrial	Yolo County Airport
Smart Growth					
Preservation of Open Space	Elkhorn would convert 280 acres of open space. Spreckels would convert 60 acres of open space. The Winters Industrial site reuses 27 acres of Ag Industrial land for proposed Ag Industrial uses. The Yolo County Airport is currently zoned for airport-related uses and development there would result in no loss of open space.	ΘΘ	Θ	∅	⊕
Compact, Healthy Development	None of these developments are proximate to existing town and employment centers and are all outside city limits. Aviation industry business proposed for Yolo County Airport requires automobile use, but the non-aviation businesses do not and would not encourage walking or bicycling.	ΘΘ	ΘΘ	ΘΘ	Θ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 9 **ALTERNATIVES EVALUATION SUMMARY --CITY EDGE GROWTH**

Issue	Explanation	Davis	West Sacramento	Winters	Woodland
Economics					
Market Viability					
Residential	Davis will experience the highest residential demand, followed by Woodland, West Sacramento and Winters, though the amount of residential in all four cities would be market viable.	⊕⊕	⊕	⊕	⊕
Commercial	There is unmet demand for retail uses in Davis. West Sacramento has the greatest retail and office demand of the four cities.	⊕	⊕⊕	Θ	⊕
Industrial	High land costs limit demand for industrial uses in Davis. West Sacramento has the greatest industrial demand of the four cities. Woodland has the second greatest demand with ample sites on Interstate 5.	Θ	⊕⊕	Θ	⊕
Community Services	The four cities are presumed to have sufficient services to support edge growth.	∅	∅	∅	∅
Fiscal Impacts	City edge growth was assumed to create no fiscal impact. See Appendix B, Section A3e.	∅	∅	∅	∅
Infrastructure					
Water	Davis edge growth could be served with several new wells or implementation of the Davis-Woodland Water Supply Project. The West Sacramento surface water treatment plant has sufficient surplus capacity. Woodland is feasible to serve with 9 or more new wells. Winters could be served with 2 or more new wells.	∅	∅	∅	∅
Wastewater	Davis, Woodland and Winters edge growth could be served with expansion of their treatment plants. The Lower Northwest Interceptor and regional treatment plant for West Sacramento have sufficient capacity.	∅	∅	∅	∅
Storm Drainage	Feasible to serve all four cities with extension of the existing municipal storm drain systems.	∅	∅	∅	∅
Flooding	Davis is less than 25 percent inside floodplain. West Sacramento protected by levees. Winters at risk for flood outside the city limits. Woodland is at risk for flood over ⅓ of its area.	Θ	Θ	Θ	ΘΘ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 9 **ALTERNATIVES EVALUATION SUMMARY --CITY EDGE GROWTH CONTINUED**

Issue	Explanation	Davis	West Sacramento	Winters	Woodland
Transportation					
Proximity to Freeways	Development at the edges of Davis would be within one mile of Interstate 80. New development in West Sacramento would be beyond one mile of Interstate 80. New development in Winters would be between one and four miles from Interstate 505. Woodland development is within one mile of Interstate 5 and Highway 113.	⊕⊕	⊕	⊕	⊕⊕
Regional Roadways	Development at the edges of Davis and West Sacramento would likely contribute to need for improvements on I-80. In Winters, no improvements to roadways are needed. In Woodland, development would require improvements on I-5, but not Highway 113.	Θ	Θ	∅	Θ
Transit Service	Development at the edges of all four cities would result in the most efficient use of existing transit systems, with limited investment needed.	⊕	⊕	⊕	⊕
Bicycle and Pedestrian Circulation	Development at the edges of all four cities would require some investment to enhance existing bicycle and pedestrian facilities with funding available fro proposed development.	⊕⊕	⊕	⊕	⊕
Environment					
Agriculture	Growth would be primarily along the north edge of Davis and would convert mostly Prime Farmland. Growth would occur on the south edge of West Sacramento, on Prime Farmland. Growth would occur on the north edge of Winters, on some Prime Farmland but mostly Farmland of Local Importance. Growth would occur mostly south and east of Woodland, on lesser quality though still important farmland.	ΘΘ	ΘΘ	Θ	Θ
Biological Resources	All four cities have known sightings and habitat of special status species. The alkali soils at the southeast edge of Woodland is habitat for several rare plants.	ΘΘ	ΘΘ	ΘΘ	ΘΘ
Airport Land Use Conflicts	Future growth in Davis could be within two miles of the Yolo County and UC Davis Airports; West Sacramento Winters and Woodland are not within two miles of an airport.	Θ	⊕	⊕	⊕

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

TABLE 9 **ALTERNATIVES EVALUATION SUMMARY --CITY EDGE GROWTH CONTINUED**

Issue	Explanation	Davis	West Sacramento	Winters	Woodland
Smart Growth					
Preservation of Open Space	Forty percent of new growth in the Davis area would be built at the edge of the city. Ten percent of new growth in the West Sacramento area would be built at the edge of the city. Forty percent of new growth in the Winters area would be built at the edge of the city. Twenty-five percent of the new growth in the Woodland area would be built at the edge of the city.	Θ	∅	Θ	Θ
Compact, Healthy Development	Moderate densities for edge growth in Davis, Winters and Woodland could support some walking and bicycling, but not as much as infill growth. West Sacramento's edge development is far from existing city boundaries.	∅	∅	∅	Θ

ΘΘ Greatest negative ranking Θ Negative ranking ∅ Neutral ⊕ Positive ranking ⊕⊕ Most beneficial ranking

1 INTRODUCTION

At its September 19, 2006 meeting, the Yolo County Board of Supervisors confirmed the four alternatives for study in the General Plan Update and directed the General Plan Update team to proceed with an evaluation of the alternatives as a basis for the later formulation of a preferred alternative. This report evaluates development that would occur in various locations in the county under each of the four alternatives and development scenarios being considered in the General Plan Update.

A. Report Contents and Organization

This report includes the following sections:

- *Executive Summary,* which includes nine summary tables that present a scoring of each alternative and development scenario.
- Section 1 is this *Introduction*, which explains the issues that were analyzed and summarizes each of the four alternatives.
- Sections 2 through 16 present the analysis for each community, under the four alternatives and the development scenarios.

There are three appendices that provide reference material for the analysis and supporting figures and tables. They are:

- *Appendix A: Description of Alternatives and Other Development Scenarios.* A full description of each alternative and each of the other development scenarios is included in this appendix, accompanied by figures and tables.
- *Appendix B: Methodology.* Methodology for analysis and explanations of the scoring system for each issue is presented in this appendix.
- *Appendix C: Jobs-Housing Balance.* A full report on the countywide affects of the four alternatives on the jobs-housing balance is included in this appendix.

B. Potential Development Locations

The report is organized by the communities and locations where growth would occur, rather than by alternative. This disaggregation allows the component parts of each alternative to be considered separately, so that decision-makers can later combine the most desirable components from each alternative to create a preferred alternative for the General Plan.

Development is only assessed where it is projected to occur in individual unincorporated communities within the county. The communities assessed are Clarksburg, Dunnigan, Esparto, Knights Landing, Madison, Monument Hills, and Yolo. Specific, non-residential development proposals foreseen under Alternative 4 in Elkhorn, the Spreckels Industrial Park site, the Winters Agricultural Industrial site and industrial development at the Yolo County Airport are also evaluated, as is development at the edges of each of the county's four cities. This report does not evaluate development in other communities, since the amount of development in them would be small. Scattered rural development foreseen in the alternatives is also excluded from the analysis, since the specific siting of this development is not known.

C. Issues Evaluated

This report evaluates the following issues for each community and location where growth would occur under each alternative and development scenario:

- Economics
  - Market Viability
  - Community Services Thresholds
  - Fiscal Impacts
- Infrastructure
  - Water
  - Wastewater
  - Storm Drainage
  - Flooding

- Transportation
  - Proximity to Freeways
  - Freeways and Regional Roadways
  - Transit Service
  - Bicycle and Pedestrian Circulation
- Environment
  - Agriculture
  - Biological Resources
  - Proximity to Airports
- Smart Growth
  - Preservation of Open Space
  - Compact Development and Healthy Design

D. Evaluation System

The evaluation of each issue is scored on a five-point scale:

- A double negative (⊖⊖) indicates the greatest negative ranking.
- A single negative (⊖) indicates a negative ranking.
- Neutral (∅) indicates neither positive nor negative ranking.
- A single positive (⊕) indicates a positive ranking.
- A double positive (⊕⊕) indicates the greatest positive ranking.

The specific criteria for application of each score are described in Appendix B.

Tables summarizing scores for each community and each development scenario are part of the Executive Summary.

E. Alternatives and Other Development Scenarios

The four alternatives and the other development scenarios are described in detail in Appendix A of this report.

The following is a summary of the build-out under each of the four alternatives, as approved by the Yolo County Board of Supervisors:

1. **Alternative 1**

   - Ten percent of future growth is projected for the unincorporated county – 40 percent would be located in the unincorporated communities, and 60 percent would be scattered rural residential development.
   - Total new residential growth in unincorporated county: 2,696 units.
   - Total new commercial/industrial development in unincorporated county: 289 acres (3,240 jobs).

2. **Alternative 2**

   - Over 85 percent of new development in unincorporated areas would be in the existing unincorporated communities.
   - Of the growth in the unincorporated communities, 94 percent would be located in Dunnigan, Esparto, Knights Landing and Madison.
   - Total new residential development in unincorporated county: 5,525 units.
   - Total new commercial/industrial development in unincorporated county: 478 acres (6,630 jobs).

3. **Alternative 3**

   - Allocates 70 percent of growth in the unincorporated county to Dunnigan, with 7,000 new residential units.
   - The remainder of the growth would occur as scattered rural development, with 906 units (nine percent of new development) occurring in the other unincorporated communities.
   - Total new residential development in unincorporated county: 9,523 units.

- Total new commercial/industrial development in unincorporated county: 717 acres (11,428 new jobs).

4. Alternative 4

- Spreads growth among several unincorporated communities.
- Increases level of economic development.
- Further restricts housing in the rural agricultural areas.
- Total new residential development in unincorporated county: 6,978 units.
- Total new commercial/industrial development in unincorporated county: 1,051 acres (8,374 jobs).

5. Other Development Scenarios

There are two other development scenarios considered by this report: the proposed Dunnigan Hills development put forth by the Dunnigan Hills Landowner Group and growth projected to occur at the edges of the four incorporated cities, through 2030.

- **Proposed Dunnigan Hills development:** While this proposal is similar to the proposal for a Dunnigan New Town that is included in Alternative 3, it covers somewhat different and includes more extensive lands than those shown in Alternative 3. It also proposes up to 10,000 units, rather than the 7,000 units in Alternative 3 and includes 615 acres of commercial and industrial uses, rather than 536.
- **City Edge Growth:** While the four alternatives previously assumed that the amount of growth in the county as a whole (including the four cities) might be constant through 2030, further analysis has indicated that this is unlikely to be the case. Instead, it is likely that the cities' growth will occur independently of the growth allowed by the county, and will be the same through 2030 regardless of what Yolo County allows in its jurisdiction. Therefore, the General Plan team worked with the county's four cities to develop projections of growth likely to occur in each city. The

team then split this growth into two components: that which would occur within current city limits and spheres of influence (considered as "infill"), and that which would occur outside of these limits. This report analyzes that portion of the growth that would occur outside city limits, with the assumption that such growth would occur either under county auspices or, more likely, under a cooperative annexation agreement with the county. In either case, the county would have some jurisdiction over this growth, so an evaluation of it is relevant.

2 CLARKSBURG

Clarksburg is an unincorporated community of approximately 180 residential units and limited non-residential uses. All four alternatives include 22 units of residential growth and one acre of retail uses on infill sites within the current town boundary.

The alternatives do not account for the Old Sugar Mill Specific Plan, which has been approved by the County but is currently pending appeal to the Delta Protection Commission. The Specific Plan includes 30 acres of industrial uses, 25 acres of commercial uses and 160 new housing units.[1]

This chapter evaluates the four alternatives and explains the scores given for each issue.

A. Economics

1. Market Viability

Considering the anticipated regional housing pressures, it is likely that 22 housing units and one acre of local-serving retail development could be absorbed during the General Plan time frame. The development called for in the Old Sugar Mill Specific Plan could also impact the marketability of other new development in Clarksburg. The rehabilitation of the existing mill for wine manufacturing as well as tasting rooms capitalizes on existing local assets. The potential increase in tourism as a result of this project could also increase buyer interest in local housing, and so all alternatives received single positive scores (⊕).

2. Community Services Thresholds

Clarksburg currently has a branch of the Yolo County library. There is also a fire department, a middle school, and a high school. A charter school is planning to open. Under all alternatives, Clarksburg would not add enough

[1] Yolo County Planning Commission, 2006, *Staff Report, Appendix F.*

population growth to warrant community services; the town receives a neutral score (Ø) because there are less than 100 units projected.

3. Fiscal Impacts

Using current home prices for existing residential units, the average home price in Clarksburg is approximately $325 per square foot, or $850,000 per market rate unit. Including affordable units, the average home value in Clarksburg is approximately $713,000.[2] To the extent that new homes' square footage and lot sizes will be less than those currently in Clarksburg, market rate home prices for new development could be significantly lower. However, new development tends to command a premium above existing units, and the county's share of property taxes in the area is above average. Thus, home prices for new development in Clarksburg would likely be sufficiently high to produce revenue surpluses to the county. In addition, the new retail development allowed under all alternatives would also be expected to be revenue positive, given the sales tax revenues that retail spaces generate.

As the development would be infill, and would generate minimal employment and population increases in the area, the additional costs of providing services to the new development should not be sufficiently high as to override the positive impacts of the new residential units and retail space, despite its distance from the county seat in Woodland, where many county services are based. However, the small amount of development specified in Alternative 1 would not likely be the catalyst for a change in service standards.

Thus, development in Clarksburg would be expected to provide a minor fiscal surplus for the county's General Fund, and all of the alternatives received a single positive score (⊕).

B. Infrastructure

[2] See Table B-4 in Appendix B.

1. Water

Clarksburg's domestic water supply comes exclusively from private groundwater wells. New development would need to provide private wells. Limited shared well use may be possible, subject to case-by-case review. Clarksburg receives a neutral score (Ø) for water supply.

2. Wastewater

There is currently no publicly-managed sewage service in Clarksburg. The current wastewater treatment method is individual septic systems. New development under all four alternatives would also rely on individual septic systems. In Clarksburg, the high water table prevents the use of regular leach fields, so mounded pressurized leach fields would be required. The minimum lot size for development would be one acre due to County Environmental Health Division septic system spacing requirements. Clarksburg receives a neutral (Ø) score for wastewater.

3. Storm Drainage

Drainage facilities for development under the alternatives would typically consist of on-site ditches to convey stormwater runoff to existing roadside ditches, where it would simply evaporate or percolate into the soil, or would flow to existing agricultural canals that empty into the Sacramento River. Development in Clarksburg under the alternatives would not require off-site or downstream drainage improvements and receives a neutral score (Ø).

4. Flooding

Clarksburg borders the Sacramento River and Elk Slough. Clarksburg is protected by levees of unknown stability, but it is not currently in the 100-year floodplain. Despite the fact that the town is currently protected by certified levees, because of the unknown stability of the existing levees, Clarksburg received a single negative score (Θ) for flooding.

C. Transportation

1. Proximity to Freeways

Clarksburg is within four miles of Interstate 5, via the Freeport Bridge and receives a positive (⊕) score.

2. Regional Roadways

State Route 84 and South River Road provide connections between Clarksburg and Highway 50 in West Sacramento (where it becomes Jefferson Boulevard) and to Interstate 5 across the Freeport Bridge. To the south, Route 84 and South River Road provide connections from Clarksburg to Solano County and eventually San Joaquin County and Contra Costa County. Route 84 (Jefferson Avenue) was recently widened from two to four lanes between South Linden Road and Highway 50[3] within West Sacramento. Under all alternatives, the new development would not require expansion of Route 84 within West Sacramento, or South River Road. This is given a score of neutral (Ø).

3. Transit Service

Currently, the Yolo County Transit District, which operates YOLOBUS, provides paratransit (on-demand dial-a-ride service) to Clarksburg. Fixed route transit service is not provided to Clarksburg at this time. With the additional development in Clarksburg under the alternatives, the increase in transit ridership would be relatively small and would not be large enough to support expansion of fixed route service to Clarksburg, and is scored neutral (Ø) for transit service.

4. Bicycle and Pedestrian Circulation

Currently bike lanes are not provided on Route 84 south of West Sacramento to provide a connection to Clarksburg. Within Clarksburg, sidewalks are limited and discontinuous even along improved frontages. Although the additional development would be infill, it would likely provide bike and pedes-

[3] State Route 84 (Jefferson Boulevard) through West Sacramento was identified as an existing deficiency in the Yolo County General Plan Background Report (January 2005); however, the recent widening of Jefferson Boulevard from two to four lanes eliminated that deficiency.

trian facilities only along project frontages, if at all. Overall, the small amount of development under the alternatives would have no effect on Clarksburg's bicycle and pedestrian facilities, and is scored neutral (Ø).

D. Environmental Issues

1. Agriculture

Clarksburg is surrounded by Prime Farmland, Class 2 and 3 soils and soils with a Grade 1 and Grade 4 Storie Index rating. The Clarksburg area is also one of the County's most important wine grape regions, with the most acreage in wine grapes, a number of wineries, and designated Clarksburg and Merritt Island appellations. It is also a growing agricultural tourism and recreation area.

Clarksburg would experience the same amount of growth under all of the alternatives, all of which would be on infill sites. A small portion of this infill would occur on Prime Farmland that is currently farmed, but this land is within the town boundary and has been designated for urban development. Overall, the 23 acres of infill development under all of the alternatives would result in a minor loss of farmland and was scored as neutral (Ø).

2. Biological Resources

There are known sightings of Swainson's Hawk in Clarksburg, and habitat for the Western Burrowing Owl also occurs in the town. However, all development under all alternatives would occur as infill, so negative effects on these species and their habitat would be minimal and are given a score of neutral (Ø).

3. Airport Land Use Conflicts

While Clarksburg is located within two miles of the privately owned Borges-Clarksburg Airport, in 2005, there was only a single flight a day. Thus new growth poses little to no conflict with airport uses, and in all alternatives, a score of positive (⊕) is given.

E. Smart Growth

1. Preservation of Open Space

Growth in Clarksburg in all four alternatives would occur on land within the current town boundaries that has already been designated for urban development. Although some of this land is still currently farmed, this small amount of infill development was considered to have a minor effect on open space. Thus, the proposed growth in Clarksburg was scored as neutral (Ø) for open space resources.

2. Compact Development and Healthy Design

All alternatives project that new residential growth in Clarksburg would be built on infill sites within town limits. Although the new housing is projected at a low density of one unit per acre, the development of infill housing would still strengthen the existing community and allow new residents and workers to walk or bike for some trips. Therefore, these alternatives received a single positive (⊕) score.

3 DUNNIGAN

Dunnigan is an unincorporated community of 400 residential units and limited convenience- and highway-oriented retail, lodging and industrial uses. This chapter evaluates the four alternatives and the privately proposed Dunnigan Hills development and explains their scores.

- Alternative 1
  - 173 units of residential growth, all of which would be infill.
  - 108 acres of non-residential growth, including nine acres of retail, three acres of office, five acres of lodging, 83 acres of industrial and eight acres of public/quasi-public uses.
- Alternative 2
  - 1,273 units of residential growth, including 173 units on infill sites within the current town boundary and 1,100 units at the edges of the community.
  - 184 acres of non-residential growth, including 49 acres of retail, two acres of office, seven acres of lodging, 96 acres of industrial and 30 acres public/quasi-public uses.
- Alternative 3
  - 7,000 units of residential growth, including 173 units on infill sites within the current town boundary and 6,827 units at the edges of the community.
  - 536 acres of non-residential growth, including 227 acres of retail, 40 acres of office, 28 acres of lodging, 169 acres of industrial and 72 acres of public/quasi-public uses.
- Alternative 4
  - 3,000 units of residential growth, including 173 units on infill sites within the current town boundary and 2,827 units at the edges of the community.

- 284 acres of non-residential growth, including 65 acres of retail, 10 acres of lodging, 25 acres of industrial and 184 acres of public/quasi-public uses.

♦ Proposed Dunnigan Hills Development

- 10,000 units of residential growth, including 173 units on infill sites within the current town boundary and 9,827 units at the edges of the community.
- 615 acres of non-residential growth, including 420 acres of commercial uses (retail/services, office, lodging) and 195 acres of industrial uses.

A. Economics

1. Market Viability

a. Alternative 1

i. Housing

Dunnigan is already attracting many retirees from Oakland and the East Bay. Based on Dunnigan's current ability to attract residents as well as the current demand for housing in communities in nearby Colusa County, it is highly likely that the 173 housing units foreseen in this alternative could be absorbed within Dunnigan through 2030. Furthermore, this number is probably insufficient to meet housing demand in Dunnigan through the General Plan time frame. Alternative 1 received a double positive score (⊕⊕) for housing market viability.

ii. Commercial

There are currently 404 housing units in Dunnigan, with the additional 173 housing units projected for the town, the total increases to less than 580 homes. This amount of new housing and residents is not sufficient to support a great deal of commercial space.[1] New local-serving retail would likely be

[1] See Appendix B, Section A1a, Market Viability, for a discussion of the populations thresholds necessary to support different types of retail development.

limited to small convenience-oriented retail establishments in stand-alone locations or in a small, unanchored retail center.

An additional fast food restaurant, gas station and convenience store, or a small motel could potentially be supported on a site that is both visible and accessible from the freeway, capitalizing on drive-by traffic. However, Dunnigan already has some highway-serving retail and lodging.

It is also unlikely that other retailers would chose to locate in Dunnigan with the intention of capturing some retail dollars from nearby communities in Colusa County. Rather, if those communities continue to grow at current rates, it is more likely that retail would locate north of the county line and Dunnigan residents would shop in Colusa County.

The absorption of 83,000 square feet of retail space, 28,000 square feet of office space and 225 lodging rooms under Alternative 1 is not feasible for Dunnigan, within the General Plan time frame of 2030. Alternative 1 received a single negative score (Θ) for commercial market viability.

iii. Industrial

Alternative 1 includes over 1.2 million square feet of industrial space in Dunnigan.[2] Due to its location near the Interstate 5/Interstate 505 interchange, warehousing and distribution facilities may be attracted to Dunnigan. This strategic location could serve as a hub for shipments into and out of the Bay Area and the Sacramento region as well as the larger western U.S. and national transportation networks. With warehousing and distribution activities, a 500,000 square foot or larger complex is common. It is conceivable that three or more projects equaling the 1.2 million square feet of industrial space

[2] For all job-generating land uses, with the exception of lodging, the square-foot estimate was calculated using 43,560 square feet per acre, applying a 15 percent discount to allow for infrastructure, and using a floor area ratio (FAR) of 0.25 for retail and office, and a 0.4 FAR for industrial building space. The lodging estimate is calculated using an estimate of 45 rooms per gross acre, based on previous research by BAE.

in Alternative 1 could be built in the vicinity of the interchange in the next 25 years or so, barring infrastructure constraints not considered as part of this analysis, and so a single positive score (⊕) was given for industrial.

b. Alternative 2

i. Housing

Based on Dunnigan's current ability to attract residents, as well as increased demand for housing in communities in nearby Colusa County, it is possible that the 1,300 housing units foreseen in this alternative could be absorbed in Dunnigan within the General Plan timeframe. Furthermore, this number is approximately equal to (though several hundred units below) the residential growth of 1,980 units projected in Dunnigan by SACOG through 2030. Alternative 2 received a single positive score (⊕) for housing market viability.

ii. Commercial

The increase in residential units in Alternative 2 from Alternative 1 would not be sufficient to support the 454,000 square feet of retail, 19,000 square feet of office and 315 lodging rooms in this alternative. Under Alternative 2, Dunnigan would still not meet the population threshold for a standard supermarket. Instead, new local-serving retail would likely be limited to small convenience-oriented retail establishments in stand-alone locations or in a small, unanchored strip retail center. Additionally, a fast food restaurant or a gas station and convenience store could potentially be supportable on a site that is both visible and accessible from the freeway, capitalizing on drive-by traffic. However, Dunnigan already has some highway-serving retail, possibly limiting the market potential for additional uses.

Based on the amount of residential growth called for in this alternative, it is unlikely that retailers would chose to locate in Dunnigan with the intention of capturing some retail dollars from nearby communities in Colusa County. Rather, if those communities continue to grow at current rates, it is more likely that retail would locate across the county border and Dunnigan residents would shop in Colusa County.

Due to the small community size in Alternative 2, it is unlikely that Dunnigan would experience much demand for office space through General Plan buildout. Therefore, the small amount of planned new office space would be likely to be adequate.

As lodging uses in small communities are not related to local demand as much as to the ability to capture demand from drive-by traffic, the findings in Alternative 1 also pertain to Alternative 2. At the most, Dunnigan can be expected to support one additional motel if it is visible and accessible from the freeway.

Overall, Alternative 2 received a single negative score (Θ) for commercial market viability.

iii. Industrial

The market demand for industrial space is not tied to community size as much as to location. Due to Dunnigan's strategic location near the Interstate 5/Interstate 505 interchange, it is plausible that 1.4 million square feet of industrial building space could be absorbed near Dunnigan over the General Plan time frame, and so a single positive score (⊕) was given for industrial.

c. Alternative 3

i. Housing

Dunnigan has the particular locational advantage of being located near the Interstate 5/Interstate 505 interchange, which provides access to both the Sacramento and Bay Area employment centers. As a result of its geographic attributes and anticipated regional housing pressures, Dunnigan has the potential to absorb 7,000 new residential units over the General Plan time horizon. This absorption potential could be enhanced if residential growth in unincorporated Yolo County were, to some extent, concentrated in Dunnigan. Alternative 3 received a single positive score (⊕) for housing market viability.

ii. Commercial

With over 7,000 residential units, Dunnigan could support a neighborhood retail center of approximately 100,000 square feet, with a supermarket, drug store, and other local-serving retail stores. The community would also support some stand-alone retail facilities and some small unanchored strip centers in addition to the larger neighborhood shopping center.

Under this alternative, with a local community size of about 20,000 at buildout, plus some potential to draw shoppers from surrounding areas, the Dunnigan retail mix would likely include some community retail center types of tenants, which might include some specialized "mid-box" retail facilities such as an Office Max or Petco in addition to the basic convenience retail establishments. However, the Dunnigan retail market potential would likely be insufficient to attract a regional retail shopping center development or big-box facilities such as a Target or Costco. Assuming that Dunnigan grows to a size range of about 20,000 residents, under this alternative, Dunnigan's per capita retail capture rate may be in the range of 12 to 18 square feet of retail space. This would translate to approximately 240,000 to 360,000 square feet of retail space, with the potential for slightly more space if residents of smaller nearby communities, including those in Colusa County, can be attracted for certain shopping trips. In addition, a fast food restaurant or a gas station and convenience store could potentially be supported on a site that is both visible and accessible from the highway, capitalizing on drive-by traffic. However, Dunnigan already has some highway-serving retail and lodging.

Overall, however, it is not realistic to expect that Dunnigan would absorb 227 acres of retail development under this alternative. A more optimistic estimate of retail capture potential might involve approximately 35 to 45 acres of land.

The forty acres (over 370,000 square feet) of office space proposed in this alternative is also quite aggressive. At buildout, the community could support some local-serving office users, such as Realtors, medical professionals or insurance agents. It is unlikely, however, that Dunnigan could absorb more than eight acres of office space under this alternative.

It is highly unlikely that Dunnigan could support the 1,260 lodging rooms proposed in this alternative. Lodging would largely remain dependent on drive-by traffic and would be limited to approximately one additional new motel, since Dunnigan already has existing motels catering to drive-by traffic.

Because the amount of commercial development foreseen for Dunnigan in Alternative 3 would far exceed what the market could support, it received a double negative score (ΘΘ) for commercial market viability.

iii. Industrial

It is also unlikely that Dunnigan could support the 2.5 million square feet of industrial space proposed in Alternative 3. Industrial uses are more dependent on location than community population. The allocation of 2.5 million square feet of industrial building is overly optimistic and is unlikely to be completely absorbed during the General Plan timeframe. Based on SACOG manufacturing employment projections, Yolo County is estimated to grow by 12.6 million industrial square feet by 2030.[3] Dunnigan would need to capture 20 percent of that countywide growth in order to absorb 2.5 million square feet of industrial building space, which seems unrealistic given competition with established locations such as West Sacramento and Woodland that have historically captured almost all of Yolo County's industrial growth. It is given a single negative score (Θ),

d. Alternative 4

i. Housing

As noted above, Dunnigan has the particular locational advantage of being located near the Interstate 5/Interstate 505 interchange, which provides access to both the Sacramento and Bay Area employment centers. As a result of its geographic attributes and anticipated regional housing pressures, it is likely

[3] Estimate calculated by applying standard employment figure of 1,000 square feet per employee for industrial space. SACOG projects an increase of 12,600 manufacturing jobs for Yolo County through 2030, as reported in Table 2 of the General Plan Update *Market and Fiscal Considerations* report.

that Dunnigan could absorb 3,000 new residential units over the General Plan time horizon. Alternative 4 received a single positive score (⊕) for housing market viability.

ii. Commercial

With approximately 3,400 residential units at General Plan buildout, the largest retail center the community in Dunnigan could potentially support would be a neighborhood retail center of approximately 100,000 square feet with a supermarket, drug store, and other convenience-oriented, local-serving retail stores. The town may also be able to support a few additional retail stores that could be located in small, unanchored centers or as stand-alone establishments. A fast food restaurant or a gas station and convenience store could also potentially be supported on a site that is both visible and accessible from the freeway, capitalizing on drive-by traffic. However, Dunnigan already has some highway-serving retail and lodging. Due to the limited market support for retail, the expectation for Dunnigan to absorb 65 acres of retail land is overly ambitious.

It is unlikely that Dunnigan could support the amount of office space proposed under this alternative.

It is also unlikely that Dunnigan could support 450 lodging rooms. Lodging would largely remain dependent on drive-by traffic and limited to approximately one to two additional motels, based on the example of other locations developed to provide highway-oriented retail and services.

Because the amount of commercial development foreseen for Dunnigan in Alternative 4 would far exceed what the market could support, it received a double negative score (ΘΘ) for commercial market viability.

iii. Industrial

As noted above, industrial uses are more dependent on location than community population. The allocation of only 370,000 square feet of industrial building may be insufficient to meet demand during the General Plan time

frame. The 1.2 to 1.4 million square feet included in Alternatives 1 and 2 might be more appropriate. Although 30,000 square feet would be easily absorbed (which would be positive), it would also represent an under-supply. Therefore, this alternative is scored neutral (Ø) for market viability.

e. Proposed Dunnigan Hills Development

i. Housing

For Dunnigan to grow by 10,000 housing units, new residential development in the unincorporated county would need to be concentrated to some extent in Dunnigan. Otherwise, it appears that development of 10,000 units in Dunnigan through 2030 may be overly ambitious. If that concentration were to happen, however, the score would be single positive (⊕).

ii. Commercial

Even if Dunnigan were to absorb 10,000 new homes by General Plan buildout, the greatest amount of retail that new housing could support would be between 45 and 55 acres, assuming that the town could capture some of local residents' demand for "community" retail types of goods in addition to attracting some shoppers from smaller nearby communities. While there would be an increase in demand for new office space by local-serving businesses, it would likely be less than 100,000 square feet, and receives a double negative score (ΘΘ).

iii. Industrial

The 195 acres of industrial uses in the Dunnigan Hills proposal is an overestimation of the demand for industrial land in this location and so it received a single negative score (Θ).

2. Community Services Thresholds

This section describes the community services that might be expected to open in Dunnigan under the four alternatives and the proposed Dunnigan Hills development.

a. Public Schools

- **Elementary Schools.** Dunnigan would not have enough new households to support a separate elementary school in Alternatives 1 and 2. In Alternatives 3 and 4, and in the proposed Dunnigan Hills development, there would be enough population growth to establish one or several new elementary schools.
- **Middle and High Schools.** Dunnigan would not have enough new population growth in Alternatives 1, 2 or 4 to support a new middle and/or high School. Only in Alternative 3 and the proposed Dunnigan Hills development would there be enough households to warrant a new middle and high School. Thresholds for community services are found in Appendix B.

b. Libraries

Dunnigan would not have enough population growth in Alternatives 1 and 2 to support the smallest "neighborhood" library. However, in Alternatives 3 and 4 and the proposed Dunnigan Hills development, there would be enough population to open a "neighborhood," and possibly a "community," library.

c. Health

Under Alternatives 1, 2 and 4, Dunnigan would not have enough population growth to support a new medical clinic. Under Alternative 3 and the proposed Dunnigan Hills development, however, there would be enough growth to open a medical clinic for basic health services.

d. Fire Protection

There is an existing fire department in Dunnigan. Under Alternatives 1 and 2, Dunnigan would not have enough population growth to support a new engine company for fire protection services. Under Alternatives 3 and 4 and the proposed Dunnigan Hills development, there would be enough new growth to warrant a new engine company.

e. Summary

Based on the above findings, Dunnigan is scored as follows for community services:

- Alternative 1: negative score (⊖), not enough new growth to support new services
- Alternative 2: negative score (⊖), not enough new growth to support new services
- Alternative 3: positive score (⊕), growth that supports new services
- Alternative 4: positive score (⊕), growth that supports some new services
- Proposed Dunnigan Hills Development: positive score (⊕), new services

3. Fiscal Impacts

a. Alternative 1

In 2005, the average Dunnigan home price was approximately $380,000 and the median home price was $400,000. Accounting for the affordable units, the average new home value in Dunnigan is assumed to be approximately $337,000.[4] Presumably, new development would command a premium over existing home prices. Thus, it is likely that new homes in Dunnigan would be sufficiently valuable to generate normal property tax revenues to the county. In addition, the range of property tax allocation rates to the county, the Dunnigan tax rate areas are between 14 percent and 15.3 percent, well above the 13 percent countywide average. Since the county will receive more property tax revenues in Dunnigan than on average, the new housing units should provide a small fiscal surplus for the county's General Fund, even with an average value below $360,000. However, it should be noted that Dunningan's distant location relative to the county seat could lead to disproportionately high services costs, which could potentially erode any fiscal surpluses.[5]

Assuming that the developers only build an amount of new commercial development in Dunnigan that the market could support, retail and lodging uses

[4] See Table B-4 in Appendix B.

should provide disproportionately high revenues to the county, with office and industrial uses generating revenues that would roughly cover anticipated service costs. Retail and lodging uses would be expected to provide higher revenues to the county because those uses would generate sales tax and transit occupancy tax revenues to the county that other types of uses do not provide. Office and industrial uses typically only generate property tax revenues to the county which would not be expected to provide significant fiscal surpluses for the county's General Fund.

Dunnigan's location, which is relatively far from Woodland, could increase the cost of providing patrol services. In addition, if the county determined that the town required remote county service offices to serve local residents, then the costs of providing county services to the new development could be much greater than otherwise indicated. However, the cost savings of efficient service could also outweigh the additional cost of the new offices. The clustering of development within a limited area would facilitate implementation of service funding mechanisms such as county Service Areas (CSAs) that would minimize the additional costs to the county's General Fund. Currently, Dunnigan has both a lighting CSA and grounds CSA. Assuming that, as required under Proposition 218, property owners support the additional taxes to pay for enhanced services through a CSA, development under all four of the alternatives and the Dunnigan Hills proposal would be expected to generate fiscal surpluses for the county's General Fund.[6]

The only exception to this general rule would occur if developers overbuild with non-residential uses, as could occur under some of the alternatives, so that the supply of commercial space exceeds demand. If this occurred, these

[5] County services that impact the General Fund do not include services that receive funding from Enterprise Funds, such as wet utilities.

[6] It should be noted that the assessments to property owners for enhanced services would likely be significant, and could impact the effective price of property in Dunnigan such that either the asking price of the homes are reduced to account for annual CSA assessments, or the effective price of the housing unit (property value plus annual assessments) would be too high for some would-be buyers.

uses would be likely to generate fiscal deficits for the county's General Fund. However, it is unlikely that this would occur under normal market conditions, so this issue is not considered further in the analysis.

This alternative is given a single positive score (⊕) for the retail and lodging revenues that could be expected.

b. Alternative 2

Development in Dunnigan under Alternative 2 is likely to produce small fiscal surpluses, provided that the market can support new development. Furthermore, with 1,273 new housing units, the town would be large enough to warrant the addition of a Sheriff sub-station, thereby allowing the county to provide cost efficient patrol services to Dunnigan. Assuming that local residents are willing to support property tax assessments to fund enhanced services, as required under Proposition 218, the development program under Alternative 2 should generate fiscal surpluses for the county's General Fund and is scored single positive (⊕).

c. Alternative 3

Development under Alternative 3 should provide fiscal surpluses for the county's General Fund. First, 7,000 new housing units would warrant a local Sheriff sub-station, which would generate cost efficiencies, thereby lowering average service costs. At the same time, with the increased per capita quantity of retail space that can be captured by a larger community size, and the fact that retail development tends to be revenue positive for the county, the Dunnigan residential development in this alternative would be more fiscally attractive than Dunnigan residential in other alternatives where the population growth would only be sufficient to support basic local convenience retail. Additionally, if property owners supported extending the assessments in the CSA to fund the costs of enhanced services, as required under Proposition 218, then this alternative could result in fiscal surpluses for the county's General Fund, provided that developers only build the amount of residential and commercial space that meets demand. This alternative is scored double positive (⊕⊕).

d. Alternative 4

Development in Dunnigan under Alternative 4 is likely to produce small fiscal surpluses for the county's General Fund, provided that the market can support new development. With 3,000 new housing units, the town would be large enough to warrant the addition of a Sheriff sub-station, thereby allowing the county to provide cost efficient patrol services to Dunnigan. Assuming that local residents are willing to support property tax assessments to fund enhanced services, as required under Proposition 218, the development program under Alternative 4 could generate fiscal surpluses for the county's General Fund and is scored double positive (⊕⊕).

e. Proposed Dunnigan Hills Development

Development in Dunnigan under the Proposed Dunnigan Hills Development alternative is likely to produce small fiscal surpluses, provided that the market can support new development. The residential portion of the development program under this alternative should generate positive fiscal impacts for the county's General Fund. As under Alternative, 3, the fiscal attractiveness of development under this alternative is enhanced by the fact that greater per capita quantities of revenue surplus-producing retail development can be supported in this larger community. The sales tax revenues that the county would receive from retail development under this alternative would result in the greatest fiscal surpluses for the county's General Fund of any Dunnigan alternative and is given a double positive (⊕⊕) score.

B. Infrastructure

1. Water

a. Alternative 1

Dunnigan's existing domestic water supply comes exclusively from private groundwater wells. Under this alternative, water supply for all uses would come from private wells. Limited private shared well use may be possible. Wellhead treatment for nitrates would likely be needed for all new wells.

b. Alternatives 2, 3 and 4 and the Proposed Dunnigan Hills Development

Under these alternatives, water for most residential, commercial and industrial development would require a new community system. A community system would consist of wells, pumps, storage tanks, and distribution piping, probably relying on a combination of surface water, ground water and recycled water. The following service requirements would exist for these four alternatives:

- **Alternative 2.** Two or more wells with a combined output of at least 1,560 gallons per minute (gpm) would be required. Of the required 1,560 gpm, 710 gpm would be for residential development and 850 gpm for commercial development.
- **Alternative 3.** To provide service to the Dunnigan edge development, ten or more wells with a combined output of at least 6,880 gpm would be required. Of the required 6,880 gpm, 4,410 gpm is from residential development and 2,470 gpm is from commercial development.
- **Alternative 4.** To provide service to the Dunnigan edge development, four wells or more with a combined output of at least 2,890 gpm would be required. Of the required 2,890 gpm, 1,830 gpm is from residential development and 1,060 gpm is from commercial development.
- **Proposed Dunnigan Hills Development.** To provide service to the proposed residential and commercial/industrial units, 9,290 gpm of capacity would be required. This demand would require the construction of 13 wells or more.

Assuming that a new community water system were built it could also be expanded to serve existing development in Dunnigan, which would provide a benefit to the community, in the form of ameliorating environmental conditions in the existing water system.

Wells alone may not be able to supply the demand associated with Alternatives 2, 3 and 4 and the proposed Dunnigan Hills development, so surface water supplies may need to be developed to supplement groundwater. Surface waters from the Tehama-Colusa Canal have been proposed to be used in combination with well water. The Dunnigan Water District (DWD) has a contract with the Bureau of Reclamation for 19,000 acre-feet of water annually and uses approximately 14,000 acre-feet annually. The 5,000 acre-feet of water available can supply nearly 3,100 gpm. However, in drought conditions, the deliveries from the canal have been decreased by 25 to 40 percent. If the canal is used for surface water, this fluctuation must be remedied. Although the DWD does not currently provide domestic water, it is possible that authority could be expanded to the DWD to operate and maintain new wells and construct a community-wide distribution system.[7] The distribution system could be located along existing DWD easements, but considerable infrastructure construction would be required to supply water service to the community.

Under all alternatives and the proposed Dunnigan Hills development, water supply is scored neutral (Ø).

2. Wastewater

a. Alternative 1

No publicly managed community sewage treatment facilities exist in Dunnigan. Sewage is treated primarily by individual septic systems. There are nine permitted wastewater treatment pond systems for individual commercial and industrial uses, and the County Faire Estates Mobile Home Park does have

[7] Hendrix, Donita. Manager, Dunnigan Water District. Personal telephone communication with Coastland Civil Engineering. June 12, 2006.

capacity to serve additional users and has some surplus to serve commercial and industrial development along Road 8. These facilities have unreliable treatment and most could not be relied on and expanded to treat wastewater from new development.

Thus, all new development would require private septic systems, or new pond systems. However, it should be possible to construct such systems with minimal effort. No additional land would be needed.

b. Alternatives 2, 3, and 4 and the Dunnigan Hills proposal

Under all of these alternatives, wastewater treatment would require a new community system, including a new treatment plant and collection pipe network. The collection system could be located along existing DWD easements, but considerable infrastructure construction would be required. Management of these facilities would require the creation of a new Community Service District (CSD) or CSA.

i. Service Requirements

The following service requirements would exist for these three alternatives and the Dunnigan Hills proposal:

- **Alternative 2.** 440 gpm of capacity would be needed. Of the required 440 gpm, at least 160 gpm would be for residential development and 280 gpm would be for commercial development. At least 110 acres of ponds would be required to meet this demand, including 50 acres of facultative ponds and 60 acres of percolation/evaporation ponds. The 50 acres of facultative ponds would be reduced to seven acres by the partial use of aeration equipment, and to two acres with fully aerated ponds. Disposal requirements would remain at 60 acres to maintain winter storm storage. The required wastewater treatment plant improvements under Alternative 2 would be estimated to cost approximately $33 million, not including land acquisition costs. There would also be additional costs to install a wastewater collection system.
- **Alternative 3.** 1,830 gpm of capacity would be needed. Of the required 1,830 gpm, at least 1,000 gpm would be for residential development and

830 gpm for commercial development. 450 acres of ponds would be required to meet this demand, including 200 acres of facultative ponds and 250 acres of percolation/evaporation ponds. The 450 acres of facultative ponds could be reduced to 26 acres by the partial use of aeration equipment and to seven acres with fully aerated ponds. Disposal requirements would remain at 250 acres to maintain winter storm storage. The required wastewater treatment plant improvements under Alternative 3 would be estimated to cost approximately $134 million, not including land acquisition costs. There would also be additional costs to construct a wastewater collection system.

- **Alternative 4.** 850 gpm of capacity would be needed. Of the required 850 gpm, at least 420 gpm would be for residential development and 430 gpm for commercial development. 210 acres of ponds would be required to meet this demand, including 100 acres of facultative ponds and 110 acres of percolation/evaporation ponds. The 210 acres of facultative ponds could be reduced to 15 acres by the partial use of aeration equipment and to three acres with fully aerated ponds. Disposal requirements would remain at 100 acres to maintain winter storm storage. The required wastewater treatment plant improvements would be estimated to cost approximately $57 million, not including land acquisition costs. There would also be additional costs to construct a wastewater collection system.

- **Proposed Dunnigan Hills Development.** The proposed Dunnigan Hills development would require the construction of a community sewer system. Wastewater generation would be 2,420 gpm, 1,500 gpm from residential development and 920 gpm from non-residential development. If a combination of facultative and percolation/evaporation ponds are used, at least 590 acres of ponds would be required, 270 acres of facultative ponds and 320 acres of percolation/evaporation ponds. Partially aerated facultative ponds would require only 35 acres, and fully aerated ponds would require ten acres. Disposal pond requirements would remain at 320 acres. The required wastewater treatment plant improvements would be estimated to cost approximately $177 million, not including land acquisition costs. There would also be additional costs to

construct a wastewater collection system. Due to the large amount of land required for ponds in this development scenario, alternative treatment and disposal methods, including using recycled water for irrigation, could be explored for the community sewer system.

ii. Land Acquisition

Under Alternatives 2, 3 and 4 and the proposed Dunnigan Hills development, land for the new facility would need to be acquired. This acreage varies, depending on the alternatives: Alternative 2 would require 110 acres; Alternative 3 would require 450 acres. Alternative 4 would require 210 acres; the proposed Dunnigan Hills development would require 590 acres.

iii. Wastewater Treatment

Using recycled water for irrigation has been proposed for the Dunnigan Hills development, and could be implemented in Alternatives 2, 3 and 4, as well. If recycled wastewater is to be used for irrigation throughout the community, additional wastewater treatment would be required to achieve tertiary level treatment. This plant would be more expensive than using a pond system, but would use less land. Land requirements for disposal would also decrease.

Under all alternatives and the proposed Dunnigan Hills development, wastewater is scored neutral (Ø).

3. Storm Drainage

a. Alternative 1

Drainage facilities for development at densities foreseen in this alternative typically consist of on-site ditches to convey water to existing roadside ditches. These measures require no off-site or downstream improvements.

b. Alternatives 2, 3, and 4 and the Dunnigan Hills proposal

These alternatives would consist of both infill at low densities and some moderate density development.

Drainage facilities for infill development would likely consist simply of on-site ditches to convey water to existing roadside ditches.

Drainage for larger developments would likely consist of curbs and gutters within some development areas and a network of on-site collection pipes or ditches that convey runoff to on-site detention basins, which in turn moderate flows to existing off-site channels. Detention basins would be sized per individual site conditions per the developers. Management of these facilities would require expansion of the responsibilities of an existing entity (DWD), the formation of a CSD/CSA, or the creation of a home owner association (HOA). In the larger development alternatives (Alternatives 3 and 4 and the Dunnigan Hills proposal), the county's standards for grading practices and construction materials site drainage to achieve a condition of no net increase to off-site drainage systems.

Under all alternatives and the proposed Dunnigan Hills development, storm drainage is scored neutral (Ø).

4. Flooding

The existing town of Dunnigan is at some risk of flooding along Dunnigan and Buckeye Creeks. The current Dunnigan General Plan requires setbacks for development from the creeks to avoid the floodplain.

Under all of the alternatives, some infill growth is projected within the 100-year floodplain. None of the future growth areas outside of Dunnigan's current development area shown in the alternatives are within the 100-year floodplain.

The proposed Dunnigan Hills development includes development that is at risk of flooding on Bird and Oat Creeks, in addition to the flood risk for infill development on Dunnigan and Buckeye Creeks.

In all alternatives as well as within the proposed Dunnigan Hills development, Dunnigan received a single negative score (Θ) for flooding.

C. Transportation

1. Proximity to Freeways

The proposed sites for development in and near Dunnigan are located adjacent to Interstates 5 and 505 and receive a double positive (⊕⊕) score.

2. Regional Roadways

Interstates 5 and 505 connect Dunnigan with other areas of the county. Interstate 5 is a four-lane freeway through Yolo County and has an existing daily volume of approximately 22,000 vehicles north of Interstate 505. Review of background traffic projections provided by the recent Sacramento Area Council of Governments (SACOG) travel demand forecasting (TDF) model[8] shows a potential increase of 10,000 daily trips (growth of two percent per year), which would result in 32,000 daily trips on Interstate 5 north of Interstate 505. This is less than 50 percent of capacity for a four-lane freeway.

Although the SACOG TDF model accounts for external trips from Colusa County, the traffic volume projections do not account for larger potential development pressures in Colusa County that are currently on the horizon, and such development could affect Interstate 5 and Interstate 505. Development in other counties, such as Yuba and Solano, would not be expected to have a large draw towards Interstate 5 and Interstate 505, and is accounted for in the background growth already assumed.

Under all of the alternative and the proposed Dunnigan Hills development, total trips on Interstate 505 would not exceed 50 percent of the mainline capacity between Interstate 5 and State Route 16, considering both background

[8] This version of the SACOG travel demand forecasting model assumes a 2027 roadway network and 2032 blueprint-based land uses.

growth and potential development in Colusa County.[9] In addition, Interstate 505 south of State Route 16 to Interstate 80 would not need to be widened beyond the existing four lanes under any of the alternatives or the proposed Dunnigan Hills development.

Several of the alternatives would have potential effects to Interstate 5 between Dunnigan and Woodland due to development in Dunnigan:

- **Alternatives 1, 2 and 4**. Alternatives 1, 2 and 4 would not have a significant effect on Interstate 5. Development in Dunnigan under these alternatives would result in less than 80 percent of the Interstate 5 mainline capacity being used (even considering development potential in Colusa County) and would not require widening beyond the existing four lanes between Dunnigan and Woodland. These alternatives are scored neutral (Ø).
- **Alternative 3.** Alternative 3 would require Interstate 5 to be widened between Dunnigan and Woodland to five or six lanes, presuming that the full buildout of this alternative (including all allowed non-residential uses) were to occur. Interstate 5 would not need to be widened beyond the existing four lanes if the reduced non-residential demand foreseen in the Market Viability section of this report were to occur. However, potential development in Colusa County would require widening of Interstate 5 to six lanes under Alternative 3 with or without full buildout of non-residential uses. Given this need for widening of Interstate 5, this alternative is given a single negative (Θ) score.
- **Proposed Dunnigan Hills Development.** To maintain current traffic operating conditions, I-5 would need to be widened to six lanes between Dunnigan and Woodland under the proposed Dunnigan Hills development, regardless of whether this alternative included all allowed non-residential development or the reduced non-residential development fore-

[9] Commuter traffic using I-505 versus I-5 was accounted for using available 2000 US Census journey-to-work data.

seen in the Market Viability section of this report. Potential development within Colusa County would further require widening of Interstate 5 to seven or eight lanes between Dunnigan and Woodland under the proposed Dunnigan Hills development.

Where improvement needs are identified beyond the existing four lanes to Interstate 5 between Dunnigan and Woodland, it is likely that improvements would also be needed on Interstate 5 east of Woodland, since external trips from Dunnigan (and potential Colusa County development) would not only head to Woodland but also toward Sacramento area employment and regional shopping centers. If Interstate 5 is not widened as identified above, traffic volumes on Road 99 West would likely increase as a parallel facility to Interstate 5. Improvements to Road 99 West would be needed to accommodate increased traffic, due to drivers avoiding the congested freeway. Given the need for Interstate 5 widening, this proposal is scored double negative (ΘΘ).

3. Transit Service

Currently, the Yolo County Transit District provides fixed route transit service by request only on Wednesdays from Woodland and Dunnigan. Potential effects to transit service due to development in Dunnigan under each alternative and the proposed Dunnigan Hills development are discussed below.

a. Alternative 1

Under Alternative 1, the existing average residential density of about one dwelling unit per acre would be maintained. This additional development in Dunnigan would result in a relatively small increase in transit ridership and would not support additional transit service, giving this alternative a score of neutral (Ø).

b. Alternative 2

Under Alternative 2, the average residential density in Dunnigan would increase from five to eight dwelling units per acre. While this residential density would meet the minimum for viable fixed route transit service with one hour headways, Dunnigan is located approximately 17 miles from Woodland

and would result in long bus travel times with few stops in between (other than in Yolo and Zamora). By comparison, existing intercity transit connections between Winters, Davis, Woodland, and West Sacramento are approximately 11 miles apart or less.

Alternative 2 would therefore require expansion of existing on-demand fixed route service to regular fixed route service with one hour headways between Woodland and Dunnigan. This would result in an inefficient use of the transit system compared to existing services within and between cities, and would require substantial investment beyond current funding that would likely have to be funded by proposed development. Moreover, the likely increase in transit ridership would be relatively small, leading to a single negative score (Θ).

c. Alternatives 3 and 4

Alternatives 3 and 4 would add substantial growth in Dunnigan at a residential density of eight units per acre, which would require an expansion of the existing transit system, to not only serve transit trips between Dunnigan and other areas of the county, but also to serve local transit trips in Dunnigan. The proposed residential and retail employment densities would meet the minimum requirement for viable fixed route transit service with one-hour headways for local transit trips in Dunnigan and for regular fixed-route service between Dunnigan and Woodland. Although the additional development would be substantial compared to existing housing in Dunnigan, the likely increase in transit ridership would be relatively small.

Moreover, the proposed densities would not meet the minimum densities to promote meaningful transit ridership. The expansion of regular fixed route service with one hour headways would result in an inefficient use of the transit system compared to existing services within and between cities, and would require substantial investment beyond current funding that would likely have to be funded by proposed development. Because these alternatives create a demand for transit service with a small number of riders, they are given a single negative score (Θ).

d. Proposed Dunnigan Hills Development

The proposed Dunnigan Hills development would add substantial growth in Dunnigan with a residential density of three dwelling units per acre. The numbers of units would warrant an expansion of the existing transit system to not only serve transit trips between Dunnigan and other areas of the county, but also to serve local transit trips in Dunnigan. However, the proposed residential density would not meet the minimum requirement to provide viable fixed route transit service with one-hour headways for local transit trips in Dunnigan. In addition, the expansion of regular fixed-route service would result in an inefficient use of the transit system, compared to existing services within and between cities.

To provide transit service under this proposal, substantial funding would be needed to provide transit service. This would include backfilling the anticipated low fare-box return compared to those in other areas where residential densities are six dwelling units per acre or higher. This would require substantial investment beyond current funding that would likely have to be funded by proposed development. Given these conclusions, the proposed Dunnigan Hills development is given a double negative score (ΘΘ).

4. Bicycle and Pedestrian Circulation

Currently, no bike lanes or bike paths connect Dunnigan to Woodland. In Dunnigan, sidewalks are limited or generally do not exist, even along improved frontages.

All of the alternatives and the Dunnigan Hills proposal would require substantial funding to develop and expand bicycle and pedestrian facilities in Dunnigan to promote walking and biking, with limiting funding available from proposed development given the planned amount of residential and non-residential uses. Expansion of bicycle facilities outside of Dunnigan would be unlikely, given the low population and the distance to regional services in Woodland, and would require a significant investment.

a. Alternative 1

Under Alternative 1, additional development at low densities would be unlikely to provide additional bike and pedestrian facilities, and is scored neutral (Ø).

b. Alternative 2

Most development would likely provide bike and pedestrian facilities along the project frontages. A modest expansion of the bicycle and pedestrian facilities would provide continuous connections between complementary land uses in Dunnigan. This alternative is scored neutral (Ø).

c. Alternatives 3 and 4

Development under Alternatives 3 and 4 would likely provide bicycle and pedestrian facilities along the project frontages. Substantial expansion of bicycle and pedestrian facilities would provide continuous connections between complementary land uses in Dunnigan. For its potential to substantially expand the facilities, these alternatives are given a single positive (⊕) score.

d. Proposed Dunnigan Hills Development

The lower residential density of the proposed Dunnigan Hills development, as compared to Alternatives 3 and 4, would likely result in less walking and biking compared to those other alternatives. This proposal would also require substantially more funding to provide continuous bicycle and pedestrian circulation compared to Alternatives 3 and 4. However, substantial funding would likely be available from proposed development given the planned amount of residential and non-residential uses, and is given a single positive score (⊕).

D. Environmental Issues

1. Agriculture

The flat areas to the east and south of Dunnigan, east of the Tehama-Colusa Canal, are Prime Farmland. Lands west of Dunnigan, in the Dunnigan Hills,

are Farmland of Local Importance and Grazing Land. Soils to the south and east of Dunnigan are Class 2 and 3 soils, with Class 3, 4 and 6 soils west of the town and in the Dunnigan Hills. The community is mostly surrounded by Class 4 soils, except that there are poorer Class 6 soils west of the town and in the Dunnigan Hills. Soils in both the flat areas and in the Dunnigan Hills are a mix of Grade 1 and Grade 4 Storie Index rating.

Although some of these factors suggest that the Dunnigan area is less important for agriculture, several of the County's top ten agricultural commodities important crops are grown in the Dunnigan area, including tomatoes, wine grapes, alfalfa, almonds, walnuts, seed crops and wheat. As noted above, much of the area is designated as Prime Farmland in the State Important Farmland Inventory system. Moreover, the Dunnigan Hills area southwest of the town is second only to the Clarksburg region in importance to the county's wine industry and is a designated appellation. The acreage dedicated to wine grapes in the Dunnigan Hills and in some flat areas along Interstate 5 south of Dunnigan is growing.

a. Alternative 1

Alternative 1 includes infill residential development, which would have no effect on agricultural resources. Non-residential development at the edges of the existing community would result in the loss of approximately 108 acres of farmland. Most of the farmland lost under Alternative 1 would be Prime Farmland and Class 2 and 3 soils along the Interstate 5 freeway south of the community, and receives a negative (Θ) score.

b. Alternative 2

Alternative 2 would have a greater amount of residential and non-residential development than Alternative 1, and would result in the conversion of greater amounts of farmland, nearly all of which would be Prime Farmland and better quality soils in the flatlands along the freeway. If development were to extend into the eastern edge of the Dunnigan Hills, then Farmland of Local Importance would also be affected, and receives a negative (Θ) score.

c. Alternative 3

The greatest loss of farmland among the four alternatives, approximately 1,700 acres, would occur under Alternative 3. Most of the farmland would be Prime Farmland and Class 2 and 3 soils along the Interstate 5 freeway south of the community. Farmland of Local Importance and Class 3 and 4 soils along the eastern edge of the Dunnigan Hills would also be affected, and receives a double negative (ΘΘ) score.

d. Alternative 4

Alternative 4 would result in less conversion of farmland than in Alternative 3 but more than in Alternatives 1 and 2. Most of the farmland would be Prime Farmland and Class 2 and 3 soils along the Interstate 5 freeway south of the community. Farmland of Local Importance and Class 3 and 4 soils along the eastern edge of the Dunnigan Hills would also be affected, and receives a double negative (ΘΘ) score.

e. Proposed Dunnigan Hills Development

The proposed Dunnigan Hills development would result in the conversion of approximately 5,770 acres of agricultural land to urban uses, far greater than any of the four alternatives, due mostly to lower development densities, as well as simply more development. Most of the farmland would be Prime Farmland and Class 2 and 3 soils along the Interstate 5 freeway south of the community but also Farmland of Local Importance and Class 3 and 4 soils along the eastern edge of the Dunnigan Hills, and receives a double negative (ΘΘ) score.

2. Biological Resources

In 2005, the U.S. Fish and Wildlife Service named areas around Dunnigan as Critical Habitat for the California tiger salamander. The habitat unit is bounded generally by Interstate 5 in the east, Road 86 to the west, Road 2 to the north and Highway E4 to the south.

In addition to the California tiger salamander, the following species are shown by the NCCP/HCP maps to have habitat in or around Dunnigan:

- Brittlescale
- Heckard's peppergrass
- Loggerhead shrike
- Northern harrier
- San Joaquin spearscale.
- Short-eared owl
- Swainson's hawk
- Western Burrowing owl
- Western spadefoot toad
- White-faced ibis

Under all alternatives, some development is projected to be built outside of current town limits, from approximately 108 acres of non-residential growth in Alternative 1 to the approximately 5,700 acres in the proposed Dunnigan Hills development. If any growth were placed west of Road 88A, it could overlap with the Critical Habitat for the California tiger salamander, or affect the potential habitat of the other special status species. While it may be possible to site development avoiding the Critical Habitat, all alternatives and the proposed Dunnigan Hills development were given a double negative score (ΘΘ), due to the numerous other species whose habitat might be affected by development.

3. Airport Land Use Conflicts

Dunnigan is not within two miles of an airport, so no conflicts would occur; and is given a score of single positive (⊕).

E. Smart Growth

1. Preservation of Open Space

a. Alternative 1

Under Alternative 1, while all residential growth in Dunnigan would occur as infill within the existing town, approximately 108 acres of non-residential growth is projected for the town's edge, giving this a single negative (Θ) score.

b. Alternative 2

In Alternative 2, a large agricultural parcel in the area between Roads 5 and 6 is slated for development. Although within the current town boundary, this parcel is designated for continued agricultural use in the current Dunnigan General Plan. This alternative is given a single negative score (Θ).

c. Alternative 3

Of all the alternatives, Alternative 3 includes the largest amount of new development on open space land around Dunnigan, approximately 1,700 acres. A double negative (ΘΘ) score is given to this alternative.

d. Alternative 4

Alternative 4 would develop large amounts of current open space – more than Alternatives 1 and 2, but less than Alternative 3 and the proposed Dunnigan Hills development. This alternative is given a single negative (Θ) score.

e. Proposed Dunnigan Hills Development

The proposed Dunnigan Hills development would develop even greater amounts of current open space than the four alternatives, approximately 5,770 acres, leading to a double negative (ΘΘ) score.

2. Compact Development and Healthy Design

a. Alternative 1

Most growth under Alternative 1 would occur inside the current town of Dunnigan, supporting the principle of guiding development into existing communities. However, the density of this development is too low to be considered compact or efficient, leading to a negative (Θ) score.

b. Alternatives 2, 3 and 4

Under these alternatives, almost all development would be accommodated on land outside of Dunnigan's existing boundaries, at residential densities between six to eight units per acre. While this is a moderate density, which

could encourage some walking and bicycling, placing development outside of town boundaries is not compact, and leads to a single negative (Θ) score.

c. Proposed Dunnigan Hills Development

The proposed Dunnigan Hills development would place about 10,000 housing units on a 5,700-acre area. This density would not be efficient and would be insufficient to support meaningful mixed use development, walking or bicycling. Thus, it is given a double negative (ΘΘ) score.

4 ESPARTO

Esparto is an unincorporated community of approximately 800 residential units and limited local-serving retail and agricultural industrial uses. The alternatives include the following growth in Esparto:

- Alternative 1
  - 460 units of residential growth, including 186 units on infill sites within the current town boundary and 274 units at the edges of the community.
  - 88 acres of non-residential growth, including 25 acres of retail, nine acres of office, 28 acres of industrial and 26 acres of public/quasi-public uses.
- Alternative 2
  - 1,260 units of residential growth, including 186 units on infill sites within the current town boundary and 1,074 units at the edges of the community.
  - 184 acres of non-residential growth, including 49 acres of retail, two acres of office, seven acres of lodging, 96 acres of industrial and 30 acres public/quasi-public uses.
- Alternative 3
  - The same as Alternative 1.
- Alternative 4
  - 1,150 units of residential growth, including 186 units on infill sites within the current town boundary and 964 units at the edges of the community.
  - 117 acres of non-residential growth, including 20 acres of retail, 10 acres of office, 10 acres of lodging, 64 acres of industrial and 13 acres of public/quasi-public uses.

This chapter evaluates the four alternatives and explains the scores given for each issue.

A. Economics

1. Market Viability

a. Alternative 1

i. Housing

Esparto is experiencing a small housing boom relative to the rest of the unincorporated county. The town has added approximately 300 homes in the last six years, with more projects on the horizon. This trend of new housing construction indicates an existing demand for housing in the community, with current residents, Cache Creek Casino employees, and Bay Area commuters adding to the locality's housing pressures. Considering these recent historical housing trends, there appears to be sufficient market demand for Esparto to absorb an additional 460 housing units through the General Plan time frame and so Alternative 1 was given a single positive score (⊕). In fact, SACOG projections estimate approximately 460 new housing units in Esparto through 2030.

ii. Retail

Alternative 1 includes 230,000 square feet of retail space and would result in approximately 1,240 total housing units in Esparto at General Plan buildout. This number of households would not be sufficient to support this amount of local-serving retail space. Even with the inclusion of the 83 new housing units in Madison under this alternative, the population base of both towns combined would still not be able to support one average-sized, 50,000 square foot grocery store.

Esparto is not located on a major freeway, hindering its ability to capture retail demand from drive-by traffic. Some small potential exists for retail services geared toward tourists traveling to and from Cache Creek Casino. However, this would not likely amount to a significant highway-oriented retail demand.

There is some limited potential for opportunistic retail connected with agritourism, such as gift shops attached to wine or olive oil tasting rooms. This does not translate into a great deal of retail space.

The 230,000 square feet of retail space in Alternative 1 would be overly aggressive from a market perspective and so received a single negative score (Θ).

iii. Office

Alternative 1 includes 83,000 square feet of office space. The approximately 1,240 total housing units in Esparto at buildout would not be sufficient to support this amount of local-serving office space and so it was given a single negative score (Θ).

iv. Industrial

Esparto does have the ability to absorb some manufacturing, warehousing and distribution space related to nearby agricultural production. As a result, it is plausible for the 400,000 square feet of industrial space included in Alternative 1 to be built in Esparto during the General Plan time frame, and it received a single positive score (⊕).

b. Alternative 2

i. Housing

Considering recent historical housing trends in Esparto and regional housing pressures, there appears to be sufficient market demand for Esparto to absorb an additional 1,260 housing units through the General Plan time frame, and so it received a single positive score (⊕).

ii. Retail

The addition of 1,260 housing units to Esparto's existing 780 homes amounts to a total of 2,040 units at General Plan buildout in Alternative 2, which would not be sufficient to support the 574,000 square feet of retail space proposed in this alternative. However, with the inclusion of the 883 new housing units called for in Madison under Alternative 2, the population base would begin to near the population threshold required for an average-sized,

full-service supermarket, though slightly greater residential growth in both Esparto and Madison may be necessary for this to occur. There is some potential for a community of this size to support a smaller independent grocery store, though Esparto already has one such establishment.

As discussed in Alternative 1, Esparto lacks the ability to capture retail demand from drive-by traffic. Some potential exists for a small amount of retail services geared towards persons traveling to and from Cache Creek Casino. In addition, there is some limited retail potential connected with agri-tourism such as gift shops attached to wine or olive oil tasting rooms. Again, this does not amount to a great deal of retail space.

The 536,000 square feet of retail space in Alternative 2 would be overly aggressive given the resident population and locational factors and so it received a single negative score (Θ).

iii. Office

Due to the proximity of Madison's population, it is plausible that 3 acres of local-serving office uses could be absorbed in Esparto through 2030 and it received a single positive score (⊕).

iv. Industrial

Esparto does have the ability to absorb some manufacturing, warehousing and distribution space related to nearby agricultural production. However, the 948,000 square feet of new industrial space in Alternative 2 is overly aggressive during the General Plan time frame and it received a single negative score (Θ).

c. Alternative 3

Alternative 3 calls for the same amount of development for Esparto as found in Alternative 1. Please see the discussion for Esparto under Alternative 1.

d. Alternative 4

i. Housing

Considering recent historical housing trends in Esparto and regional housing pressures, there appears to be sufficient residential demand for Esparto to absorb an additional 1,150 housing units through 2030 and it was given a single positive score (⊕).

ii. Retail

Even the full amount of residential development under this alternative would likely be insufficient to support a full-sized grocery store. Without such an anchor tenant, few other retail tenants are likely to be attracted to the community. Therefore, there may not be enough retail demand over the General Plan time frame to support even the 185,000 square feet of new retail space in Alternative 4 and it received a single negative score (Θ).

As discussed in Alternative 1, Esparto lacks the ability to capture commercial demand from drive-by traffic. Some potential exists for a small amount of retail services geared towards persons traveling to and from Cache Creek Casino. In addition, there is some limited retail potential connected with agritourism, such as gift shops attached to wine or olive oil tasting rooms. Again, this does not amount to a great deal of retail space.

iii. Office

Alternative 4 includes 93,000 square feet of office space. The approximately 1,900 total housing units in Esparto at buildout would not be sufficient to support this amount of local-serving office space and it received a single negative score (Θ).

iv. Lodging

Alternative 4 includes 450 lodging rooms. Due to Esparto's distance from Interstate 505, it unlikely that the town will experience much, if any, new lodging demand by General Plan buildout and so Alternative 4 was given a single negative score (Θ).

v. Industrial

Esparto does have the ability to absorb some manufacturing, warehousing and distribution space related to nearby agricultural production. However, the 948,000 square feet of new industrial space in Alternative 4 may be too aggressive for the General Plan time frame and this amount could likely be halved and still be adequate to meet demand. A single negative score (Θ) was given.

2. Community Services Thresholds

This section describes the population growth needed to support new community services in Esparto: public schools, libraries, health services and fire protection.

a. Public Schools

Esparto residents are currently served by three public schools: Esparto Elementary, Middle and High Schools. Under all alternatives, there would not be enough population growth to warrant additional elementary, middle and/or high schools.

b. Libraries

Esparto is served by the Esparto Regional Library. Under all alternatives, Esparto would not grow large enough to support a second "neighborhood" library, in addition to its current "community" library.

c. Health Services

Under all alternatives, Esparto would not have enough new population to warrant a new clinic for health services.

d. Fire Protection

There is an existing fire department in Esparto, and no alternatives project enough growth to support a new fire engine company.

Esparto is scored neutral (Ø) for community services, due to its existing schools and public library. New growth under any of the alternatives would not be large enough to support new services.

3. Fiscal Impacts

a. Alternative 1

Average 2005-06 new construction home prices in Esparto were approximately $420,000 per unit. For the purposes of this analysis, it is assumed that the average new home price in Esparto is $369,000 per unit, including affordable home prices.[1] The average homes represented at this price are similar to those that would most likely develop in Esparto. The County's share of property taxes from Esparto is higher than the countywide average. Thus, new housing in Esparto would be expected to generate fiscal surpluses for the County's General Fund.

Assuming that commercial development only occurs to the extent that the market can support it, retail space would likely provide higher than normal County sales tax revenues, via sales tax revenues. Office and industrial space would likely generate normal revenues, assuming that property values are not so low as to erode the County's property tax revenues from being in a tax rate allocation area where the County receives a higher than average share of basic property taxes.

As development is clustered within a limited area under this alternative, the County should be able to extend services without losing efficiency, despite its distance from Woodland. Currently, the town of Esparto is in a CSA that provides for a variety of maintenance functions. Assuming that property owners support the additional taxes to pay for enhanced services through a CSA, as required under Proposition 218, development under this alternative that could be supported by the market would most likely generate fiscal surpluses for the County's General Fund, and was given a single positive score (⊕).

[1] See Table B-4, Appendix B.

b. Alternative 2

Development in Esparto is likely to produce fiscal surpluses, provided that the market can support new development. Furthermore, with 1,260 new housing units, the town would be large enough to warrant the addition of a Sheriff sub-station, thereby allowing the County to provide cost efficient patrol services to Esparto. Thus, development under Alternative 2 would be expected to generate fiscal surpluses for the County's General Fund, so it was given a single positive score (⊕).

c. Alternative 3

Alternative 3 calls for the same development in Esparto as Alternative 1. Please see the fiscal discussion under Alternative 1.

d. Alternative 4

Development in Esparto is likely to produce fiscal surpluses, provided that the market can support new development. Furthermore, with 1,260 new housing units, the town would be large enough to warrant the addition of a Sheriff sub-station, thereby allowing the County to provide cost efficient patrol services to Esparto. Thus, development under Alternative 4 would likely generate fiscal surpluses for the County's General Fund, so it was given a single positive score (⊕).

B. Infrastructure

1. Water

Under all alternatives, all new development would connect to the existing water system maintained by the Esparto CSD, which consists of four wells.[2] A recent test well yielded 750 gpm, which exceeds the average well produc-

[2] Ron S Loudon, General Manager of Esparto Community Services District, memo, September 15, 2006, and phone call, September 28, 2006.

tion in the area.[3] Existing six-inch water mains in the older town core would need to be upsized to meet fire flow requirements for new development. In addition, new storage facilities and distribution infrastructure would also be required.

a. Alternative 1 and 3

These alternatives would require 650 gpm of additional capacity, at least 250 gpm for residential development and 400 gpm for commercial development. At this capacity, one well would be required to accommodate the development in these alternatives.

b. Alternative 2

Under this alternative, wells and storage facilities would be needed to provide at least 1,540 gpm of additional capacity, at least 760 gpm for new residential development and 780 gpm for non-residential development. At this capacity, two wells would be needed to accommodate development under this alternative.

c. Alternative 4

Under this alternative, wells and storage facilities would be needed to provide 1,470 gpm of additional capacity, at least 690 gpm for residential development and 780 gpm for commercial development. At this capacity, two wells would be needed to accommodate development under this alternative.

2. Wastewater

All new development would connect to the existing sewer system maintained by the Esparto CSD. The wastewater treatment facility currently has approximately 18 acres of ponds on 59 acres of land. To expand that capacity in all alternatives, undeveloped land next to the existing facility may be purchased or otherwise acquired. However, land acquisition for future wastewa-

[3] Ron S Loudon, General Manager of Esparto Community Services District, memo, September 15, 2006, and phone call, September 28, 2006.

ter treatment services would not be needed if the CSD uses aeration methods with the new ponds.

a. Alternatives 1 and 3

These alternatives would require at least 200 gpm of additional wastewater be generated. Of the required 200 gpm, 70 gpm is from residential development and 130 gpm is from commercial development. An additional 50 acres of ponds are required to meet this additional demand. Approximately 20 acres are facultative ponds, and the remaining 30 acres are percolation/evaporation ponds. It appears at this time that the 23 acres needed for facultative ponds would decrease to three acres with partial aeration and 1.5 acres with full aeration ponds. The 27-acre requirement for disposal would still be necessary. If standard facultative ponds are used, seven acres of land beyond the 59 acres currently owned by the CSD would need to be acquired. The required wastewater treatment plant improvements under Alternatives 1 and 3 would be estimated to cost approximately $15 million, not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

b. Alternative 2

This alternative requires at least 440 gpm of additional wastewater be generated. Of the required 440 gpm, at least 190 gpm from residential development and 250 gpm from non-residential development. An additional 110 acres of ponds are required to meet this additional demand. Approximately 50 acres are facultative ponds, and the remaining 60 acres are percolation/evaporation ponds. Continued expansion using current treatment methods would ultimately require acquisition of land beyond the 59 acres currently owned by the CSD. Initial calculations appear to indicate that treatment pond requirements would decrease to six acres with partial aeration and decrease to two acres using fully aerated ponds. Disposal requirements would remain at 60 acres. To meet the demands for disposal, land acquisition would remain a requirement regardless of aeration use. The required wastewater treatment plant improvements would be estimated to cost approximately $33 million,

not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

c. Alternative 4

Under this alternative, at least 350 gpm of additional wastewater would be generated. Of the required 350 gpm, at least 170 gpm is from residential development and up to 180 gpm is from commercial development. An additional 90 acres of ponds are required to meet this additional demand. Approximately 40 acres are facultative ponds, and the remaining 50 acres are percolation/evaporation ponds. Continued expansion using current treatment methods would ultimately require acquisition of additional land beyond the 59 acres currently owned by the CSD. It appears at this time that the 39 acres needed for facultative ponds would decrease to five acres with partial aeration and two acres with full aeration ponds. The 50-acre requirement for disposal would still apply. To meet the demands for disposal using current treatment methods, 44 acres of additional land would be required. The required wastewater treatment plant improvements would be estimated to cost approximately $32 million, not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

3. Storm Drainage

Under all alternatives, infill development would require facilities (ditches or pipe collection systems) to convey water to existing roadside ditches. On-site detention systems would be required for major subdivisions and commercial/industrial development. Current mixed-use developments proposals exemplify the use of on-site detention systems. On these projects, storm drainage is conveyed to detention basins by a collection pipe network. The on-site detention basins moderate flows to the Lamb Valley Slough. The maintenance of the detention basins and on site storm drain system would be performed by the Madison-Esparto Regional CSA.[4]

[4] Madison-Esparto Regional County Service Area Final MSR/SOI, 2006, page 16.

4. Flooding

A portion of Esparto is at risk of a 100-year flood, especially in the east, where Willow Slough crosses the town. Under all alternatives, a small amount of this land would be developed for both residential and non-residential uses. Esparto received a single negative score (Θ) for flooding to reflect the small area that maybe developed inside the 100-year floodplain.

C. Transportation

1. Proximity to Freeways

Esparto is within four miles of Interstate 505.

2. Regional Roadways

Connections between Esparto and other areas of the county are primarily provided by State Route 16, a two-lane highway that carries approximately 12,000 vehicles a day east of Esparto. Expansions of the Cache Creek Casino have resulted in substantial increases in traffic on State Route 16. Possible future expansions of the casino were not considered in this analysis since such expansions are unknown and, in any event, would be the same for all alternatives. State Route 16 is currently at 50 percent of its capacity. Potential State Route 16 improvements needed under each alternative are discussed below. The analysis considered only daily capacities related to development in Esparto. Peak periods on State Route 16 would be more concentrated and thus use a higher percent of available capacity.

a. Alternatives 1 and 3

With build-out of these alternatives, together with development in Madison, State Route 16 would reach 80 percent of capacity and would likely accommodate the additional traffic volumes under Alternative 1. However, intersection improvements (e.g. the all-way stop-controlled County Road 89/State Route 16 intersection in Madison) would be needed to accommodate the additional growth in traffic during peak period conditions, and the alternatives given a single negative score (Θ).

b. Alternatives 2 and 4

Under these alternatives, considered together with development in Madison, State Route 16 would need to be widened to four lanes between Esparto and Woodland to maintain current traffic operating conditions. If State Route 16 were not widened, congestion would cause further diversion of traffic to parallel facilities such as Road 85B, Road 23, and/or Road 24, and these roadways would need improvements. With the increased traffic on State Route 16, traffic is expected to also increase on Main Street in Woodland, which would require measures to accommodate additional traffic volumes through Woodland.

Under both scenarios, these alternatives are given a double negative (ΘΘ) score for regional roadways.

3. Transit Service

Currently, Yolo County Transit District provides fixed route transit service 16 times every day from Woodland to the Cache Creek Casino with a transit stop in Esparto. Under all alternatives, the additional development in Esparto would result in a relatively small increase in transit ridership, and could be accommodated by the existing fixed-route transit service between the Cache Creek Casino and Woodland, and is scored neutral (Ø).

4. Bicycle and Pedestrian Circulation

Currently, no bike lanes or bike paths connect Esparto east to Woodland or south to Winters. In Esparto, sidewalks are provided along sections of State Route 16 but are limited and are intermittently provided along local residential streets. In addition, a separated pedestrian/bicycle trail has been established along new development in the western area of Esparto, with plans to provide a continuous trail that would potential provide a connection to the proposed new high school site as new development moves forward.

a. Alternatives 1 and 3

Under these alternatives, additional development would likely provide additional bike and pedestrian facilities only along the project frontages, and is scored neutral (Ø).

b. Alternatives 2 and 4

Under these alternatives, which are of a moderate density, new growth would likely provide bike and pedestrian facilities along the project frontages and some expansion of bicycle and pedestrian facilities is possible, providing continuous connections between complementary uses in Esparto. These alternatives are given a single positive score (⊕).

D. Environmental Issues

1. Agriculture

Esparto is surrounded by Prime Farmland, Class 1 and 2 soils and soils with a mix of Grade 1 and Grade 4 Storie Index rating, with some lesser quality Unique Farmland and Farmland of Local Importance and Class 3 and 6 soils in nearby hillier areas to the southwest.

a. Alternatives 1 and 3

These alternatives include infill development of up to 186 residential units and 274 units at the edges of the community. Some of this infill development would be on farmland that is designated and zoned for urban development but is currently farmed, and all of the edge development would be on farmland. All of the farmland that would be converted is Prime Farmland, and most of it would be the best quality soils. These alternatives are given a single negative (Θ) score.

b. Alternative 2

The greatest amount of development in Esparto, and therefore the greatest effect on surrounding agriculture, would occur under Alternatives 2, with over 350 acres converted. All of the farmland that would be converted is

Prime Farmland, and most of it would be the best quality soils. This alternative is given a double negative score (ΘΘ).

c. Alternative 4

Alternative 4 would result in slightly less development and loss of farmland in Esparto than with Alternative 2, and considerably more than with Alternatives 1 and 3. All of the farmland that would be converted is Prime Farmland, and most of it would be the best quality soils. This alternative is given a double negative (ΘΘ) score.

2. Biological Resources

The Esparto area contains habitat for the western burrowing owl and Swainson's hawk. In all alternatives, development could effect this habitat. However, since both these species have extensive habitat areas in the county, these effects would likely be relatively insignificant and is scored neutral (Ø).

3. Airport Land Use Conflicts

Esparto is not within two miles of an airport, and is given a score of positive (⊕).

E. Smart Growth

1. Preservation of Open Space

In Alternatives 1 and 3, 60 percent of the new housing in Esparto would be built outside of the town limits, and in Alternatives 2 and 4, 85 percent of the new housing would be built outside of town limits. This loss of open space in all alternatives leads to a score of double negative (ΘΘ).

2. Compact Development and Healthy Design

In all alternatives, new development would be built in and at the edge of Esparto at densities of five to eight units per acre. This is a moderate density that could support some walking and bicycling, particularly given its proximity to the town. Additionally, the Esparto General Plan requires all new

housing to be connected to the peripheral bicycle and pedestrian path at the western portion of the town. This issue receives a single positive (⊕) score, due to its moderate density.

5 KNIGHTS LANDING

Knights Landing is an unincorporated community of approximately 400 residential units and limited local-serving retail and agricultural industrial uses. The alternatives include the following growth in Knights Landing:

- Alternative 1
  - 193 units of residential growth, all of which would be infill.
  - 12 acres of non-residential growth, including 4 acres of retail, 2 acres of office, and 6 acres of public/quasi-public uses.
- Alternative 2
  - 993 units of residential growth, including 228 units on infill sites within the current town boundary and 765 units at the edges of the community.
  - 50 acres of non-residential growth, including 29 acres of retail, 1 acre of office and 20 acres public/quasi-public uses.
- Alternative 3
  - The same as Alternative 1.
- Alternative 4
  - 1,250 units of residential growth, including 228 units on infill sites within the current town boundary and 1,022 units at the edges of the community.
  - 105 acres of non-residential growth, including 20 acres of retail and 85 acres of public/quasi-public uses.

This chapter evaluates the four alternatives and explains the scores given for each issue.

A. Economics

1. Market Viability

a. Alternative 1

i. Housing

Knights Landing has started to become an affordable housing option for households priced out of Woodland's housing market. With continued housing pressures in Woodland, it is highly likely that Knights Landing could absorb 200 units by 2030. In fact, this number would likely be insufficient to meet housing demand over that period. Alternative 1 received a single positive score (⊕) for housing market viability.

ii. Retail

With the existing 380 housing units, Knights Landing would grow to a total of approximately 580 housing units through the General Plan time-frame. While this is not a sufficient population base to support a significant amount of commercial space under this alternative, Alternative 1 only calls for approximately 37,000 square feet of new retail. It is feasible for this modest amount of commercial space to be absorbed during the General Plan time frame. Because retail development in Knights Landing in Alternative 1 would be feasible in terms of market-viability, a single positive score (⊕) was assigned.

iii. Office

Alternative 1 includes 19,000 square feet of office space. This modest amount of office space could be absorbed within the General Plan horizon. A single positive score (⊕) was assigned.

b. Alternative 2

i. Housing

With continued housing pressures anticipated for Woodland, it is possible that Knights Landing could increase by nearly 1,000 units by General Plan buildout. Alternative 2 received a single positive score (⊕) for housing market viability.

ii. Retail

With the existing 380 housing units, Knights Landing would increase to a total of approximately 1,370 housing units through the General Plan timeframe. This is not a sufficient population base under this alternative to support a significant amount of new commercial space in Knights Landing, particularly given the proximity to Woodland and its large supply of existing and planned retail space. Because the amount of retail development in Knights Landing in Alternative 2 would not be viable in the market, this alternative received a single negative score (Θ) for commercial viability.

iii. Office

As the approximately 9,000 square feet of office space in Alternative 2 is not a large amount, it is potentially feasible for it to be absorbed through the duration of the General Plan time frame. A single positive score (⊕) was assigned.

c. Alternative 3

Alternative 3 includes the same amount of development in Knights Landing as found in Alternative 1. Please see the discussion for Knights Landing under Alternative 1.

d. Alternative 4

i. Housing

With continued regional housing pressures and increasing prices in Woodland, it is feasible for Knights Landing to capture 1,250 new housing units. Therefore, Alternative 4 received a single positive score (⊕) for housing market viability.

ii. Retail

Even with the 1,250 new homes, by General Plan buildout the community of Knights Landing would consist of no more than approximately 1,630 residential units. Such a community size would not be sufficient to support the 185,000 square feet of retail space proposed under this alternative, particularly considering that much of Knights Landing's retail demand will likely leak out

to nearby Woodland, where the larger community size supports a large and diverse range of retail options. Because the amount of retail development in Knights Landing in Alternative 4 would not be viable in the market, this alternative received a single negative score (Θ) for commercial viability.

2. Community Services Thresholds

This section describes the new population needed in Knights Landing to support a new public school, library, health services and fire protection.

a. Public Schools

Knights Landing is currently served by Grafton Elementary School. No alternative brings enough population growth to prevent the closing of Grafton and the consolidation of its students into other schools in the School District.

Under all alternatives, there is also not enough population growth to bring a new Middle and/or High School to Knights Landing.

b. Libraries

The Knights Landing Branch Library currently serves existing residents from a converted mobile home. No alternatives bring enough new population to the town to warrant a second neighborhood library.

c. Health Services

The existing health clinic in Knights Landing, operated under contract by CommuniCare Health Centers, is currently open less than 20 hours a week. However, under all alternatives, there is not enough population growth in the town to open a new clinic of basic medical services.

d. Fire Protection

The Knights Landing Fire Department currently provides services to the town, but there is not enough population growth in any of the alternatives to support a new fire company.

e. Summary

A score of neutral (Ø) is given to Knights Landing for the current services and lack of population growth to support new services.

3. Fiscal Impacts

a. Alternative 1 and 3

The average home price in Knights Landing was approximately $366,000 per unit between 2005 and 2006, or $326,000 including affordable housing units.[1] Although new development would command a premium over these prices, the area is located within a tax rate area with lower than average County allocation rates. Thus, new housing units would need to sell at prices upwards of $600,000 per unit in order to generate normal revenues to the County.

Assuming that the developers only build new commercial development in Knights Landing to the level that the market could support, the commercial and industrial space would need to have relatively high values in order to generate normal revenues, although retail space could generate higher revenues for the County through sales tax receipts.

As development under these alternatives is in close proximity to the County seat, where many county services are based, additional service costs would likely be relatively small. In addition, the County would be able to extend the services provided through the Snowball CSA or implement a funding mechanism to minimize the impact of County service costs for enhanced services. Assessing new development would fund the additional service costs could potentially offset the lower revenues associated with this development. However, given the County's small share of basic property taxes and particularly property values in Knights Landing, development in Knights Landing under alternative 1 and 3 would most likely generate fiscal deficits for the County's General Fund, and therefore were given a single negative score (Θ).

[1] See Table B-4 in Appendix B.

b. Alternative 2

Development in Knights Landing is likely to be fiscally neutral at best, and more likely would produce fiscal deficits resulting from the lower property values of the affordable units. Although the number of new housing units could warrant the development of a local Sheriff sub-station, the area's proximity to Woodland indicates that the County would not gain cost efficiencies from developing a sub-station in Knights Landing. Since residential property tax revenues under this alternative would not cover the costs of providing additional County services that are funded with General Fund dollars, development in Knights Landing under Alternative 2 would be expected to generate net fiscal deficits for the County's General Fund and therefore was given a double negative score (ΘΘ).

c. Alternative 4

As with development in Alternatives 1, 2 and 3, development under Alternative 4 would likely result in fiscal deficits for the county's General Fund. Because residential units in Knights Landing are likely to generate fiscal deficits, and this alternative proposed the largest number of in Knights Landing, Alternative 4 would likely produce the largest fiscal deficits to the county's General Fund was therefore given a double negative score (ΘΘ).

B. Infrastructure

1. Water

Under all alternatives, new development would connect to an expanded Knights Landing CSD community water system. Existing six-inch water mains would need to be upsized to meet fire flow requirements.

a. Alternatives 1 and 3

Under these alternatives, the additional water demand from new development would be at least 180 gpm, 130 gpm from residential development and 50 gpm from commercial development. This demand could be satisfied with the addition of one well.

b. Alternative 2

The additional water demand from new development in this alternative would be at least 870 gpm, 640 gpm from residential development and 230 gpm from commercial development. This demand could be met by two or more wells. Additional storage facilities and distribution infrastructure would also be needed.

c. Alternative 4

The additional water demand from new development in this alternative would be 1,040 gpm, 810 gpm from residential development and 230 gpm from commercial development. This demand could be met by two or more wells. Additional storage facilities and distribution infrastructure would also be needed.

2. Wastewater

The current treatment plant in Knights Landing has 22 acres of land available for expansion.

a. Alternatives 1 and 3

Under these alternatives, waste generation would be at least 50 gpm, 30 gpm from residential development and 20 gpm from commercial development. An additional 12 acres of ponds would be required to satisfy this demand, six acres of facultative ponds and six acres of percolation/evaporation ponds. No additional land would need to be acquired under these alternatives. The required wastewater treatment plant improvements under Alternatives 1 and 3 would be estimated to cost approximately $4 million. There would also be additional costs to expand the wastewater collection system.

b. Alternative 2

Development under Alternative 2 would generate an at least an additional 220 gpm of wastewater, 150 gpm from residential development and 80 gpm from commercial development. An additional 55 acres of ponds would be required to meet this additional demand, 25 acres of facultative ponds and 30 acres of percolation/evaporation ponds. If aeration were used to reduce the size of

ponds needed, 3.5 acres would be required for partially aerated ponds and 1.5 acres would be required for fully aerated ponds. Disposal pond requirements would remain at 30 acres. To meet the demands for disposal, additional land beyond the 22 acres currently owned by the CSD would need to be acquired. The required wastewater treatment plant improvements under Alternative 2 would be estimated to cost approximately $17 million, not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

c. Alternative 4

Development under Alternative 4 would generate at least an additional 340 gpm, 190 gpm from residential development and 150 gpm from commercial development. An additional 85 acres of ponds would be required to meet this additional demand, 39 acres of facultative ponds and 46 acres of percolation/evaporation ponds. If aeration equipment were used to reduce the size of ponds needed, the 39 acres of facultative ponds would decrease to five acres with partial aeration and two acres with full aeration. The additional 39 acres of disposal ponds would still be needed and additional land beyond the 22 acres currently owned by the CSD would still need to be acquired. The required wastewater treatment plant improvements under Alternative 4 would be estimated to cost approximately $20 million, not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

3. Storm Drainage

New development in Knights Landing under all four alternatives would require new storm drain facilities, including additional drainage pipes. Development could implement storm drainage features and permits similar to the recently approved White Subdivision, which uses a detention basin to collect storm drainage and a pump station to pump the drainage into the Colusa Basin Drain.[2]

[2] Information provided by David Morrison, August 15, 2006.

4. Flooding

Knights Landing is situated along the Sacramento River and is protected by levees of unknown stability. The 100-year floodplain in Knights Landing is contained by current drainage channels. Under all alternatives, future development would not occur in those channels.

Due to its protection by a levee of unknown stability, Knights Landing was given a negative score (Θ) for flooding.

C. Transportation

1. Proximity to Freeways

Knights Landing is more than four miles from the nearest freeway, Interstate 5, and is given a score of a single negative (Θ).

2. Regional Roadways

State Route 113 and Road 102 provide connections between Knights Landing and I-5 in Woodland. Road 14 connects to I-5 in Zamora. To the north, State Route 45 connects Knights Landing to Colusa County and Route 113 provides a connection to Sutter County. Existing traffic volumes on State Route 113 and Road 102 between Knights Landing and Woodland are less than 40 percent of capacity, and with the anticipated growth in Knights Landing under all alternatives, it is expected that these roadways would not exceed 60 percent of capacity and would not need to be widened.

Because no roadway improvements would be needed to accommodate increased traffic volumes from development in Knights Landing under all alternatives, all alternatives received a neutral score (Ø).

Review of recent vehicle accident data for Road 102 between Knights Landing and Woodland revealed a moderately high number of accidents at intersections and on roadway segments relative to other County roads; therefore, safety improvements are likely needed. Potential safety improvements could

include widening existing roadways to accommodate separate turn lanes, wider travel lanes and/or shoulders, and/or constructing/improving bicycle and pedestrian facilities.

3. Transit Service

Currently, the Yolo County Transit District provides semi-weekly fixed route transit service from Woodland. Under all alternatives, growth in Knights Landing would result in a relatively small increase in transit ridership. Because all alternatives would rely on existing fixed route transit services, all alternatives received a neutral score (Ø).

4. Bicycle and Pedestrian Circulation

Currently, bike lanes are provided on Road 102 from Knights Landing (beginning on State Route 113) to Woodland and south to Davis. Sidewalks are provided along sections of State Route 113 in Knights Landing but are limited or do not exist along local residential streets. Potential effects to bicycle and pedestrian circulation due to development in Knights Landing under each alternative are discussed below. For all alternatives, existing bike lanes along Road 102 may require some enhancements.

a. Alternatives 1 and 3

Under these alternatives, development would likely provide additional bike and pedestrian facilities only along the project frontages. Existing bike lanes along Road 102 may require some enhancements. Because the amount of development in these alternatives would provide limited funding for needed bike and pedestrian facility improvements, it was given a neutral score (Ø).

b. Alternatives 2 and 4

With the amount of residential and non-residential development proposed under these alternatives, additional development would possibly provide bike and pedestrian facilities along the project frontage(s) and could provide expansion of the bicycle and pedestrian facilities to provide continuous connections between complementary land uses inside the town. Because the amount of development in these alternatives might provide needed bike and pedestrian enhancements, it received a positive score (⊕).

D. Environmental Issues

1. Agriculture

Knights Landing is surrounded by Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating.

a. Alternative 1

Alternative 1 includes infill development of 193 residential units in Knights Landing, which would have no effect on agricultural resources, and edge development of non-residential uses, which would result in the loss of 12 acres of Prime Farmland and Class 1 soils east of the community.

Due to the small amount of Prime Farmland and Class I soils converted in Knights Landing under Alternative 1, it was given a neutral score (Ø).

b. Alternative 2

Alternative 2 would convert approximately 178 acres of Prime Farmland outside the current town boundary.

Due to the large amount of high quality farmland converted, Alternative 2 was given a double negative score (ΘΘ).

c. Alternative 3

Development and resulting agricultural effects under Alternative 3 would be the same neutral score (Ø) as under Alternative 1.

d. Alternative 4

Alternative 4 includes the most growth and would convert up to approximately 275 acres of farmland east of town, all of it Prime Farmland and the best quality soils.

Due to the large amount of high quality farmland converted under Alternative 4, it was given a double negative score (ΘΘ).

2. Biological Resources

While Knights Landing is habitat for Swainson's hawk, maps from the NCCP/HCP show a known sighting of Swainson's hawk near, but not in, the town. Other species with habitat in the Knights Landing area include western burrowing owl, loggerhead shrike, white-faced ibis and California tiger salamander.

a. Alternative 1

Since Alternative 1 includes only infill in Knights Landing, it is very unlikely that development under this alternative would affect any of these species and so it received a neutral score (Ø).

b. Alternative 2

Alternative 2 includes development at the edges of the town, which has some chance of affecting habitat for one or more of these species, particularly the white-faced ibis and the California tiger salamander, which has only limited habitat locations. Therefore, Alternative 2 was given a single negative score (Θ).

c. Alternative 3

Development in Knights Landing under Alternative 3, and resulting effects on biological resources, would be the same as under Alternative 1.

d. Alternative 4

As in Alternative 2, development in Alternative 4 would be at the edge of Knights Landing and could affect habitat for the white-faced ibis and the California tiger salamander and so it was given a single negative score (Θ).

3. Airport Land Use Conflicts

Knights Landing is not within two miles of an airport, so no conflicts would occur.

E. Smart Growth

1. Preservation of Open Space

a. Alternatives 1 and 3

In these alternatives, development in Knights Landing could occur as infill, with no resulting conversion of open space lands, and so it was given a single positive score (⊕).

b. Alternatives 2 and 4

In these alternatives, significant development would occur on open lands at the edge of town, and so they receive a single negative score (Θ).

2. Compact Development and Healthy Design

a. Alternatives 1 and 3

In these alternatives, all development in Knights Landing would be accommodated inside existing town limits, meeting the smart growth principles of strengthening existing communities, and supporting walking and biking, meriting a single positive score (⊕).

b. Alternatives 2 and 4

These alternatives puts less than a quarter of the new development inside existing town limits, with the remainder as edge growth. While this growth would support the existing town and could be located so that people would walk and bicycle, it would not be as compact and efficient as growth in the town itself, and so both alternatives receive a double negative score (ΘΘ).

6 MADISON

Madison is an unincorporated community of approximately 150 residential units and limited convenience-oriented retail uses. The alternatives include the following growth in Madison:

- Alternative 1
  - 83 units of residential growth, all of which would be infill.
  - One acre of retail uses.
- Alternative 2
  - 883 units of residential growth, including 126 units on infill sites within the current town boundary and 757 units at the edges of the community.
  - 27 acres of non-residential growth, including 16 acres of retail, 1 acre of office and 10 acres public/quasi-public uses.
- Alternative 3
  - The same as Alternative 1.
- Alternative 4
  - 83 units of residential growth, all of which would be infill.
  - 27 acres of non-residential growth, including 16 acres of retail, one acre of office and 10 acres public/quasi-public uses.

This chapter evaluates the four alternatives and explains the scores given for each issue.

A. Economics

1. Market Viability

a. Alternative 1

i. Housing

Madison's location near Interstate 505 makes an attractive location for commuters to jobs in Vacaville, Fairfield, and the Bay Area. As such, the alloca-

tion of 83 housing units in Alternative 1 is probably insufficient to meet demand for new housing in Madison over the next couple of decades. Alternative 1 was given a single positive score (⊕) for residential market viability.

ii. Retail

The existing 156 housing units combined with the 83 new units total to approximately 240 units, which is insufficient to support any significant retail. However, The 9,000 square feet of retail space in this alternative could be viable if located to take advantage of proximity to Interstate 505. Alternative 1 was given a single positive score (⊕) for commercial market viability.

b. Alternative 2

i. Housing

While the residential growth called for in Alternative 2 represents an extremely high growth rate, Madison's location along Interstate 505 makes it a competitive site that has the potential to attract commuters to Vacaville, Fairfield and even the Bay Area. Due to the anticipated regional housing pressures, it is possible that Madison could absorb the nearly 900 new housing units in Alternative 2 over the next 25 years. Therefore, Alternative 2 was given a single positive score (⊕) for residential market viability.

ii. Retail and Office

Even with such aggressive residential growth under this alternative, the total number of housing units in Madison by General Plan buildout would total to approximately 1,040 units. The overall small community size would remain insufficient to support a significant amount of new local-serving retail or office space. As described for Alternative 1, Madison may be able to accommodate some small amount of retail space geared towards freeway traffic. Even with the potential increase in traffic related to growth in Dunnigan, demand for highway-serving retail would remain limited. The amount of retail and office space in Madison under Alternative 2 would not be market viable and was given a single negative score (⊖).

c. Alternative 3

Alternative 3 calls for the same amount of development for Madison as found in Alternative 1. Please see the discussion for Madison under Alternative 1.

d. Alternative 4

i. Housing

As noted above in Alternative 1, 83 new housing units could be readily absorbed and would likely be insufficient to meet residential demand in Madison over the General Plan time frame. Therefore, Alternative 4 was given a single positive score (⊕) for residential market viability.

ii. Retail and Office

As described under Alternative 2, beyond a small amount of retail geared towards drive-by traffic, Madison would be unable to support any significant amount of new commercial space. This finding holds as the amount of residential growth under Alternative 2 is greater than the 83 units called for in this alternative. Because it is unlikely that Madison could absorb the amount of retail or office space in Alternative 4 during the General Plan time horizon, this alternative was given a single negative score (Θ) for commercial market viability.

2. Community Services Thresholds

Madison currently has a continuing education school and a fire department.

However, Madison, under all alternatives, is not projected to have enough population growth to support any new community services, and is given a single negative (Θ) score.

3. Fiscal Impacts

a. Alternatives 1 and 3

In 2005-06 the average home in Madison sold for $330,000 per unit, below the $360,000 threshold to generate normal revenues for fiscal neutrality. Accounting for required affordable units further reduces the average home price

to $291,000.[1] Although new development would likely command a premium, the softening housing market could lead to reduced premiums for new development over the first portion of the General Plan horizon. However, the tax rate areas that encompass the Madison area tend to have property tax allocation rates that are greater than or equal to the average countywide allocation rate of 13 percent. Given that home prices are below the threshold for fiscal neutrality, the slightly above average county property tax allocation rate in this location not withstanding, this analysis considers that new housing development in Madison would likely generate fiscal deficits for the county's General Fund.

The retail portion could generate small fiscal surpluses for the county, particularly if new retail developments were built just outside of the town in order to have visibility from Interstate 505. If retail property values in Madison are inline with property values countywide, the retail portion could be expected to generate above normal revenues. Because insufficient data exists to determine the property values for retail space in Madison, there is no way to determine whether retail uses would generate higher than normal revenues. However, with only 9,000 square feet proposed under this alternative, the fiscal impact of retail development would be minimal.

Because development under this alternative would be close to the county seat, additional service costs would likely be relatively small. In addition, the county would be able to extend the existing CSA or implement a new funding mechanism to minimize the impact of additional county service costs. Assessing new development to fund the additional service costs could potentially offset the lower revenues associated with this development. However, given the low property values and small amount of supportable retail space, development in Madison under Alternative 1 would likely generate fiscal deficits for the county's General Fund, and so it received a single negative score (Θ).

[1] See Table B-4 in Appendix B.

b. Alternative 2

This analysis assumes that developers will only develop sufficient retail space to satisfy the market. However, because development in Madison is likely to produce fiscal deficits, development under Alternative 2 would likely generate fiscal deficits for the county's General Fund, and so it was given a double negative score (ΘΘ).

c. Alternative 4

This analysis assumes that developers will only develop sufficient retail space to satisfy the market. However, as development in Madison is likely to produce fiscal deficits, development under Alternative 2 would likely generate fiscal deficits for the County's General Fund, and it was given a single negative score (Θ).

B. Infrastructure

1. Water

New development, under all alternatives would connect to the Madison CSD community water system, and the CSD's new well is scheduled to begin production in December of 2006.[2] The new well is expected to satisfy water demand under all four alternatives. No additional wells would be required, however. Additional distribution infrastructure would be needed. Existing six-inch water mains would need to be upsized to meet fire flow requirements. Additional wellhead treatment can be provided.

a. Alternatives 1 and 3

Under these alternatives, additional water demand would be approximately 60 gpm, 55 gpm from residential development and 5 gpm from commercial development.

[2] Anderson, Andy. Madison Community Services District. Personal telephone communication with Coastland Civil Engineering. July 28, 2006.

b. Alternative 2

The additional water demand under Alternative 2 would be at least 700 gpm, 570 gpm would from residential development and 130 gpm from commercial development.

c. Alternative 4

Water demand for Alternative 4 would be at least 170 gpm, 50 gpm from residential development and approximately 120 gpm from commercial development.

2. Wastewater

In order to serve new development, Madison's wastewater collection system and treatment plant must complete the repairs and upgrades required to comply with a Cease and Desist Order issued by the Regional Water Quality Control Board. These improvements include raising the walls on three treatment ponds, which increases the capacity of the system, and replacing failed vitrified clay collection system piping, which decreases inflow and infiltration.

a. Alternatives 1 and 3

Under these alternatives, wastewater generation from new development would be 14 gpm, 13 gpm from residential development and 1 gpm from commercial development. An additional 3.6 acres of ponds would be required to meet this demand, 1.6 acres of facultative ponds and 2 acres of percolation/evaporation ponds. The improvements required by the Regional Board would be expected to provide the additional capacity to treat the 14 gpm flow from the proposed development without the need for additional improvements or land acquisition.

b. Alternative 2

Under this alternative, at least 170 gpm of additional wastewater would be generated, 130 gpm from residential development and 40 gpm from commercial development. Even after completion of the repairs and upgrades required to comply with the Cease and Desist Order issued by the Regional Water

Quality Control Board, an at least an additional 40 acres of ponds are required to meet this additional demand, 20 acres of facultative ponds and 20 acres of percolation/evaporation ponds. The area of additional facultative ponds required could be reduced to three acres with partial aeration and to one acre with full aeration. Disposal requirements would remain at 20 acres of percolation/evaporation ponds. To meet the demands for disposal, additional land acquisition would still be needed regardless of aeration use. The required wastewater treatment plant improvements under Alternative 2 would be estimated to cost approximately $13 million, not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

c. Alternative 4

In this alternative, 50 gpm of additional wastewater would be generated, 10 gpm from residential development and 40 gpm from commercial development. Even after completion of the repairs and upgrades required to comply with the Cease and Desist Order issued by the Regional Water Quality Control Board, an additional 13 acres of ponds are required to meet this additional demand, 6 acres of facultative ponds and 7 acres of percolation/evaporation ponds. The 6 acres needed for facultative ponds could be reduced to one acre with partial aeration and ½ acre with full aeration. The 7-acre requirement for percolation/evaporation ponds would still apply. The required wastewater treatment plant improvements would be estimated to cost approximately $4.2 million, not including land acquisition costs. There would also be additional costs to expand the wastewater collection system.

3. Storm Drainage

Under all alternatives, infill development in Madison would require on-site ditches to convey water to existing roadside ditches. Continued maintenance of Lamb Valley Slough and the connecting Willow Slough performed by the Madison-Esparto Regional CSA would reduce flood hazards and require minimal yearly cost. Additionally, under Alternative 2, new peripheral development in Madison would require on-site storm drain detention.

4. Flooding

Madison is entirely within the 100-year floodplain of Willow and Cottonwood Sloughs. The floodplain is exacerbated by Highway 16 and Interstate 505. Under all alternatives, more than 50 percent of the town or acreage projected for future growth is subject to flooding from a 100-year event, and is given a double negative (ΘΘ) score.

C. Transportation

1. Proximity to Freeways

Madison is less than one mile from Interstate 505.

2. Regional Roadways

Connections between Madison and other areas of the county are provided by State Route 16. State Route 16 is a two-lane highway that carries approximately 12,000 vehicles a day east of Esparto. Expansions of the Cache Creek Casino have resulted in substantial increases in traffic along State Route 16. Potential future expansions of the Casino were not included in the alternatives comparison since this information is unknown and, in any event, would be the same for all alternatives. Currently State Route 16 is at 50 percent of capacity. Potential improvements needed on State Route 16 under each alternative are discussed below. The analysis considers only daily capacities on State Route 16 related to development in Madison. Peak periods along State Route 16 would be more concentrated thus use a higher percent of available capacity.

a. Alternatives 1 and 3

Under these alternatives, combined with development in Esparto, State Route 16 would be expected to reach 80 percent of capacity and thus would likely accommodate the additional traffic volumes under both alternatives. However, intersection improvements (e.g. the all-way stop controlled intersection of Road 89/State Route 16 in Madison) would be needed during peak period conditions, and thus these alternatives are given a single negative(Θ) score.

b. Alternatives 2 and 4

Under these alternatives, and considering development in Esparto, State Route 16 would need to be widened to four lanes between Esparto and Woodland to maintain current traffic operating conditions. These alternatives are given a double negative (ΘΘ) score.

If State Route 16 were not widened, congestion on State Route 16 would cause further diversion than currently occurs to parallel facilities such as Road 85B, Rod 23, and/or Road 24, and these roadways would need improvements due to traffic diverted from the highway. With the increased traffic on State Route 16, traffic is expected to also increase on Main Street in Woodland, which would require measures to accommodate additional traffic volumes through Woodland.

3. Transit Service

Currently, the YCTD provides regular daily fixed route transit service from Woodland to the Cache Creek Casino, with a transit stop in Madison. Under all the alternatives, the increase in ridership due to new development in Madison could be accommodated by the existing fixed route service between the Cache Creek Casino and Woodland, and is scored neutral (Ø).

4. Bicycle and Pedestrian Circulation

Currently, no bike lanes or bike paths connect Madison east to Woodland or south to Winters. In Madison, sidewalks generally do not exist along State Route 16 or on local residential streets.

a. Alternatives 1, 3 and 4

Under these alternatives, development would likely provide additional bike and pedestrian facilities only along the project frontages. Given the amount of projected development under these alternatives, it is unlikely that the substantial funding needed to develop and expand bicycle and pedestrian facilities in Madison would be generated. These alternatives are scored neutral (Ø).

b. Alternative 2

Under this alternative, additional development would likely provide bike and pedestrian facilities along the project frontages and some expansion of the bicycle and pedestrian facilities to provide continuous connections between complementary uses in Madison. This alternative is given a single positive (⊕) score.

D. Environmental Issues

1. Agriculture

Madison is surrounded by Prime Farmland, Class 1 and 2 soils and soils with a Grade 1 Storie Index rating.

a. Alternative 1

Alternative 1 includes infill development of 83 housing units on vacant and underutilized land within the current town boundary, none of which is farmed, plus one acre of non-residential growth on farmland at the edge of the community, for a minimal effect on agricultural resources and a neutral score (Ø) under this alternative.

b. Alternative 2

Alternative 2 has over ten times the growth in Madison than in the other alternatives and would convert approximately 153 acres of Prime Farmland and the highest quality soils. Because of the comparatively large amount of farmland converted in Madison under Alternative 2, it received a double negative score (ΘΘ) for agriculture.

c. Alternative 3

Development in Madison under Alternative 3, and resulting effects on agriculture, would be the same as under Alternative 1. Alternative 3 received a neutral score (Ø) for agriculture.

d. Alternative 4

Under Alternative 4, all residential growth would also be infill with no farmland effects, but this alternative includes 27 acres of non-residential growth on Prime Farmland. Alternative 4 received a single negative score (Θ) for agriculture.

2. Biological Resources

There are known sightings of Swainson's hawk in Madison and the community is habitat for the species. Other species with habitat in the Madison area include loggerhead shrike, San Joaquin spearscale, western burrowing owl, and western spadefoot toad.

a. Alternatives 1 and 3

Under these alternatives, only infill residential growth and a single acre of commercial growth is projected in Madison. It is very unlikely that any of these species would be affected by this development, giving these alternatives a score of neutral (Ø).

b. Alternative 2

Most residential development is placed at the edge of Madison under this alternative, which has some chance of affecting habitat for one or more of these species, giving these a single negative (Θ) score.

c. Alternative 4

Similar to Alternatives 1 and 3, the residential development in Alternative 4 is infill, but the commercial development totals some 27 acres, and would be built at the edge of town. This could affect habitat for one or more of these species, and gives this alternative a single negative score (Θ).

3. Airport Land Use Conflicts

Madison is not located within two miles of an airport and there are no land use conflicts.

E. Smart Growth

1. Preservation of Open Space

a. Alternatives 1 and 3

Under these alternatives, no construction is projected outside of the existing town, so there would be no loss of open space, leading to a positive (⊕) score.

b. Alternative 2

In Alternative 2, over 800 housing units could be built on approximately 140 acres of open space lands adjacent to the town, giving a double negative (ΘΘ) score.

c. Alternative 4

Alternative 4 includes no residential development outside of the existing town. However, the alternative projects 27 acres of commercial uses that could be built at the town's edge. This loss of open space resources gives this alternative a score of single negative (Θ).

2. Compact Development and Healthy Design

a. Alternatives 1 and 3

Under these alternatives, development could be built within existing town limits, meeting the smart growth principles of strengthening existing communities and supporting walking and bicycling. Thus, these alternatives are given a single positive (⊕) score.

b. Alternative 2

Alternative 2 puts 85 percent of the new residential development, in addition to 27 acres of commercial uses, on land at the edge of the existing town. A proposal under this alternative develops a new town center at the edge of current town limits, and places development in close proximity to the new town center. Even with this proposal, the amount of land at the edge of Madison that would be developed leads to a single negative (Θ) score.

c. Alternative 4

Alternative 4 includes no residential development outside of the existing town. However, the alternative projects 27 acres of commercial uses that could be built at the town's edge. This much growth at the town's edge, if it were built, would not promote mixed use, walking or compact development, and gives this alternative a single negative (Θ) score.

7 MONUMENT HILLS

Monument Hills is a residential area that includes the 337-unit Wild Wings development and nearly 300 rural residential units on 5-acre lots. The alternatives include the following residential growth in Monument Hills. No non-residential growth is proposed.

- Alternative 1
  - 25 units of infill residential growth at the existing density of 1 unit per 5 acres.
- Alternative 2
  - 150 units of infill residential growth at an increased density of 1 unit per 2.5 acres.
- Alternative 3
  - The same as Alternative 1.
- Alternative 4
  - 450 units of infill residential growth at an increased density of 1 unit per 1.5 acres.

This chapter evaluates the four alternatives and explains the scores given for each issue.

A. Economics

1. Market Viability

Monument Hills has experienced favorable housing absorption rates despite its distance from freeways. This is mostly attributable to the high level of unmet demand for large-lot housing development as found in Monument Hills, as well as to regional housing pressures, which are anticipated to continue in the long-term. For these reasons, it is highly likely that Monument Hills would be able to absorb 25 residential units in Alternatives 1 and 3 by General Plan buildout and residential demand would likely exceed this supply during this time frame. Despite the reduction in lot size under Alternatives 2

and 4, by 2030 Monument Hills could reasonably absorb the 150 units in Alternative 2 and, though slightly aggressive, even the 450 units in Alternative 4. Alternatives 1 and 3 received double positive scores (⊕⊕) for market viability, while Alternatives 2 and 4 received single positive scores (⊕).

2. Community Services Thresholds

There is an existing fire department in Monument Hills. None of the alternatives project enough growth in Monument Hills to bring new community services to the area, and were given single negative scores (⊖)

3. Fiscal Impacts

a. Alternatives 1 and 3

Home sales data from 2006 indicate that the 3,000 square foot homes on ¼-acre lots in the Wild Wings subdivision are currently selling for approximately $689,000 per unit, or $187 per square foot, which is relatively low. Although the Wild Wings subdivision is not representative of the entire Monument Hills area, development Monument Hills under Alternatives 1 and 3 would occur on five-acre lots, which indicates that home prices would likely exceed the $689,000 sale price in the Wild Wings subdivision. Thus, development in Monument Hills would likely generate relatively high revenues for the County. Including affordable units, the average value of a new home in Monument Hills is approximately $585,000,[1] which is sufficiently high to generate fiscal surpluses for the County's General Fund, even though the allocation rate in the tax rate area for Monument Hills tends to be lower than the countywide average.

Development in Monument Hills under all four alternatives would be close to the County seat in Woodland, so additional service costs should be relatively small. In addition, the County would be able to extend the service provisions of the existing CSA or implement a new funding mechanism to minimize the impact of enhanced County service costs. Given the relatively low service costs and the precedent for the development of large, high-value

[1] See Table B-4 in Appendix B.

homes, continued development of similar homes under all four alternatives in Monument Hills would most likely generate fiscal surpluses for the County's General Fund. The small amount of development in Monument Hills under Alternatives 1 and 3 would likely generate fiscal surpluses for the county's General Fund, and so they received single positive scores (⊕).

b. Alternative 2

Development in Monument Hills is likely to produce fiscal surpluses, provided that the additional housing has comparable property values with current housing constructed in the area. Although the current construction home prices are not indicative of future construction, recently constructed homes in Monument Hills were developed on ¼-acre lots, while development of residential units under Alternative 2 would occur on 2.5-acre lots. Given that larger homes are likely to be built on large lots, it is probable that the property values of new development under this alternative would be sufficiently high to produce fiscal surpluses for the County's General Fund. Alternative 2 would likely generate fiscal surpluses for the county's General Fund, and so it received a single positive score (⊕).

c. Alternative 4

Development in Monument Hills is likely to produce fiscal surpluses, provided that the additional housing has comparable property values with current housing constructed in the area. Although the current construction home prices are not indicative of future construction, recently constructed homes in Monument Hills were developed on ¼-acre lots, while development of residential units under Alternative 4 would occur on 1.5-acre lots. Given that larger homes are likely to be built on large lots, it is probable that the property values of new development under this alternative would be sufficiently high to produce fiscal surpluses for the County's General Fund. Alternative 4 would likely generate fiscal surpluses for the county's General Fund, and so it received a single positive score (⊕).

B. Infrastructure

Under all alternatives, county staff have indicated that infrastructure capacity be should coordinated in Monument Hills, by, for example, installing small community water systems and/or sharing septic systems through clustering homes on adjoining parcels.

1. Water

Property owners in Monument Hills currently rely on individual private wells to supply domestic water. New residential development in all four alternatives would similarly require the use of private wells. The use of shared private wells may also be possible. Well water in this area is known to be high in arsenic. However, wellhead treatment applied to each well can render the water suitable for domestic use.

2. Wastewater

Property owners in Monument Hills currently rely on individual private on-site septic systems. New residential development in all four alternatives could also use private septic systems. The use of shared private septic systems may also be possible in certain circumstances, subject to County approval. The intent of Alternatives 2 and 4 would be to allow for increased densities and the possible provision of shared or community infrastructure provision. If a community wastewater system were constructed, the treatment plant would be estimated to cost approximately $2 million under Alternative 2 and $6 million under Alternative 4, not including land acquisition costs. There would also be additional costs to construct a wastewater collection system.

3. Storm Drainage

Drainage facilities for development at densities of two units per acre or less could consist simply of on-site ditches to convey water to existing roadside ditches. Detention basins serving multiple units would need to have a home owner association (HOA) or an arrangement with the Yolo County Planning

and Public Works Division to perform maintenance. This drainage approach typically requires no off-site or downstream improvements.

4. Flooding

Monument Hills is not inside the 100-year floodplain around Cache Creek, which is contained inside the creek channel. This channel is adjacent to Wild Wings, at its northernmost point. In all alternatives, future growth in Monument Hills is well south of Cache Creek. A single negative (Θ) score is given for the adjacency of this floodplain to Wild Wings.

C. Transportation

1. Proximity to Freeways

Monument Hills is less than four miles from Interstate 505.

2. Regional Roadways

Connections between Monument Hills and other areas of the County are provided by SR 16, which is a two-lane highway that carries approximately 12,000 vehicles a day near Monument Hills. Expansions of the Cache Creek Casino have resulted in substantial increases in traffic along SR 16. Future expansions of the Casino were not included in the alternatives comparison since future expansions are unknown at this time and would be the same for all alternatives. Currently SR 16 is at 50 percent of capacity. Potential improvement needs on SR 16 under each alternative are discussed below. The discussion below pertains to daily capacities on SR 16 related to development in Monument Hills; however, peak periods along SR 16 would be concentrated and thus may use a higher percentage of available capacity.

a. Alternatives 1 and 3

Under these alternatives, and considering development in Madison and Esparto, SR 16 would be expected to reach 80 percent of capacity and would likely accommodate the additional traffic volumes generated by new development in the alternatives.

However, intersection improvements would be needed to accommodate the additional growth in traffic (e.g., the intersection on SR 16 at Monument Hills) during peak period conditions, and is given a single negative (Θ) score.

b. Alternatives 2 and 4

Under these alternatives, to maintain current traffic operating conditions on SR 16 would require widening to four lanes between Esparto and Woodland under Alternative 2 to accommodate development in Monument Hills, Madison, and Esparto. With the increased traffic on SR 16, traffic is expected to also increase on Main Street in Woodland, which would require measures to accommodate additional traffic volumes through Woodland.

If SR 16 was not widened under Alternative 2, the congestion on SR 16 would cause further diversion than currently occurs to parallel facilities such as Roads 85B, 23, and/or 24 , and these roadways would need improvements due to diverted traffic from the highway. Given either scenario, these two alternatives are given a double negative score (ΘΘ).

3. Transit Service

Currently, Yolo County Transit District provides daily fixed route transit service from Woodland to Cache Creek Casino; however, a transit stop is not provided on SR 16 at Monument Hills. Under all alternatives, new development in Monument Hills would result in little, if any, transit ridership, and would not be large enough to support expansion of fixed route service to Monument Hills. All alternatives are given a neutral score (Ø).

4. Bicycle and Pedestrian Circulation

In Monument Hills, sidewalks and bike lanes are generally provided along local and collector residential streets. Under all alternatives, the existing facilities along developed frontages would likely be continued along future project frontage(s), providing continuous connections between complementary land uses in Monument Hills. Thus, a score of neutral (Ø) is given.

D. Environmental Issues

1. Agriculture

Monument Hills is an area of lesser quality soils, though still capable of growing important crops. The area is a mix of Farmland of Local Importance and Other Land, and Class 3, 4 and 6 soils, and soils with a Grade 1 Storie Index rating. It is recognized as an area potentially suitable for growing wine grapes and wine grapes are grown a few miles north of Monument Hills. However, there is little significant agricultural activity in Monument Hills today.

Under all four alternatives, all new growth in Monument Hills would be infill development of parcels that have already been committed to development. This would result in a minor agricultural conversion effect. A score of neutral (Ø) is given.

2. Biological Resources

There is a known sighting of Swainson's hawk in Monument Hills, which is also the site of the bird's habitat. Other species with habitat in Monument Hills include Northern harrier, Short-eared owl and Western burrowing owl.

In all alternatives, new development would occur in Monument Hills in areas that are currently developed with low density residences. Since the densities in the area are currently low, special status species could occur on development sites, and could be adversely affected by densification. However, habitat for each of the species in question is relatively common in the county, so a score of neutral (Ø) is given.

3. Airport Land Use Conflicts

The Watts-Woodland Airport is located in Monument Hills. All of Monument Hills is within two miles of the airport and most of Monument Hills is within the airport's Overflight Zone. A few lots immediately south of the airport are within the airport's Approach-Departure Zone, giving this a double negative score (ΘΘ).

E. Smart Growth

1. Preservation of Open Space

In all alternatives, development in Monument Hills would occur as infill on sites already dedicated to development, so no loss of open space would occur. A single positive (⊕) score is given in all alternatives.

2. Compact Development and Healthy Design

Monument Hills lacks a town center and services, so new development in this area cannot strengthen existing commercial or community uses. Moreover, densities in all alternatives would be low and no new mixed uses would be built, so there would be no inducement to walking or bicycling. Although in Alternative 4 the density is increased somewhat, it is still low, at one home per 1.5 acres. In all alternatives, therefore, development is given a double negative (ΘΘ) score.

8 YOLO

All four alternatives include 56 units of residential growth in Yolo, including five units on infill sites within the current town boundary and 51 units at the edges of the community.

This chapter evaluates the four alternatives and explains the scores given for each issue.

A. Economics

1. Market Viability

Due to Yolo's location near Woodland and on Interstate 5, it is very feasible for Yolo to absorb 56 new residential units during the General Plan time frame. Yolo received a double positive score (∅∅) for market viability.

2. Community Services Thresholds

Yolo is served by the Yolo Branch Library and Yolo High School. Under all alternatives, there is not enough growth to support a second "neighborhood" library. None of the alternatives include enough growth to support new public schools, health services or fire protection.

Given the existing library, Yolo is scored neutral (∅) for community services.

3. Fiscal Impacts

Insufficient data exists to determine market prices for homes in the Yolo area. However, given the below average County property tax allocation rate in Yolo, home prices would need to exceed an average of $360,000 per unit to maintain fiscal neutrality. Due to the lack of data, Yolo received a score of neutral (∅).

B. Infrastructure

1. Water

All new development would be connected to an expanded community water system. Water service in Yolo is provided by the Cacheville CSD, which operates two wells and has capacity for approximately 25 new residential units. Development under all alternatives would require at least an additional 30 gpm of capacity, with 20 gpm for residential development and 10 gpm for commercial development. One new community well plus additional distribution infrastructure would be required to serve development under all alternatives.

Subsidence is an issue in Yolo and surrounding areas. Subsidence monitoring would be required for the new well. The use of community storm water detention basins would allow for groundwater recharge and maintenance of the aquifer.

2. Wastewater

The current wastewater treatment method in Yolo is individual private septic systems. Under all four alternatives, the five acres of infill residential development would need to use individual private septic systems and maintain 1.5-acre minimum lot size. Edge residential and non-residential development could be served with a new community pond system that could be sized to serve the entire community. The Cacheville CSD could operate the new system or a new managing entity could be established. The entire community, including the proposed development, would generate approximately 60 gpm of wastewater, 30 gpm from residential uses and 30 gpm from commercial development. Fourteen acres of ponds would be required, 6.5 acres of facultative ponds and 7.5 acres of percolation/evaporation ponds. The 6.5 acres of facultative ponds could be reduced to one acre with partial or full aeration. Locating the new treatment facility on the northern or western side of the community would minimize potential flooding from Cache Creek. The required wastewater treatment plant improvements would be estimated to cost

approximately $4 million, not including land acquisition costs. There would also be additional costs to construct a wastewater collection system.

3. Storm Drainage

The Yolo County Public Works Division provides storm drainage for the community. Extension of existing curb, gutter and storm drain piping would be needed for the new development under all four alternatives.

The storm drain system in Yolo conveys runoff to a discharge pipe into Cache Creek. Storm water runoff from additional development under all the alternatives would need to be held in detention basins to avoid an increase in flooding problems downstream in Woodland. The detention basins would also provide for groundwater recharge.

4. Flooding

According to current FEMA maps, Yolo is not in the 100-year floodplain, but the town is protected from flooding from Cache Creek by levees of unknown stability. The 100-year floodplain does inundate land south of Yolo. However, none of the alternatives include growth in these areas. A single negative (Θ) score was given, due to the status of the levee.

C. Transportation

1. Proximity to Freeways

Yolo is on Interstate 5.

2. Regional Roadways

Connections between Yolo and other areas of the County are provided by Interstate 5. Interstate 5 is a four-lane freeway through Yolo County and has an existing daily volume of approximately 36,000 near Yolo.

Under all alternatives, growth in Yolo would not have a substantial effect on the existing mainline capacity of Interstate 5 between Yolo and Woodland. In

addition, the highway-serving commercial uses proposed along Interstate 5 near Yolo under Alternative 4 would likely not produce many new trips, as most trips would be pass-by trips from motorists already on the freeway. A score of neutral (Ø) is given for all alternatives.

3. Transit Service

Currently, the Yolo County Transit District provides fixed route transit service by request one day a week from Woodland to Dunnigan with a transit stop in Yolo.

Under all alternatives, the increase in ridership due to new development in Yolo would not be large enough to support expansion of the existing fixed route service to between Woodland and Dunnigan, leading to a score of neutral (Ø).

4. Bicycle and Pedestrian Circulation

Currently, no bike lanes or bike paths connect Yolo to Woodland In Yolo, sidewalks are limited or generally do not exist even along improved frontages. Under all alternatives, development would likely provide additional bike and pedestrian facilities only along the project frontage(s). Expansion of bicycle facilities outside of Yolo may be feasible, but are unlikely, and a score of neutral (Ø) is given.

D. Environmental Issues

1. Agriculture

Yolo is surrounded by Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating.

Growth in Yolo would be the same under all four alternatives. Nearly all of it would occur on Prime Farmland at the edges of the community. Approximately 51 acres of Prime Farmland would be converted. Yolo received a neutral score (∅) for agriculture under all alternatives.

2. Biological Resources

The Yolo area has habitat for Swainson's hawk and western burrowing owl. In all alternatives, new development on approximately 51 acres at the edge of town could affect this habitat. A single negative (Θ) score is given.

3. Airport Land Use Conflicts

Yolo is not within two miles of an airport, there are no land use conflicts.

E. Smart Growth

1. Preservation of Open Space

In all alternatives, 90 percent of new growth in Yolo would occur at the edges of town on existing open space lands. Assuming a potential buildout of one unit per acre, that could mean a loss of up to 51 acres of open space resources. This issue is given a double negative (ΘΘ) score for this loss of open space.

2. Compact Development and Healthy Design

In all alternatives, Yolo receives 56 new residential units built at low densities, that would not encourage walking or result in compact town boundaries. However, in Alternative 4, a small commercial center with limited local-serving retail and services is envisioned. Depending on the retail and services that locate at this potential commercial center, there could be an opportunity to walk for daily trips. Nonetheless, due to the low densities projected in all alternatives, a double negative score (ΘΘ) is given.

9 ELKHORN

The proposed Elkhorn development, a part of Alternative 4, would be located on approximately 250 acres of agricultural land next to Interstate 5 between the Yolo Bypass and the Sacramento River, south of County Road 22 and west of Old River Road. Elkhorn includes 40 acres of retail, 30 acres of office, 20 acres of lodging and 160 acres of industrial uses. No residential growth is proposed.

This chapter evaluates the proposed Elkhorn development under Alternative 4 and explains the scores given for each issue.

A. Economics

1. Market Viability

The proposed Elkhorn Business Park and Convention Center would be located on Interstate 5 approximately ten minutes driving distance from the Sacramento International Airport. The proposed project would include 370,000 square feet of retail, 278,000 square feet of office, up to 900 lodging rooms and 2.4 million square feet of industrial space.[1]

The market success of the Elkhorn Business Park and Convention Center would likely depend on the project's ability to cater to a niche market. Sacramento is only a short, fifteen minute drive from the airport. The Elkhorn project would be in an isolated location, some distance from urban centers and their attractions and amenities. In contrast, there are a variety of lodging and conference options in nearby Sacramento which make it more attractive in this regard. In addition, plans for the Sacramento International Airport's new Terminal B include a 200-room hotel.[2]

---

[1] The estimate of 900 lodging rooms is likely greater than what the actual project would entail, as some of the space would be for ancillary uses, such as meeting rooms.

[2] Turner, Melanie. "New Terminal, Hotel Highlight Airport Expansion." *The Sacramento Business Journal*. June 8, 2006.

However, as a conference center catering specifically to small- or medium-sized groups, Elkhorn may be able to provide the specialized, distraction-free environment that some employers are seeking for activities such as employee training, business meetings and company retreats. This type of small conference center could gain a local competitive advantage by using its open space and isolation from urban areas and providing recreational and leisure activities in addition to state-of-the-art meeting facilities and high quality catering services. Such a facility would still need to capture business from companies across the Sacramento region in order to succeed.

Even if a conference center were developed, it would not be large enough to drive further development of retail, restaurant or office space in the surrounding area. Furthermore, the planned Metro Air Park near the airport on the other side of the river would likely compete for the non-conference center uses foreseen at Elkhorn. While there is some question as to when and in what form the Metro Air Park will come on-line, there are other industrial site options within the region that are more competitive than the Elkhorn location. Based on regional competition for projects such as the one proposed for Elkhorn, the acreages are more aggressive than market demand could support at this location and Elkhorn was given a single negative score (Θ) for market viability.

2. Community Services Thresholds

The analysis for Community Services, particularly fire protection, studied alternatives that featured new residential growth. The development in Elkhorn has no residential growth, and there were no specific thresholds established for fire protection services of non-residential development. However, it is likely that the proposed development at Elkhorn would require new fire protection services, and it was scored for negative effect (Θ).

3. Fiscal Impacts

Office and industrial uses typically generate sufficient revenues to cover the additional costs to the County of providing services. Retail and lodging uses also tend to generate above normal revenues to the County from sales tax and

transient occupancy tax revenues. However, as the development would be located in a tax rate area with a lower than average County allocation rate, the County could anticipate lower than average property tax revenues for development in Elkhorn. Property value data do not exist to determine the values of development in this location. Thus, this analysis cannot determine whether the assessed value of the development would be sufficiently high to offset the lower tax allocation rates.

As this development would be located on Interstate 5 near the County seat in Woodland, the analysis assumes efficiency in providing services to this development. Thus, service costs for development in Elkhorn would be in line with average County service costs.

Provided that sales and transient occupancy tax revenues are greater than the revenue generated by the below-average property tax revenues, and that property values are sufficiently high to offset below average tax allocation rates, this development would produce fiscal surpluses for the County's General Fund. However, a lack of sufficient property values data makes it impossible to determine overall fiscal effects with certainty. Due to the lack of property value data and fiscal impacts certainty, Elkhorn received a score of neutral (∅).

B. Infrastructure

1. Water

Water demand for the proposed Elkhorn development would be at least 560 gpm. This demand could be met by one or more wells. Storage facilities and distribution infrastructure would also be needed to provide adequate fire flows.

2. Sewer

The proposed Elkhorn development would generate approximately 375 gpm of wastewater. A total of 92 acres of wastewater ponds would be required to

meet this additional demand, 42 acres of facultative ponds and 50 acres of percolation/evaporation ponds. The 42 acres of facultative ponds could be reduced to six acres with partial aeration or two acre with full aeration. The 25-acre pond requirement for disposal would still apply. A private package plant similar to that of the Cache Creek Indian Casino could be used.

3. Storm Drainage

Drainage for this development would likely consist of curbs and gutters within some development areas and a network of on-site collection pipes or ditches that convey runoff to on-site detention basins, which in turn moderate flows to existing off-site channels.[3] Revised grading practices and construction materials can also be incorporated into site drainage to achieve a condition of no net increase to off-site drainage systems. A pump station could pump the drainage into the Yolo Bypass.[4] Elkhorn was given a neutral score for storm drainage.

4. Flooding

The Elkhorn proposal would be completely inside the 100-year floodplain, at risk from flooding in the Sacramento River. It is given a score of double negative (ΘΘ).

C. Transportation

1. Proximity to Freeways

The proposed Elkhorn Business Park would be located on Interstate 5, west of Old River Road and south of Road 22.

2. Regional Roadways

Road 22 connects Elkhorn and West Sacramento. Interstate 5 is the primary connection between Elkhorn and the rest of the county. I-5 is a four-lane

[3] County of Yolo Improvement Standards Section 11 Stormwater Quality, Erosion and Sediment Control, August 1, 2006

[4] Information provided by David Morrison, August 15, 2006.

freeway through Yolo County and has an existing daily volume of approximately 55,000 east of Woodland. Review of background traffic projections provided by the recent SACOG TDF model[5] shows a potential increase of 30,000 daily trips (growth of approximately two percent per year), which would result in 85,000 daily trips on I-5 near Elkhorn. This would result in I-5 exceeding the capacity of the existing four-lane freeway section of I-5 near Elkhorn.

The SACOG TDF model takes into account development within Woodland; however future traffic volumes along I-5 would likely be higher and at or over capacity for a six-lane freeway when taking into account growth in Dunnigan and potential development in Colusa County under Alternative 4. Development in Elkhorn would produce approximately 8,000 daily external trips on I-5 that would have origins and destinations in both Yolo and Sacramento County.

Growth in Elkhorn would likely contribute to the need to widen I-5 to seven or eight lanes between Woodland and Sacramento County under Alternative 4. In addition, the planned non-residential uses would result in the need to provide interchange improvements at Road 22 on I-5. The Elkhorn proposal is given a double negative (ΘΘ) score.

3. Transit Service

Currently, YCTD provides fixed route and express transit service more than 30 times per day between Woodland and Sacramento County, including the Sacramento International Airport; however, a transit stop is not provided on I-5 at Elkhorn. Under Alternative 4, the addition of a hotel, conference center, retail uses, and office/research facilities would create additional transit demand, especially from the near-by Sacramento International Airport.

The increase in ridership due to development in Elkhorn could be large enough to support expansion of fixed route and express service between

[5] This version of the SACOG travel demand forecasting model assumes a year 2027 roadway network and year 2032 blueprint-based land uses.

Woodland and Sacramento County to provide a transit stop at Elkhorn. The additional development in Elkhorn would provide additional fares from transit users on these routes that are already highly used and would result in an efficient use of transit service given the proximity to transit trip generating uses such as the Sacramento International Airport. The additional ridership may require initial investment to enhance existing services; but this investment could result in a positive return given the potential for transit ridership from the Elkhorn area, and is scored double positive (⊕).

4. Bicycle and Pedestrian Circulation

Currently, no bike lanes or bike paths connect Elkhorn to Woodland and sidewalks generally do not exist, given the limited development that has occurred. Under Alternative 4, development would likely provide additional bike and pedestrian facilities along the project frontage(s) and connections between complementary land uses.

While promoting walking and bicycling under Alternative 4 would require substantial funding to develop and expand facilities in Elkhorn, substantial funding would likely be available from proposed development to provide continuous sidewalks between complementary land uses, with the planned amount of non-residential uses. In addition, providing a bicycle connection to Woodland along CR 22 may be possible. A score of single positive (⊕) is given.

D. Environmental Issues

1. Agriculture

The proposed Elkhorn Business Park site is surrounded by Prime Farmland, Class 1 and 2 soils and soils with a Grade 1 Storie Index rating. This proposed project would be expected to convert some 160 acres of Prime Farmland and the best quality soils and was given a negative score (Θ) for agriculture.

2. Biological Resources

The proposed Elkhorn Business Park development is on land that is potential habitat for Loggerhead shrike, Northern harrier, Swainson's hawk, Western burrowing owl and White-faced ibis, and could effect these species. Moreover, this site is relatively isolated, low-lying and near the Sacramento River, so its habitat value is likely higher than that of other areas proposed for development under the alternatives. A score of negative impact (Θ) is given this proposal.

3. Airport Land Use Conflicts

The proposed Elkhorn Business Park would be within two miles of the Sacramento International Airport. Part of the development may be within the airport's Overflight Zone, although it appears that it would be possible to locate the development so as to avoid this area. A score of single negative (Θ) is given.

E. Smart Growth

1. Preservation of Open Space

Development in Elkhorn requires the urbanizing of approximately 280 acres of open space resources. It is given a double negative (ΘΘ) score.

2. Compact Development and Healthy Design

Placing a mixed use hotel/conference center with retail development outside of any existing town would not generally uphold the principles of smart growth. All users and employees of this facility would likely arrive by car, and the development would not support vitality in any existing community. Elkhorn is given a double negative (ΘΘ) score.

10 SPRECKELS

The proposed Spreckels industrial park development, a part of Alternative 4, would be located on approximately on 160 acres at the former Spreckels sugar plant site north of Woodland. Spreckels includes 160 acres of industrial uses. No residential uses are proposed.

This chapter evaluates the proposed Spreckels development under Alternative 4 and explains the scores given for each issue.

A. Economics

1. Market Viability

As discussed in Appendix B, there may be an overabundance of industrial-zoned land within the Sacramento region over the General Plan time horizon. Furthermore, the *Market and Fiscal Considerations* report found that potential industrial sites in Yolo County may not be competitive relative to already established sites or those closer to existing population and distribution centers. However, the Spreckels site is near existing industrial uses in Woodland, effectively making it part of the Woodland market. This may make it more competitive than other sites in unincorporated Yolo County for light industrial, warehousing and distribution uses that are ancillary to primary agricultural uses. At the same time, SACOG projections estimate approximately 3.9 million new square feet of industrial space for Woodland through 2030.[1] Although some industrial development could be absorbed at Spreckels, the 2.4 million square feet proposed for the site would represent over 60 percent of the growth projected by SACOG and it is unlikely that Woodland would cede that much of their projected economic development to a development outside the city's boundaries. Spreckels received a single negative score (Θ) for market viability.

[1] Estimate calculated by applying standard employment figure of 1,000 square feet per employee for industrial space. SACOG projects an increase of 3,900 manufacturing jobs for Woodland through 2030.

2. Community Services Thresholds

The analysis for Community Services, particularly fire protection services, studied alternatives that featured new residential growth. The proposed development at Spreckels has no residential growth, and there was no specific thresholds established for fire protection services of non-residential development. However, it is likely that the proposed development at Spreckels will require new fire protection services, and is scored for negative effect (Θ).

3. Fiscal Impacts

In 2005-06 the market valued industrial space in Woodland at approximately $63 per square foot, lower than the countywide average. In addition, the Spreckels area has below average County property tax allocation rates. Finally, industrial uses are not likely to generate additional revenues above those related to property values (e.g. property tax revenues), as sales taxes are distributed based on the location of the sale to the end user, not the manufacturing site. Thus, industrial development at Spreckels could be expected to generate lower than normal revenues to the County

Due to its location near Woodland, the cost of providing services to the development would likely not be expected to be above average. However, due to the lower revenues that the County could expect to receive from development at this site, Spreckels would likely not generate fiscal benefits for the County's General Fund. However, industrial development at Spreckels could provide non-fiscal job generation benefits, which should be weighed when considering development at the site. Spreckels received a single negative score (Θ) for fiscal impacts.

B. Infrastructure

1. Water

The water demand for the development foreseen for Spreckels would be at least 840gpm, which could be supplied by two or more new wells. There are existing wells at the site that were abandoned when the former sugar plant use

closed. These wells could reused provided they meet current water quality standards. Storage facilities and distribution infrastructure would also be needed to provide adequate fire flows.

2. Wastewater

The development foreseen for Spreckels would generate 240 gpm of wastewater, requiring 59 acres of ponds, 27 acres of facultative ponds and 32 acres of percolation/evaporation ponds. The 30 acres of facultative ponds could be reduced to 4 acres with partial aeration or 2 acres with full aeration. The 32-acres of percolation/evaporation ponds for disposal would still be needed. A private package plant similar to what is used at the Cache Creek Indian Casino could be used for this site.

3. Storm Drainage

The site does have a subsurface pipe network that was connected to the City of Woodland storm drainage system that drains to the Yolo Bypass. This system is currently non-operational. Drainage for this development would likely consist of curbs and gutters within some development areas and a network of on-site collection pipes or ditches that conveys runoff to on-site detention basins.[2] The existing system should be inspected and revised to provide a collection pipe network that conveys water to an on-site detention basin.

4. Flooding

According to current FEMA Flood Maps, development at the Spreckels site would be completely inside the 100-year floodplain, and receives a score of double negative(ΘΘ).

[2] County of Yolo Improvement Standards Section 11 Stormwater Quality, Erosion and Sediment Control, August 1, 2006

C. Transportation

1. Proximity to Freeways

The proposed Spreckels industrial park is just over one mile from the Interstate 5/West Avenue interchange.

2. Regional Roadways

Highway 113 and Road 102 provide connections between Spreckels and Interstate 5 in Woodland.

The existing traffic volumes on Highway 113 and Road 102 between Knights Landing and Woodland are less than 40 percent of capacity, and with the anticipated growth in Spreckels under Alternative 4, it is not expected that these roadways would exceed 70 percent of capacity and would not need to be widened; it is given a neutral (Ø) score.

Review of recent vehicle accident data for Road 102 between Knights Landing and Woodland revealed a moderately high number of accidents at intersections and on roadway segments relative to other county roads; therefore, safety improvements are likely needed. Potential safety improvements could include widening existing roadways to accommodate separate turn lanes, wider travel lanes and/or shoulders.

3. Transit Service

Currently, Yolo County Transit District provides fixed route transit service twice weekly from Woodland to Knights Landing, but does not provide a transit stop near Spreckels. Based on the anticipated industrial uses and likely low employment density, the additional development in Spreckels would likely result in a relatively small increase in potential transit ridership.

The increase in ridership due to new development in Speckles would not be large enough to support expansion of fixed route service between Knights Landing and Woodland, and is given a neutral score(Ø).

4. Bicycle and Pedestrian Circulation

Currently, the Spreckels area has no bicycle facilities along Road 18C, although bike lanes are provided on Road 102 from Knights Landing (beginning on Highway 113) to Woodland and south onto Davis. At the proposed Spreckels development, sidewalks generally do not exist, given the limited existing development that has occurred in this area.

Alternative 4 would require substantial funding to develop and expand bicycle and pedestrian facilities in Spreckels to promote walking and biking; however, some funding would likely be available from proposed development given the planned amount of non-residential uses. Expansion of bicycle facilities outside of Spreckels would be feasible given the distance from Spreckels to the existing bike lanes on Road 102, but unlikely given the potential demand and conflicts with industrial uses. Spreckels is given a single positive score (⊕).

D. Environmental Issues

1. Agriculture

The location of the proposed Spreckels Industrial Park is Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating. The Spreckels site, the site of the closed Spreckels sugar plant, is already partially developed. Nonetheless, development proposed at this location would be expected to convert approximately 60 acres of Prime Farmland and best quality soils.

To the extent that food processing and agricultural support businesses locate or expand in the county as a result of this development, this would further county agricultural and economic development objectives. In addition, the county does not consider the development of agricultural support industry to be a conversion of farmland. Nonetheless, this alternative would convert a significant amount of Prime Farmland and the highest quality soils, and receives a single negative (⊖) score.

2. Biological Resources

The proposed Spreckels development is on land that is potential habitat for Loggerhead Shrike, Swainson's Hawk, Western Burrowing Owl and White-faced Ibis, and could effect these species. While this proposed development site reuses 100 acres of existing agricultural industrial land, which would not be presumed habitat for those species, it also builds upon 60 acres of current agricultural land, which could be potential habitat. A single negative score (Θ) is given.

3. Airport Land Use Conflicts

The Spreckels site is not within two miles of an airport, and receives a positive score (⊕).

E. Smart Growth

1. Preservation of Open Space

The proposed development at the Spreckels site would occur on approximately 60 acres of existing agricultural land, requiring the loss of open space for about 40 percent of the total development footprint. While the county does not count agricultural industrial use as a conversion of open space resources, it is nonetheless given a single negative score (Θ).

2. Compact Development and Healthy Design

Although the Spreckels Industrial Park would reuse about 100 acres of existing agricultural industrial land for its development, it would be located away from existing communities. Almost all users and employees would likely arrive at it by automobile, and it would do little to support any existing community or the city of Woodland. It is given a double negative score (ΘΘ).

11 WINTERS INDUSTRIAL SITE

The proposed Winters Industrial Site development, a part of Alternative 4, would be located in the southeast quadrant of the Interstate 505/Highway 128 interchange. The Winters Industrial Site includes 27 acres of industrial uses. No residential uses are proposed.

This chapter evaluates the proposed Winters Industrial Site development under Alternative 4 and explains the scores given for each issue.

A. Economics

1. Market Viability

The Winters Industrial Site location at the Interstate 505/Highway 128 interchange is not as competitive as other sites in the county which offer greater transportation amenities and easier access to population centers. Nevertheless, the site could likely absorb 400,000 square feet of light industrial, warehousing and distribution uses related to local agricultural production by 2030. A single positive score (⊕) was given.

2. Community Services Thresholds

The analysis for Community Services, particularly fire protection services, studied alternatives that featured new residential growth. The proposed development at the Winters Industrial site has no residential growth, and there was no specific thresholds established for fire protection services of non-residential development. However, it is likely that the proposed development at Winters Industrial site will require new fire protection services, and is scored for negative effect (⊖).

3. Fiscal Impacts

Assuming that the value of industrial space in Winters is on par with the countywide average, the development foreseen at the Winters Industrial Site would likely not produce sufficient revenues to cover costs because the County's share of property taxes is well below average at this location. On average, the County receives 13 percent of property taxes collected in unin-

corporated areas. However, around Winters, the average County allocation rate is only 8.5 percent. Property values would need to be well above the countywide average in order to generate average revenues for the County's General Fund.

Service costs for the County would likely be average and minimal for this one agricultural industrial site. Nevertheless, despite average service costs, because of the low tax allocation rate in the area, the property values of the development would need to be much higher than average in order for it to be fiscally neutral to the County. Thus, this development would likely generate fiscal deficits for the County's General Fund. This development could, however, provide non-fiscal job generation benefits to the County, which should be weighed when considering development at the site. The Winters Industrial Site received a single negative score (Θ) for fiscal impacts.

B. Infrastructure

1. Water

Water demand for the development foreseen at the Winters Industrial Site would be approximately 340 gpm, which could be met by one well, plus storage facilities and distribution infrastructure.

2. Wastewater

The development foreseen for the Winters Industrial Site would generate 110 gpm of wastewater, requiring 11 acres of ponds, five acres of facultative ponds and six acres of percolation/evaporation ponds. The five acres of facultative ponds could be reduced to one acre with either partial or full aeration. The six acres of percolation/evaporation ponds for disposal would still be needed. A private package plant similar to what is used at the Cache Creek Indian Casino could be used for this site.

3. Storm Drainage

Construction projects greater than one acre are required by the county in accordance with the storm water National Pollutant Discharge Elimination System (NPDES) permit to implement a program that addresses the post construction storm water impacts from applicable capital improvement. Best Management Practices (BMP) would need to be used during construction and drainage plans generated showing a post construction condition of no net increase to the surrounding areas. Drainage features may vary from drainage ditches or curb and gutter construction that convey runoff to an on-site detention basin(s), which moderate flows to existing off-site channels.[1]

4. Flooding

This proposal is adjacent to the 100-year floodplain from Putah Creek and is given a single negative (Θ) score.

C. Transportation

1. Proximity to Freeways

The proposed agricultural industrial development would be located within one mile of the interchange of Interstate 505 and Highway 128.

2. Regional Roadways

Interstate 505 and Highway 128/Russell Boulevard provide connections between the proposed industrial uses and Winters to the west and Davis to the east. The industrial uses located near Winters would generate approximately 600 daily external trips that would not exceed the roadway capacity of Interstate 505, Highway 128, or Russell Boulevard and these roadways would not need to be widened. However, the industrial uses would likely require ramp terminal intersection improvements at the Interstate 505/Highway 128 interchange and through Winters along Highway 128 (Grant Street). This proposal is given a negative (Θ) score.

[1]County of Yolo Improvement Standards Section 11 Stormwater Quality, Erosion and Sediment Control, August 1, 2006.

Review of recent vehicle accident data for Russell Boulevard/Road 32 between Winters and Davis revealed a moderately high number of accidents at intersections and on roadway segments relative to other county roads; therefore, safety improvements are likely needed. Potential safety improvements could include widening existing roadways to accommodate separate turn lanes, wider travel lanes and/or shoulders.

3. Transit Service

Currently, Yolo County Transit District provides regular daily fixed route transit service from Davis to Winters and into Solano County, and does provide a transit stop near Winters Industrial (a quarter of a mile away on Russell Boulevard) at the residential area just east of Interstate 505. Based on the anticipated industrial uses and likely low employment density, the additional development of Winters Industrial would likely result in a relatively small increase in potential transit ridership; however, this increase would not be large enough to support expansion of fixed route service between Winters and Davis. This proposal is scored neutral (Ø).

4. Bicycle and Pedestrian Circulation

Currently, bike lanes are provided on Russell Boulevard/Road 32 from Winters to Davis which would provide a connection to the industrial uses near Winters. Where the industrial uses are planned near Winters, sidewalks generally do not exist given the limited existing development that has occurred in this area.

Alternative 4 would require some funding to develop and expand bicycle and pedestrian facilities from Winters to the proposed industrial area east of Interstate 505 to promote walking and biking. Given the type of planned development and the non-residential uses, however, limited funding would be available for new facilities and is scored neutral (Ø).

D. Environmental Issues

1. Agriculture

The Winters site is Prime Farmland, Class 1 soils and soils with a Grade 1 Storie Index rating. The proposed project would keep approximately 27 acres of these high quality agricultural resources in agricultural industrial use, and is scored neutral (Ø).

2. Biological Resources

Putah Creek is habitat for the yellow-billed cuckoo. Depending on the adjacency of the Winters Industrial Site to the creek, this bird's habitat could be affected, and is given a negative (Θ) score.

3. Airport Land Use Conflicts

The proposed Winters Industrial Site is not within two miles of any airport, and is given a positive (⊕) score.

E. Smart Growth

1. Preservation of Open Space

The Winters Industrial Site would be located on land that is currently zoned for agricultural use. Because the proposal will reuse agricultural land for agricultural industrial business, the score of neutral (Ø) is given.

2. Compact Development and Healthy Design

This proposal is located near, but not inside, of existing city boundaries, and would likely require automobile usage on the part of its employees and clients (given its proximity to the Interstate 505 interchange). While the site could be designed to encourage walking and bicycling between buildings, a score of double negative (ΘΘ) is given for the presumed reliance on automobile use.

12 YOLO COUNTY AIRPORT

Alternative 4 includes development on land zoned AV (Airport) at the Yolo County Airport. This development scenario includes 10 acres of retail, five acres of office and 135 acres of industrial uses. No residential uses are proposed.

This chapter evaluates development at the Yolo County Airport under Alternative 4 and explains the scores given for each issue.

A. Economics

1. Market Viability

Yolo County Airport has a 6,000 foot runway, which is twice as long as the runways of the two other airports in the County, Watts-Woodland and the UC Davis airport, and is able to accommodate larger planes.[1] In addition to the longer runway strip, Yolo Airport is located in a flat area within a valley with few conflicting uses nearby that might complicate visibility during take-off and landing procedures.[2] As a result, Yolo County Airport experiences a significantly higher average daily volume aircraft operations compared to the two other airports located in Yolo County.[3]

According to County staff, there has been an increased level of private sector interest in the Yolo County Airport, particularly from aviation-related businesses. Davis Flight Support recently took over the Woodland Aviation's lease at the airport. The new company has plans to upgrade the facilities on the site, which could amount to millions of dollars in private investment. The improvements are intended to attract high-end executive and corporate jets to the airport. Other current tenants are exploring the possibility of ex-

[1] www.airnav.com

[2] Wes Ervin, Yolo County Office of Economic Development and Ray Groom, Yolo County General Services Division. November 7, 2006.

[3] www.airnav.com

panding their existing hangar space. Furthermore, County staff point to a high volume of inquiries to the County regarding available hangars for lease.[4]

While non-aviation related industries have yet to express interest in locating at the Yolo County Airport, a *Market and Target Industry Identification* report, prepared by Applied Development Economics (ADE) in December of 2000 for the Yolo County Airport, identified several non-aviation uses suitable for the airport site. These uses include enclosed document or equipment storage, small-scale light manufacturing, engine or machine repair, high value-added agricultural products, and printing and publishing facilities. However, the same report also identifies several site development issues facing the Yolo County Airport, such as water and sewer capacity, narrow county roads connecting the airport with nearby highways, the airport's isolation from population and business centers, the availability of vacant industrial land elsewhere in Yolo County, and the location of a residential neighborhood in close proximity to the airport.

The County is currently in the process of hiring a new airport manager that will be tasked with addressing the market hurdles to site development listed above, including possibly improving runway, water, sewer, and road capacity. However, as noted in the *Market and Target Industry Identification* report "any market demand for development sites at Yolo County Airport will not result from a shortage of industrial sites in the incorporated areas."[5]

Due to the site development issues created by Yolo County Airport's distance from major highways as compared to other potential sites in the county, relative isolation from population and business centers, and the availability of competitive industrial sites throughout the county (both in the cities and unincorporated area), Yolo County Airport is not a highly marketable location to non-aviation users. County funds that might be used to upgrade the infra-

[4] Wes Ervin, Yolo County Office of Economic Development and Ray Groom, Yolo County General Services Division. November 7, 2006.

[5] *Market Analysis and Target Identification Yolo County Airport*. Applied Development Economics. December 2000.

structure at the Yolo County Airport might better serve the County if invested in a site along a major freeway or highway with better general industrial marketing potential. On the other hand, there is a significant potential for expansion of aviation-related uses at the Yolo County Airport, including increased hangar facilities, the addition of another Fixed Base Operator such as Davis Flight Support at the airport, as well as aviation-related recreational uses such as the existing skydiving operation or a flight school.

On balance, two million square feet of new industrial development at the Yolo County Airport is likely greater than the amount of new industrial space that will be demanded at the airport during the next 25 years or so. In addition, land uses in the vicinity of the airport must remain compatible with increased aviation activity in order for the Yolo County Airport to maintain its competitiveness. For example, increased residential uses in the area may hinder the ability of the airport to expand the number of flights or types of aviation uses on site.

Furthermore, any potential for commercial space at the Yolo County Airport would be limited to retail or office space ancillary to these aviation businesses such as the sports equipment sold as part of the skydiving operation. Therefore, the allocation of 93,000 square feet of retail space is unlikely to absorb over the General Plan Update time frame, but 46,000 square feet of office space may be feasible as support space for a successful expansion of aviation-related business at the airport.

In summary, the two million square feet of new industrial space and 93,000 square feet of retail space foreseen for the Yolo County Airport would not be market viable but the 46,000 square feet of office may be feasible. The Yolo County Airport received a single negative score (Θ) for market viability.

2. Community Services Thresholds

The analysis for Community Services, particularly fire protection services, studied alternatives that featured new residential growth. The proposed development at the Yolo County Airport has no residential growth, and there

were no specific thresholds established for fire protection services of non-residential development. However, it is likely that the proposed development at the Yolo County Airport will require new fire protection services, and is given a negative score (Θ).

3. Fiscal Impacts

Generally, office and industrial uses generate sufficient revenues to cover the additional county costs of providing services to their sites. Retail uses tend to generate additional revenues above normal levels to the county via sales tax revenues. However, the amount of taxable sales that this site could generate would likely be small, absent a business that sells airplanes. Furthermore, as the development would be located in a tax rate area with a lower than average county allocation rate, the county could anticipate lower than average property tax revenues under this development scenario. Unfortunately, property value data do not exist to determine the values of development in this location.

The county would receive additional General Fund revenues from personal property taxes collected on the assessed value of additional airplanes based at the airport. If development under this alternative results in the location of additional airplanes based at the Yolo County Airport, the county would receive additional General Fund revenues from personal property taxes. Currently, the county annually collects 1.03 percent[6] of the assessed value of each aircraft. These additional revenues would likely offset any fiscal deficits from providing General Fund services, making development at this site fiscally neutral and potentially generating fiscal surpluses for the county's General Fund.

As this development would be located between Davis and Winters, the analysis assumes that the County could lose some efficiency in providing services to this development. Thus, service costs associated with this development could potentially be higher than average County service costs.

[6] Yolo County Assessor's Office.

Most likely, development under this scenario would be fiscally neutral and a neutral score was given (∅). However, since the county owns the airport property, there is additional potential for the county to generate entrepreneurial revenues from airport operations. Under this scenario, the county could potentially generate revenues from renting space to end users, funds which would go back into use at the Airport, because it operates as an Enterprise Fund.

B. Infrastructure

1. Water

Water demand for the development foreseen at the Yolo County Airport would be at least 1,030 gpm. This capacity could be met by adding two or more wells to the existing 300 gpm well and 12-inch distribution system.[7] The existing 160,000 gallon water tank may need to be supplemented for adequate fire flows.

2. Wastewater

Yolo County Airport currently relies on private septic systems with capacities varying from 1,000 to 2,500 gallons. The leach fields for these systems are located east of Aviation Boulevard and north of Skydance Aviation. The soil density in the area of the leach fields has slow percolation rates and is subject to flooding. Therefore new development would likely require a new community wastewater system.

The development foreseen for the County Airport would generate 225 gpm of wastewater, requiring 56 acres of ponds, 26 acres of facultative ponds and 30 acres of percolation/evaporation ponds. The 26 acres of facultative ponds

[7] Information for the Airport utilities provided by Fire Chief Mike Smith with the Yolo County Fire Department and by Dave Sammut, Maintenance Supervisor for the Yolo County General Services Building Division via phone interviews on November 6, 2006.

could be reduced to 5 acre with either partial aeration or 2 acres with full aeration. The 30 acres of percolation/evaporation ponds for disposal would still be needed. The ponds could be located near the runways to make use of land that has limited development capability. Because the county owns the land at the airport and leases to tenants, wastewater services could be a service provided to the tenants, as is water service.

3. Storm Drainage

Storm drainage for the development sites at the Yolo County Airport relies on natural flow patterns and roadside ditches from north to south into Chickahominy Slough and ultimately into Putah Creek. There is an existing concrete ditch along the eastern fence line of the airport but it is in severe disrepair. There are no other drainage facilities. Chickahominy Slough, located along the southeastern edge of the airport, often backflows onto airport property on the east side of Aviation Avenue [8] The area east of Aviation Avenue is the location of proposed development and is located in the 100-year floodplain. A storm drain system would need to be constructed and could incorporate detention basins. Drainage facilities would need to be added to Aviation Avenue to control drainage backflows.

4. Flooding

The Yolo County Airport is within the 100-year floodplain for approximately a quarter of its 150 acres, at its eastern edge. It is given a double negative (ΘΘ) score for flooding.

C. Transportation

1. Proximity to Freeways

The Yolo County Airport is approximately five miles from both Interstate 505 and Highway 113.

[8] Information provided by Chief Mike Smith and confirmed per David Morrison via email on November 6, 2006

2. Regional Roadways

Road 95 provides a connection between the Yolo County Airport and Highway 16 to the north and Road 32/Russell Boulevard to the south. The non-residential development at the Yolo County Airport would generate approximately 2,500 daily external trips on Road 95 between Highway 16 and Road 32/ Russell Boulevard, which would not exceed the capacity of the two lane roadway and not require widening the roadway under Alternative 4. However, intersections improvements along Road 95 would likely be needed to accommodate the industrial uses, and the proposal is given a single negative score (Θ).

3. Transit Service

Currently, Yolo County Transit District provides daily fixed route transit service from Davis to Winters and into Solano County, but does not provide a transit stop at the Yolo County Airport on Road 95. Based on the anticipated non-residential uses (90 percent industrial) and likely low employment density, the additional development near the Yolo County Airport would likely result in a relatively small increase in potential transit ridership. However, the aviation operations at the Yolo County Airport provide approximately 80 transient general aviation trips per day that could have the potential to provide transit ridership.

The increase in ridership due to new development near the Yolo County Airport would not be large enough to support expansion of fixed route service between Winters and Davis. This proposal is ranked neutral (Ø) for transit service.

4. Bicycle and Pedestrian Circulation

Currently, bike lanes are provided on Road 32/Russell Boulevard from Winters to Davis; however a connection on Road 95 is not provided to the Yolo County Airport. Near the Yolo County Airport, sidewalks generally do not exist given the limited existing development that has occurred in this area.

Alternative 4 would require some funding to develop and expand bicycle and pedestrian facilities near the Yolo County Airport to promote walking and biking to and from complementary land uses (i.e. between the airport and office and retail uses); however, most improvements would likely be funded by proposed development given the planned amount of non-residential uses. This alternative is given a single positive score (⊕).

D. Environmental Issues

1. Agriculture

Approximately half of the land zoned AV (Airport) at the Yolo County Airport is classified as Farmland of Local Importance, with the remainder mostly Developed land and a small area of Prime Farmland and Unique Farmland. The soils are Class 2 and Class 3, with a Grade 1 Storie Index rating. While development at the airport would convert land mostly classified Farmland of Local Importance, the land is already zoned for Airport use, and so is given a neutral score (Ø).

2. Biological Resources

The Airport has a known sighting of Swainson's hawk. It is habitat for Northern harrier, Loggerhead shrike, Western burrowing owl and Short-eared owl. While development at the airport could affect this habitat, the land is already zoned for the Airport's use, and is given a neutral score (Ø).

3. Airport Land Use Conflicts

Development in the AV zoning district, surrounding the airport, would be inside the Overflight Zone. However, the aviation industry businesses envisioned for this development require close proximity to the runways of the Airport, and so is given a neutral score (Ø).

E. Smart Growth

1. Preservation of Open Space

Because the land around the Yolo County airport is currently zoned for airport use, there would be no loss of open space resources in developing the land as established in the current General Plan. A score of single positive (⊕) is given for this issue.

2. Compact Development and Healthy Design

It is unavoidable that the aviation industry employees who will be commuting to the proposed development around the Yolo Airport will require auto-based transportation. However, it is presumed that some non-aviation businesses will also locate at the Airport, and the degree to which those employees are required to use automobiles does not meet the smart growth criteria. While some streetscape design could encourage pedestrian or bicycling between buildings, a single negative score (⊖) is given.

13 CITY EDGES: DAVIS

Davis is expected to grow over the next 25 years by 6,700 residential units, as projected by the Sacramento Area Council of Governments. The assumption is that 4,600 units would be built inside existing city limits or the sphere of influence, and 2,100 units are to be built at the periphery of the city. This chapter evaluates the issues as they affect city edge growth in Davis, and explains the scores given for each issue.

A. Economics

1. Market Viability

The greatest market demand for new development is located in and around the incorporated cities. These areas provide access to urban infrastructure as well as amenities such as shopping, and recreational opportunities. Following is a discussion of residential and job-generating land use demand.

a. Residential

In order to analyze residential demand for development at each city's edge, current median housing prices for new housing construction within each of the incorporated cities were referenced.[1] While housing prices reflect myriad factors, ranging from location to lot size, in order to provide an analysis of different levels of residential demand in each of the incorporated cities, housing prices are treated as a product of supply and demand in this analysis. Relatively higher housing prices in one housing market indicates that the existing supply of homes does not meet current demand as compared to other housing markets with lower prices. While price comparison does not gauge the exact number of households seeking to locate in a particular city, it does provide a measure for comparing unmet demand for each of the four cities. Furthermore, it is assumed that the current demand for new housing products within the current city limits is a reasonable proxy for demand at the edge of each city.

[1] See Table B-1 in Appendix B.

Of the four cities, unmet demand for housing is greatest in Davis, with a median price of $585,000. Davis will probably experience the greatest amount of residential demand at its periphery and received a double positive score (⊕⊕).

b. Commercial

With high occupancy rates for retail space downtown, and a Target store approved by voter initiative within the city in the November election, there is also observable retail demand in Davis. In fact, even with the Target store, Davis will be underserved by retail in certain categories, creating pent-up demand in this area. However, market barriers, such as restrictive local land use policies, prevent many retailers from locating in this city. In addition, the University of California, Davis contributes to the demand for office space in Davis.

Due to unmet retail demand, Davis received a positive score (⊕) for commercial market viability.

c. Industrial

The high cost of land in Davis results in below average demand for manufacturing, warehousing or distribution uses so Davis edge growth received a negative score (Θ) for industrial market feasibility.

2. Community Services Thresholds

It is presumed that existing public schools, libraries, health services and fire protection are adequate to accommodate the growth projected for the edge of Davis, and is scored neutral (Ø).

3. Fiscal Impacts

Edge growth at the four incorporated cities in Yolo County was assumed to create no fiscal impact (Ø) on the County General Fund. See Appendix B, Section A3e, for a full explanation of this assumption.

B. Infrastructure

1. Water

Development at the periphery of Davis would connect to the city's municipal water system. The additional water demand from projected edge development would be approximately 4,330 gpm. This demand could be met by six or more additional wells, or by implementation of the proposed Davis-Woodland Water Supply Project, which would develop Sacramento River surface water supplies. Additional storage facilities and distribution infrastructure would need to be added to the existing system to connect these wells to the community.

2. Wastewater

Development at the periphery of Davis would connect to the city's municipal wastewater system. At least an additional 1,000 gpm of wastewater would be generated, requiring an additional 250 acres of ponds at the wastewater treatment plant, 110 acres of facultative ponds and 140 acres of percolation/evaporation ponds. Although the discharge system into the Yolo Bypass has enough capacity to accommodate the additional flows from the projected edge development, major treatment plant upgrades or some alternative solution are needed to meet increasingly tighter discharge water quality requirements and these measures would need to take the additional flows into account.

3. Storm Drainage

Storm Drainage in Davis consists of a series of detention ponds in the downtown area, and an open drainage ditch which transports water both to the Davis Wetlands and the Yolo Bypass. Storm drain facilities for new edge development would require extension of these existing storm drain facilities.

4. Flooding

The 100-year floodplain covers some of the western neighborhoods of Davis, and also covers parts of the north and east areas around Davis, but outside of

city limits, where new development is likely to occur. The city is given a single negative (Θ) score for being less than 25 percent inside the floodplain.

C. Transportation

1. Proximity to Freeways

Development at periphery of Davis would generally be located within one mile of Interstate 80 or the Highway 113 freeway.

2. Regional Roadways

The connection between Davis and West Sacramento is provided by Interstate 80. Interstate 80 is a six-lane freeway through Yolo County. Interstate 80 also provides the connection between the San Francisco Bay Area and Downtown Sacramento employment centers. Therefore, although the additional development in Davis would contribute to needed improvements on Interstate 80, regional growth outside of Davis would likely dictate the need for substantial improvements on Interstate 80 between Davis and West Sacramento.

Highway 113 is a four lane freeway between Davis and Woodland and would not likely need to be widened with growth in the county under all alternatives. Roads 102 and 98 provide a connection between Davis and Woodland, while Road 31 provides a connection between Davis and Winters.

Under all alternatives, the existing traffic volumes on Roads 102, 98, and 31 are less than 50 percent of capacity, and with the anticipated growth in the county, it is not expected that these roadways would need to be widened. Edge growth in Davis is given a single negative (Θ) score.

Review of recent vehicle accident data on Roads 102, 98, and 31 revealed a moderately high number of accidents at intersections and on roadway segments relative to other County roads; therefore, safety improvements are likely needed. Potential safety improvements could include widening existing

roadways to accommodate separate turn lanes, wider travel lanes and/or shoulders.

3. Transit Service

Transit service in Davis is provided locally by Unitrans in association with UC Davis and regionally by the Yolo County Transit District. Under all alternatives, the focus of growth within and near Davis would make the most efficient use of previous investments in the transit system with continued use of the existing transit system without major route extensions or new service to unserved populations. Additional transit ridership generated by growth in Davis would likely require additional investment to enhance existing services (e.g., new transit stops, increase transit headways, etc.), and is given a single positive (⊕) score.

4. Bicycle and Pedestrian Circulation

The mode split for walking (five percent) and bicycling (15 percent) in Davis are each more than the entire state, with bicycling more than four times the state average, based on the 2000 US Census data. Currently bicycle facilities are provided throughout Davis and sidewalks are provided along improved frontages.

All alternatives would require some funding to develop and expand bicycle and pedestrian facilities to growth in Davis outside the existing city limits to promote walking and biking; however, most improvements would likely be funded by proposed development given the planned amount of residential uses. Therefore, edge growth in Davis is given a double positive (⊕⊕) score for bicycle and pedestrian circulation.

D. Environmental Issues

1. Agriculture

Davis is surrounded by a mix of mostly Prime Farmland, some Farmland of Statewide Importance and Farmland of Local Importance, and by a mix of

Class 1 through 4 soils and soils with a Grade 1 Storie Index rating, with mostly Class 1 soils to the east and Class 2 and 3 soils to the north and west. Edge growth would occur primarily along the north edge of Davis and would convert a large amount of mostly Prime Farmland, so it received a double negative score (ΘΘ).

2. Biological Resources

There are known sightings of Swainson's hawk, western burrowing owl and alkali milk-vetch at Davis' northern edge. Other species with habitat in the peripheral areas around Davis include brittlescale, California tiger salamander, loggerhead shrike, northern harrier, San Joaquin spearscale, short-eared owl, western burrowing owl and western spadefoot toad. New development in these areas has the potential to affect any of these species. Davis is given a double negative (ΘΘ) score.

3. Airport Land Use Conflicts

Some growth at the edge of Davis could be within two miles of the Yolo County Airport, and possibly the UC Davis Airport as well, but would be expected to be outside the Overflight Zones of these facilities. Given this proximity, edge growth in Davis is given a single negative score (Θ).

E. Smart Growth

1. Preservation of Open Space

Approximately 40 percent of all new development in Davis would occur on existing open space land. Because less than half of the new development is at the edge of city limits, this issue is given a single negative score (Θ).

2. Compact Development and Healthy Design

The 40 percent of the future projected growth in Davis that is expected to be built the edge of the city is likely to be built in suburban patterns at densities that range from five to eight units per acre. This is a moderate density that could support some walking and bicycling, and would also help to further

strengthen existing patterns in Davis. However, it would not be as supportive of smart growth principles as infill, which would make the remainder of future growth in Davis, and leads to a neutral score (Ø).

14 CITY EDGES: WEST SACRAMENTO

In the next 25 years, West Sacramento projects its growth at 20,500 new residential units. 18,000 units would be built inside the current city limits and the sphere of influence, and 2,500 would be built at the city's edge. This chapter evaluates the issues as they affect city edge growth in West Sacramento and explains the scores given for each issue.

A. Economics

1. Market Viability

The greatest market demand for new development is located in and around the incorporated cities. These areas provide access to urban infrastructure as well as amenities such as shopping, and recreational opportunities. Following is a discussion of residential and job-generating land use demand.

a. Residential

In order to analyze residential demand for development at each city's edge, current median housing prices for new housing construction within each of the incorporated cities were referenced.[1] While housing prices reflect myriad factors, ranging from location to lot size, in order to provide an analysis of different levels of residential demand in each of the incorporated cities, housing prices are treated as a product of supply and demand in this analysis. Relatively higher housing prices in one housing market indicates that the existing supply of homes does not meet current demand as compared to other housing markets with lower prices. While price comparison does not gauge the exact number of households seeking to locate in a particular city, it does provide a measure for comparing unmet demand for each of the four cities. Furthermore, it is assumed that the current demand for new housing products within the current city limits is a reasonable proxy for demand at the edge of each city.

[1] See Table B-1 in Appendix B.

West Sacramento, with a median price of $485,000, would have the third highest residential demand of the county's four cities, after Davis and Woodland. West Sacramento received a positive score (⊕) for residential market demand.

b. Commercial

West Sacramento, with a significant amount of growth projected over the next few decades, seems to be experiencing the greatest retail interest of all four cities. Following the location of a new IKEA along Interstate 80, other retailers are looking at potential locations along the Interstate 80 corridor. Also, the proximity of West Sacramento to the State Capitol as well as the growing local population both contribute to increased office demand in this location. Sacramento Area Council of Governments (SACOG) projections estimate that, of the county's four cities, the greatest increase in office employment will occur in West Sacramento, likely tied to the potential expansion of Downtown Sacramento.[2]. With the greatest retail and greatest office demand of the county's four cities, West Sacramento received a double positive score (⊕⊕) for commercial market viability.

c. Industrial

West Sacramento's location offers the best transportation access via Interstate 80, Interstate 5 and Interstate 50 that connect West Sacramento to population centers in all directions. Therefore, West Sacramento will probably capture the greatest amount of demand for industrial land. It is possible that new residents in West Sacramento may oppose the expansion of industrial uses near their homes, hindering industrial growth. If that is the case, then growth of industrial uses in Woodland may surpass growth in West Sacramento. Nevertheless, due to the probability that of the four cities, West Sacramento will probably capture the greatest amount of demand for industrial land, it received a double positive score (⊕⊕) for industrial market viability.

[2] SACOG projections are reported in Table 2 of the Yolo County General Plan Update *Market and Fiscal Considerations* report.

2. Community Services Thresholds

It is presumed that existing public schools, libraries, health services and fire protection are adequate to accommodate the growth projected for the edge of West Sacramento. This issue is scored neutral (∅).

3. Fiscal Impact

Edge growth at the four incorporated cities in Yolo County was assumed to create no fiscal impact (∅) on the County General Fund. See Appendix B, Section A3e, for a full explanation of this assumption.

B. Infrastructure

1. Water

Development at the edge of West Sacramento would connect to the municipal water system. The additional water demand would be 13,240 gpm. West Sacramento's water source is the Sacramento River. The water treatment plant currently has sufficient surplus capacity to serve the projected development. Additional storage facilities and distribution infrastructure would need to be added.

2. Wastewater

Development at the edge of West Sacramento would connect to the municipal water system. At least an additional 3,070 gpm of wastewater would be generated. West Sacramento's sewage collection and treatment facility are planned to undergo a major reconfiguration, including the closing of the wastewater treatment plant so the City can connect to the Sacramento Regional Sanitation District Lower Northwest Interceptor, which will convey wastewater from nearly 200,000 households in the Sacramento region, including West Sacramento, to a regional treatment plant. The Lower Northwest Interceptor would have enough capacity to convey and treat the wastewater from projected development at the edge of the city. The wastewater collection system within the city may need repairs and upgrades to fix current infiltration and inflow problems in order to serve the projected development.

3. Storm Drainage

The storm drain system for West Sacramento discharges into the Sacramento River and the Deep Water Ship Channel. Projected development at the periphery of the city would require the extension of the existing system.

4. Flooding

West Sacramento is protected by levees from the Sacramento River. The area proposed for the edge growth to the south of the city, the University Park development, is protected by levees along both the Sacramento River and the Deep Water Ship Channel. The protection from these levees gives West Sacramento a single negative score (Θ).

C. Transportation

1. Proximity to Freeways

West Sacramento is bisected by Interstate 80 and is near Interstate 5. However, growth at the southern edge of West Sacramento would be over a mile from these freeways, and was given a positive (⊕) score, as opposed to a score of most positive.

2. Regional Roadways

Interstate 80 connects West Sacramento and Davis. Interstate 80 is a six-lane freeway through Yolo County. Interstate 80 also provides the connection between the San Francisco Bay Area and Downtown Sacramento employment centers. Therefore, although the additional development in West Sacramento would contribute to needed improvements on Interstate 80, regional growth outside of West Sacramento would likely dictate the need for substantial improvements on Interstate 80 between Davis and West Sacramento, and gives this issue a single negative score (Θ).

3. Transit Service

Transit service in West Sacramento is provided by the Yolo County Transit District. Under all alternatives, the focus of growth within and near West Sacramento would make the most efficient use of previous investments in the transit system with continued use of the existing transit system without major route extensions or new service to unserved populations. Additional transit ridership generated by growth in West Sacramento would likely require additional investment to enhance existing services (e.g., new transit stops, increase transit headways, etc.), and is given a positive (⊕) score.

4. Bicycle and Pedestrian Circulation

The mode split for walking (approximately one percent) and bicycling (approximately two percent) in West Sacramento are each close to the rates in the entire state, based on the 2000 US Census data. Currently bicycle facilities are provided throughout West Sacramento and sidewalks are provided along improved frontages.

Under all alternatives, some funding to develop and expand bicycle and pedestrian facilities to would be required for growth in West Sacramento outside the existing city limits to promote walking and biking; however, most improvements would likely be funded by proposed development given the planned amount of residential uses. Therefore, this issue is given a single positive (⊕) score.

D. Environmental Issues

1. Agriculture

West Sacramento is surrounded by mostly Prime Farmland, Class 2 and 3 soils and a mix of soils with Grades 1, 2 and 4 Storie Index ratings. Growth would occur south of the city in the area proposed for the proposed University Park development, on Prime Farmland and Class 2 and 3 soils. Because of the large amount of high quality farmland converted to urban use, West Sacramento received a double negative score (ΘΘ).

2. Biological Resources

There are known sightings of Swainson's hawk and Cooper's hawk to the south of West Sacramento in the area proposed for the University Park development. Other species with habitat to the south of West Sacramento include: brittlescale, California tiger salamander, giant garter snake, Heckard's peppergrass, loggerhead shrike, northern harrier, San Joaquin spearscale, short-eared owl, western burrowing owl, western spadefoot toad, white-faced ibis and yellow-billed cuckoo. The proposed University Park development has the potential to affect any of these species. West Sacramento is given a double negative (ΘΘ) score.

3. Airport Land Use Conflicts

West Sacramento is not within two miles of Sacramento International Airport or any other airport, and there are no land use conflicts.

E. Smart Growth

1. Preservation of Open Space

Only ten percent of the future growth projected in West Sacramento is to be built on undeveloped agricultural land. A single development, the proposed University Park, accounts for all 2500 units of edge growth in the city. A score of neutral (Ø) is given for this issue, because less than 25 percent of the new growth in the city urbanizes open space resources.

2. Compact Development and Healthy Design

The future projected growth in West Sacramento is predominantly expected to be infill. Development at the edge of West Sacramento is proposed to be built in suburban patterns with single-family densities that range from one to eight units per acre, and a multi-family component with 15 units per acre. While this is a moderate density that could support some walking and bicycling within the development, it is proposed to be built at some distance to the boundaries of West Sacramento and would not strengthen the communities of the existing city, and is given a single negative score (Θ).

15 WINTERS

Winters is expecting growth of 2,000 new residential units over the next 25 years. 1,150 units could be built as infill, inside current city boundaries and the Sphere of Influence, and 850 units are projected to be built at the city's edge. This chapter evaluates the issues as they affect city edge growth in Winters and explains the rankings given to each issue.

A. Economics

1. Market Viability

The greatest market demand for new development is located in and around the incorporated cities. These areas provide access to urban infrastructure as well as amenities such as shopping, and recreational opportunities. Winters' relatively small population and distance from Interstate 5 and Interstate 80 limits demand for both residential and job-generating growth. Following is a discussion of residential and job-generating land use demand.

a. Residential

In order to analyze residential demand for development at each city's edge, current median housing prices for new housing construction within each of the incorporated cities were referenced.[1] While housing prices reflect myriad factors, ranging from location to lot size, in order to provide an analysis of different levels of residential demand in each of the incorporated cities, housing prices are treated as a product of supply and demand in this analysis. Relatively higher housing prices in one housing market indicates that the existing supply of homes does not meet current demand as compared to other housing markets with lower prices. While price comparison does not gauge the exact number of households seeking to locate in a particular city, it does provide a measure for comparing unmet demand for each of the four cities. Furthermore, it is assumed that the current demand for new housing products within the current city limits is a reasonable proxy for demand at the edge of each city.

[1] See Table B-1 in Appendix B.

Winters has the lowest median housing price of $450,000 and therefore is assumed to have the lowest housing demand of the county's four cities. Winters received a positive score (⊕) for housing demand.

b. Commercial

The relatively small population in Winters combined and its proximity to Vacaville add up to low retail demand in Winters over the General Plan time horizon. Winters is also expected to experience the least office demand of all four cities. Winters received a negative score (Θ) for commercial demand.

c. Industrial

Due to Winters' distance from Interstate 5 and Interstate 80, it is not expected to experience much demand for industrial land over the next 25 years. Winters received a negative score (Θ) for industrial demand.

2. Community Services Thresholds

It is presumed that existing public schools, libraries, health services and fire protection are adequate to accommodate the growth projected for the edge of Winters, and is scored neutral (∅).

3. Fiscal Impacts

Edge growth at the four incorporated cities in Yolo County was assumed to create no fiscal (Ø) impact on the County General Fund. See Appendix B, Section A3e, for a full explanation of this assumption.

B. Infrastructure

1. Water

All new residential development would be connected to the municipal water system. The source of Winters' water supply is a combination of near-surface gravel beds in Putah Creek and groundwater wells. Water demand from edge development foreseen in Winters would be at least an additional 1,290 gpm.

This demand could be met by two or more new wells. Additional storage facilities and distribution infrastructure would also be needed.

2. Wastewater

All new residential development would be connected to the municipal sewer system. The sewer system for Winters is currently at capacity. In this alternative, an additional 300 gpm capacity would be required. If a combination of facultative and percolation/evaporation ponds are used, an additional 74 acres of ponds would be required to meet this demand. Approximately 34 acres are facultative ponds, and the remaining 40 acres are percolation/evaporation ponds. Continued expansion would ultimately require acquisition of additional land.

3. Storm Drainage

The existing storm drain facilities for Winters include storage in the Ranch Arroyo Detention Pond and then conveyance to wetlands which in turn drain into Putah Creek. The projected edge development would require extension of the existing storm drain system.

4. Flooding

Winters is at risk from a 100-year flood from Dry Slough and the Willow Canal, primarily in the area to the northeast of the city limits. The floodplain around Putah Creek begins to the west of Interstate 505. Due to the adjacency of city limits to the floodplain, a score of single negative (Θ) is given.

C. Transportation

1. Proximity to Freeways

Interstate 505 is located near the eastern edge of Winters, and the city is served by the Interstate 505/Highway 128 interchange. New edge growth in Winters would be within four miles of the freeway.

2. Regional Roadways

Road 31provides a connection between Winters and Davis. Under all alternatives, the existing traffic volumes on Road 31 is less than 50 percent of capacity, and with the anticipated growth in the county under all alternatives, it is not expected that this roadway would need to be widened, and a score of neutral (Ø) is given.

Review of recent vehicle accident data on Road 31 revealed a moderately high number of accidents at intersections and on roadway segments relative to other county roads; therefore, safety improvements are likely needed. Potential safety improvements could include widening existing roadways to accommodate separate turn lanes, wider travel lanes and/or shoulders.

3. Transit Service

Transit service in Winters is provided by the YCTD. Under all alternatives, the focus of growth within and near Winters would make the most efficient use of previous investments in the transit system with continued use of the existing transit system, without major route extensions or new service to unserved populations. Additional transit ridership generated by growth in Winters would likely require additional investment to enhance existing services (e.g., new transit stops, increase transit headways, etc.), and is given a single positive (⊕) score.

4. Bicycle and Pedestrian Circulation

In Winters, the mode split for walking (six percent) is double that of the entire state, while bicycling (less than one percent) is half, according to 2000 US Census data. Currently, bicycle facilities are provided in Winters and sidewalks are provided along improved frontages. Under all alternatives, some funding would be needed to develop and expand bicycle and pedestrian facilities to growth in Winters outside the existing city limits to promote walking and biking; however, most improvements would likely be funded by proposed development given the planned amount of residential uses. Assuming this, a single positive (⊕) score is given.

D. Environmental Issues

1. Agriculture

Winters is surrounded by Prime Farmland and Class 1 and 2 soils to the northeast and southwest, and Farmland of Local Importance and Grazing Land and a mix of Class 3, 4 and 6 soils to the northwest. These lands are a mix of soils with a Grade 1 through Grade 5 Storie Index rating. Growth would occur along the northern edge of Winters, on some Prime Farmland but primarily on Farmland of Local Importance. Winters edge growth received a single negative score (Θ) for agriculture.

2. Biological Resources

There have been specific occurrences for the Valley elderberry longhorn beetle in Winters, and a known sighting of the Western Burrowing Owl. Winters is also potential habitat for Swainson's Hawk and the Western spadefoot toad. Development on the northwest edge of Winters has the potential to affect any of these species. Putah Creek is habitat for the Yellow-billed Cuckoo; development to the south of Winters could affect this species. Given the potential habitat of these species, growth in Winters is given a double negative score (ΘΘ).

3. Airport Land Use Conflicts

Winters is not within two miles of an airport, and there are no conflicts in land use.

E. Smart Growth

1. Preservation of Open Space

Approximately 40 percent of the projected new development in Winters is at the edge of the city, and would be built on current agricultural land. Because this is less than a majority of the new growth, but still more than 25 percent, it is given a single negative score (Θ).

2. Compact Development and Healthy Design

The 40 percent of future development projected to be built at the edge of Winters is likely to be built in suburban patterns at densities that range from five to eight units per acre. This is a moderate density that could support some walking and bicycling, and could also help to further strengthen the city. However, it would not be as supportive of smart growth principles as the 60 percent of new projected growth that would be built as infill, and is given a score of neutral (Ø).

16 CITY EDGES: WOODLAND

Woodland is projecting 10,580 new residential units over the next 25 years. 8,028 units are expected as infill, inside the current city limits and the sphere of influence, and 2,552 new units are projected to be built at the city's periphery. This chapter evaluates the issues as they affect city edge growth in Woodland and explains the scores given for each issue.

A. Economics

1. Market Viability

The greatest market demand for new development is located in and around the incorporated cities. These areas provide access to urban infrastructure as well as amenities such as shopping, and recreational opportunities. Following is a discussion of residential and job-generating land use demand.

a. Residential

In order to analyze residential demand for development at each city's edge, current median housing prices for new housing construction within each of the incorporated cities were referenced.[1] While housing prices reflect myriad factors, ranging from location to lot size, in order to provide an analysis of different levels of residential demand in each of the incorporated cities, housing prices are treated as a product of supply and demand in this analysis. Relatively higher housing prices in one housing market indicates that the existing supply of homes does not meet current demand as compared to other housing markets with lower prices. While price comparison does not gauge the exact number of households seeking to locate in a particular city, it does provide a measure for comparing unmet demand for each of the four cities. Furthermore, it is assumed that the current demand for new housing products within the current city limits is a reasonable proxy for demand at the edge of each city.

[1] See Table B-1 in Appendix B.

Woodland will be second only to Davis in residential demand, with the second-highest home price, at $528,000. Woodland received a positive score (⊕) for housing demand.

b. Commercial

Woodland is likely to experience the second greatest demand for retail space of the county's four cities. Already the approved Gateway project consists of 525,000 square feet of retail on Interstate 5.[2] Woodland is also likely to experience office demand resulting from population increases and growth in businesses serving the County government. SACOG projections estimate the second greatest increase in office employment for Woodland.[3] Woodland received a positive score (⊕) for commercial demand.

c. Industrial

Woodland will likely experience the second-greatest industrial demand of the four cities due to available sites along Interstate 5 as well as existing supply chains serving current industrial uses. However, it is possible that new residents in West Sacramento may oppose the expansion of industrial uses near their homes, hindering industrial growth. If that is the case, then growth of industrial uses in Woodland may be greater, surpassing growth in West Sacramento. Woodland received a positive score (⊕) for industrial demand.

2. Community Services Thresholds

It is presumed that existing public schools, libraries, health services and fire protection are adequate to accommodate the growth projected for the edge of Woodland. This issue is scored for neutral effect (∅).

---

[2] Johnson, Kelly. "Work on Gateway Retail Center Could Start as Early as August." *The Sacramento Bee*. February 17, 2006.

[3] SACOG projections are reported in Table 2 of the Yolo County General Plan Update *Market and Fiscal Considerations* report.

3. Fiscal Impacts

Edge growth at the four incorporated cities in Yolo County was assumed to create no fiscal impact (Ø) on the County General Fund. See Appendix B, Section A3e, for a full explanation of this assumption.

B. Infrastructure

1. Water

All new residential development would be connected to the municipal water system. The additional water demand from development at the periphery of Woodland would be 6,390 gpm, which could be met by upgrading the current system with nine or more wells, or by implementation of the Davis-Woodland Water Supply Project, which would develop Sacramento River surface water supplies. Additional storage facilities and distribution infrastructure would also be needed. In order to maintain acceptable fire flows, additional development would require the expansion of water mains and additional pumps and/or storage facilities.

2. Wastewater

The Woodland wastewater treatment plant is currently upgrading to provide tertiary treatment by filtration and ultraviolet light disinfection.[4]

Development at the edge of Woodland would be connected to the municipal sewer system. New growth would generate an additional 1,590 gpm of wastewater, requiring at least an additional 390 acres of ponds, 180 acres of facultative ponds and 210 acres of percolation/evaporation ponds.

3. Storm Drainage

Woodland's drainage system consists of piping, open channels, detention ponds and lift stations that eventually discharge into the Yolo Bypass. New development would require extension of the existing system.

[4] *City of Woodland Urban Water Management Plan 2005*, pages 8-1 to 8-5.

4. Flooding

About one-third of Woodland is at risk from a 100-year flood. Floodwaters from Cache Creek could inundate the northern part of the existing city as well as possible future development areas to the east. Due to the more than 25 percent of the city and its future development areas being inside the floodplain, this is given a double negative score (ΘΘ).

C. Transportation

1. Proximity to Freeways

Woodland is on Interstate 5 and Highway 113. Growth at the south and eastern edges of the city could be in close proximity to these freeways.

2. Freeways and Regional Roadways

Woodland is connected to other areas of the county by Freeways and Regional Roadways.

a. Freeways

Interstate 5 is a four-lane freeway through Yolo County and has an existing daily volume of approximately 55,000 east of Woodland. Review of background traffic projections provided by the recent SACOG TDF model[5] shows a potential increase of 30,000 daily trips (growth of approximately two percent per year), which would result in 85,000 daily trips on Interstate 5 near Woodland. This would result in Interstate 5 exceeding the capacity of the existing four-lane freeway section of Interstate 5 near Woodland. Under all alternatives, growth in Woodland would likely contribute to the need to widen Interstate 5 beyond the existing four lane freeway between Woodland and Sacramento County. If development was approved and widening of I-5

[5] This version of the SACOG travel demand forecasting model assumes a year 2027 roadway network and year 2032 blueprint-based land uses. The SACOG TDF model takes into account development within Woodland; however, future traffic volumes along I-5 would likely be higher and at or over capacity for a six-lane freeway when taking into account growth in Dunnigan and potential development in Colusa County under all alternatives.

across the Yolo Bypass is not feasible; then the bridge crossing would likely be a bottleneck for regional and local traffic.

Highway 113 is a four-lane freeway between Woodland and Davis and would not likely need to be widened with growth in the county under all alternatives.

b. Regional Roadways

Roads 102 and 98 provide a connection between Davis and Woodland. Under all alternatives, the existing traffic volumes on Roads 102 and 98 are less than 50 percent of capacity, and with the anticipated growth in the County under all alternatives, it is not expected that these roadways would need to be widened.

Review of recent vehicle accident data on Roads 102 and 98 revealed a moderately high number of accidents at intersections and on roadway segments relative to other County roads; therefore, safety improvements are likely needed. Potential safety improvements could include widening existing roadways to accommodate separate turn lanes, wider travel lanes and/or shoulders.

c. Scoring

The need for widening Interstate 5 under the projected edge growth in Woodland gives this criteria a single negative (Θ) score.

3. Transit Service

Transit service in Woodland is provided by the Yolo County Transit District. Under all alternatives, growth within and near Woodland would make the most efficient use of previous investments in the transit system, with continued use of the existing transit system without major route extensions or new service to unserved populations. Additional transit ridership generated by growth in Woodland would likely require additional investment to enhance existing services (e.g., new transit stops, increase transit headways, etc.) and receives a single positive score (⊕).

4. Bicycle and Pedestrian Circulation

In Woodland, the percentage of people who walk (approximately three percent) and bicycle (approximately two percent), are each the same as the entire state, based on the 2000 US Census data. Currently, bicycle facilities are provided throughout Woodland and sidewalks are provided along improved frontages.

Under all alternatives, some funding would be required to develop and expand bicycle and pedestrian facilities to growth in Woodland outside the existing city limits, to promote walking and bicycling. However, given the projected amount of residential uses, most improvements would likely be funded by proposed development, and thus receives a positive (⊕) score.

D. Environmental Issues

1. Agriculture

Woodland is surrounded by mostly Prime Farmland and Class 1 and 2 soils, with a mix of Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance and Other Land, and a mix of Class 2, 3 and 4 soils to the east. The Storie Index rating of these soils is a mix of all grades, mostly Grade 1. Growth would be expected to occur mostly to the south and east of Woodland, where there is more of a mix of Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance and Other Land. Woodland edge growth received a single negative score (⊖) for agriculture.

2. Biological Resources

There are known sightings of Alkali milk-vetch, Brittlescale, Palmate-bracted birds-beak, Swainson's Hawk and Western Burrowing Owl near the edge of Woodland. In the southern Sphere of Influence, there is an occurrence of San Joaquin spearscale. Other species with potential habitat at the edge of Woodland include the Western Burrowing Owl and the Loggerhead Shrike. Both the Alkali milk-vetch and Palmate-bracted birds-beak have sightings and habitat around Roads 25 and 103. Development at Woodland's southeastern edge

has the potential to affect any of these species, and is given a double negative score (ΘΘ).

3. Airport Land Use Conflicts

Woodland is not within two miles of the Watts-Woodland Airport, or any other airport, and there are no land use conflicts.

E. Smart Growth

1. Preservation of Open Space

The 25 percent of future projected growth at Woodland's edge would convert existing agricultural lands to urbanized uses. Because this is less than a majority of the total projected growth, a score of single negative (Θ) is given.

2. Compact Development and Healthy Design

Future growth in Woodland is projected to be 75 percent infill. The development that could occur at the edge Woodland is likely to be built in suburban patterns at densities that range from five to eight units per acre. While this is a moderate density that could support some walking and bicycling, it is not as supportive of smart growth principles as infill, and is given a neutral (Ø) score.