

## Chapter 8. Circulation Element

### 8.1 Introduction

This chapter describes the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local transportation facilities. It includes consideration of roads, public transportation, non-motorized transportation facilities, airports, and marine and rail transportation.

#### **Relationship to Other Elements and Other Plans**

The goals and policies in this Element are correlated with the Land Use Element (Chapter 5), so new and existing development will be adequately served by the transportation system, and will not interfere with existing or planned improvements. Transportation policies in this Element are also consistent with policies in the Energy Element (Chapter 17), and the Air Quality Element (Chapter 19), to minimize energy costs and air quality impacts. The Circulation Element is also consistent with the Community Infrastructure and Services Element, which contains policies regarding infrastructure financing and level of service standards.

State laws (Government Code §65103(f) and §65080 et seq.) encourage coordination between the County's Circulation Element and transportation plans developed by other local, regional, and State agencies.

The County coordinated with the California Department of Transportation (CalTrans) and the City of Eureka to develop a Greater Eureka Area Travel Model (GEATM), a county-wide travel demand forecasting model. The model is a joint-agency planning and decision making tool that can be used to assess impacts of land use and transportation changes, and help determine the effectiveness of potential improvements to the road system.

The County is also synchronizing with on-going transportation planning by the regional Humboldt County Association of Governments (HCAOG); in addition to the 2006 Regional Transportation Plan (RTP), HCAOG has produced a Regional Bicycle Transportation Plan (2004), a Pedestrian Needs Assessment (2003), and a Regional Parking Needs Study (2003). The 2006 RTP reviewed other local transportation planning documents as well, such as the Manila Community Transportation Plan (Phases I and II), a traffic calming and safety concept plan for Hoopa, the County's Airport Master Plan, the Port of Humboldt Bay Harbor Revitalization Plan, and a recent feasibility study for the Northwestern Pacific Railroad.

### 8.2 Description of Transportation Facilities

#### **Roadway Infrastructure**

The overall roadway network in Humboldt County has approximately 1,400 miles of county roads and city streets, 378 miles of state highways, including U.S. Highway 101,

and roadways on federal lands. These roadways provide for the inter-regional and intra-regional movement of goods and people on California's north coast. The Humboldt County-maintained roadway system is made up primarily of two-lane roads that traverse varying degrees of flat, rolling, and mountainous terrain.

#### *Road Capacity*

As the County's population grows over the 20 year general plan period, corresponding increases in vehicle-volumes will have impacts on the safety and functionality of County roadways. The GEATM model predicts most vehicle trip increases will occur within the Urban Study Areas (USAs) shown in Chapter 4 (Managing Growth).

As described in the Community Infrastructure and Services Technical Report (Winzler & Kelly, 2007), the model uses a Volume to Capacity Ratio (V/C Ratio) to describe the "Level of Service" (LOS) of roads, a measure of the adequacy of the road to accommodate vehicle traffic. In several cases, roadways in the Eureka area are already operating at or above capacity during peak hours; F Street, Herrick Avenue and Harrison Avenue are among the eight (8) road segments already operating at above capacity<sup>1</sup>.

The 2007 Technical Report also identifies other roads currently able to accommodate existing traffic volumes, but expected to have segments that reach or exceed capacity as traffic volumes increase over the next 20 years. Seven (7) roadways fall into this category; Ridgewood Drive and Elk River Road in the Eureka area, as well as School Road and Central Avenue in McKinleyville are among them. Still others are expected to remain below capacity over the next 20 years; 44 of the 64 total roads analyzed by the model fall into this category.

Roadway capacity is generally less of an issue for rural areas due to the lower population densities, but even so there are rural roadways where existing and future capacity and functionality must be addressed. Roadway capacity is also affected by limited right-of-way width and the need to provide for vehicle travel lanes and facilities for other transportation modes, including public transit, bicycles and walking.

Several map series provide details of the County's road system. Maps showing existing and planned future County roads and multimodal transportation facilities are attached as Appendix XX, existing and future above-capacity road segments are in the 2007 Technical Report, and maps showing the 2006 Average Daily Traffic and Level of Service for the State Highways in Humboldt County are in the 2006 Regional Transportation Plan (RTP) developed by the Humboldt County Association of Governments.

Impacts of new development on the safety and capacity of the road network are assessed on a project-by-project basis. Developments are required to make on-site improvements to the road frontage, and to provide safe access to the new development. The County no longer accepts new roads into the County-maintained road system, but instead requires they be constructed by the developer, and a Road Maintenance Association is established to maintain them into the future.

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<sup>1</sup> In addition to the road segments at capacity in the Eureka area predicted by the GEATM model, the 2006 RTP also identified capacity constraints along Indianola Road between Eureka and Arcata, on Blue Lake Boulevard (in the Blue Lake area), in McKinleyville on Murray Road and Sutter Road, and on Redwood Drive in Garberville. The 2006 RTP used data compiled from CalTrans to derive capacity estimates, rather than the GEATM model; they used the 1997 Route Segment Report, the 2002 California State Highway Log for District 1, and 2004 traffic volume data.

Some developments are required to make off-site improvements as well, to mitigate for off-site impacts. Increasingly, the County is relying on the GEATM model to assess off-site impacts of new development. The model helps compare alternative improvement designs, and can be used to apportion to the new development the fair share of the selected road and/or intersection improvements. Road infrastructure financing policies and implementation measures are contained in the Community Infrastructure and Services Element (Chapter 7).

Road capacity and functionality is connected to development potential described in the Land Use Element (Chapter 5). Simply put, areas with development potential need to be adequately served by roads with sufficient capacity to accommodate the new development.

*Road Maintenance*

Roadway maintenance is one of the biggest challenges facing the County. At the time this chapter was written, there was over \$100 million in deferred maintenance on the County's major roadways, which does not include maintenance costs for local streets. The majority of future maintenance needs will occur within in the USAs, but it is an issue system wide. Without significant increases in spending on maintenance, roadway conditions in the County will continue to decline.

In 2000, Humboldt County's arterial and collector roadways were inspected and rated as part of the County's new Pavement Management System (PMS). This system relies on assessments of roadway condition and helps roadway maintenance managers identify thresholds for maintenance measures. The PMS generates pavement distress data for a representative sample of arterial and collector roadways in Humboldt County. This data forms the basis for the creation of an "Overall Condition Index" (OCI), which rates roadway surfaces on a scale from 0-100 as shown in the following table:

**Table 8-1 Roadway OCI Estimates, Maintenance Requirements and Costs**

OCI	Condition	Maintenance Typically Required at this Condition Level	Average Cost (\$/ft <sup>2</sup> ) <sup>2</sup>
70-100	Very Good	<i>Minor</i> (OCI 70-85)—Variable maintenance.	<.4
50-69	Good	<i>Chip Seal</i> —Pavement sprayed with asphalt, covered with aggregate and rolled.	.4
25-29	Poor	<i>Overlay</i> —An increase in the pavement load carrying capacity by adding additional pavement layers.	4.0
<25	Very Poor	<i>Reconstruction</i> —Complete removal and replacement of the existing pavement structure.	10.0

The OCI is used to prioritize maintenance projects for the County's arterial and collector roads. The 2007 Technical Report expands the OCI to include the other County maintained roads.

Besides the OCI, funding for roadway maintenance, upgrades and expansions is often the limiting factor for determination of project eligibility and priority. Funding issues are

<sup>2</sup> Cost estimates are based on 2003 CIP estimates escalated to reflect current material costs as reported by Public Works personnel.

more fully described in the 2007 Technical Report, and is addressed by policies in the Community Infrastructure and Services Element (Chapter 7).

The County is developing a five-year Capital Improvement Program (CIP) for the years 2008-2012 to help guide the use of the County's transportation budget into the future. The County is also developing a list of road projects from its pavement management system that will determine the future priorities for maintenance and rehabilitation of the County's roadways.

The 2006 RTP already includes a list of the top priority transportation improvement projects for the County. That list will be updated in future versions of the RTP with projects from the CIP and Pavement Management System.

#### Best Management Practices

In response to the 1997 listing of the coho salmon as a threatened species, Humboldt County worked with four (4) adjacent counties (Del Norte, Mendocino, Trinity and Siskiyou County) to form the "Five Counties Salmonid Conservation Program" to evaluate options for County grading and road maintenance practices to provide or improve salmonid habitat and water quality overall.

From this effort, the County developed and implemented a grading ordinance in 2001 to standardize best management practices for controlling soil erosion from stormwater runoff across disturbed areas. Another outcome of this effort in 2002 was a road manual to act as a guide and framework for implementing improved road maintenance practices. County Public Works adopted this as Departmental Policy several years ago. Now that the County has an approved incidental take permit for operating under these guidelines, Public Works will be seeking formal adoption of the manual by the Board of Supervisors.

#### U.S. Highway 101 Safety Corridor Project

Arguably the single largest transportation project with the most potential impact on Humboldt County residents during the timeframe of the General Plan is the CalTrans Highway 101 Safety Corridor project between Arcata and Eureka. The 2007 Draft Environmental Impact Report (DEIR) described the alternatives under consideration, and the preferred alternative involves construction of an overpass at the intersection of Indianola Cutoff and U.S. Highway 101.

Policies in this Element reflect the comments made on the DEIR by the Board of Supervisors September 18, 2007 to request consideration of a strategy that treats all three main roads between Arcata and Eureka as one system. The strategy would develop an overall improvement plan that phases improvements on a prioritized basis between the three roads; U.S. Highway 101, State Route 255, and Old Arcata Road/Myrtle Avenue.

### **Public Transportation**

The 2006 RTP contains a comprehensive description of public transit services of fixed route, paratransit and other providers. The following fixed route systems serve the County's public transit needs: Redwood Transit System, Eureka Transit System, Southern Humboldt Rural Transit System, Arcata & Mad River Transit System, Klamath/Trinity Non Emergency Transportation (K/T Net), and Blue Lake Rancheria.

Paratransit services are available through Dial a Ride/Dial a Lift, K/T Net Paraneet, Blue Lake Rancheria Dial a Ride, Fortuna Senior Transit, Humboldt Community Access and Resource Center (HCAR), Bridgeville Community Center Van, Ferndale Senior Resource Transportation Network "Bridging the Gap", Coastline Enterprises, Humboldt County Mental Health, and United Indian Health Services, Inc (UIHS).

Also described in the 2006 RTP are the services of the Redwood Coast Transit service between Crescent City and Humboldt County, Greyhound Bus Lines, AMTRAK and City Cab.

The 2006 RTP defines a threshold level of public transit service as, "a minimum level that should be provided in Humboldt County to ensure system integrity and to implement RTP transportation policies" (2006 RTP). It identifies a 1 hour weekday interval or less as the appropriate level of service for the urban areas of Eureka and Arcata, and an interval of 1.5 hours for the U.S. Highway 101 corridor between Trinidad and Scotia. This Element carries forward those public transit goals, policies and implementation measures applicable to the unincorporated areas of the County.

### **Non-Motorized Transportation**

The term "non-motorized transportation facilities" generally refers to improvements for bicycles and pedestrians, and for the mobility-challenged, and they mostly include sidewalks, crosswalks, and bicycle lanes associated with the road system. While walking or cycling between destinations is a choice for some, it is a necessity for others that do not have access to motorized vehicles.

Most facilities dedicated exclusively for non-motorized use are located in urban areas of the county. However, pedestrians and bicyclists frequently utilize roads in Humboldt County that lack sidewalks and/or bicycle lanes. Cyclists are also granted full access to all state route facilities in CalTrans District 1, which includes all of Humboldt County. Major new non-motorized facilities are possible along the Annie and Mary Rail Line from Arcata to Blue Lake, and along the Northwestern Pacific Railroad between Arcata and Eureka.

Impacts on non-motorized transportation facilities are assessed on a project-by-project basis. While the County uses LOS standards for determining impacts of new development to vehicle traffic, assessing impacts to non-motorized facilities is less standardized. Adoption of a Level of Service standard for non-motorized transportation facilities would help standardize those assessments.

For recreational use, many trails either dedicated or shared, are identified in the 1979 Trails Master Plan, and in the six (6) coastal plans. While equine use does not constitute a significant portion of daily commuter travel in Humboldt County, equestrian trails are a significant recreational resource, and are also identified in the Trails Plan. Maps and descriptions of existing and proposed future non-motorized transportation facilities are shown in Appendix XX.

The 1979 Trails Master Plan recognized the health benefits of bike paths and trails when it stated,

"It is becoming more widely accepted by doctors and health officials alike that America's increasingly sedentary life style is having a detrimental effect on its

citizens. With the provision of recreation or transportation oriented trails for walking, horseback riding, and bicycling, county residents as well as north coast tourists will have increased opportunity to improve their general well-being through physical activity.

The connection between public health and non-motorized transportation is receiving increased attention both locally and nationally as childhood obesity and other health problems related to our more sedentary life styles become epidemic in our population.

The 1979 Trails Master Plan also looked at school access conditions for students walking and bicycling to and from county schools. It reported that parents and school administrators at the elementary school level were concerned about safe child access to schools. One of the policy initiatives that came out of the Plan was to gradually provide safe student access "trails" wherever children walk or bicycle to school regardless of the number of children involved. Schools cited in the 1979 Trails Master Plan for improved accessibility were: Cutten (Eureka area), Dows Prairie (McKinleyville), Fieldbrook, Freshwater, Jacoby Creek, Lafayette (Eureka area), Morris (McKinleyville), Orick, Pine Hill (Eureka area), Redway, Winship Jr. High (Eureka area), and Worthington (Eureka area).

The need for safe access to schools is reflected today in the "Safe Routes to Schools" funding program administered by CalTrans, which helped construct bicycle and pedestrian facilities along Central Avenue in McKinleyville. The Redwood Community Action Agency (RCAA) has also completed several "walkability audits" to assess the difficulty of walking in communities, particularly along school routes.

Current state law exempts schools from general plan requirements to coordinate with local jurisdictions regarding transportation routes to schools. Nonetheless, a policy has been added to this Element to encourage coordination between the school districts and the County.

## **Truck Transportation**

The primary routes into and out of the County used by commercial trucks are U.S. Highway 101 and State Route 299. These major highways provide many trucks adequate facilities and level of service for their operations. However, narrow, windy sections of these highways prevent larger trailers from entering the County, which increases shipping costs for both imported and exported goods.

Improvements to the road alignment of Highway 101 through Richardson Grove in the southern end of the County, combined with recent State regulatory reforms, may eliminate the constraint on large truck access. This would reduce costs of shipping and may help local businesses become more profitable. Future improvements to Highway 299 in the Buckhorn Summit area of Trinity County could provide trucks with larger trailers access from the east, which would also have broad economic benefits for the County.

## **Air Transportation**

The following airports presently operate in the County:

**Table 8-2. Inventory of Airports of Humboldt County**

<i>Airport Name</i>	<i>Runway Length (in linear feet)</i>	<i>Runway Width (in linear feet)</i>	<i>Lighting</i>	<i>Number of Based Aircraft</i>
Arcata-Eureka Airport	5,998	150	Yes	11
Dinsmore Airport	4,499	150	Yes	
Eureka Municipal Airport	2,510	48	No	1
Garberville Airport	2,700	60	No	16
Hoopla Airport	3,050	75	No	20
Kneeland Airport	2,325	50	No	2
Murray Field	2,270	50	No	0
Rohnerville Airport	3,000	50	Yes	69
Shelter Cove Airport	4,005	100	Yes	35
	3,400	75	No	0

Source: Humboldt County Aviation Division, 2007

Airports in the unincorporated areas (all except the Eureka Municipal Airport) are operated according to an Airport Master Plan, which was developed in 1992. The plan for the Arcata-Eureka Airport and the Kneeland Airport were updated in 2005, and the plans for the Garberville, Dinsmore, Murray Field and Rohnerville airports were updated in 2006. (Operation of the Shelter Cove Airport has been assumed by the Resort Improvement District, and the Hoopa Airport is being operated by the Hoopa Tribe.)

The State Airport Land Use Compatibility Plans map "Land Use Compatibility Zones", which restrict the allowed uses, and residential densities in areas that would impact aircraft operations. This is another area where the Land Use Element needs to be consistent with this Circulation Element; the development potential in the Land Use Element should reflect the residential densities allowed by the current State designated Airport Compatibility Zones. The Noise Element (Chapter 20) and Safety Element (Chapter 21) also include policies and standards to address airport noise and safety issues.

## Marine Transportation

The Moving Goods and People Report (Dyett & Bhatia, 2002) reported that historically, forest products have been the highest volume commodity passing through Humboldt Bay. The export demand for forest products has fluctuated over the years, having been affected by governmental regulations, market fluctuations, and construction activity levels. Shipped commodities passing through Humboldt Bay include petroleum products (gasoline and fuel oil), wood chips, logs, lumber, and paper pulp.

The marine transport of goods has been affected by changes in the shipping industry. Larger deep draft vessels are becoming more common for moving cargo along Pacific Ocean shipping lanes. These vessels have higher cargo capacities and require deeper and wider channels and turning basins. In response to this need, the Humboldt Bay Harbor District and the U.S. Army Corps of Engineers completed a project in 2000 to deepen the Bar, Entrance, North Bay, and Samoa Channels and widen the Entrance Channel. In addition, the Harbor District has been working with members of Congress

and the U.S. Army Corps of Engineers to develop a companion project that would deepen and widen the Fields Landing Channel.

Upgrading and modernization of the port facilities is considered an important component of economic growth for the area. The bar and entrance channels have been deepened to a depth of 48 feet, and the North Bay and Samoa Channels deepened to a depth of 38 feet. The growth of Humboldt Bay's marine transport industry is linked to growth in the truck and rail transportation modes. All six dock facilities identified in the 2006 RTP have railroad spurs that connect to the main North Coast Railroad facilities. Due to the current condition of railroad operations, goods loaded on and off of commercial vessels calling on Humboldt Bay are transported to and from the dock facilities by truck.

## **Rail Transportation**

Rail transportation in the County is described in detail in the 2006 RTP and the Moving Goods and People Report (Dyett & Bhatia, 2002), which reported that the North Coast Railroad Authority (NCRA), created by the State Legislature in 1989, began acquiring the Northwestern Pacific Railroad Company (NWP) in 1992, and fully acquired it by 1996.

In 1997, the rail line effectively ceased operation. When the line operated, it provided freight service three days a week and occasional excursion passenger service on weekends and holidays. Principal freight for the railroad was lumber being transported to the California and Arizona markets. Additional traffic included dairy products, fish products, and aggregates. There was also some inbound traffic of coke and calcified lime used in pulp processing.

The railroad's ability to offer service depends largely on the condition of the track and roadbed and the availability of stations. Currently, there are six inactive stations at Willits, Ukiah, Scotia, Fort Seward, Calpella and Laughlin. A considerable program of roadbed, track, bridge and tunnel and station rebuilding would be necessary if operations are to ever resume.

A potential use of the northern most portion of the rail line considered in the 2002 Moving Goods and People Report would support tourism by developing an excursion train. The Northern Counties Logging Interpretive Association's (NCLIA's) mission is to create a logging and timber technology museum in Humboldt County, coupled with an operating steam-powered "Humboldt Bay Scenic Railroad" excursion train. This tourist railroad would operate from South Fork north to Samoa. The NCLIA envisions two excursion lines. One line would operate from Eureka, around the bay to Arcata, then to Samoa. Another line would originate in Arcata, and travel to Eureka, Loleta, Fernbridge, Fortuna, Scotia, and South Fork.

The excursion trains would be operated under the NCLIA's non-profit (501(c)3) corporation. According to NCLIA, the section of the railroad to be used, referred to as the "Humboldt short rail," can be profitable with limited local freight and tourist train service. The NCLIA hopes to have the Humboldt Bay Scenic Railroad, along with the "Redwood Empire Museum of Timber Technology" in operation after the NCRA opens this portion of the railroad.

The NCRA Board of Directors intends to focus on updating and implementing the adopted business plan and three major areas of future need:

- Executing public policy to protect the railroad as a public transportation asset and to promote its use.
- Oversee the financial accounting and record keeping system through auditing and monitoring of all systems.
- Pursue new funding sources and new legislation, as well as continuing management of grant funding from existing local, state and federal sources to improve railroad infrastructure and operations.

## 8.3 Goals and Policies

- C-G1 Roadway Safety and Functionality.** To develop, operate and maintain a well-coordinated, balanced, circulation system that is safe, efficient and provides good access to all cities, communities, neighborhoods, recreational facilities and adjoining regions [FRWK].
- C-G2 Multi-Modal Transportation.** To provide a balanced multi-modal transportation system that accommodates motorized vehicles, public transit, bicycles, and pedestrians.
- C-G3 Interagency Cooperation.** To coordinate planning among state/county/city roadway system service providers and HCAOG for improved system design, development, operations and maintenance.

### Policies

#### Policy Topic #1—Roadway Classification, Safety and Functionality

- C-P1. Safety Improvement.** Use safety indicators and threshold criteria for capital improvements in the Capital Improvement Plan that result in levels of safety on County roadways higher than statewide averages.
- C-P2. Roadway Functional Classifications.** Adopt and apply consistent roadway functional classifications that reflect urban/rural/community distinctions and that maximize right-of-way use for multi-modal safety and functionality.
- C-P3. Roadway Condition Thresholds.** Roadway system condition thresholds should be used to allow for maintenance project prioritization and selection based on the attainment of acceptable overall system condition levels.
- C-P4. Functional Efficiency and Capacity.** Manage roadway systems for functional efficiency (roadway system and demand management) before functional capacity (roadway widening or new road construction) whenever possible.
- C-P5. Pavement Management Criteria.** Strive to maintain the overall condition of County-maintained roadways above the 50<sup>th</sup> percentile of the Overall Condition Index (OCI) and Modified OCI developed in the 2007 Technical Report.
- C-P6. Orderly Development.** Encourage development of a road system that supports an orderly pattern of land use through:

- A. Using minor collector roads to provide access to higher density residential areas, local commercial facilities, neighborhood parks and schools.
- B. Locating lower density residential areas with frontage onto arterial or major collector roads away from through-traffic unless sufficient mitigation measures are used.
- C. Locating retail, service and industrial facilities, community centers, major recreational facilities, employment centers, and other intensive land uses near major collector, or arterial roads.
- D. Improving roads to accommodate land uses served by an inappropriate road classification. [FRWK]

**C-P7. Consideration of Land Uses in Transportation Decision-making.** Transportation decisions in urban and rural areas should be based on a comprehensive planning approach that considers at a minimum existing land uses and future land development as proposed in adopted County plans and plans of other governmental agencies. [FRWK]

**C-P8. Consideration of Transportation Impacts in Land Use Decision-making.** Decisions to change or expand the land use of a particular area should include an analysis of the impacts to existing and/or proposed transportation facilities and services so as to minimize or avoid serious operational or economic consequences. [FRWK]

**C-P9. Mitigation Measures.** Proportionate mitigation measures should be used to construct on- and off-site transportation infrastructure improvements and dedicate rights-of-way clearly connected to impacts resulting from new development.

**C-P10. Tracking Road Improvement Requirements.** Maintain a database to track road improvement requirements.

**C-P11. Road Abandonments.** ~~The County Planning Commission shall review~~ All proposed abandonments of ownership or maintenance on County roads shall be reviewed for conformance with the County General Plan before they are approved. [FRWK]

**C-P12. Right of Ways as Public Facilities.** Road and rail right of ways are hereby designated as Public Facilities (PF) in the Land Use Element, whether or not specifically mapped.

**C-P13. Acceptance of Roads in the Circulation Element into the County Maintained Road System.** Roads whose alignment are part of the Circulation Element (generally arterial and collector roads) that are constructed to County standards approved by the Department of Public Works shall be recommended to the Board of Supervisors for inclusion into the County Maintained Road System.

**C-P14. Acceptance of Roads Outside of the Circulation Element into the County Maintained Road System.** Roads that are constructed to County standards approved by the Department of Public Works that are not a part of the

Circulation Element , and are not arterial or collector roads shall not be recommended for acceptance into the County Maintained Road System unless adequate funding for the future maintenance of the road and its associated facilities is provided, subject to approval of the Department of Public Works.

**C-P15. Public Input.** Continue to consider public input in the development of the Capital Improvement Program.

**C-P16. U.S. Highway 101 Safety Corridor Improvements.** The County supports a strategy for improvements to the U.S. Highway 101 Safety Corridor that minimizes impacts to coastal resources, and treats all three main roads between Arcata and Eureka as one system. The strategy would develop an overall improvement plan that phases improvements on a prioritized basis between the three roads; U.S. Highway 101, State Route 255, and Old Arcata Road/Myrtle Avenue.

### **Policy Topic #2—Road Construction and Maintenance and Watershed Protection**

**C-P17. Best Management Practices for Grading.** New development subject to the grading ordinance shall use best management practices as described in the Grading Ordinance to prevent soil erosion and minimize impacts to watersheds from grading activities.

**C-P18. Best Practices for Road Maintenance.** Continue use of the 2002 Water Quality and Habitat Protection Manual (Best Practices Manual), or subsequent revisions to the manual, for County road maintenance and maintenance yards to minimize impacts to watersheds from roads and maintenance yard facilities.

**C-P19. Update Standards.** Recognizing that best management practices continue to evolve, the County should continue to update their procedures for grading, road maintenance and maintenance yard facilities on regular basis to incorporate advances in the state of the art.

### **Policy Topic #3—Public Transit**

**C-P20. Coordinating Public Transit with Other Modes of Travel.** Transportation systems in the County and those which link with other areas of the State should be coordinated and integrated so that a full range of travel patterns can be supported.

- A. Existing and future public transit services should be coordinated so that service from rural areas is effectively integrated with urban service. Schedules should be designed for a smooth transfer between rural and urban buses. Fares should be integrated so that a person pays only once for the full trip. Convenience facilities should be made available so that transfer areas are protected from the weather and bus information is provided.
- B. Automobile and bicycle transport should be integrated with public transit by developing adequate parking facilities at major bus stops and, where feasible, transporting bicycles on the buses along the intercity bus routes.

- C. Multi-family housing, public uses such as libraries, schools and community centers, and commercial uses should be encouraged in areas serviced by public transit where consistent with other sections of the plan. [FRWK]

#### Policy Topic #4—Multi-Modal Transportation

- C-P21. Roadway Capacity Expansion and Non-Vehicle Modes.** Enhance the Level of Service for non-vehicle modes when expanding roadway capacity for vehicle circulation.
- C-P22. Right-of-Way Design Standards.** Right-of-way design standards should incorporate design options which include facilities for bicycles, pedestrians and public transit.
- C-P23. Encourage bicycle-friendly design on all streets and roadways through new technologies, “best practices” standards, guidelines, and innovative treatments where appropriate on new roadways and multiuse paths.** ~~Administer~~ Resurfacing programs for local streets ~~to~~ should include appropriate provisions for bicycle facilities. [2006 RTP]
- C-P24. Right-of-Way Multi-Modal Level of Service Standards.** Right of Way Multimodal Level of Service (LOS) Standards should be used for maximizing the multi-modal suitability of County roads and intersections.
- C-P25. Efficiency and Capacity Investment Priority.** Transportation facility investments should consider functional efficiency and capacity of pedestrian, bike and public transit.
- C-P26. Capital Improvement Plan.** The County's Capital Improvement Plan shall include an assessment of the impacts on multimodal transportation for all projects considered for funding.
- C-P27. Coordination with School Districts.** The County and school districts should coordinate with one another regarding school site locations and transportation facilities.
- C-P28. Walkability Audits.** Information from walkability audits should be incorporated in the prioritization of road improvements for non-motorized modes of travel.
- C-P29. Traffic Calming.** Use ~~of~~ traffic calming measures where appropriate as a means of providing balanced multi-modal roadways that are compatible with adjacent land uses. Traffic calming measures include, but are not limited to, chicanes, curb extensions and traffic circles. [MCCP]
- C-P30. Landscape Maintenance Zones.** The County or other local agency should explore alternative financing mechanisms for landscape maintenance zones which will enhance street aesthetics and enable landscape strips with street trees within the public right-of-way. [MCCP]

- C-P31. Protection of Designated Trails.** The County shall review ~~land~~ development along and adjacent to designated trails and pathway corridors ~~in order to provide sufficient right-of-way~~ to ensure that ~~adjacent~~ new development is compatible with safety, recreational, and aesthetic qualities of the corridor. [MCCP]
- C-P32. Encourage Bicycle Storage Facilities.** Encourage the provision of secure, weather protected bicycle storage facilities at bus stops, businesses, and public buildings as needed. [FRWK]
- C-P33. Encourage Bicycle Transport racks on Public Transit.** Encourage appropriate buses to be equipped with bicycle transport racks. [FRWK]
- C-P34. Encourage Access to Recreation Areas.** Encourage development of access ~~and, where suitable, camping areas~~ into existing and future recreation areas. [FRWK]
- C-P35. Encourage Visual Screens Along Horsetrails.** Encourage the placement of landscaping along horsetrails located adjacent to roadways to serve as safety and/or visual screens between trail and vehicle lanes. [FRWK]
- C-P36. Annie and Mary Trail.** Encourage development of the Annie and Mary trail between the cities of Blue Lake and Arcata as a Class I bike/pedestrian trail using the existing railroad right of way where feasible.
- C-P37. Use of the NWP Railroad Right of Way for Bicycles and Pedestrians.** The County shall encourage of the NWP right of way between Arcata and Eureka as a Class 1 bike/pedestrian trail provided those uses do not compromise future use of the right of way for rail transportation.
- C-P38. Support the Development of More Park-&-Ride Lots Near Population Centers to Encourage Bus Ridership and Carpooling.** The County shall support CalTrans efforts to add park-&-ride lots in McKinleyville, Fortuna, and other population centers as identified in the most recent RTP. [2006 RTP]
- C-P39. Integrate social transportation services with daily services where possible.** Promote integrated social service and public transportation services, using existing programs where possible, and seek available alternatives for independently providing client transportation services. In addition, encourage public and private non-profit specialized transportation providers to notify and apprise each other of all service changes that will impact programs or clientele. [2006 RTP]

**Policy Topic #5—Interagency Cooperation** (See also Policies GP P8 – P16 in Chapter 3)

- C-P40. Departmental Coordination/Integration.** Participate in coordinated transportation-related activities through integration and shared use of consistent transportation standards and roadway functional classifications.
- C-P41. Joint Use of the Greater Eureka Area Travel Model.** Integrate roadway maintenance and improvement data through use of the Greater Eureka Area Travel Model (GEATM). Support coordination with other agencies to resolve

discrepancies in the list of road segments with capacity problems between the GEATM model and estimates made by HCOAG based on CalTrans data.

**C-P42. Coordination with Public Health.** The Planning Division shall refer all new subdivisions and discretionary permits for commercial developments to the Environmental Health Division for comments on potential public health impacts.

**C-P43. Coordination Between County Agencies.** County agencies shall coordinate with each other to encourage development patterns more easily served by public transit, biking and walking.

#### **Policy Topic #6- Marine Transportation**

**C-P44.** Humboldt County supports continued maintenance of the channels to provide access to existing and planned port facilities. [FRWK]

**C-P45.** Humboldt County supports the improvement and modernization of commercial fishing facilities in Humboldt County. The cities of Eureka and Trinidad, Humboldt County and Humboldt Bay Harbor District should actively and cooperatively seek to encourage private investment into commercial facilities and, where necessary, invest public funds into rehabilitation, upgrading and expanding boat marinas and public piers. [FRWK]

**C-P46.** Local business groups should be encouraged to work with local government to encourage private investment into facilities such as:

- Boat building and repair facilities;
- Fleet service facilities; and
- Fish processing facilities. [FRWK]

#### **Policy Topic #7- Rail Transportation**

**C-P47.** When it becomes economically and environmentally feasible, the railroad system connecting to points south shall be maintained and operated to support the County's economic development and maintain the diversification of the County circulation network. [FRWK]

**C-P48.** Protect and reserve the rail right of way for public transportation uses, regardless of whether or not rail service is restored.

**C-P49.** The County supports use of the NWP railroad for excursion trains as a tourist attraction provided they do not interfere with use of the railroad for cargo transport.

#### **Policy Topic #8- Air Transportation** (See also Policies GP P8 – P16 in Chapter 3)

**C-P50. Expansion of Airline Service.** Humboldt County supports efforts to expand commercial airline service to the area consistent with the Airport Master Plans of each airport operated by the County. [FRWK]

### Policy Topic #9- Coastal Access Policies From All Six (6) Coastal Plans

- C-P51. Coastal Access.** Implement policies for coastal access through review of new development as required by the Coastal Act. (Coastal Plans)
- C-P52. Coastal Public Roadway Projects.** Public roadway improvement projects shall not, either individually or cumulatively, degrade environmentally sensitive habitats or coastal scenic areas. Improvements (beyond repair and maintenance) shall be consistent with Coastal Act protections of environmentally sensitive habitats and visual resources and shall be limited to the following:
- a. Reconstruction and restoration of existing roadways, including bridge restoration and replacement, highway planting, construction of protective works such as rock slope protection and slope corrections, reconstruction of roadways following damage by storms or other disasters, and improvement of roadside rests.
  - b. Operational improvements, such as traffic signals, guard rails and curve corrections.
  - c. Roadside enhancements, such as construction or improvement of roadside rests and vista points consistent with Section 3.40 (Resource Protection Policies and Standards), and removal of roadside signs consistent with Section 3.42 C (Coastal Scenic Areas).
  - d. Minor improvement projects, such as modifying encroachments or ramps, construction turnouts, and channelized intersections.
  - e. Except in coastal scenic areas, climbing and passing lanes.
  - f. Expansion of substandard roadway shoulders.
  - g. Construction of bikeways. (Coastal Plans)

### Policy Topic #10- Community Plan Policies

*McKinleyville Community Plan (MCCP)*

- C-P53. On-Street Parking.** On street parking shall be prohibited discouraged in commercial areas and shall be prohibited discouraged where bicycle routes are planned adjacent to public street's travel lanes unless parking lanes are provided. (MCCP)
- C-P54. Design Standards for All Pathways.** Design standards should be adopted for all pathways. Pathways are defined as developed portions of rights-of-way from which motor vehicles are excluded. (MCCP)
- C-P55. Circulation Planning for Bicycles and Pedestrians.** All future circulation planning shall include bicycle and pedestrian pathway routes. (MCCP)
- C-P56. Road and Intersection Designs for Bicycles and Pedestrians.** All new roads and intersections shall be designed to provide convenient use by pedestrians, bicyclists and motor vehicles. (MCCP)

- C-P57. Repair and Reconstruction Projects to Provide for Bicycles and Pedestrians.** When major repairs or reconstruction occurs on existing substandard collector and arterial roads and intersections, they should be brought up to standards which provide for pedestrian, bicycle and motor vehicle use. Existing deficiencies shall be corrected prior to further development. This policy is contingent upon funding availability. (MCCP)
- C-P58. Prioritize Funding for Bicycles and Pedestrian Facilities.** Priority (from the available funds provided for McKinleyville) shall be given to circulation projects which enhance safe pedestrian and bicycle access to McKinleyville's schools. (MCCP)
- C-P59. Bicycles and Pedestrian Facilities in New Subdivisions.** In subdivisions creating new interior roads, bikeways, off-street pedestrian ways, or sidewalks separate from roadways shall be incorporated when warranted into the design of the subdivision. (MCCP)
- C-P60. Landscape Buffer Strips.** Landscape buffer strips shall be used to segregate pedestrian walkways from arterial and busy connector travelways. (MCCP)
- C-P61. Removal of Obstacles in Pathways.** New pathways (including sidewalks) shall be free of obstacles such as utility poles and mailboxes. Where obstacles are unavoidable on existing sidewalks or pathways, they shall be widened or otherwise designed to provide the least amount of obstruction to users. (MCCP)
- C-P62. Minimize Impacts to Streams and Wetlands With New Road Construction.** Site plans for new roads, paths and trails, or improvements to existing ones shall minimize their impact to streams and wetlands, and incorporate and preserve aesthetically pleasing natural features consisting of native and non-native species. A funding mechanism should be provided for the design of improved public pathways. Funding alternatives include development impact fees, user fees (such as fuel taxes and tolls), non-user fees (such as property and sales taxes), special benefit fees (such as assessment districts), joint ventures (such as public/private agreements), and debt financing (such as bonds, certificates of participation etc.). (MCCP)
- C-P63. Wheelchair Accessibility for New Walkways.** All new hard surfaced walkways shall be wheelchair accessible. (MCCP)
- C-P64. Wheelchair Accessibility for Existing Walkways.** Existing hard surfaced walkways should be improved to be wheelchair accessible when funding is available or when development projects occur on adjacent parcels. (MCCP)
- C-P65. Creative and Flexible Application Of Travelway Design Standards.** Creative and flexible application of travelway design standards based upon engineering principles in new subdivisions shall be allowed if they minimally impact the natural environment. (MCCP)
- C-P66. Integration with the Pedestrian Circulation Network.** New subdivisions and other major developments shall be designed to integrate with the pedestrian circulation network in the community. (MCCP)

**C-P67. Rights-of-way for Pathways.** In order to minimize travel distances for pedestrians (encouraging pathway short-cuts and non-automobile use), new subdivisions and other major developments shall provide rights-of-way for pathways consistent with the adopted Trails Plan between public streets (or other public or commercial destinations) at least every 1,320 feet (1/4 mile) in R-1 neighborhoods; and every 350 feet (one city block) in higher density areas. Assessment districts, subject to voter ratification or other funding mechanisms, shall be created for all subdivisions to improve and maintain rights-of-way to pathway standards as identified in the Circulation and Trails Plans. (MCCP)

**C-P68. Off-Street Parking.** Off-street parking along local streets shall be encouraged in the design of new developments. Creative on-street parking arrangements such as parking pockets or bays on local service roads are encouraged when based on engineering principles. (MCCP)

**C-P69. Off-Site Improvements.** Offsite improvements along local streets shall be encouraged in the design of new developments. (MCCP)

1. All subdivision applications which propose new roads not listed in the circulation element shall submit alternate roadway designs which reflect an emphasis on pedestrian convenience. They may include reducing travelway widths within the required right-of-way easement. (MCCP)
2. Prior to approving a reduced roadway width, the County shall ensure that the roadway provides adequate access for emergency vehicles.
3. The County shall implement where appropriate as determined by the Public Works Department the use of traffic calming measures as a means of reducing the speed of motor vehicles, and facilitating pedestrian movement. Traffic calming measures include chicanes, curb extensions and traffic circles.
4. The County or other local agency should explore alternative financing mechanisms for landscape maintenance zones which will enhance street aesthetics and enable landscape strips with street trees within the public right-of-way.
5. All pedestrian pathways should be located adjacent to or within landscape strips or greenways. Pathways should not be located adjacent to the traveled way.
6. Subdivisions involving five or more units and zoned for under 20,000 square foot minimum parcel size are encouraged to incorporate parking bays into the design of any proposed traveled way that are not shown as collector streets on the Circulation Plan map.
7. Intersections and streets shall be designed to provide an attractive environment for multiple modes of transportation.

8. The County shall explore the use of incentives to property owners/subdividers for providing landscaping strips, maintenance programs, and parking bays. These incentives may include density bonuses. (MCCP)

**C-P70. Trails Implementation Plan** A Trails Implementation Plan shall be prepared that includes a trail by trail review with recommendations for how easements could be gained and under what circumstances dedication of easements might be required. Development projects proposed on lands that include a trail as shown on the Trails Map may be required to dedicate and/or improve such trail if an individualized determination is made that the dedication is related both in nature and extent and is roughly proportional to the impact of the proposed development.

For purposes of this section, 'development projects' include discretionary projects including subdivisions, special or conditional use permits, variances, and zoning reclassifications and ministerial projects requiring more than five (5) new parking spaces. Excluded from requirement to dedicate a trail easement are ministerial projects that would require less than five (5) new parking spaces. Also excluded are the following discretionary projects: temporary uses, including public assemblages, timber production, variances where the proposed development does not interfere with a trail alignment, lot line adjustments which do not interfere with a trail alignment, signage. (MCCP)

**C-P71. Review of Development Along Trails.** The County shall review land development along and adjacent to designated trails and pathway corridors in order to provide sufficient right-of-way to ensure that adjacent development is compatible with safety, recreational, and aesthetic qualities of the corridor. (MCCP)

*Avenues of the Giants Community Plan (Avenues CP)*

**C-P72. Maintenance and Repair of County/State encroachments at intersections.** Coordinate with CalTrans to maintain and repair County/State encroachments at intersections. (Avenues CP)

**C-P73. Lowering the Speed Limit in Miranda and Phillipsville.** The County shall work with CalTrans in lowering the speed limit through the communities of Miranda and Phillipsville. (Avenues CP)

**C-P74. Funding for Pedestrian Safety, Access and Egress.** The County shall request that CalTrans comply with Streets and Freeways Code, Section 157, to provide for pedestrian safety, access, and egress, as an integrally funded part of their highway projects. (Avenues CP)

## Roadway And Multimodal Transportation Standards

**C-S1 Capacity Standards.** Volume-to-Capacity and/or movement-delay estimates should be used to assess Level of Service (LOS) impacts of new developments on the road network according to the following table. Volume to Capacity Ratio estimates from the GEATM Model should be used where feasible. Alternatively, site-specific data from a certified engineer may be used.

Volume to Capacity - V/C ratio (percent)	Level of Service (LOS)
<30	<b>A</b>
30-50	<b>B</b>
50-75	<b>C</b>
75-90	<b>D</b>
90-100	<b>E</b>
>100	<b>F</b>

**C-S2 Levels of Service.** Level of Service (LOS) C should be used as the Threshold of Significance for all roadways during non-peak periods, and LOS D as the Threshold of Significance within Urban Study Areas for peak periods. Calculation of LOS shall be based upon V/C Ratios as described in C-S4, or other methods acceptable to Public Works. Cumulative impacts to levels of service shall also be considered in project review and addressed through the use of development impact fees.

**C-S3 Consistent Roadway Design Standards.** Roadway design standards and functional classifications shall be applied in a consistent manner throughout the County roadway system.

**C-S4 Functional Classifications.** The County's Road Standards in the Subdivision Ordinance shall be modified to incorporate the following functional classifications for the Humboldt County-maintained roadway system:

**Urban/Rural Minor Arterials** link cities and towns. An arterial provides service between major traffic generators such as cities or large towns, and normally provides the most direct route to the state system. Arterials usually provide the highest level of service to the County as measured by mobility and traffic volume. An arterial will have some access and traffic control. Arterials have relatively high travel speeds with minimum interference to through movement.

**Urban/Rural Major and Minor Collectors.** A collector road moves local traffic from or to arterial roads. A collector can also link arterials or provide access to an arterial. A collector also provides service between minor traffic generators. Collectors typically have shorter routes than arterials with more moderate speeds.

Major collectors serve more important intracounty travel corridors than minor collectors.

**Urban/Rural Local Roads.** Local roads provide access or entrance to residences, businesses or other abutting property. They generally provide the least mobility within the County system and are usually the origin and destination route for a “trip” within the County.

**Table 8-4 Description of Road Classifications**

General Characteristics	Functional Classification		
	Urban/Rural Minor Arterials	Urban/Rural Major and Minor Collectors	Urban/Rural Local Roads
Length	Usually more than three (3) miles long.	Varies from ½ mile to 2 miles.	Generally less than one mile long.
Traffic Volumes	5,000 to 30,000 ADT	1,000 to 15,000 ADT	100 to 5,000 ADT
Posted Speed	30 to 50 miles per hour	35 miles per hour or less	25 to 30 miles per hour
On-Street Parking	Limited	Normally Permitted	Permitted
Access	Intersect with Freeways, Arterials, Collectors and Local Roads. Limited access for private roadways and driveways.	Intersect with Arterials and Local Roads. Private roads and driveways permitted.	Intersect with Arterials and Collectors. Private roads and driveways permitted.
Sidewalks	Yes	Yes	Yes
Bikeways	Yes	Yes	Yes

**Table 8-5a Cross Sections of Road Classifications (Urban)**

	Functional Classification		
	Urban Minor Arterials (feet)	Urban Major and Minor Collectors (feet)	Urban Local Roads (feet)
Right of Way Width	60-88	50-66	50
Vehicle Lane Widths	11-12	10-12	10-12
Bicycle Lane Width	5-6	4-6	4-6
Sidewalk Width	5-8	4-6	5-6
Landscape Strip Widths	0-8	0-5	n/a
Medians/Turn Lane Widths	6-12	n/a	n/a
On-Street Parking Width	8 <i>Limited, One Side Only</i>	8 <i>Limited, One Side Only</i>	7-8

**Table 8-5b Cross Sections of Road Classifications (Rural)**

	Functional Classification			
	Rural Minor Arterials (feet)	Rural Major Collectors (feet)	Rural Minor Collectors (feet)	Rural Local Roads (feet)
Right of Way Width	66-84	50-64	50-64	40-52
Vehicle Lane Widths	10-12	10-12	10-12	10-12
Bicycle Lane Width	5-6	4-6	4-6	4
Sidewalk Width	5-8	4-6	4-6	4
Landscape Strip Widths	8-10	0-5	0-5	n/a
Medians/Turn Lane Widths	0-14	n/a	n/a	n/a
On-Street Parking Width	7-8	7-8	7-8	7-8

**C-S5 Prioritization of Road Improvements.** Volume to Capacity Ratios (V/C Ratios) should be considered in the prioritization of roadway projects.

**C-S6 Prioritization of Road Maintenance Projects.** Use and refine the OCI rating system to prioritize road maintenance projects for roads that have been assessed under this system. Maintenance projects on other roads shall use the Modified OCI system. Technological advances such as Geographic Information Systems (GIS) and Geographic Positioning System (GPS) shall be used to enhance these rating systems.

**C-S7 Multi-Modal Level of Service Standards.** Right of Way Multimodal Level of Service (LOS) Standards should be used for maximizing the multi-modal suitability of County roads and intersections. For bicycle facilities, LOS standards should be developed for the following types of facilities:

**Bike Path** Class I Separated, surfaced right-of-way designated exclusively for nonmotorized use. The minimum width for each direction is 1.5 meters, with a 2.4 meter minimum width for a bi-directional path.

**Bike Lane** Class II White stripe and Bike Lane sign on roadway providing 1.5 meters of road surface for preferential bicycle use (not including gutter). Vehicle parking adjacent to and motorist crossflow is allowed. Bike lanes must be on both sides of a two-way road for one-way travel only.

**Bike Route** Class III Shared roadway with motorists on through routes not served by Class I or II bikeways or to connect discontinuous bikeways. Established by a Bike Route sign

**C-S8 Safe Routes To Schools, and Between Transit Stops And Nearby Libraries, Parks, And Community Centers.** Construct and maintain contiguous sidewalks and bike paths along roads used for multimodal access within one mile of all public schools, and between transit stops and nearby public facilities (libraries, parks, and community centers) as funding sources are identified and available.

*McKinleyville Community Plan (MCCP)*

**C-S9 Dedication of Trails and Parkland Fees.** Public pathways, trails and greenways identified on the Trails Map are to be dedicated separately from and in addition to dedication of park acreage or payment of in-lieu fees authorized by the Quimby Act (CA Gov. Code §66477) and the local implementing ordinance (HCC Title III, Div. 1, Sec. 316-24 *et seq* ) [MCCP]

**C-S10 Use of Parkland Fees for Trails Improvements.** The trails, parks, and improvements identified in this section may be developed using Quimby Act parkland dedication in-lieu fees. [MCCP]

**C-S11 Terms for Dedication of Trails.** When new development triggers a dedication requirement, the County shall require the developer to provide either: a) a 50 year offer of dedication of an easement; b) an easement (with any improvements as may be agreed on); or c) fee simple title of that portion of the trail (with any improvements as may be agreed on). [MCCP]

**C-S12 Review of Trails Proposed for Dedication.** The review of development subject to trail and greenway dedication and/or improvement shall include consideration of the following features:

- A. The intended purpose for the trail (i.e., a surfaced pedestrian walkway, bicycle path, semi-improved recreational trail for walkers, bicyclists, and equestrians, an unimproved rural trail for hikers, mountain biking, and horseriding).
- B. Consistency of the proposed class of trail and its location with adjacent uses so as not to have adverse impacts on adjacent owners' use of their property.
- C. The intensity of adjacent development.
- D. Minimizing the likelihood of trespass and vandalism on adjacent private property through the trail design, including location, improvement standard, and the sanctioned use of the trail.
- E. Evaluating public health and safety needs for:
  - 1) parking;
  - 2) road capacity and traffic patterns;
  - 3) avoiding conflicts in uses (i.e. pedestrian, equestrian, vehicular);
  - 4) use by the handicapped;
  - 5) sanitary facilities including trash disposal; and
  - 6) accessibility of the terrain (topography of trail is not too steep).
- F. Availability and adequacy of other nearby trail alignments.
- G. Potential for significant conflicts with agriculture including:
  - 1) vandalism;
  - 2) theft of livestock, agricultural supplies and tools;
  - 3) damage to crops and livestock;

- 4) trespass on areas not part of accessway;
  - 5) damage to fencing and gates;
  - 6) livestock depredation;
  - 7) litter; and
  - 8) interference with agricultural operations.
- H. The design, construction, and management of trails and pathways should be carefully executed in order to reduce environmental disturbance.
- I. Bridges and other public improvements within designated trails and pathway corridors should be designed to provide safe and secure routes for trails, including grade separation between roadways and trails whenever feasible.
- J. Encouraging the incorporation of trails and pathways into corridors used for public and utility purposes.
- K. New development shall not block existing neighborhoods' access to trails.
- L. Bikeways, hiking trails, and equestrian trails (off road) should be provided within designated trail corridors, and whenever feasible, rest areas and picnicking accommodations.
- M. The applicant for development of a parcel which the Trails Map indicates as having a trail crossing it shall have the option of designing the trail route through the property provided the trail's entry and exit points are consistent with the Trails Map.
- N. A parcel which the Trails Map indicates as crossing it "in whole" (i.e., not straddling a common property boundary with an adjacent lot) shall have the option of designing the trail route through the parcel provided the trails end points --- where it enters and exits the parcel --- are consistent with the Trails Map.  
[MCCP]

Eureka Community Plan (ECP)

**C-S13 Robinson\Dunn Project Improvements.** Incorporate the following standards into the transportation improvements for development of the Robinson\Dunn property south of the Lundbar Hills neighborhood:

- a) The project should require that a road be constructed from Ridgewood Drive toward Fairway Drive at least to the north end of the property. The road should be planned so that it may eventually be connected through to the City to Fairway Drive.
- b) The development should have multiple access points onto Walnut Drive and Ridgewood Drive. The timing for development of each access point shall be determined by Public Works, as warranted, as each development phase is submitted to the County.
- c) These access points should coincide with existing street systems whenever feasible, such as entering Walnut Drive where a street already exists on the opposite side, thus providing for a four-way intersection.
- d) Access point location designs should conform with good traffic engineering principles such as adequate site distance, adequate storage for vehicular

movements entering and exiting, appropriate intersection controls, and conformance with the County's street design standards. (ECP)

- C-S14 McKay Tract Improvements.** Incorporate the following standards into the transportation improvements for development of the North and South McKay Tracts off of Walnut Drive:
- a) Development of the North McKay property should include a primary through road from Cypress Street to the end of Harrison Avenue. In addition, development of the North McKay property shall include at least three access points onto Walnut Drive. These access points shall incorporate the extensions of Redwood, Fern and Arbutus Streets. The timing for extension of each street shall be determined by Public Works, as warranted, as each development phase is submitted to the County.
  - b) Development of the South McKay property shall be designed with a primary access other than Northridge Road. The primary access shall be designed to intersect Walnut Drive when possible. Northridge Road shall be used as a secondary access. The timing for construction of the secondary access shall be determined by Public Works, as warranted, as each development phase is submitted to the County.
  - c) All access points should coincide with existing street systems whenever feasible, such as entering Walnut Drive where a street already exists on the opposite side, thus providing for a four way intersection.
  - d) Access point locations should conform with good traffic engineering principles, as mentioned above (for Robinson\Dunn property). (ECP)

## **Roadway Implementation Measures**

- C-IM1 Review of the Capital Improvement Program.** Planning and Environmental Health staff should review and provide comments on the Capital Improvement Program.
- C-IM2 Great Eureka Area Travel Model (GEATM).** In coordination with the City of Eureka and CalTrans, the County shall, maintain, update and validate the GEATM on a regular basis, and use the GEATM to evaluate development-related traffic impacts on the City's existing and proposed circulation system.
- C-IM3 Missing Links.** Where feasible, construct missing roadway links to complete the roadway system designated in the Circulation Element when warranted by safety concerns, congestion relief, and improvement of roadway functional efficiency and/or capacity.
- C-IM4 Multi-Modal Requirements.** Roadway improvements should include pedestrian and bike facilities and bus stops as needed to accommodate demand for such facilities and where rights of way can accommodate such facilities, including sidewalks, bicycle lanes, bus stops, safe highway passages and neighborhood trail linkages.

- C-IM5 Future Multi-Modality Options.** Preserve use of dedicated rights of way for future pedestrian, bicycle and transit facilities on roads where they do not presently exist.
- C-IM6 Transit Infrastructure.** Work with regional transit providers (HTA) to situate transit stops and hubs at locations that are convenient for transit users, and promote increased transit usage through the provision of shelters, benches, and other amenities.
- C-IM7 New Roadway Construction/Widening.** Use roadway designs that minimize environmental impact for proposed construction and widening projects and, where impacts are unavoidable, impose mitigation measures to limit the impact of roadway improvements on County waterways.
- C-IM8 Adoption of Water Quality and Stream Habitat Protection Measures.** Formally adopt the 2002 manual, "Water Quality and Stream Habitat Protections Manual for County Road Maintenance" to guide the following activities:
- o routine and emergency road repair;
  - o maintenance of county roads and related facilities including actions taken to prevent erosion and/or the deterioration of a roadway, such as activities affecting the cutbank, road surface, fillslope and all drainage structure;
  - o maintenance and replacement of bridges and culverts;
  - o activities on County-owned maintenance yards; and
  - o measures to protect the traveling public, such as snow and ice removal.
- C-IM9 U.S. Highway 101 Safety Corridor Improvements.** Issuance of Coastal Development Permits and other discretionary permits by the County for the U.S. Highway 101 Safety Corridor Improvement project should support a strategy that treats all three main roads between Arcata and Eureka (U.S. Highway 101, State Route 255, and Old Arcata Road/Myrtle Avenue) as one system. The strategy would develop an overall improvement plan that phases improvements on a prioritized basis between the three roads. Potential impacts of the project on coastal resources, including those that were identified in the comments made to CalTrans by the Board of Supervisors September 18, 2007, should be minimized.
- C- IM11 Re-establish transit service to east, south and north county.** ~~The Humboldt Transit Authority will Pursue partnerships with the County of Humboldt, Humboldt Transit Authority, Native American Tribes, and non-profit transportation organizations, that will help fund and facilitate the re-establishment of services to rural communities in the east, south and north portions of the County. [2006 RTP]~~
- C-IM12 Handicapped Access.** Outdoor recreation facilities shall be designed and constructed to be accessible to handicapped persons consistent with the requirements of the Americans with Disabilities Act.

*Implementation Measures From All Six (6) Coastal Plans*

**C-IM13 Lateral Access Guidelines in Coastal Areas**

Guidelines for the designation of lateral accessways are as follows

- (1) Where there is an existing accessway adjoining the proposed accessway, the location and size of the new accessway shall be the same as the adjoining accessways; or
- (2) where there is a fixed landward point from which to measure (e.g. bluffline) the accessway shall be no less than 25 feet in width seaward from the fixed landmark; or
- (3) to the first line of terrestrial vegetation, excepting dune areas; or
- (4) a minimum of 25 feet from the mean high tide line
- (5) where there is no vertical gradient differential between the development and the accessway, a privacy buffer shall be established with a minimum of 10 feet with only limited uses allowed from 10 to 20 feet and only passive recreational uses between 20 and 50 feet. *(Coastal Plans)*

**C-IM14 Vertical Access Guidelines in Coastal Areas**

Guidelines for the designation of vertical accessways are as follows

- (1) Location should be along boundaries of property but may be resited as necessary.
- (2) Width should be a minimum of 10 feet for pedestrian use with additional width as required for slope or construction easements and/or other uses.
- (3) Privacy buffer between accessway and residence shall be a minimum of five (5) feet for pedestrian accessways. *(Coastal Plans)*

**C-IM15 Access Improvements**

1. Minimal improvements should be scheduled for unimproved access points in character with the rural nature of the communities they serve, and accessways accepted by the responsible entity or agency should include but shall not be limited to, the following as they are found consistent with the identified uses, modes of access and limitations as identified in the Access Inventory.

- a. parking
- b. roads
- c. trails, stairs and ramps
- d. sanitary facilities (including trash collection)
- e. facilities for the handicapped
- f. fencing and barriers to inappropriate uses
- g. signing of access points, trails and hazard areas
- h. maintenance and operation of the accessway and support

facilities.

2. In reviewing improvements to accessways, the approving authority shall consider the following:

- a. The common use(s) of the shoreline;
- b. The proposed mode of access (pedestrian, equestrian, or vehicular) and adverse impacts on adjacent owners' use of their property, and the size of the development;
- c. The likelihood of trespass and vandalism on adjacent private property;
- d. The need to provide for public health and safety, including the need for:
  - (1) parking
  - (2) road capacity and traffic patterns
  - (3) conflicts in uses (i.e. pedestrian, equestrian, vehicular)
  - (4) use by the handicapped
  - (5) capacity of sanitary facilities, including trash disposal
  - (6) topography of trail
  - (7) beach hazards (tides, currents, undertows)
- e. Conflicts with agriculture including:
  - (1) vandalism
  - (2) theft of livestock, agricultural supplies and tools
  - (3) damage to crops and livestock
  - (4) trespass on areas not part of accessway
  - (5) damage to fencing and gates
  - (6) dogs killing, maiming or harassing livestock
  - (7) litter
  - (8) interference with agricultural operations (by access corridor)

3. Improvement of accessways shall be permitted where the level of development is adequate to support common uses of the shoreline and the mode(s) of access proposed in the Plan, and where the improvements are sited and designed to prevent significant hazards to public health and safety or to agriculture and minimize the likelihood of trespass and vandalism on adjacent private property.

4. Signs at access points should be supplemented by an atlas of County coastal access points for use by both residents and visitors. (*Coastal Plans*)

#### **C-IM16 Unavoidable Loss of Coastal Public Access**

New industrial development which impedes or interferes with public access to or along the bayshore shall provide off-site improvements to open other equivalent bayshore areas where no public access exists, or enhance comparable, existing bay access. Such improvements shall include, as necessary, dedication of access easements, fee title along the new accessway, access improvements, including parking areas and trails, and provisions for maintenance and operation of the new accessway.

If an applicant cannot provide these improvements or these improvements amount to only a portion of an overall preferred off-site access proposal, an in-lieu fee payment shall be made to an appropriate public agency for the

purpose of providing the above comparable bay access or enhancement of existing comparable bay access. (Enhancement of existing, comparable bay access could include in-lieu fees for shoreline protection, development of a public fishing pier, or provision of additional off-site access facilities. (*Coastal Plans*))

*Eureka Community Plan (ECP)*

**C-IM17 Improvements to F Street (Oak to Alder).** ~~F Street is being recommended for widening from two to four lanes. This Improvement should be coordinated with the same improvement warranted on F Street within the city boundaries. This improvement is needed at the 25% development scenario (assuming 100% buildout of the City's vacant parcels). This can largely be accommodated by restriping of the existing facility, and perhaps with removal of on-street parking.~~ (ECP)

**C-IM18 Improvements to Herrick Road at Elk River Road.** The intersection of Herrick Road and Elk River Road should be signalized and left-turn lanes should be constructed. (ECP)

**C-IM19 Improvements to Union Street.** That portion of Union Street from the city limits to Madison Avenue should be improved to allow for access from Pine Hill to the City of Eureka. The improvements should consist of a minimum of 2 driving lanes, pedestrian/bicycle corridor, and improvement of the intersection of Sea Avenue.

**C-IM20 Improvements to Togo Street.** Incorporate the Togo Street improvements onto Public Works Five Year Priority List Capital Improvement program.

**C-IM21 Robinson\ Dunn Project Improvements.** When the Robinson/Dunn property develops, the County shall work with the City of Eureka to ensure a route through the City to connect Fairway Drive with Ridgewood Drive.

**C-IM22 Lot Frontage on Major Roads.** The policy to discourage lots from fronting onto such roads as Humboldt Hill, Walnut, Campton and Ridgewood (west of Walnut) shall be implemented through the subdivision process for parcels along these corridors.

**C-IM23 Pedestrian Corridors.** The County shall incorporate the development of pedestrian corridors along major roads into Public Works Five Year Priority List Capital Improvement program.

**C-IM24 Elk River/Ridgewood/Westgate Intersections.** The County shall incorporate the realignment of these intersections as a high priority in Public Works Five Year Priority List Capital Improvement program.

NOTE: the section below will fall out of the 'final' version found in the GP, but will be critical to the process of review.

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## 8.4 Staff Analysis and Alternatives

### State Requirements

The primary purpose of this section of the plan is to recommend policies and programs which will resolve the transportation needs of unincorporated Humboldt County. The Circulation Element is one of the seven mandated elements of a general plan. It is required to describe the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan.

### Staff Recommendation

Current trends in transportation reflect the same trends described in the 1985 Framework Plan. The 1985 Plan referred to the rising costs of fuel and hence, the rising cost of travel, and suggested a transportation system that included modes of travel other than the automobile. Its stated goal was to correlate the transportation system with planned land uses, and with the needs of various segments of the population. The staff recommended alternative continues to place an emphasis on the development of a balanced, multi-modal transportation system.

Another finding of the 1985 Plan was that because of Humboldt County's large land area, with a great deal of sparsely populated rural areas, transportation costs make up an inordinately high proportion of the amount of money leaving the County for energy. The continued export of local dollars in exchange for imported fuel is well documented in the draft Energy Element (Chapter 4?). To confront this issue, the 1985 Plan recommended that, "to help make the county's economy sounder, energy conservation in transportation should be stressed. Ride sharing, greater use of public transit, and use of bicycles for commuting should be encouraged where feasible." Policies in the recommended Alternative B continue to support energy conservation in transportation.

In addition to moving forward with the goals and programs in the 1985 Plan, the Circulation Element also draws from the results of other recent local transportation planning efforts. First, the Element recognizes the policies and measures put forward in Plans recently adopted by HCAOG: the 2006 Regional Transportation Plan (RTP), the Regional Bicycle Transportation Plan (2004), a Pedestrian Needs Assessment (2003), and a Regional Parking Needs Study (2003). Included in these plans are policies and action items directed at achieving a coordinated and balanced regional transportation system.

The Element also recognizes policies and measures coming from more recent work linking public health and transportation. One of the main findings from this emerging field of science and study is that land decisions emphasizing automobile travel over other modes of travel, such as walking or biking, can indirectly lead to health problems, such as obesity, diabetes and heart disease. Policies in this Element support development of tools to assess

the impact of policies and projects on public health, and creating incentives for measures that that respond to transportation-related impacts on public health in a positive way.

The McKinleyville Community Plan contains a number of policies and standards that are recommended to be implemented in the other USA's.

## **Background**

A complete description of transportation and circulation conditions is contained in the 2002 Moving Goods and People Report (Bhatia and Dyett), the 2006 Regional Transportation Plan (HCOAG) and the 2007 Community Infrastructure and Services Technical Report (Winzler and Kelly), a technical background study for the General Plan Update.

The information contained in these documents is summarized below.

### Road Network

The County-maintained roadways are integrated with an overall countywide circulation system maintained by the California Department of Transportation (CalTrans); the U.S. Forest Service, Bureau of Land Management and the Bureau of Indian Affairs; cities; and private property owners. This roadway network contributes to the economic vitality of Humboldt County, providing safe access and travel routes for Humboldt County citizens and visitors, from low-density rural areas to higher-density urban areas.

Most of the cities and larger unincorporated communities are within a few miles of Highway 101. And although the road network provides access to all developed parts of the county, the topography and natural barriers of Humboldt limit easy access between all communities. This configuration results in many local trips on Highway 101 and the other highways, treating them as principal arterials. Steep hills, environmental constraints, and community opposition prevent roads from being built over hills to connect adjacent valleys.

The 2006 RTP projects the number of vehicles and vehicle fuel consumption will increase over the next 20 years. Humboldt County is expected to experience a total compounded growth rate of 24.4 percent increase in vehicle miles traveled during the next 20 years; gasoline consumption during this time frame is expected to increase by 20%, and diesel consumption by almost 24%.

The County's road network is normally described using a functional classification to group streets and roadways into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary to determine how this travel can be channelized within the network in a logical and efficient manner.

Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a roadway network. The classification identifies the function that a roadway served and the level to which it should be designed. In Humboldt County, many roadways are designed

well below the function they have come to serve, and over time, vehicle volumes have increased.

Humboldt County Public Works constructs and maintains roads pursuant to its "Roadway Design Standards Manual" (1971). The Manual defines the following primary roadway functional classifications:

- *Arterial Road.* An arterial provides service between major traffic generators such as cities or large towns, and normally provides the most direct route to the state system. It usually provides the highest level of service to the County as measured by mobility and traffic volume. An arterial will have some access and traffic control and may be located in either an urban or a rural area. An example of a County arterial road is Central Avenue in McKinleyville.
- *Collector Road.* A collector road moves local traffic from or to arterial roads. A collector can also link arterials or provide access to an arterial. A collector also provides service between minor traffic generators. An example of a County collector is Elk River Road.
- *Local, or Access, Road.* A local road provides access or entrance to residences, businesses or other abutting property. It generally provides the least mobility within the County system and is usually the origin and destination route for a "trip" within the County.

Humboldt County Public Works uses Department of Transportation (DOT) functional classifications for more refined analysis of county-maintained roadways. These classifications include: Urban Arterial, Urban Collector, Rural Arterial, Rural Minor Collector, Rural Major Collector, and Local Roads.

Figure 2-1 of the Community Infrastructure and Services Technical Report shows the relationship between these road classifications, and proposed modifications are described in the Standards section of the Element.

Estimates of roadway capacities and condition help to identify roadways where upgrades, expansions and/or maintenance may be needed. Critical issues for the County road system are safety, functionality and road rehabilitation. Roadway maintenance is a challenge for rural areas such as Humboldt County: lower population densities and long travel distances mean fewer funds are available on a per-mile basis. Roadway capacity is generally less of an issue for rural areas due to the lower population densities, but even so there are existing and projected areas of congestion constraints that must be addressed. Roadway capacity is also affected by competition for space in the right-of-way among vehicular traffic and complementary modes of transportation, including transit service, bicycles and pedestrians.

#### Level of Service

Traffic analyses generally use the concept of "Level of Service" to express the adequacy of the road network to handle traffic. Level of Service standards use a lettering system to compare streets, as shown below:

1. Level-of-service A      Level A describes primarily free flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.
2. Level-of-service B      Level B also represents reasonably free-flow conditions. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.
3. Level-of-service C      Level C provides for stable operations, and allows drivers at signalized intersections to (typically) proceed in one signal cycle but flows approach. It is also the range in which small increases in vehicles will cause substantial deterioration in service. Freedom to maneuver within the traffic stream is noticeably restricted at LOS C, and lane changes require additional care and vigilance by the driver.
4. Level-of-service D      Level D borders on unstable flow. In this range, small increases in vehicles cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited, and the driver experiences drastically reduced physical and psychological comfort levels.
5. Level-of-service E      The boundary between LOS D and LOS E describes operation at capacity. Operations in this level are extremely unstable, because there are virtually no usable gaps in the traffic stream. The range of flows encompassed by LOS E is relatively small compared to other levels, but reflects a substantial deterioration in service. Maneuverability within the traffic stream is extremely limited, and the level of physical and psychological comfort afforded to the driver is extremely poor.
6. Level-of-service F      Level F describes forced or breakdown flow. Breakdown occurs when demand actually exceeds the roadway capacity. Average speeds of 10 mph or 15 mph are not unusual.

Source: Transportation Research Board, *Highway Capacity Manual*, 1985.

The County does not have any adopted standards for Level of Service. Most jurisdictions consider Levels of Service C and above to be adequate. The 2007 Community Infrastructure and Services Technical Report identifies several factors associated with determining appropriate LOS levels, including whether the roadway is urban or rural, the characteristics of the terrain, and the costs associated with constructing the desired facility.

In rural areas, roadway design usually aims to provide LOS C or better as an appropriate balance between more desirable levels of service and cost-effectiveness in providing transportation facilities. Many transportation planners (especially proponents of public transit) recommend aiming for a "C" level of service (particularly in urban areas), one that would slow cars down and make roads safer for pedestrians. LOS D and worse are not generally appropriate design criteria in rural areas. This provides no room for future growth,

and can easily lead to substantial deterioration in traffic operations which can decrease safety conditions.

Even so, LOSs lower than designed can be acceptable in some instances, such as during peak travel times, when rights of way must accommodate multiple travel modes, or when existing developments or budgetary restrictions reduce the ability of service providers to remediate congestion problems through costly capacity expansion projects.

The 2007 Community Infrastructure and Services Technical Report proposes an LOS D or better standard for the urban areas of County to assess impacts of new development on the road network. It also proposes using a Volume to Capacity Ratio (V/C Ratio) to assign LOS to specific road segments, as shown in the following table:

<b>Volume to Capacity - V/C ratio (percent)</b>	<b>Level of Service (LOS)</b>
<30	<b>A</b>
30-50	<b>B</b>
50-75	<b>C</b>
75-90	<b>D</b>
90-100	<b>E</b>
>100	<b>F</b>

In part, the Volume to Capacity ratio measure is proposed because data to assess projects is being generated locally through the GEATM.

Humboldt County is expected to experience a total compounded growth rate of 24.4 percent increase in vehicle miles traveled during the next 20 years. Table 2-3 of the report identifies the following road segments that are projected by the model to approach or exceed the standard:

Urban Study Area	Roadway Name	Functional Classification (DOT)	ADT 2005	ADT 2030	ADT Increase 2005-2030 (percent)	2005 MAX V/C Ratio	2030 MAX V/C Ratio
<b>Alderpoint</b>	Alderpoint Road	Rural Major Collector	2,967	3,954	33%	28%	88%
<b>Briceland</b>	Briceland-Thorne Road	Rural Major Collector	7,599	9,456	24%	50%	120%
<b>Freshwater</b>	Freshwater-Kneeland Road	Rural Major Collector	7,649	8,212	7%	78%	116%
<b>Humboldt Hill</b>	Humboldt Hill Road	Rural Minor Collector	8,041	9,440	17%	112%	233%
<b>McKinleyville</b>	Central Avenue	(U/R) Minor Arterial	12,751	14,115	11%	77%	115%
	School Road	(U/R) Minor Arterial	5,208	6,383	23%	49%	105%
<b>Myrtle town</b>	Hall Avenue	(U/R) Other Principal Arterial	6,202	8,020	29%	68%	86%
	Harrison Avenue	(U/R) Minor Arterial	10,113	10,951	8%	117%	177%
	Myrtle Avenue	Rural Major Collector,(U/R) Minor Arterial	8,257	8,925	8%	84%	119%
<b>Redway</b>	Redway Drive	Rural Minor Collector	1,373	2,053	50%	25%	91%
<b>Shelter Cove</b>	Shelter Cove Road	Rural Major Collector	1,953	2,652	36%	20%	80%
<b>South Eureka</b>	Elk River Road	Rural Major Collector	3,390	6,118	80%	37%	178%
	Eureka Street	Urban Collector	1,512	1,428	-6%	18%	80%
	F Street	(U/R) Minor Arterial	12,796	14,121	10%	131%	224%
	Harris Street	(U/R) Other Principal Arterial	13,091	14,290	9%	118%	166%
	Herrick Avenue	(U/R) Minor Arterial	12,019	13,349	11%	122%	215%
	Meyers Avenue	Urban Collector	1,540	1,910	24%	25%	95%
	Pound Road	(U/R) Minor Arterial	13,298	16,550	24%	135%	273%
	Ridgewood Drive	Rural Major Collector	3,649	6,081	67%	44%	147%
	Trinity Street	Urban Collector	10,049	12,727	27%	102%	236%
	Union Street	Urban Collector	2,636	2,961	12%	46%	89%
	Walnut Drive	Urban Collector,(U/R) Minor Arterial	10,049	12,727	27%	102%	236%
<b>Westhaven</b>	Westhaven Drive	Rural Minor Collector	2,844	3,222	13%	42%	80%

V/C ratio values shown above represent maximum values provided by the GEATM model for specific roadway segments, and are not to be interpreted as applying to the entire roadway. Maps of specific roadways are included in the report identifying specific areas of existing and projected congestion.

Road capacity and functionality is connected to development potential described in the Land Use Element (Chapter 5). Areas with development potential need to be adequately served by roads with sufficient capacity to accommodate the new development in order to avoid serious operation or economic consequences. There is also a need for the County to track specific road improvement requirements to ensure that, over time, users are paying their proportional share of the costs.

#### Road Network Maintenance

The 2007 Technical Report describes the County's road maintenance system. It reports that, overall, the County's roads are in "poor" condition, with the County's Overall Condition Index (OCI) rated at 40 on a scale of 1-100.<sup>3</sup> The report notes that, in 2000, there was approximately \$100 million in deferred maintenance on the County's roadways (not including maintenance costs for local streets). The report also notes that if Humboldt County continues to limit spending to around \$1 million a year on road surfaces—the approximate budget for resurfacing County roads for the previous 20 years—the OCI would continue to decline, and absent other maintenance activities, would drop in another 20 years to an overall level of 15 (at which point the average road in Humboldt County would require reconstruction).

In 2003, the CIP stated that it would cost approximately \$7.5 million per year to maintain the County's roadways (i.e., keep them at the same overall OCI) if the OCI was in the "very good" range (OCI 70-100). This number is based on the fact that most roads would only require chip seals at 20 cents per square foot (2003 costs) every 5-7 years, and overlays approximately every 30 years at \$2 per square foot (2003 costs). Information contained in the 2003 CIP suggests that close to \$11 million for annual maintenance expenditures was necessary merely to maintain the roads at OCI 40.<sup>4</sup> Since 2003, materials costs for roadway maintenance and construction have almost doubled,<sup>5</sup> which suggests that costs merely to maintain County Roads in their current condition could be upwards of \$20 million per year.

Humboldt County Public Works' adopted 2006-07 budget was \$26.2 million. Road Maintenance and Construction received \$8.9 million out of a total Road Fund budget of \$14.8 million. Of this \$8.9 million, roughly \$6.5 million goes to personnel and equipment. This leaves approximately \$2.5 million for roadway maintenance materials—about 12 percent of what is needed to keep the roads from degrading further.

#### Modified Overall Condition Index

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<sup>3</sup> Humboldt County 5-Year Road and Bridge Capital Improvement Plan, 7/22/03.

<sup>4</sup> This estimate is derived by extrapolating from estimates of required funding levels contained in the "OCI Scenario Comparison" graph included in the CIP's appendices.

<sup>5</sup> Communication with Humboldt County Public Works personnel.

The Pavement Management System’s OCI assessment was conducted for only a sample of Humboldt County arterial and collector roadways. For the analysis conducted for this technical report, a modified OCI (MOCI) rating was developed and applied to the USA roadways. The MOCI is based on OCI quintiles as shown in Table 8-8.

**Table 8-8, Modified Overall Condition Index**

Modified OCI	Comparable (Average) OCI	Condition Description	Recommended Maintenance	Maintenance Costs (\$/ft2)
5	90	Very Good	None	<.4
4	70	Good	Chip Seal	.4
3	50	Fair	Chip Seal/Overlay	2.0
2	30	Poor	Overlay/Reconstruct	6.0
1	10	Failed	Reconstruct	10.0

Based on the MOCI assessment conducted for this study, average roadway condition for the USAs is slightly higher than for the county as a whole, with an average MOCI of 3 (corresponding to an OCI of approximately 50, compared to 40 for the County as a whole). This may be explained in part by the larger percentage of roadways in the USAs with higher volumes, higher functional classification, and more frequent maintenance. When roads are allowed to deteriorate below a MOCI of 3, as currently exists in Humboldt County, maintenance costs can escalate significantly.

Calculation of total maintenance requirements and costs is not straightforward. Maintenance is typically prioritized for more heavily traveled roadways, and even then is subject to funding limitations. Costs tend to be roadway- and even segment-specific and subject to the volatile prices of raw material (asphalt, concrete, metals). Often, only first-hand assessment of a roadway can indicate the specific segments that require maintenance.

Because roadway maintenance is ongoing and typically a catch-up process (meeting most urgent maintenance needs first), maintenance expenditures for a given roadway will likely be spread out over time (in addition to being subject to available funds) and applied only to the most-deficient and/or highly-used roadway segments. Traffic engineers use deterioration curves to estimate the time it will take a section of roadway to deteriorate from one condition level to the next and to plan for future maintenance. Very generally, these curves can be summarized as:

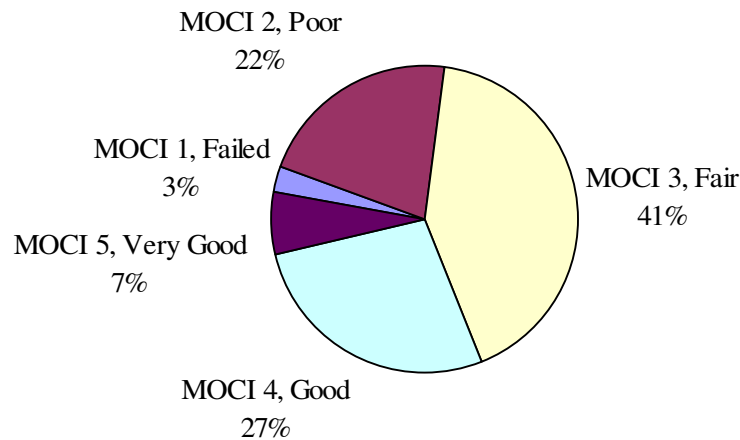
- MOCI 5 to 4: 10 years
- MOCI 4 to 3: 5 years
- MOCI 3 to 2: 5 years
- MOCI 2 to 1: 5 years

For example, a roadway in very good condition (MOCI 5) in 2007 would be expected to deteriorate without maintenance to MOCI 4 in by about 2017 and to MOCI 3 by 2022. Roadways in the USAs are no different from the rest of Humboldt County’s roadways in their deterioration rates, and may be subject to more rapid deterioration to the extent that

the higher traffic volumes projected for the USAs and the presence of larger vehicles (owing to higher functional classifications) result in more roadway degradation than experienced by other roadways. In general, roadways in poorer condition (< MOCI 3) deteriorate faster than roadways maintained at a higher level (MOCI 4 and 5).

The figure below shows the relative percentages of MOCI for Humboldt County maintained roadways in USAs. As can be seen, two-thirds (66 %) of the County's roadways are at MOCI 3 or below. Only one-third (34 %) are in the good to very good category (MOCI 4 and 5).

**Figure 8-1, Percentages of MOCI for USA Roadways**



Public Transportation

The 2006 RTP contains a comprehensive description of the public transportation services provided in the County. The majority of public transit service in the unincorporated County is provided by the Redwood Transit System operated by the Humboldt Transit Authority. Passengers from many areas of Humboldt from Scotia to Trinidad are served by this bus system. The following table describes the Redwood Transit System services in the County.

Operator	Area	Service	
		Weekday	Saturday
Eureka Transit Service	City of Eureka	5 routes, 1 hr. headway, 6 a.m. – 7 p.m.	2 routes, 1 hr. headway, 10 a.m. – 5 p.m.
Arcata & Mad River Transit System	City of Arcata	2 routes, 1 hr. headway, 7 a.m. – 7 p.m.	2 routes, 2 hr. headway, 10 a.m.– 5 p.m.
Redwood Transit Service	U.S 101 from Scotia to Trinidad	1 route, 1 – 2 hour headways, 7 a.m. – 11 p.m.	1 route, 2 – 3 hour headways, 8 a.m. – 5 p.m.

Note: No scheduled transit service on Sunday. Times and frequencies are approximate.  
Source: Regional Parking Needs Study Final Report, HCAOG, 2003

Public transit in Humboldt County primarily serves persons who have no alternative means of transportation available. With existing and likely available future funding, it does not appear financially feasible to provide transit service that can compete with the automobile. A competitive transit service would require at least a doubling of service from current levels, and greatly extended hours of operation. But transit operators are financially stretched to operate at their current levels.

Non-Motorized Transportation

The 1979 Trails Master Plan, 2006 RTP, June 2004 Regional Bicycle Transportation Plan Update, and the Humboldt County Pedestrian Needs Assessment Study by HCAOG describe the quality and quantity of non-motorized transportation facilities in the County. Non-motorized transportation facilities are used as an alternative means of transportation for some, and serve recreational needs as well. They mostly serve bicyclists and pedestrians, although equine use is also an important consideration for recreational trails.

*Bicycle Facilities*

In general, there are two major types of bicycle facilities: bicycle routes and lanes associated with the road system, and community and public land trail systems either dedicated bikeways or shared with pedestrian and equestrian trails systems. Dedicated bicycle facilities are generally provided in urban areas of the county. Bicycle facility types are grouped into **Bike Paths** (separated, surfaced right-of-way); **Bike Lanes**, which are designated by a white stripe, and **Bike Routes**, which share the roadway with motorists and established by a Bike Route sign.

McKinleyville has limited systems of bike lanes and designated routes. Bike lane width standards were increased from four feet to 1.5 meters (approx. 5 feet) in 1997; consequently, many bike lanes constructed before 1997 do not meet the new state width standards.

The only example of a bike path in Humboldt County is the Hammond Coastal Trail in McKinleyville, which provides a non-motorized environment for both transportation and recreation purposes. The Hammond Coastal Trail between Murray and Airport Road in

McKinleyville was recently completed, making a continuous trail from Clam Beach to the north through McKinleyville to the City of Arcata to the south.

Bicycle level of service (LOS) modeling has been developed in the past five years and is gaining acceptance throughout the country. Service standards can be established to help evaluate the ability of existing facilities to meet current and future needs. The current County Trails Plan does not include service standards. These can be expressed on the same A to F scale as used for roadway planning.

For bike routes, for example, standards could reflect the relationship between flow rates, density and speed. In Davis, California, standards for Class I – Bike Paths and Class II Bike Lanes address the function of the facility, access control and right-of-way requirements. In Humboldt County, these standards should reflect differences between the rural and urban environments.

A prime component of Bicycle LOS modeling is the perception of hazard. A bicyclist's perception of hazard is based on many factors, including road conditions, traffic conditions, and the individual's age, skill level, and riding experience. Poor roadway conditions can include close proximity of the bicyclist to motor vehicles, deteriorated pavement, presence of debris, high volume and/or speed of traffic, and uncontrolled vehicle movement. The perception of hazard is a major factor in bicyclists' route selection, as well as a significant factor in whether a bicycle trip is even initiated.

This link between perceived hazards and cycling behavior was supported locally in the *Humboldt Bay Area Bicycle Use Study*. When cyclists believed conditions to be "hazardous," they were more likely to ride either on the sidewalk or against traffic, select a different route, or not ride at all (RCAA 1999). The perception of hazard affects both bicycle use volume and route selection. Incorporating this concept into planning and developing bicycle facilities can increase bicycle use. In addition, a variety of facility types and cycling environments will meet the needs of a larger cycling population. Although the above modeling is applied to bicyclists, it is a model that contains components applicable to pedestrians as well, specifically, the perception of hazard.

A bicyclists and pedestrians perception of hazard may be used to prioritize areas for bike and pedestrian improvements. It is also important to recognize that improving access for cars can sometime increase conflicts with pedestrians and bicyclists. All modes of transportation should be considered in the planning and design phase of road construction or rehabilitation.

The presence of adequate bicycle parking facilities impacts the transportation choices of many cyclists. Overall, bicycle parking facilities outside of Eureka and Arcata business centers are sporadic, and few are sheltered from weather. In addition, much of the older bicycle parking facilities in the region either do not accommodate contemporary bicycle designs or have lost function as they aged. However, the communities of Arcata, Eureka, and McKinleyville have installed new low maintenance, easy-to-use bicycle parking facilities. In addition, steps have been taken by a few local transit providers to aid commuters that rely

on the transit system and bicycle as a means of transportation. Humboldt Transit Authority installed improved front-loading bicycle racks on all of their Redwood Transit System buses. Blue Lake Rancheria buses are also equipped with user-friendly bike racks.

*Pedestrian Facilities*

Data from the 2000 Census indicates that in Humboldt County, 6.5 percent of persons aged 16 years or older walk to work. Although pedestrians typically include all segments of the population, elderly, children, college students, low-income, and disabled individuals are most likely to rely on pedestrian travel. People with disabilities comprise a substantial part of the pedestrian population, especially elderly citizens who have a variety of mobility and sensory limitations.

Facilities utilized by pedestrians are generally sidewalks, crosswalks, and, where these facilities are not available, road or highway shoulders, although shoulders are not considered a pedestrian facility. Many of the rural roadways in the county do not provide any facility for pedestrians, often forcing pedestrians to walk in or near the travel path of the road. In a few areas, multi-use or walking pathways or trails serve as transportation corridors.

Pedestrian facilities are most commonly provided in urban areas of the county (including a number of unincorporated communities). Where these facilities do exist, they most often meet only the minimum ADA standards. Existing sidewalks may be obstructed by utility poles, sign posts, street furniture and/or driveways which can force pedestrians and wheelchair users into road shoulders or bicycle lanes.

In recent years, some of the cities and County have installed more curb cuts and otherwise improved wheelchair access. There remain numerous gaps in the system of sidewalks, curb cuts and street crossings. Existing pedestrian street crossings in some areas are difficult to negotiate, particularly for the mobility-impaired. Many smaller communities or neighborhoods in outlying areas of the county have no dedicated pedestrian facilities. A number of communities are bisected by very busy state routes or county roads with no or limited crossing facilities. In and between most of these smaller communities, pedestrians must use roadways because, for the most part, no separate pedestrian facilities exist.

Policies in the Element acknowledge the relationship between public health and transportation, and support active (non-motorized) transportation to help reduce costs of health care and improve health conditions locally. The health benefits of active transportation are well documented and include: reduction of Diabetes Mellitus in overweight individuals; improved mental health; reduction of falls in the elderly; and improvement of cardiovascular health. It was emphasized in the 1979 Trails Master Plan, which stated,

“Trails provide space for healthier movement and can give the average person extra strength, endurance, and coordination, not to mention improved appearance, posture, and mental outlook. The President’s Council on Physical Fitness has pointed out that exercise can eliminate chronic tiredness, tension, minor body pains, and depression. Exercise gained in

transportation or recreation trail use, as well as other means, can play an important role in the prevention and reversal of degenerative illnesses such as heart disease, diabetes, and hypertension, especially when combined with a nutritional diet. In addition, exercise aids in controlling weight problems and maintaining health during old age. The basic enjoyment and benefits associated with trails use are being recognized by more and more people as evidenced by increasing participation in walking, jogging, bicycling, and horseback riding activities.

Although it is true that many county residents are engaged in logging and other outdoor employment which requires strenuous physical exertion, many of these same people may be fairly inactive during periods of seasonal unemployment. By the same token, many other county residents work at jobs requiring little if any physical labor. The establishment of trails and the promotion of their use can provide these workers, as well as county residents in general, with the opportunity to remedy basic trends toward physical inactivity in favor of better overall health. Walking, jogging, bicycling, and horseback riding should be encouraged and promoted on this basis. “

Policies in the Element continue forward the policies in the 1979 Trails Master Plan and the trails and other coastal access policies of the coastal plans.

#### Railroad

The County General Plan's current rail transportation policies emphasize support for the maintenance and modernization of rail services and facilities. However, the policies do not provide direction on how Humboldt County can achieve or assist in achieving these goals, making implementation difficult – especially since rail service was suspended in recent years.

The new economic challenges of continued rail service may require the County to be more proactive in efforts to support the railway.

According to the 2000-02 Regional Transportation Plan, opportunities for economic development and growth of rail-freight traffic would support a fully rehabilitated rail line.<sup>5</sup> As with marine transportation, the principal freight for the railroad is lumber. Currently, Humboldt County lumber mills are forced to truck their products to a transload site in Redding or Willits to remain competitive. Not only does the additional cost create an economic disadvantage for local lumber mills, the additional truck traffic on both SR 299 and US 101 has significant impacts on maintenance costs and traffic loads.

Other existing needs for a fully operational rail system are the removal of solid waste out of the county and to handle backhaul movements for export traffic through the Port of Humboldt Bay. Additional opportunities by rail also include the export of dairy products, fish products, and aggregates, and inbound traffic of coke and calcified lime used in paper processing.

Passenger rail service could support efforts to increase tourism and offer an alternative for visitors to the County to Highway 101. The projected ridership, however, is unlikely to have

a significant impact on Highway 101 congestion during peak summer periods. Nonetheless, passenger rail service can be an important element of a comprehensive transportation system for the County. The key will be to secure state and federal funding to support railroad operations.

General Plan policies that can contribute to sustainable passenger and rail service include supportive land use in rail corridors and efforts to coordinate overall economic development activities with the cities.

## **Alternatives**

Plan Alternative A includes policies that are made mandatory rather than suggestive:

### **Policies**

**C-P9 Mitigation Measures.** Proportionate mitigation measures ~~should~~ shall be used to construct on- and off-site transportation infrastructure improvements or dedicated rights-of-way clearly connected to and rationally resulting from new development.

**C-P23 Encourage bicycle-friendly design on all streets and roadways through new technologies, “best practices” standards, guidelines, and innovative treatments where appropriate on new roadways and multiuse paths.**  
~~Administer~~ Resurfacing programs for local streets ~~to should~~ shall include appropriate provisions for bicycle facilities.

**C-P24 Right-of-Way Multi-Modal Level of Service Standards.** Right of Way Multimodal Level of Service (LOS) Standards ~~should~~ shall be used for maximizing the multi-modal suitability of County roads and intersections.

**C-P32 ~~Encourage~~ Require Covered Bicycle Storage Facilities in New Commercial Developments.** ~~Encourage~~ Require the provision of secure, weather protected bicycle storage facilities at businesses and public buildings used for community assembly at the rate of one (1) bicycle parking space per 6,000 square feet of gross floor area, with a minimum of three (3) parking spaces for buildings with a gross floor area of 6,000 square feet.

### **Standards**

**C-S7 Multi-Modal Level of Service Standards.** Right of Way Multimodal Level of Service (LOS) Standards ~~should~~ shall be used for maximizing the multi-modal suitability of County roads and intersections. For bicycle facilities, LOS standards should be developed for the following types of facilities:

Bike Path Class I Separated, surfaced right-of-way designated exclusively for nonmotorized use. The minimum width for each direction is 1.5 meters, with a 2.4 meter minimum width for a bi-directional path.

Bike Lane Class II White stripe and Bike Lane sign on roadway providing 1.5 meters of road surface for preferential bicycle use (not including gutter). Vehicle parking

adjacent to and motorist crossflow is allowed. Bike lanes must be on both sides of a two-way road for one-way travel only.

Bike Route Class III Shared roadway with motorists on through routes not served by Class I or II bikeways or to connect discontinuous bikeways. Established by a Bike Route sign

### **Implementation Measures**

**C-IM4 Multi-Modal Requirements.** Roadway improvements ~~should~~ shall include pedestrian and bike facilities and bus stops as needed to accommodate demand for such facilities and where rights of way can accommodate such facilities, including sidewalks, bicycle lanes, bus stops, safe highway passages and neighborhood trail linkages.

Alternative A also would implement in all the USA's some policies in the existing McKinleyville Community Plan that encourage multimodal transportation.

Plan Alternative C includes makes Policy C-21 less mandatory, and would not implement a number of policies as shown in the Plan Alternative Comparison Chart. Policies in the McKinleyville Community Plan would apply only in the McKinleyville Urban Study Area and Water Study Area.

### **Policies**

**C-P21 Roadway Capacity Expansion and Non-Vehicle Modes.** Seek to enhance the Level of Service for non-vehicle modes when expanding roadway capacity for vehicle circulation.

**Plan Alternatives Comparison Chart**

The “Vote” column is provided for the user to indicate a policy preference. Enter a **R**etain, **D**elete or **M**odify.

<i>Table 8-10. Plan Alternatives Comparison Chart</i>						
<i>Plan Alternative</i>				<i>Goals</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-G1 Roadway Safety and Functionality.</b> To develop, operate and maintain a well-coordinated, balanced, circulation system that is safe, efficient and provides good access to all cities, communities, neighborhoods, recreational facilities and adjoining regions [FRWK].		
<b>A</b>	<b>B</b>	<b>C</b>		<b>C-G2 Multi-Modal Transportation.</b> To provide a balanced multi-modal transportation system that accommodates motorized vehicles, public transit, bicycles, and pedestrians.		
<b>A</b>	<b>B</b>	<b>C</b>		<b>C-G3 Interagency Cooperation.</b> To coordinate planning among state/county/city roadway system service providers and HCAOG for improved system design, development, operations and maintenance.		
<i>Policies</i>						
<b>Policy Topic #1— Roadway Classification, Safety and Functionality</b>						
<b>A</b>	<b>B</b>			<b>C-P1. Safety Improvement.</b> Use safety indicators and threshold criteria for capital improvements in the Capital Improvement Plan that result in levels of safety on County roadways higher than statewide averages.		
<b>A</b>	<b>B</b>	<b>C</b>		<b>C-P2. Roadway Functional Classifications.</b> Adopt and apply consistent roadway functional classifications that reflect urban/rural/community distinctions and that maximize right-of-way use for multi-modal safety and functionality.		
<b>A</b>	<b>B</b>	<b>C</b>		<b>C-P3. Roadway Condition Thresholds.</b> Roadway system condition thresholds should be used to allow for maintenance project prioritization and selection based on the attainment of acceptable overall system condition levels.		

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A	B	C		<b>C-P4. Functional Efficiency and Capacity.</b> Manage roadway systems for functional efficiency (roadway system and demand management) before functional capacity (roadway widening or new road construction) whenever possible.		
A	B	C		<b>C-P5. Pavement Management Criteria.</b> Strive to maintain the overall condition of County-maintained roadways above the 50 <sup>th</sup> percentile of the Overall Condition Index (OCI) and Modified OCI developed in the 2007 Technical Report.		
A	B	C	D	<b>C-P6. Orderly Development.</b> Encourage development of a road system that supports an orderly pattern of land use through:		
A	B	C	D	A. Using minor collector roads to provide access to higher density residential areas, local commercial facilities, neighborhood parks and schools.		
A	B	C	D	B. Locating lower density residential areas with frontage onto arterial or major collector roads away from through-traffic unless sufficient mitigation measures are used.		
A	B	C	D	C. Locating retail, service and industrial facilities, community centers, major recreational facilities, employment centers, and other intensive land uses near major collector, or arterial roads.		
A	B	C	D	D. Improving roads to accommodate land uses served by an inappropriate road classification. [FRWK]		
A	B	C	D	<b>C-P7. Consideration of Land Uses in Transportation Decision-making.</b> Transportation decisions in urban and rural areas should be based on a comprehensive planning approach that considers at a minimum existing land uses and future land development as proposed in adopted County plans and plans of other governmental agencies. [FRWK]		
A	B	C	D	<b>C-P8. Consideration of Transportation Impacts in Land Use Decision-making.</b> Decisions to change or expand the land use of a particular area should include an analysis of the impacts to existing and/or proposed transportation facilities and services so as to minimize or avoid serious operational or economic consequences. [FRWK]		

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
	B			<b>C-P9. Mitigation Measures.</b> Proportionate mitigation measures should be used to construct on- and off-site transportation infrastructure improvements and dedicate rights-of-way clearly connected to impacts resulting from new development.	See revised wording for Alt. A	
A				<b>C-P9 Mitigation Measures.</b> Proportionate mitigation measures <del>should</del> <u>shall</u> be used to construct on- and off-site transportation infrastructure improvements or dedicated rights-of-way clearly connected to and rationally resulting from new development.	Revised wording for Alt. A	
A	B	C		<b>C-P10. Tracking Road Improvement Requirements.</b> Maintain a database to track road improvement requirements.		
A	B	C	D	<b>C-P11. Road Abandonments.</b> <del>The County Planning Commission shall review</del> All proposed abandonments of <u>ownership or maintenance</u> on County roads <u>shall be reviewed</u> for conformance with the County General Plan before they are approved. [FRWK]		
A	B	C		<b>C-P12. Right of Ways as Public Facilities.</b> Road and rail right of ways are hereby designated as Public Facilities (PF) in the Land Use Element, whether or not specifically mapped.		
A	B	C		<b>C-P13. Acceptance of Roads in the Circulation Element into the County Maintained Road System.</b> Roads whose alignment are part of the Circulation Element (generally arterial and collector roads) that are constructed to County standards approved by the Department of Public Works shall be recommended to the Board of Supervisors for inclusion into the County Maintained Road System.		
A	B	C		<b>C-P14. Acceptance of Roads Outside of the Circulation Element into the County Maintained Road System.</b> Roads that are constructed to County standards approved by the Department of Public Works that are not a part of the Circulation Element , and are not arterial or collector roads shall not be recommended for acceptance into the County Maintained Road System unless adequate funding for the future maintenance of the road and its associated facilities is provided, subject to approval of the Department of Public Works.		

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A	B	C		<b>C-P15. Public Input.</b> Continue to consider public input in the development of the Capital Improvement Program.		
A	B	C		<b>C-P16. U.S. Highway 101 Safety Corridor Improvements.</b> The County supports a strategy for improvements to the U.S. Highway 101 Safety Corridor that minimizes impacts to coastal resources, and treats all three main roads between Arcata and Eureka as one system. The strategy would develop an overall improvement plan that phases improvements on a prioritized basis between the three roads; U.S. Highway 101, State Route 255, and Old Arcata Road/Myrtle Avenue.		
				<b>Policy Topic #2—Road Construction and Maintenance and Watershed Protection</b>		
A	B	C		<b>C-P17. Best Management Practices for Grading.</b> New development subject to the grading ordinance shall use best management practices as described in the Grading Ordinance to prevent soil erosion and minimize impacts to watersheds from grading activities.		
A	B	C		<b>C-P18. Best Practices for Road Maintenance.</b> Continue use of the 2002 Water Quality and Habitat Protection Manual (Best Practices Manual), or subsequent revisions to the manual, for County road maintenance and maintenance yards to minimize impacts to watersheds from roads and maintenance yard facilities.		
A	B	C		<b>C-P19. Update Standards.</b> Recognizing that best management practices continue to evolve, the County should continue to update their procedures for grading, road maintenance and maintenance yard facilities on regular basis to incorporate advances in the state of the art.		
				<b>Policy Topic #3—Public Transit</b>		
A	B	C	D	<b>C-P20. Coordinating Public Transit with Other Modes of Travel.</b> Transportation systems in the County and those which link with other areas of the State should be coordinated and integrated so that a full range of travel patterns can be supported.		

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A	B	C	D	A. Existing and future public transit services should be coordinated so that service from rural areas is effectively integrated with urban service. Schedules should be designed for a smooth transfer between rural and urban buses. Fares should be integrated so that a person pays only once for the full trip. Convenience facilities should be made available so that transfer areas are protected from the weather and bus information is provided.		
A	B	C	D	B. Automobile and bicycle transport should be integrated with public transit by developing adequate parking facilities at major bus stops and, where feasible, transporting bicycles on the buses along the intercity bus routes.		
A	B	C	D	C. <u>Multi-family housing, public uses such as libraries, schools and community centers, and commercial uses</u> should be encouraged in areas serviced by public transit where consistent with other sections of the plan. [FRWK]		
				<b>Policy Topic #4—Multi-Modal Transportation</b>		
A	B			<b>C-P21. Roadway Capacity Expansion and Non-Vehicle Modes.</b> Enhance the Level of Service for non-vehicle modes when expanding roadway capacity for vehicle circulation.	See revised wording for Alt. C	
		C		<b>C-P21. Roadway Capacity Expansion and Non-Vehicle Modes.</b> <u>Seek to</u> enhance the Level of Service for non-vehicle modes when expanding roadway capacity for vehicle circulation.	Revised wording for Alt. C	
A	B			<b>C-P22. Right-of-Way Design Standards.</b> Right-of-way design standards should incorporate design options which include facilities for bicycles, pedestrians and public transit.		
	B			<b>C-P23. Encourage bicycle-friendly design on all streets and roadways through new technologies, “best practices” standards, guidelines, and innovative treatments where appropriate on new roadways and multiuse paths.</b> <del>Administer</del> Resurfacing programs for local streets <del>to</del> <u>should</u> include appropriate provisions for bicycle facilities. [2006 RTP]	See revised wording for Alt. A	

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A				<b>C-P23 Encourage bicycle-friendly design on all streets and roadways through new technologies, “best practices” standards, guidelines, and innovative treatments where appropriate on new roadways and multiuse paths.</b> <del>Administer</del> Resurfacing programs for local streets to <del>should</del> <b>shall</b> include appropriate provisions for bicycle facilities.	Revised wording for Alt. A	
	B			<b>C-P24. Right-of-Way Multi-Modal Level of Service Standards.</b> Right of Way Multimodal Level of Service (LOS) Standards should be used for maximizing the multi-modal suitability of County roads and intersections.	See revised wording for Alt. A	
A				<b>C-P24. Right-of-Way Multi-Modal Level of Service Standards.</b> Right of Way Multimodal Level of Service (LOS) Standards <del>should</del> <b>shall</b> be used for maximizing the multi-modal suitability of County roads and intersections.	Revised wording for Alt. A	
A	B	C		<b>C-P25. Efficiency and Capacity Investment Priority.</b> Transportation facility investments should consider functional efficiency and capacity of pedestrian, bike and public transit.		
A	B	C		<b>C-P26. Capital Improvement Plan.</b> The County’s Capital Improvement Plan shall include an assessment of the impacts on multimodal transportation for all projects considered for funding.		
A	B			<b>C-P27. Coordination with School Districts.</b> The County and school districts should coordinate with one another regarding school site locations and transportation facilities.		
A	B			<b>C-P28. Walkability Audits.</b> Information from walkability audits should be incorporated in the prioritization of road improvements for non-motorized modes of travel.		
A	B	C	D	<b>C-P29. Traffic Calming.</b> Use of traffic calming measures where appropriate as a means of providing balanced multi-modal roadways that are compatible with adjacent land uses. Traffic calming measures include, <u>but are not limited to</u> , chicanes, curb extensions and traffic circles. [MCCP]	Alt. A & B would apply this policy in the other USA’s, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A	B	C	D	<b>C-P30. Landscape Maintenance Zones.</b> The County or other local agency should explore alternative financing mechanisms for landscape maintenance zones which will enhance street aesthetics and enable landscape strips with street trees within the public right-of-way. [MCCP]	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P31. Protection of Designated Trails.</b> The County shall review <del>land</del> development along and adjacent to designated trails and pathway corridors <del>in order to provide sufficient right-of-way</del> to ensure that adjacent <u>new</u> development is compatible with safety, recreational, and aesthetic qualities of the corridor. [MCCP]	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
	B	C	D	<b>C-P32. Encourage Bicycle Storage Facilities.</b> Encourage the provision of secure, weather protected bicycle storage facilities at bus stops, businesses, and public buildings as needed. [FRWK]	See revised wording for Alt. A	
A				<b>C-P32 Encourage Require Covered Bicycle Storage Facilities in New Commercial Developments.</b> <del>Encourage</del> <u>Require</u> the provision of secure, weather protected bicycle storage facilities at businesses and public buildings used for community assembly at the rate of one (1) bicycle parking space per 6,000 square feet of gross floor area, with a minimum of three (3) parking spaces for buildings with a gross floor area of 6,000 square feet.	Revised wording for Alt. A	
A	B	C	D	<b>C-P33. Encourage Bicycle Transport racks on Public Transit.</b> Encourage appropriate buses to be equipped with bicycle transport racks. [FRWK]		
A	B	C	D	<b>C-P34. Encourage Access to Recreation Areas.</b> Encourage development of access <del>and, where suitable, camping areas</del> into existing and future recreation areas. [FRWK]		
A	B	C	D	<b>C-P35. Encourage Visual Screens Along Horsetrails.</b> Encourage the placement of landscaping along horsetrails located adjacent to roadways to serve as safety and/or visual screens between trail and vehicle lanes. [FRWK]		
A	B	C		<b>C-P36. Annie and Mary Trail.</b> Encourage development of the Annie and Mary trail between the cities of Blue Lake and Arcata as a Class I bike/pedestrian trail using the existing railroad right of way where feasible.		

Plan Alternative			Policies (continued)	Staff Remarks	Vote: R, D, M
A	B	C	<b>C-P37. Use of the NWP Railroad Right of Way for Bicycles and Pedestrians.</b> The County shall encourage of the NWP right of way between Arcata and Eureka as a Class 1 bike/pedestrian trail provided those uses do not compromise future use of the right of way for rail transportation.		
A	B	C	<b>C-P38. Support the Development of More Park-&amp;-Ride Lots Near Population Centers to Encourage Bus Ridership and Carpooling.</b> <u>The County shall support CalTrans efforts to add park-&amp;-ride lots in McKinleyville, Fortuna, and other population centers as identified in the most recent RTP. [2006 RTP]</u>		
A	B	C	<b>C-P39. Integrate social transportation services with daily services where possible.</b> Promote integrated social service and public transportation services, using existing programs where possible, and seek available alternatives for independently providing client transportation services. In addition, encourage public and private non-profit specialized transportation providers to notify and apprise each other of all service changes that will impact programs or clientele. [2006 RTP]		
			<b>Policy Topic #5—Interagency Cooperation</b> (See also Policies GP P8 – P16 in Chapter 3)		
A	B	C	<b>C-P40. Departmental Coordination/Integration.</b> Participate in coordinated transportation-related activities through integration and shared use of consistent transportation standards and roadway functional classifications.		
A	B	C	<b>C-P41. Joint Use of the Greater Eureka Area Travel Model.</b> Integrate roadway maintenance and improvement data through use of the Greater Eureka Area Travel Model (GEATM). Support coordination with other agencies to resolve discrepancies in the list of road segments with capacity problems between the GEATM model and estimates made by HCOAG based on CalTrans data.		
A	B		<b>C-P42. Coordination with Public Health.</b> The Planning Division shall refer all new subdivisions and discretionary permits for commercial developments to the Environmental Health Division for comments on potential public health impacts.		

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A	B	C		<b>C-P43. Coordination Between County Agencies.</b> County agencies shall coordinate with each other to encourage development patterns more easily served by public transit, biking and walking.		
				<b>Policy Topic #6- Marine Transportation</b>		
A	B	C	D	<del>C-P44. The deepening of the ship channels in Humboldt Bay beyond a depth of 35 feet may be justified.</del> Humboldt County supports continued maintenance of the channels to provide access to existing and planned port facilities. [FRWK]		
A	B	C	D	<b>C-P45.</b> Humboldt County supports the improvement and modernization of commercial fishing facilities in Humboldt County. The cities of Eureka and Trinidad, Humboldt County and Humboldt Bay Harbor District should actively and cooperatively seek to encourage private investment into commercial facilities and, where necessary, invest public funds into rehabilitation, upgrading and expanding boat marinas and public piers. [FRWK]		
A	B	C	D	<b>C-P46.</b> Local business groups should be encouraged to work with local government to encourage private investment into facilities such as: Boat building and repair facilities; Fleet service facilities; and Fish processing facilities. [FRWK]		
				<b>Policy Topic #7- Rail Transportation</b>		
A	B	C	D	<b>C-P47.</b> <u>When it becomes economically and environmentally feasible,</u> the railroad system connecting to points south shall be maintained and operated to support the County's economic development and maintain the diversification of the County circulation network. [FRWK]		
A	B	C		<b>C-P48.</b> Protect and reserve the rail right of way for public transportation uses, regardless of whether or not rail service is restored.		
A	B	C		<b>C-P49.</b> The County supports use of the NWP railroad for excursion trains as a tourist attraction provided they do not interfere with use of the railroad for cargo transport.		

<i>Plan Alternative</i>				<i>Policies (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
				<b>Policy Topic #8- Air Transportation</b> (See also Policies GP P8 – P16 in Chapter 3)		
A	B	C	D	<b>C-P50. Expansion of Airline Service.</b> Humboldt County supports efforts to expand commercial airline service to the area <u>consistent with the Airport Master Plans of each airport operated by the County.</u> [FRWK]		
				<b>Policy Topic #9- Coastal Access Policies From All Six (6) Coastal Plans</b>		
A	B	C	D	<b>C-P51. Coastal Access.</b> Implement policies for coastal access through review of new development as required by the Coastal Act. (Coastal Plans)		
A	B	C	D	<b>C-P52. Coastal Public Roadway Projects.</b> Public roadway improvement projects shall not, either individually or cumulatively, degrade environmentally sensitive habitats or coastal scenic areas. Improvements (beyond repair and maintenance) shall be consistent with Coastal Act protections of environmentally sensitive habitats and visual resources and shall be limited to the following:		
A	B	C	D	a. Reconstruction and restoration of existing roadways, including bridge restoration and replacement, highway planting, construction of protective works such as rock slope protection and slope corrections, reconstruction of roadways following damage by storms or other disasters, and improvement of roadside rests.		
A	B	C	D	b. Operational improvements, such as traffic signals, guard rails and curve corrections.		
A	B	C	D	c. Roadside enhancements, such as construction or improvement of roadside rests and vista points consistent with Section 3.40 (Resource Protection Policies and Standards), and removal of roadside signs consistent with Section 3.42 C (Coastal Scenic Areas).		
A	B	C	D	d. Minor improvement projects, such as modifying encroachments or ramps, construction turnouts, and channelized intersections.		
A	B	C	D	e. Except in coastal scenic areas, climbing and passing lanes.		
A	B	C	D	f. Expansion of substandard roadway shoulders. g. Construction of bikeways. (Coastal Plans)		

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
				<b>Policy Topic #10- Community Plan Policies</b>		
				<i>McKinleyville Community Plan (MCCP)</i>		
A	B	C	D	<b>C-P53. On-Street Parking.</b> On street parking shall be <del>prohibited</del> <u>discouraged</u> in commercial areas and shall be <del>prohibited</del> <u>discouraged</u> where bicycle routes are planned adjacent to public street's travel lanes <u>unless parking lanes are provided.</u> (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P54. Design Standards for All Pathways.</b> Design standards should be adopted for all pathways. <del>Pathways are defined as developed portions of rights of way from which motor vehicles are excluded.</del> (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P55. Circulation Planning for Bicycles and Pedestrians.</b> All future circulation planning shall include bicycle and pedestrian pathway routes. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P56. Road and Intersection Designs for Bicycles and Pedestrians.</b> All new roads and intersections shall be designed to provide convenient use by pedestrians, bicyclists and motor vehicles. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P57. Repair and Reconstruction Projects to Provide for Bicycles and Pedestrians.</b> When major repairs or reconstruction occurs on existing substandard collector and arterial roads and intersections, they should be brought up to standards which provide for pedestrian, bicycle and motor vehicle use. Existing deficiencies shall be corrected prior to further development. This policy is contingent upon funding availability. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P58. Prioritize Funding for Bicycles and Pedestrian Facilities.</b> Priority (from the available funds provided for McKinleyville) shall be given to circulation projects which enhance safe pedestrian and bicycle access to McKinleyville's schools. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
A	B	C	D	<b>C-P59. Bicycles and Pedestrian Facilities in New Subdivisions.</b> In subdivisions creating new interior roads, bikeways, off-street pedestrian ways, or sidewalks separate from roadways shall be incorporated when warranted into the design of the subdivision. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P60. Landscape Buffer Strips.</b> Landscape buffer strips shall be used to segregate pedestrian walkways from arterial and busy connector travelways. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P61. Removal of Obstacles in Pathways.</b> New pathways (including sidewalks) shall be free of obstacles such as utility poles and mailboxes. Where obstacles are unavoidable on existing sidewalks or pathways, they shall be widened or otherwise designed to provide the least amount of obstruction to users. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA.	
A	B	C	D	<b>C-P62. Minimize Impacts to Streams and Wetlands With New Road Construction.</b> Site plans for new roads, paths and trails, or improvements to existing ones shall minimize their impact to streams and wetlands, and incorporate and preserve aesthetically pleasing natural features consisting of native and non native species. A funding mechanism should be provided for the design of improved public pathways. Funding alternatives include development impact fees, user fees (such as fuel taxes and tolls), non-user fees (such as property and sales taxes), special benefit fees (such as assessment districts), joint ventures (such as public/private agreements), and debt financing (such as bonds, certificates of participation etc.). (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P63. Wheelchair Accessibility for New Walkways.</b> All new hard surfaced walkways shall be wheelchair accessible. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
A	B	C	D	<b>C-P64. Wheelchair Accessibility for Existing Walkways.</b> Existing hard surfaced walkways should be improved to be wheelchair accessible when funding is available or when development projects occur on adjacent parcels. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P65. Creative and Flexible Application Of Travelway Design Standards.</b> Creative and flexible application of travelway design standards based upon engineering principles in new subdivisions shall be allowed if they minimally impact the natural environment. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P66. Integration with the Pedestrian Circulation Network.</b> New subdivisions and other major developments shall be designed to integrate with the pedestrian circulation network in the community. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P67. Rights-of-way for Pathways.</b> In order to minimize travel distances for pedestrians (encouraging pathway short-cuts and non-automobile use), new subdivisions and other major developments shall provide rights-of-way for pathways consistent with the adopted Trails Plan between public streets (or other public or commercial destinations) at least every 1,320 feet (1/4 mile) in R-1 neighborhoods; and every 350 feet (one city block) in higher density areas. <del>Assessment districts, subject to voter ratification or other funding mechanisms, shall be created for all subdivisions to improve and maintain rights of way to pathway standards as identified in the Circulation and Trails Plans.</del> (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-P68. Off-Street Parking.</b> Off-street parking along local streets shall be encouraged in the design of new developments. Creative on-street parking arrangements such as parking pockets or bays on local service roads are encouraged when based on engineering principles. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
A	B	C	D	<b>C-P69. Off-Site Improvements.</b> Offsite improvements along local streets shall be encouraged in the design of new developments. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	1. All subdivision applications which propose new roads not listed in the circulation element shall submit alternate roadway designs which reflect an emphasis on pedestrian convenience. They may include reducing travelway widths within the required right-of-way easement. (MCCP)	(see above note)	
A	B	C	D	2. Prior to approving a reduced roadway width, the County shall ensure that the roadway provides adequate access for emergency vehicles.	(see above note)	
A	B	C	D	3. The County shall implement where appropriate as determined by the Public Works Department the use of traffic calming measures as a means of reducing the speed of motor vehicles, and facilitating pedestrian movement. Traffic calming measures include chicanes, curb extensions and traffic circles.	(see above note)	
A	B	C	D	4. The County or other local agency should explore alternative financing mechanisms for landscape maintenance zones which will enhance street aesthetics and enable landscape strips with street trees within the public right-of-way.	(see above note)	
A	B	C	D	5. All pedestrian pathways should be located adjacent to or within landscape strips or greenways. Pathways should not be located adjacent to the traveled way.	(see above note)	
A	B	C	D	6. Subdivisions involving five or more units and zoned for under 20,000 square foot minimum parcel size are encouraged to incorporate parking bays into the design of any proposed traveled way that are not shown as <u>arterials or</u> collector streets on the Circulation Plan map.	(see above note)	
A	B	C	D	7. Intersections and streets shall be designed to provide an attractive environment for multiple modes of transportation.	(see above note)	

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
A	B	C	D	8. The County shall explore the use of incentives to property owners/subdividers for providing landscaping strips, maintenance programs, and parking bays. These incentives may include density bonuses. (MCCP)	(see above note)	
A	B	C	D	<b>C-P70. Trails Implementation Plan</b> A Trails Implementation Plan shall be prepared that includes a trail by trail review with recommendations for how easements could be gained and under what circumstances dedication of easements might be required. Development projects proposed on lands that include a trail as shown on the Trails Map may be required to dedicate and/or improve such trail if an individualized determination is made that the dedication is related both in nature and extent and is roughly proportional to the impact of the proposed development.	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	For purposes of this section, 'development projects' include discretionary projects including subdivisions, special or conditional use permits, variances, and zoning reclassifications and ministerial projects requiring more than five (5) new parking spaces. Excluded from requirement to dedicate a trail easement are ministerial projects that would require less than five (5) new parking spaces. Also excluded are the following discretionary projects: temporary uses, including public assemblages, timber production, variances where the proposed development does not interfere with a trail alignment, lot line adjustments which do not interfere with a trail alignment, signage. (MCCP)	(see above note)	
A	B	C	D	<b>C-P71. Review of Development Along Trails.</b> The County shall review land development along and adjacent to designated trails and pathway corridors in order to provide sufficient right-of-way to ensure that adjacent development is compatible with safety, recreational, and aesthetic qualities of the corridor. (MCCP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
				<i>Avenues of the Giants Community Plan (Avenues CP)</i>		
A	B	C	D	<b>C-P72 Maintenance and Repair of County/State encroachments at intersections.</b> Coordinate with CalTrans to maintain and repair County/State encroachments at intersections. (Avenues CP)		

Plan Alternative				Policies (continued)	Staff Remarks	Vote: R, D, M
A	B	C	D	<b>C-P73 Lowering the Speed Limit in Miranda and Phillipsville.</b> The County shall work with CalTrans in lowering the speed limit through the communities of Miranda and Phillipsville. (Avenues CP)		
A	B	C	D	<b>C-P74 Funding for Pedestrian Safety, Access and Egress.</b> The County shall request that CalTrans comply with Streets and Freeways Code, Section 157, to provide for pedestrian safety, access, and egress, as an integrally funded part of their highway projects. (Avenues CP)		
				<i>Standards</i>		
A	B	C		<b>C-S1 Capacity Standards.</b> Volume-to-Capacity and/or movement-delay estimates should be used to assess Level of Service (LOS) impacts of new developments on the road network according to the following table. Volume to Capacity Ratio estimates from the GEATM Model should be used where feasible. Alternatively, site-specific data from a certified engineer may be used.		
A	B	C		<b>C-S2 Levels of Service.</b> Level of Service (LOS) C should be used as the Threshold of Significance for all roadways during non-peak periods, and LOS D as the Threshold of Significance within Urban Study Areas for peak periods. Calculation of LOS shall be based upon V/C Ratios as described in C-S4, or other methods acceptable to Public Works. Cumulative impacts to levels of service shall also be considered in project review and addressed through the use of development impact fees.		
A	B	C		<b>C-S3 Consistent Roadway Design Standards.</b> Roadway design standards and functional classifications shall be applied in a consistent manner throughout the County roadway system.		
A	B			<b>C-S4 Functional Classifications.</b> The County's Road Standards in the Subdivision Ordinance shall be modified to incorporate the following functional classifications for the Humboldt County-maintained roadway system ( <i>See Table 8-4 and 8-5a &amp; b for classifications</i> ).		
A	B	C		<b>C-S5 Prioritization of Road Improvements.</b> Volume to Capacity Ratios (V/C Ratios) should be considered in the prioritization of roadway projects.		

Plan Alternative			Standards (continued)	Staff Remarks	Vote: R, D, M
A	B	C	<p><b>C-S6 Prioritization of Road Maintenance Projects.</b> Use and refine the OCI rating system to prioritize road maintenance projects for roads that have been assessed under this system. Maintenance projects on other roads shall use the Modified OCI system. Technological advances such as Geographic Information Systems (GIS) and Geographic Positioning System (GPS) shall be used to enhance these rating systems.</p>		
	B		<p><b>C-S7 Multi-Modal Level of Service Standards.</b> Right of Way Multimodal Level of Service (LOS) Standards should be used for maximizing the multi-modal suitability of County roads and intersections. For bicycle facilities, LOS standards should be developed for the following types of facilities:</p> <p><b>Bike Path</b> Class I Separated, surfaced right-of-way designated exclusively for nonmotorized use. The minimum width for each direction is 1.5 meters, with a 2.4 meter minimum width for a bi-directional path.</p> <p><b>Bike Lane</b> Class II White stripe and Bike Lane sign on roadway providing 1.5 meters of road surface for preferential bicycle use (not including gutter). Vehicle parking adjacent to and motorist crossflow is allowed. Bike lanes must be on both sides of a two-way road for one-way travel only.</p> <p><b>Bike Route</b> Class III Shared roadway with motorists on through routes not served by Class I or II bikeways or to connect discontinuous bikeways. Established by a Bike Route sign.</p>	See revised wording for Alt. A	
A			<p><b>C-S7 Multi-Modal Level of Service Standards.</b> Right of Way Multimodal Level of Service (LOS) Standards <del>should</del> shall be used for maximizing the multi-modal suitability of County roads and intersections. For bicycle facilities, LOS standards should be developed for the following types of facilities: <i>(insert descriptions of facilities from above)</i></p>	Revised wording for Alt. A	

Plan Alternative				Standards (continued)	Staff Remarks	Vote: R, D, M
A	B	C		<b>C-S8 Safe Routes To Schools, and Between Transit Stops And Nearby Libraries, Parks, And Community Centers.</b> Construct and maintain contiguous sidewalks and bike paths along roads used for multimodal access within one mile of all public schools, and between transit stops and nearby public facilities (libraries, parks, and community centers) as funding sources are identified and available.		
A	B	C	D	<b>C-S9 Dedication of Trails and Parkland Fees.</b> Public pathways, trails and greenways identified on the Trails Map are to be dedicated separately from <u>and in addition</u> to dedication of park acreage or payment of in-lieu fees authorized by the Quimby Act (CA Gov. Code §66477) and the local implementing ordinance (HCC Title III, Div. 1, Sec. 316-24 <i>et seq</i> ) [MCCP]	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
A	B	C	D	<b>C-S10 Use of Parkland Fees for Trails Improvements.</b> The trails, parks, and improvements identified in this section may be developed using Quimby Act parkland dedication in-lieu fees. [MCCP]	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	

<i>Plan Alternative</i>				<i>Standards (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-S11 Terms for Dedication of Trails.</b> When new development triggers a dedication requirement, the County shall require the developer to provide either: a) a 50 year offer of dedication of an easement; b) an easement (with any improvements as may be agreed on); or c) fee simple title of that portion of the trail (with any improvements as may be agreed on). [MCCP]</p>	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-S12 Review of Trails Proposed for Dedication.</b>                      The review of development subject to trail and greenway dedication and/or improvement shall include consideration of the following features: A The intended purpose for the trail (i.e., a surfaced pedestrian walkway, bicycle path, semi-improved recreational trail for walkers, bicyclists, and equestrians, an unimproved rural trail for hikers, mountain biking, and horseriding).                      B. Consistency of the proposed class of trail and its location with adjacent uses so as not to have adverse impacts on adjacent owners' use of their property.                      C. The intensity of adjacent development.                      D. Minimizing the likelihood of trespass and vandalism on adjacent private property through the trail design, including location, improvement standard, and the sanctioned use of the trail.                      E. Evaluating public health and safety needs for:                      1) parking;                      2) road capacity and traffic patterns;                      3) avoiding conflicts in uses (i.e. pedestrian, equestrian, vehicular);                      4) use by the handicapped;                      5) sanitary facilities including trash disposal; and                      6) accessibility of the terrain (topography of trail is not too steep).                      F. Availability and adequacy of other nearby trail alignments.</p>	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	

<i>Plan Alternative</i>				<i>Standards (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p>G. Potential for significant conflicts with agriculture including:</p> <ol style="list-style-type: none"> <li>1) vandalism;</li> <li>2) theft of livestock, agricultural supplies and tools;</li> <li>3) damage to crops and livestock;</li> <li>4) trespass on areas not part of accessway;</li> <li>5) damage to fencing and gates;</li> <li>6) livestock depredation;</li> <li>7) litter; and</li> <li>8) interference with agricultural operations.</li> </ol> <p>H. The design, construction, and management of trails and pathways should be carefully executed in order to reduce environmental disturbance.</p> <p>I. Bridges and other public improvements within designated trails and pathway corridors should be designed to provide safe and secure routes for trails, including grade separation between roadways and trails whenever feasible. trails and pathways into corridors used for public and utility purposes.</p> <p>J. Encouraging the incorporation of trails and pathways into corridors used for public and utility purposes.</p> <p>K. New development shall not block existing neighborhoods' access to trails.</p> <p>L. Bikeways, hiking trails, and equestrian trails (off road) should be provided within designated trail corridors, and whenever feasible, rest areas and picnicking</p> <p>M. The applicant for development of a parcel which the Trails Map indicates as having a trail crossing it shall have the option of designing the trail route through the property provided the trail's entry and exit points are consistent with the Trails Map.</p> <p>N. A parcel which the Trails Map indicates as crossing it "in whole" (i.e., not straddling a common property boundary with an adjacent lot) shall have the option of designing the trail route through the parcel provided the trails end points --- where it enters and exits the parcel --- are consistent with the Trails Map. [MCCP]</p>	<p>Alt. A &amp; B would apply this policy in the other USA's, whereas in Alt. C &amp; D, it would only be applied in the McKinleyville USA and WSA</p>	

<i>Plan Alternative</i>				<i>Standards (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><i>Eureka Community Plan (ECP)</i></p> <p><b>C-S13 Robinson\Dunn Project Improvements.</b>                      Incorporate the following standards into the transportation improvements for development of the Robinson\Dunn property south of the Lundbar Hills neighborhood:</p> <p>a) The project should require that a road be constructed from Ridgewood Drive toward Fairway Drive at least to the north end of the property. The road should be planned so that it may eventually be connected through to the City to Fairway Drive.</p> <p>b) The development should have multiple access points onto Walnut Drive and Ridgewood Drive. The timing for development of each access point shall be determined by Public Works, as warranted, as each development phase is submitted to the County.</p> <p>c) These access points should coincide with existing street systems whenever feasible, such as entering Walnut Drive where a street already exists on the opposite side, thus providing for a four-way intersection.</p> <p>d) Access point location designs should conform with good traffic engineering principles such as adequate site distance, adequate storage for vehicular movements entering and exiting, appropriate intersection controls, and conformance with the County's street design standards. (ECP)</p>		

<i>Plan Alternative</i>				<i>Standards (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-S14 McKay Tract Improvements.</b> Incorporate the following standards into the transportation improvements for development of the North and South McKay Tracts off of Walnut Drive:</p> <p>a) Development of the North McKay property should include a primary through road from Cypress Street to the end of Harrison Avenue. In addition, development of the North McKay property shall include at least three access points onto Walnut Drive. These access points shall incorporate the extensions of Redwood, Fern and Arbutus Streets. The timing for extension of each street shall be determined by Public Works, as warranted, as each development phase is submitted to the County.</p> <p>b) Development of the South McKay property shall be designed with a primary access other than Northridge Road. The primary access shall be designed to intersect Walnut Drive when possible. Northridge Road shall be used as a secondary access. The timing for construction of the secondary access shall be determined by Public Works, as warranted, as each development phase is submitted to the County.</p> <p>c) All access points should coincide with existing street systems whenever feasible, such as entering Walnut Drive where a street already exists on the opposite side, thus providing for a four way intersection.</p> <p>d) Access point locations should conform with good traffic engineering principles, as mentioned above (for Robinson\Dunn property). (ECP)</p>		
				<i>Implementation Measures</i>		
<b>A</b>	<b>B</b>			<p><b>C-IM1 Review of the Capital Improvement Program.</b> Planning and Environmental Health staff should review and provide comments on the Capital Improvement Program.</p>		

Plan Alternative			Implementation Measures (continued)	Staff Remarks	Vote: R, D, M
A	B	C	<b>C-IM2 Great Eureka Area Travel Model (GEATM).</b> In coordination with the City of Eureka and CalTrans, the County shall, maintain, update and validate the GEATM on a regular basis, and use the GEATM to evaluate development-related traffic impacts on the City's existing and proposed circulation system.		
A	B	C	<b>C-IM3 Missing Links.</b> Where feasible, construct missing roadway links to complete the roadway system designated in the Circulation Element when warranted by safety concerns, congestion relief, and improvement of roadway functional efficiency and/or capacity.		
	B		<b>C-IM4 Multi-Modal Requirements.</b> Roadway improvements should include pedestrian and bike facilities and bus stops as needed to accommodate demand for such facilities and where rights of way can accommodate such facilities, including sidewalks, bicycle lanes, bus stops, safe highway passages and neighborhood trail linkages.	See revised wording for Alt. A	
A			<b>C-IM4 Multi-Modal Requirements.</b> Roadway improvements <del>should</del> shall include pedestrian and bike facilities and bus stops as needed to accommodate demand for such facilities and where rights of way can accommodate such facilities, including sidewalks, bicycle lanes, bus stops, safe highway passages and neighborhood trail linkages.	Revised wording for Alt. A	
A	B	C	<b>C-IM5 Future Multi-Modality Options.</b> Preserve use of dedicated rights of way for future pedestrian, bicycle and transit facilities on roads where they do not presently exist.		
A	B		<b>C-IM6 Transit Infrastructure.</b> Work with regional transit providers (HTA) to situate transit stops and hubs at locations that are convenient for transit users, and promote increased transit usage through the provision of shelters, benches, and other amenities.		
A	B	C	<b>C-IM7 New Roadway Construction/Widening.</b> Use roadway designs that minimize environmental impact for proposed construction and widening projects and, where impacts are unavoidable, impose mitigation measures to limit the impact of roadway improvements on County waterways.		

<i>Plan Alternative</i>			<i>Implementation Measures (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<p><b>C-IM8 Adoption of Water Quality and Stream Habitat Protection Measures.</b> Formally adopt the 2002 manual, “Water Quality and Stream Habitat Protections Manual for County Road Maintenance” to guide the following activities:</p> <ul style="list-style-type: none"> <li>• routine and emergency road repair;</li> <li>• maintenance of county roads and related facilities including actions taken to prevent erosion and/or the deterioration of a roadway, such as activities affecting the cutbank, road surface, fillslope and all drainage structure;</li> <li>• maintenance and replacement of bridges and culverts;</li> <li>• activities on County-owned maintenance yards; and</li> <li>• measures to protect the traveling public, such as snow and ice removal.</li> </ul>		
<b>A</b>	<b>B</b>	<b>C</b>	<p><b>C-IM9 U.S. Highway 101 Safety Corridor Improvements.</b> Issuance of Coastal Development Permits and other discretionary permits by the County for the U.S. Highway 101 Safety Corridor Improvement project should support a strategy that treats all three main roads between Arcata and Eureka (U.S. Highway 101, State Route 255, and Old Arcata Road/Myrtle Avenue) as one system. The strategy would develop an overall improvement plan that phases improvements on a prioritized basis between the three roads. Potential impacts of the project on coastal resources, including those that were identified in the comments made to CalTrans by the Board of Supervisors September 18, 2007, should be minimized.</p>		
<b>A</b>	<b>B</b>		<p><b>C- IM11 Re-establish transit service to east, south and north county.</b> <del>The Humboldt Transit Authority will</del> Pursue partnerships with the <del>County of Humboldt,</del> <u>Humboldt Transit Authority</u>, Native American Tribes, and non-profit transportation organizations, that will help fund and facilitate the re-establishment of services to rural communities in the east, south and north portions of the County. [2006 RTP]</p>		

<i>Plan Alternative</i>				<i>Implementation Measures (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>		<b>C-IM12 Handicapped Access.</b> Outdoor recreation facilities shall be designed and constructed to be accessible to handicapped persons consistent with the requirements of the Americans with Disabilities Act.		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><i>Implementation Measures From All Six (6) Coastal Plans</i></p> <p><b>C-IM13 Lateral Access Guidelines in Coastal Areas.</b> Guidelines for the designation of lateral accessways are as follows</p> <ul style="list-style-type: none"> <li>(1) Where there is an existing accessway adjoining the proposed accessway, the location and size of the new accessway shall be the same as the adjoining accessways; or</li> <li>(2) where there is a fixed landward point from which to measure (e.g. bluffline) the accessway shall be no less than 25 feet in width seaward from the fixed landmark; or</li> <li>(3) to the first line of terrestrial vegetation, excepting dune areas; or</li> <li>(4) a minimum of 25 feet from the mean high tide line</li> <li>(5) where there is no vertical gradient differential between the development and the accessway, a privacy buffer shall be established with a minimum of 10 feet with only limited uses allowed from 10 to 20 feet and only passive recreational uses between 20 and 50 feet. <i>(Coastal Plans)</i></li> </ul>		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-IM14 Vertical Access Guidelines in Coastal Areas.</b> Guidelines for the designation of vertical accessways are as follows</p> <ul style="list-style-type: none"> <li>(1) Location should be along boundaries of property but may be resited as necessary.</li> <li>(2) Width should be a minimum of 10 feet for pedestrian use with additional width as required for slope or construction easements and/or other uses.</li> <li>(3) Privacy buffer between accessway and residence shall be a minimum of five (5) feet for pedestrian accessways. <i>(Coastal Plans)</i></li> </ul>		

<i>Plan Alternative</i>				<i>Implementation Measures (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-IM15 Access Improvements</b></p> <p>1. Minimal improvements should be scheduled for unimproved access points in character with the rural nature of the communities they serve, and accessways accepted by the responsible entity or agency should include but shall not be limited to, the following as they are found consistent with the identified uses, modes of access and limitations as identified in the Access Inventory.</p> <ul style="list-style-type: none"> <li>a. parking</li> <li>b. roads</li> <li>c. trails, stairs and ramps</li> <li>d. sanitary facilities (including trash collection)</li> <li>e. facilities for the handicapped</li> <li>f. fencing and barriers to inappropriate uses</li> <li>g. signing of access points, trails and hazard areas</li> <li>h. maintenance and operation of the accessway and support facilities.</li> </ul> <p>2. In reviewing improvements to accessways, the approving authority shall consider the following:</p> <ul style="list-style-type: none"> <li>a. The common use(s) of the shoreline;</li> <li>b. The proposed mode of access (pedestrian, equestrian, or vehicular) and adverse impacts on adjacent owners' use of their property, and the size of the development;</li> <li>c. The likelihood of trespass and vandalism on adjacent private property;</li> </ul>		

Plan Alternative				Implementation Measures (continued)	Staff Remarks	Vote: R, D, M
A	B	C	D	<p>d. The need to provide for public health and safety, including the need for:</p> <ul style="list-style-type: none"> <li>(1) parking</li> <li>(2) road capacity and traffic patterns</li> <li>(3) conflicts in uses (i.e. pedestrian, equestrian, vehicular)</li> <li>(4) use by the handicapped</li> <li>(5) capacity of sanitary facilities, including trash disposal</li> <li>(6) topography of trail</li> <li>(7) beach hazards (tides, currents, undertows)</li> </ul> <p>e. Conflicts with agriculture including:</p> <ul style="list-style-type: none"> <li>(1) vandalism</li> <li>(2) theft of livestock, agricultural supplies and tools</li> <li>(3) damage to crops and livestock</li> <li>(4) trespass on areas not part of accessway</li> <li>(5) damage to fencing and gates</li> <li>(6) dogs killing, maiming or harassing livestock</li> <li>(7) litter</li> <li>(8) interference with agricultural operations (by access corridor)</li> </ul> <p>3. Improvement of accessways shall be permitted where the level of development is adequate to support common uses of the shoreline and the mode(s) of access proposed in the Plan, and where the improvements are sited and designed to prevent significant hazards to public health and safety or to agriculture and minimize the likelihood of trespass and vandalism on adjacent private property.</p> <p>4. Signs at access points should be supplemented by an atlas of County coastal access points for use by both residents and visitors. <i>(Coastal Plans)</i></p>		

<i>Plan Alternative</i>				<i>Implementation Measures (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-IM16 Unavoidable Loss of Coastal Public Access.</b>                      New industrial development which impedes or interferes with public access to or along the bayshore shall provide off-site improvements to open other equivalent bayshore areas where no public access exists, or enhance comparable, existing bay access. Such improvements shall include, as necessary, dedication of access easements, fee title along the new accessway, access improvements, including parking areas and trails, and provisions for maintenance and operation of the new accessway.</p> <p>If an applicant cannot provide these improvements or these improvements amount to only a portion of an overall preferred off-site access proposal, an in-lieu fee payment shall be made to an appropriate public agency for the purpose of providing the above comparable bay access or enhancement of existing comparable bay access. (Enhancement of existing, comparable bay access could include in-lieu fees for shoreline protection, development of a public fishing pier, or provision of additional off-site access facilities. <i>(Coastal Plans)</i>)</p>		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><i>Eureka Community Plan (ECP)</i></p> <p><b>C-IM17 Improvements to F Street (Oak to Alder).</b> <del>F Street is being recommended for widening from two to four lanes. This</del> Improvements should be coordinated with the same improvement warranted on F Street within the city boundaries. <del>This improvement is needed at the 25% development scenario (assuming 100% buildout of the City's vacant parcels). This can largely be accommodated by restriping of the existing facility, and perhaps with removal of on street parking.</del> (ECP)</p>		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<p><b>C-IM18 Improvements to Herrick Road at Elk River Road.</b> The intersection of Herrick Road and Elk River Road should be signalized and left-turn lanes should be constructed. (ECP)</p>		

<i>Plan Alternative</i>				<i>Implementation Measures (continued)</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-IM19 Improvements to Union Street.</b> That portion of Union Street from the city limits to Madison Avenue should be improved to allow for access from Pine Hill to the City of Eureka. The improvements should consist of a minimum of 2 driving lanes, pedestrian/bicycle corridor, and improvement of the intersection of Sea Avenue. (ECP)		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-IM20 Improvements to Togo Street.</b> Incorporate the Togo Street improvements onto Public Works Five Year Priority List Capital Improvement program. (ECP)		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-IM21 Robinson\Dunn Project Improvements.</b> When the Robinson/Dunn property develops, the County shall work with the City of Eureka to ensure a route through the City to connect Fairway Drive with Ridgewood Drive (ECP)		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-IM22 Lot Frontage on Major Roads.</b> The policy to discourage lots from fronting onto such roads as Humboldt Hill, Walnut, Campton and Ridgewood (west of Walnut) shall be implemented through the subdivision process for parcels along these corridors. (ECP)		
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-IM23 Pedestrian Corridors.</b> The County shall incorporate the development of pedestrian corridors along major roads into Public Works Five Year Priority List Capital Improvement program. (ECP)	Alt. A & B would apply this policy in the other USA's, whereas in Alt. C & D, it would only be applied in the McKinleyville USA and WSA	
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>C-IM24 Elk River/Ridgewood/Westgate Intersections.</b> The County shall incorporate the realignment of these intersections as a high priority in Public Works Five Year Priority List Capital Improvement program. (ECP)		

**Other Existing Goals, Policies and Programs in Alternative D**

In addition to the above existing goals, policies, standards and implementation measures, following is a listing of the others that are considered part of Alternative D, the Existing Framework Plan:

*Framework Plan*

**4230 POLICIES**

**4231 Roads**

1. Humboldt County supports the construction of a depressed freeway Route 101 through Eureka. If continued development along the proposed route renders it physically or economically infeasible, Humboldt County would support construction along an alternate route.
2. Humboldt County supports improvements and maintenance of public access roads to natural resource areas designated for timber production, agriculture and mining.
3. Significant increases in traffic volumes and turning movements on and off a major expressway/freeway at high volume at grade intersections should be discouraged.
4. Humboldt County supports the need for additional State revenue from sources such as State Gas Tax for the maintenance and reconstruction of County roads that carry heavy commercial truck traffic.
5. Humboldt County shall take action to support the increase of gas tax revenues to a level adequate for local street and road maintenance.
6. Humboldt County recognizes that the era of abundant and inexpensive energy has ended. Energy considerations must become a critical element in all policy decisions involving the selection and use of transportation systems.

**4232 Ports**

3. Several public agencies are responsible for the improvement of waterfront facilities on Humboldt Bay. Their efforts should be coordinated so that the public investment is effectively applied to support the commercial fishing industry and other public uses. The Humboldt Bay Harbor Recreation and Conservation District should take the lead role in coordinating this development.

**4233 Rail**

2. The County supports the modernization of freight rail services.
3. Humboldt County supports efforts to have the Northwestern Pacific Rail Line included in the California State Rail Plan as a project designated eligible to receive Federal funds for rehabilitation and new facility construction.
4. Humboldt County supports State and Federal programs that would provide funding for railroad crossing protection devices.

**4234 Airports**

1. Humboldt County should regularly update and maintain the Airport Master Plan as the primary County policy document for airport development.
2. Humboldt County shall establish land use controls around airports as recommended by the Airports Master Plan through the Airport Land Use Commission.

**4237 Planning Process**

3. Land use plans and policies shall be the basis for transportation facilities development.
5. The Circulation corridor requirements shall be consistent with expected traffic volumes.
6. County roads identified by the Public Facilities Plan Maps require improvements and roadway dedications as conditions of development as specified by Minimum Corridor Standards (see the standards 4240).
7. New development shall only be approved which will not significantly create or aggravate safety, capacity or parking problems on County roads.
8. Community Plans shall include a Circulation Plan which:
  - A. Establishes future locations of major roadways.
  - B. Minimizes dead end roads.
  - C. Sets requirements clearly connecting future land use developments with the provision of an adequate circulation system.
  - D. Considers designation of parking districts where in-lieu fees may be collected for a specified parking area.
9. All circulation planning shall be based on the County's very limited ability to construct new projects. To the maximum extent feasible, necessary circulation routes and facilities shall be obtained as a condition of approval for land development projects.
10. Access to public transit, bicycle parking and carpool parking should all be considered in circulation planning.

## **4240 STANDARDS**

1. The Rural Principal Arterial system consists of a connected rural network of continuous routes which have trip length and travel density characteristics indicative of substantial statewide or interstate travel.
2. The Rural Minor Arterial road system, in conjunction with the rural principal arterial system, links cities and towns above 5,000 in population and other major traffic generators, and forms an integrated network providing interstate and intercounty service.
3. Rural Connectors provide connections between the higher order system and have low-volume/long trip length characteristics.
4. The Rural Collector routes generally serve travel of primarily regional importance rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. The collector road system is subclassified into two categories:
  - a. Major Collectors are spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.
  - b. Minor Collectors are spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.
5. The Rural Local Road system serves primarily to provide access to adjacent land and accommodate travel over relatively short distances as compared to higher systems. (Not shown individually on circulation map.)
6. Urban Principal Arterials in conjunction with Rural Principal Arterials, provide the highest level of conventional street service to virtually all area traffic generators.
7. Ten Year Flood: a ten year flood means a flood which can reasonably be expected to occur once every ten years.

8. Road Classification - Minimum Corridor Standards

<u>Classification</u>	<u>County Minimum Roadway Design Category</u>
Rural Principal Arterial	State Highway
Rural Minor Arterial	State Highway
Rural Connector	State Highway
Major Rural Collector	5
Minor Rural Collector	4
Urban Principal Arterial	6
Minor Urban Collector	5
Minor Urban Arterial	6

\* Refers to Roadway Categories and Standards contained in Appendix 4-1 of the County Subdivision Ordinance.

**4300 TRAILS**

**4310 GOALS**

1. To provide guidelines for establishing a safe, efficient, and enjoyable County trails program for the transportation and recreation needs of bicyclists, equestrians, hikers, and joggers.
2. To increase participation in bicycling, horseback riding, and hiking activities which can provide physical, social, environmental, and economic benefits for County residents and tourists.

**4311 POLICIES**

1. Develop an accessible trails network as shown on trails map which includes trails within and between communities, parks and other publicly owned lands.
2. Provide safe bicycle and pedestrian trails to schools, when it is determined that inadequate access exists.
3. Encourage development of trails with varying lengths and difficulty through diverse terrain, scenery, and points of attraction.
4. Blend trails into the natural environment to reduce environmental disruption.
5. Place priority of bicycle route maintenance on routes that are most heavily used.

7. Encourage appropriate buses to be equipped with bicycle transport racks.
8. Encourage development of access and, where suitable, camping areas into existing and future recreation areas.
9. Encourage the placement of landscaping along horsetrails located adjacent to roadways to serve as safety and/or visual screens between trail and vehicle lanes.

#### **4312 STANDARDS**

1. Capital improvement programs should determine specific project expenses reflective of available finances and volunteer resources.
2. Maintenance of trails includes, but is not limited to, drainage grate modification, pothole repair, and bicycle path sweeping.
3. Education and associated law enforcement programs should be used through use of media, brochures, and/or public presentations.
4. Enforcement of rules pertaining to trails is to be accomplished through contact with the California Highway Patrol, County Sheriff and recognized volunteer trail patrol groups.
5. Trail system coordination is to be accomplished through contact with cities, Caltrans, and other appropriate agencies.
6. Notwithstanding policies of Coastal Elements, the following methods may be utilized for trail right of way acquisitions; where trails cross private lands:
  - Purchase of fee title, option to purchase agreements
  - Bargain sales (part sale and part charitable contribution)
  - Outright donation (fee simple)
  - Donation with a reserved life estate or undivided land interest
  - Bequests
  - Donation or purchase of easement
  - Lease and/or sale and leaseback
  - Various parkland dedication ordinance provisions of the State Subdivision

Map Act

- Various provisions of the California State Subdivision Map Act as in Articles 3 and 4, Chapter 4, or other relevant provisions

- Eminent Domain may be used as a last resort when all other acquisition methods have proved unsuccessful. The County should not use proceedings of eminent domain in the acquisition of property for trail purposes, where those properties are managed primarily for agricultural or timber production, except for purposes of widening County roads.

7. In the review of accessways to trails, the approving authority shall find that:

A. The proposed mode of access and the location of such access shall be consistent with adjacent uses and shall not have an adverse impact on adjacent owners' use of their property and shall be consistent with the intensity of development; and

B. The likelihood of trespass and vandalism on adjacent private property has been minimized through the location of, and the level of improvements required, for the use of the accessway; and

C. The need to provide for public health and safety has been evaluated for:

1. parking
2. road capacity and traffic patterns
3. conflicts in uses (i.e. pedestrian, equestrian, vehicular)
4. use by the handicapped
5. capacity of sanitary facilities including trash disposal
6. topography of trail (too steep);

D. Adequate access is not available nearby; and

E. There is no significant conflict with agriculture including:

1. vandalism,
2. theft of livestock, agricultural supplies and tools,
3. damage to crops and livestock,
4. trespass on areas not part of accessway,
5. damage to fencing and gates,
6. livestock depredation,
7. litter,
8. interference with agricultural operations; and

F. The development and use of the accessways shall be consistent with the environmental limitations as shown on the Biological Resources Maps.

### *1979 Trails Plan*

#### GOALS

- Provide guidelines for the establishment of a safe, efficient, and enjoyable transportation and recreation oriented county trails program for use by bicyclists, equestrians, hikers, and joggers.
- Increase the level of participation in transportation and/or recreation bicycling, horseback riding, and hiking activities which can provide physical, social, environmental, and economic benefits for county residents and tourists visiting the region.

#### 2.4 OBJECTIVES •

- Develop a conveniently accessible trails network which interconnects communities with shopping and employment districts, community activity centers, bus stops, parklands, and other county, state, and federal lands of countywide significance.
- Determine methods for trails acquisition, development, and maintenance which utilize a maximum of volunteer services and other low cost trail establishment options.
- Provide for safe bicycle and pedestrian trails to schools within county jurisdiction when it is determined that inadequate access conditions exist.
- Develop and/or institute on-going traffic safety and trail user education programs for students (particularly in the elementary grade levels), general trail users, and motorists. • Determine trail routes which may be safely used by bicyclists, equestrians, and hikers of all ages and skills.
- Promote activities of bicyclists, equestrians, joggers, and hikers based on the direct user benefits or enhanced physical and mental well-being.
- Provide a variety of trail experiences by locating trails of varying lengths and difficulty through diverse terrain, scenery, and points of attraction to draw users and maintain their interest.

Blend trails into the natural environment to result in as little environmental disruption as possible.

- Promote activities of bicyclists, equestrians, and hikers which enhance environmental and economic conditions for the county.
- Provide policies and adequate enforcement of trail use regulations in order to protect trails and adjacent properties and maintain safe conditions for all trail users. • Enforce rules pertaining to trails use through the California Highway Patrol, County Sheriff, and recognized volunteer trail patrol groups.
- Adopt necessary ordinances pertaining to trail use violations which provides for direct monetary penalty via infractions.
- Adopt trail designs which minimize trail maintenance requirements.
- Place priority for sweeping and general maintenance on high volume bicycle routes.
- Retain those trails shown in this plan through lands undergoing development.

- Encourage public and agency participation in all phases of trails establishment.
- Coordinate trails system planning with cities, CalTrans, and other appropriate agencies.
- Incorporate staging areas and, where suitable, camping areas into existing and future recreation areas.
- Provide trees and other available landscaping along horse trails located adjacent to roadways to serve as a partial barrier between trail and vehicle lanes.
- Establish an annual capital improvement and project priority program which emphasizes implementation of bicycle transportation and school access routes and reflects available financial and volunteer resources.
- Maintain a comprehensive inventory of potential trail routes including, but not limited to, routes proposed in the Trails Plan.
- Monitor accident data and impacts resulting from implementation of any portions of the Trails Plan.
- Conduct an annual review of the trails plan and seek amendments as needed to reflect changing design specifications, implementation impacts, and user needs, etc.

The County Should:

- Provide supportive staff assistance to volunteer public trails groups in the coordination and development of a conveniently accessible trails network which provides a variety of trail user experiences for bicyclists, hikers, equestrians, and joggers. • (Public Works)
- Construct trails according to fundamental state guidelines to insure user safety and basic uniformity with trails developed by other agencies statewide. (Public Works)
- Coordinate trail system planning and implementation with cities, CalTrans, Humboldt County Association of Governments, and other appropriate agencies where proposed trail routes affect those jurisdictions. (Public Works)
- Monitor general land use development and subdivisions to see that easements for designated trails are developed or maintained within growing areas (Ref. Subdivision Map Act). (Planning)
- Provide assistance when requested to help determine where shopper and/or employee need would justify bicycle support facilities. (Public Works)
- Maintain a comprehensive inventory of potential trail routes including, but not limited to, routes proposed in this plan. (Public Works)
- Develop a comprehensive inventory of all Federal, State, County, and trail user funding sources and update this list as new sources become available. (Public Works)

5.2 PUBLIC INVOLVEMENT The County should:

- Encourage and maximize active public involvement in all phases of trails establishment and support public efforts directed at implementation of the Trails Plan. (Public Works, Planning)

- Place as much responsibility as possible for Trails Plan implementation with public volunteer groups interested in trails development so to reduce county staff support time needed to implement the Trails Plan. (Public Works)
- Establish a permanent Trails Advisory Committee to advise county staff and the Board of Supervisors in the planning, development, maintenance, monitoring, and up—dating of the Trails Plan. (Public Works)
- Encourage private sector involvement in the trails program through the provision of facilities and support services such as boarding and rental stables, maintenance and repair shops, trail tours, bicycle rentals, etc. (Public Works)
- Promote a “sense of community” by encouraging public participation in all phases of establishing community trails. (Public Works, Planning)

#### 5.3 LAND USE The County Should:

- Orient trails establishment to the utilization of public lands and roadways and avoid trail routing on private lands unless owner approval or public need justifies. (Public Works)
- Blend trails into the natural environment and use construction standards and techniques which minimize environmental impacts. (Public Works)
- Prohibit the use of motorized vehicles on designated off-road bicycle, hiking, and equestrian trails except where required for construction, maintenance, and enforcement purposes unless otherwise specified. (Public Works, Sheriff)
- Prohibit fires and camping on all trails within county jurisdiction unless otherwise specified. (Public Works, Sheriff)
- Prohibit or regulate dogs on all trails near agricultural lands unless otherwise specified. (Public Works, Sheriff)

#### 5.4 DEVELOPMENT The County Should:

- Negotiate acquisition terms with property owners affected by trail route proposals using various means as stated in Section 4.4.3.3. (Public Works, Planning)
- Be responsible for the development and maintenance of trails passing through private lands unless otherwise requested by the property owner. (Public Works)
- Consider its long term capabilities for the maintenance of all existing trail facilities when additional trails are being considered for development. (Public Works)
- Provide adequate access routes to shopping and employment areas for pedestrians and bicyclist use. (Public Works)
- Encourage businesses and employers to provide secure, weather protected bicycle storage facilities for shopper and/or employee use where need is determined. (Public Works)
- Provide suitable trail facilities at appropriate sites for use by the handicapped after it has been determined that such a facility would be used. (Public Works)
- Provide *staging areas* where suitable, for equestrian and hiker groups. (Public Works)

- Seek donations of labor, plants, or other materials to provide a partial barrier between trail and vehicle lanes as specified in Section 951 of the Streets and Highways Code. (Public Works)

#### 5.5 SCHOOL ACCESS The County Should:

- Coordinate and/or provide for adequate bicycle and pedestrian trails to County schools, particularly at the primary grade level, where physical conditions along the route need improvement. (Public Works)
- Develop and/or encourage on—going child educational programs directed at traffic safety awareness and bicycle maintenance. (Public Works)
- Provide pedestrian crossings at those high traffic volume intersections which carry significant amounts of child bicyclists and walkers. (Public Works)

#### 5.6 IMPLEMENTATION The County Should:

- Maximize various methods for trails acquisition, development, and maintenance which lead to the establishment of trails at little or no cost to the County. (Public Works, Planning)
- Utilize a maximum of community-contributed services (volunteerism) and user funding for the acquisition, development, and maintenance of trails within the County system, particularly community trails. (Public Works)
- Reserve available trails program finances primarily for those project features which can not be provided through volunteerism or special services programs. (Public Works)
- Establish methods for user subsidy so that actual trail users may contribute a more proportionate share for the establishment of trails and related support facilities. (Public Works)
- Orient construction of bicycle shoulder improvements to those projects where general road improvements are being made in order to reduce overall bikeway construction costs. Special attention should be placed on those road sections where grade and/or sight distance limitations impede safe route use. (Public Works)
- Orient bikeway development to the improvement of on-street (ClassII, III) bicycling conditions rather than off-street (Class I and IV) routes.
- Give priority when implementing school access improvements to those projects which serve additional functions of transportation and/or recreation. (Public Works)

#### 5.7 MAINTENANCE The County Should:

- Encourage public involvement in trail maintenance. (Public Works)
- Provide necessary funds for the maintenance of existing county trails prior to development of new trail facilities. (Public Works)
- Utilize trail designs which minimize trail maintenance. (Public Works)
- Make effective cleaning and general maintenance of high cyclist volume on—street bicycle routes a priority item for county road sweepers and maintenance crews. (Public Works)

- Encourage Caltrans to maintain an effective sweeping and general maintenance schedule for state bicycle routes as user need indicates. (Public Works)

#### 5.8 EDUCATION The County Should:

- See to the development and implementation of public educational programs which serve to inform people of the various benefits of trail use activities, concerns relating to private property issues, general trail use rules, motorist and trail user awareness, and safe school access. (Public Works)

#### 5.9 ENFORCEMENT The County Should:

- Adopt necessary county ordinances pertaining to the trails program which supplement existing state law and which regulate trail use and protect the interests of private property owners. (Public Works, County Counsel, Sheriff)
- Make trails related County ordinances infractionary and punishable by a fine only therefore providing for receptive and responsive punishment and a simplified judicial process. (Public Works)
- Enforce state and county laws which apply to the trails program enforceable under the jurisdiction of the Sheriff. The Sheriff may appoint County Park personnel or members of the public as Special Deputies provided these persons meet the requirements of the Sheriff's Department policy and comply with criteria established by Section 830.6 and 832.6 of the California Penal Code. (Sheriff, Public Works)
- Provide the public with information which explains state and county laws pertaining to the trail program (including Vehicle Code violations) as part of a promotional trails brochure and education program. (Public Works, Sheriff)

#### 5.10 PROMOTION The County Should:

- Encourage transportation and/or recreation activities of bicyclists, equestrians, and hikers based on the health, energy conservation, and environmental benefits of such activities. (Public Works)
- Assist the Trails Advisory Committee and other groups in the promotion of transportation and recreation activities of bicyclists, equestrians, hikers, and joggers. (Public Works)
- Encourage walking and bicycling for trips to community shopping areas and work locations., (Public Works)
- Develop a promotional trails brochure which provides *users* with information regarding: benefits of trail use activities, regulations relating to safe and legal trail conduct, trails which are proposed by the county and those which the county has developed including route condition, private property issues, and other pertinent information. (Public Works)
- Support reasonable State and Federal legislative efforts to develop, enhance, and evaluate trails related equipment and safety standards and support reasonable legislation which will aid in trail development funding. (Public Works)

#### 5.11 REVIEW AND UPDATE The County Should:

- Assist the Trails Advisory Committee in conducting an annual review of the Trails Plan and seek amendments as needed to reflect changing design specifications, implementation impact, and user needs. (Public Works)

### *McKinleyville Community Plan*

#### **4200 Circulation**

##### 4220 Goal

Provide for a circulation system which will accommodate growth in the McKinleyville area and should work toward safe, convenient routes for pedestrians, bicyclists and equestrians throughout the community.

##### 4230 Policies

1. The alignments of collector and arterial streets necessary for community circulation should be located and reserved for future development. These routes are illustrated on the Circulation Plan map.
2. Rights-of-way for new arterial and collector routes as generally shown on the Circulation Plan Map shall be dedicated to the County as condition of approval of any development permit as each area is developed, unless waived by the Planning Commission based on approval of an alternative right-of-way.
4. New roadway design standards (for example, those identified in *Planning and Design for Bikeways in California*) should be adopted which incorporate provisions for walkways and bikeways into all road designs.
9. Priority (from the available funds provided for McKinleyville) shall be given to circulation projects which enhance safe pedestrian and bicycle access to McKinleyville's schools.
13. Within the McKinleyville Urban Development Area, lighting should be required near new travelways, major intersections and the Commercial Core Area when recommended by governmental agencies.
14. On-street parking and driveway encroachments shall be prohibited along all new arterial roads.
15. Improvement to existing collector and arterial roadways should be designed to eliminate on-street parking.
17. A funding mechanism should be provided for the design of improved public pathways. Funding alternatives include development impact fees, user fees (such as fuel taxes and tolls), non-user fees (such as property and sales taxes), special benefit fees (such as assessment districts), joint ventures (such as public/private agreements), and debt financing (such as bonds, certificates of participation etc.).
21. New subdivisions and other major developments shall be designed to integrate with the pedestrian circulation network in the community.

22. In order to minimize travel distances for pedestrians (encouraging pathway short-cuts and non-automobile use), new subdivisions and other major developments shall provide rights-of-way for pathways consistent with the adopted Trails Plan between public streets (or other public or commercial destinations) at least every 1,320 feet (1/4 mile) in R-1 neighborhoods; and every 350 feet (one city block) in higher density areas. Assessment districts, subject to voter ratification or other funding mechanisms, shall be created for all subdivisions to improve and maintain rights-of-way to pathway standards as identified in the Circulation and Trails Plans.
23. Developers shall be encouraged to dedicate landscaped buffer strips to the McKinleyville Community Services District (MCS D), accompanied by a maintenance fee assessment (pursuant to MCS D Ordinance 42).
25. Offsite improvements along local streets shall be encouraged in the design of new developments.

4250                    **Implementation**

1. A comprehensive circulation plan which integrates the circulation needs of pedestrians, bicyclists, and automobiles shall be adopted as part of this Community General Plan.
2. All ordinances necessary for the implementation of the policies of the circulation element of this Plan should be adopted within six months of the approval of the General Plan revision.
3. Investigate road improvement assessment districts as a means of funding priority improvements to new and existing roads including non-vehicular travelways.
4. An annual capital improvement and project priority program should be adopted within one year of the approval of this General Plan revision.

**4260                    Alternate Roadway Designs**

4261                    **Goal**

1. To provide alternate or conceptual road way designs intended to show how a variety of provisions for pedestrians, bicyclists and automobiles should be implemented.

4262                    **Policies**

1. All subdivision applications which propose new roads not listed in the circulation element shall submit alternate roadway designs which reflect an emphasis on pedestrian convenience. They may include reducing travelway widths within the required right-of-way easement.
2. Prior to approving a reduced roadway width, the County shall ensure that the roadway provides adequate access for emergency vehicles.
3. The County shall implement where appropriate as determined by the Public Works Department the use of traffic calming measures as a means of reducing the speed of

- motor vehicles, and facilitating pedestrian movement. Traffic calming measures include chicanes, curb extensions and traffic circles.
4. The County or other local agency should explore alternative financing mechanisms for landscape maintenance zones which will enhance street aesthetics and enable landscape strips with street trees within the public right-of-way.
  5. All pedestrian pathways should be located adjacent to or within landscape strips or greenways. Pathways should not be located adjacent to the traveled way.
  6. Subdivisions involving five or more units and zoned for under 20,000 square foot minimum parcel size are encouraged to incorporate parking bays into the design of any proposed traveled way that are not shown as collector streets on the Circulation Plan map.
  7. Intersections and streets shall be designed to provide an attractive environment for multiple modes of transportation.
  8. The County shall explore the use of incentives to property owners/subdividers for providing landscaping strips, maintenance programs, and parking bays. These incentives may include density bonuses.

#### **4300                    Trails, Greenways, Parks, and Recreational Facilities**

##### **4301                    Goals**

1. Provide for all citizens a variety of enjoyable leisure, recreation, and cultural opportunities that are accessible, affordable, safe, physically attractive, and uncrowded.
2. Provide a network of safe pedestrian and bike trails through off-road linear greenbelts and pathways throughout McKinleyville to supplement the on-road bike paths and bike lanes to be implemented as part of the circulation element.
3. Provide for the coordinated multi-agency development of a full spectrum of recreational facilities.

##### **4310                    Trails and Greenways**

##### **4311                    Goals**

1. To provide guidelines for establishing a safe, efficient, and enjoyable trails program for the transportation and recreational needs of bicyclists, equestrians, hikers and joggers.
2. To increase participation in bicycling, horseback riding, and hiking activities which can provide physical, social, environmental, and economic benefits for community residents and tourists.
3. To insure that trails and greenways are provided proportional to development.

**4312 Policies**

1. The County shall implement, in cooperation with MCSD and/or other entities, the Trails Map (see Figure 12) prepared and adopted by the McKinleyville Citizens' Advisory Committee (1997-98). This map was compiled after consulting the Trails Policies in Volume 1 of the Framework Plan, the Humboldt County's Trail Plan adopted in 1979, the McKinleyville Services District's Recreational Plan, the RCAA Recreational Trails Plan and the "Corbett Plan" (Town Planners, 1993).
2. "A Trails Implementation Plan shall be prepared that includes a trail by trail review with recommendations for how easements could be gained and under what circumstances dedication of easements might be required. Development projects proposed on lands that include a trail as shown on the Trails Map may be required to dedicate and/or improve such trail if an individualized determination is made that the dedication is related both in nature and extent and is roughly proportional to the impact of the proposed development.  
  
For purposes of this section, 'development projects' include discretionary projects including subdivisions, special or conditional use permits, variances, and zoning reclassifications and ministerial projects requiring more than five (5) new parking spaces. Excluded from requirement to dedicate a trail easement are ministerial projects that would require less than five (5) new parking spaces. Also excluded are the following discretionary projects: temporary uses, including public assemblages, timber production, variances where the proposed development does not interfere with a trail alignment, lot line adjustments which do not interfere with a trail alignment, signage."
4. The County should promote cooperative interagency planning of pathways, bikeways and equestrian trails.
5. Extraordinary offers of trail dedication (e.g., those offering to undertake trail construction, or provide supplementary corridor width and/or landscaping) shall merit consideration toward density bonus credit.
6. The development of trails by the private-sector shall be encouraged in addition to the above, but shall not substitute for them.
7. Joint public-private development of trails shall be encouraged.

**4313 Standards**

5. Enforcement of rules pertaining to trails is to be accomplished through contact with the California Highway Patrol, County Sheriff and recognized volunteer trail patrol groups.
6. Trail system coordination is to be accomplished through contact with cities, Caltrans, and other appropriate agencies.
7. The following methods may also be utilized for trail right-of-way acquisitions where trails cross private lands:
  - A. Purchase of fee title or option-to-purchase agreements
  - B. Bargain sales (part sale and part charitable contribution)
  - C. Outright donation (fee simple)
  - D. Donation with a reserved life estate or undivided land interest
  - E. Bequests

- F. Donation or purchase of easement
- G. Lease and/or sale and leaseback
- H. Various provisions of the California State Subdivision Map Act as in Articles 3 and 4, Chapter 4, or other relevant provisions
- I. Eminent domain may be used as a last resort when all other acquisition methods have proved unsuccessful. The County should not use proceedings of eminent domain in the acquisition of property for trail purposes, where those properties are managed primarily for agricultural or timber production, except for purposes of widening County roads.

*Eureka Community Plan*

**4200 Circulation**

**4220 Goals and Policies**

Goal A:      Roadway Network: To provide a circulation system that accommodates existing and planned land uses and provides for an efficient movement of people, goods, and services within the Planning Area.

Policies:

1.      The County shall strive to maintain a Level of Service of C or better on arterials in the Planning Area. The acceptable level of service goal will be consistent with the financial resources available and the limits of technical feasibility.
2.      The County shall maintain design standards for streets and roadways that meet the American Association of State Highway and Transportation Officials' street design standards and require that existing facilities be improved to, and that new facilities be constructed to these standards, where feasible.
3.      The County shall require the dedication, extension, widening, and construction of public streets as abutting lands are developed or redeveloped. In currently developed areas, the County may determine that improvements may be either infeasible or undesirable.
4.      The County should upgrade existing substandard streets, as needed and when feasible, to accommodate traffic flow and minimize safety hazards.
5.      The County shall require the dedication of rights-of-way and may require the construction of roadways at time of subdivisional development in order to conform to all the policies in the Eureka Community Plan and its circulation plan. It is understood that the timing of such dedication and/or construction shall be in phase with the demands created by the actual subdivision development.

Goal B:      Parking: To ensure the adequate provision of both on-street and off- street parking.

Policies:

1. The County shall continue to implement parking requirements according to County standards. These County standards should be periodically reviewed and updated.
2. The County should consider replacement of on-street parking in commercial areas, which will be lost to additional turn lanes at intersections, with an equal number of off-street spaces within the same vicinity, where feasible. Harrison Avenue provides a good example.

Goal C:      Transit: To encourage the use and extension of the transit system where feasible.

Policies:

1. The County should support the expansion of fixed route service as development densities support such extensions.
2. The County should provide information to local residents on available transit services.

Goal D:      Pedestrians: To provide for a safe and convenient pedestrian circulation system.

Policies:

1. The County shall continue to require sidewalks for developments in accordance with County design standards and encourage additional pedestrian access where applicable.
2. The County shall consider the need for an interconnected system of pedestrian paths where appropriate, especially near schools, parks, and commercial development within residential areas.

Goal E:      Bicycles: To encourage the use of bicycles as an alternate mode of transportation.

Policies:

1. The County should encourage the use of bicycles as an alternate mode of transportation, and consider the need for an interconnected system of bicycle lanes or paths where appropriate.
2. The County should encourage new commercial developments to provide bicycle racks and should support the placement of bicycle lockers at park-and-ride facilities.

Goal F: Financing: To provide a financing program for future circulation improvements.

Policies:

1. The County shall continue to implement their Five Year Priority list capital improvement program so that improvements can be prioritized and implemented in a timely manner.
2. After all feasible alternatives have been exhausted, the County should develop a traffic fee schedule to be applied to new development to pay a pro rata cost of the required improvements in Section 4204 of the Eureka Community Plan.

Goal G: Coordination with Other Agencies and Jurisdictions: To maintain a cooperative relationship with state, regional, and local agencies.

Policy:

1. The County shall continue to coordinate with the California Department of transportation, the Humboldt County Association of Governments, and the City of Eureka in implementing future transportation and circulation improvements.

## 8.5 Preliminary Environmental Impact Analysis

### Potential Impacts, Mitigations & Findings

An impact is considered significant if:

*Implementation of the Element will precipitate an increase in traffic volume which will result in a decrease in the level of service in the unincorporated areas below LOS C.*

*The buildout anticipated under the Element will adversely affect public transit systems.*

*New development will cause an increased parking demand which cannot be accommodated and will exceed the capacity of existing parking facilities.*

IMPACT 7-A Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.

IMPACT 7-B Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

IMPACT 7-C Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

There will be an adverse impact on level of service on streets and highways with the growth projected in the Element. Most of the growth will likely occur in urban areas where traffic conditions are presently very good, and which have excess capacity to accommodate some of the increased traffic resulting from the projected growth.

The Eureka study found that even if all 3,100 units projected by the Element were built in the Eureka area, all but one of the 20 streets included in the study would still be operating at

LOS C or above (*Eureka Community Plan Draft Environmental Impact Report*, Humboldt County Planning and Building Department, 1992, p. 59). This project will therefore have no significant impacts on traffic conditions in the Eureka area.

If future development patterns echo historical development patterns, 75% of the growth in the unincorporated area will occur in McKinleyville. This would be expected to increase the peak hour traffic in that areas by as much as 4,650 vehicles.

The McKinleyville study also found that all roads in the McKinleyville area will be operating at LOS A or B if all the homes projected by the Element were constructed in McKinleyville. However, the traffic impacts from that level of new development will be significant for a number of intersections. If all the homes projected in the Housing Element were built in McKinleyville, the intersection of Hiller and Central Avenue will drop to LOS C with an average 2.2 second increase in delays at that intersection per vehicle. The LOS at the intersection between Murray Road and McKinleyville Avenue would also drop from LOS B to C. And on the average, vehicles will have to wait 17 seconds longer at the unsignalled intersection of Central Avenue and Murray Road, corresponding with a drop in the LOS for that intersection from D to E. Traffic impacts on the intersections described above are significant.

Development in rural areas is expected to be widely dispersed across the County. Based on historical development patterns, approximately 25% of the units projected by the Element to be constructed over the next five years will be built in rural areas. These units could potentially be dispersed across more than a million acres of land, which is served by many different arterials, collectors, major and minor roads.

Accident rates tend to correlate with the type of road and its general location (e.g. urban suburban or rural area). Traffic volumes are not necessarily highly correlated with accident rates. An exception occurs when Level of Service reaches F -- the stop and go driving in bumper-to-bumper conditions may raise the accident rate somewhat.

#### Mitigation Measures and Findings

For most parts of the County, including both rural and urban areas, this project is not expected to have any significant adverse impacts on the LOS of roads. An exception is in the community of McKinleyville, where most of the population increase will probably take place. Although a more in-depth study may prove otherwise, it seems clear that several intersections in McKinleyville will probably deteriorate to below a LOS C unless specific improvements are made.

Policies, programs regulations and standards administered by the County, regional agencies and the State partially mitigate this impact, but not to a level of insignificance.

#### IMPACT 7-D. Result in inadequate emergency access.

Emergency access to new residential construction are mitigated by General Plan policies in the Hazards and Resources section of the Framework Plan and by requirements of the

County's Fire Safe Ordinance, which applies to all new residential construction and subdivisions.

#### Mitigation Measures

The proposed program 3.1c, which will amend the zoning ordinance to specifically allow second units on roads that do not meet Road Category 4 standards provided has built in mitigation for any adverse impacts regarding wildland fires by ensuring such use and the access road is consistent with the Fire Safe ordinance.

#### Finding

Existing policies, programs, standards and regulations noted above serve to reduce Impact 7-D (Emergency Access) to a level of insignificance.

#### IMPACT 7-E Result in inadequate parking capacity.

The projected increase in vehicle use indirectly resulting from implementation of the Element will result in the need for additional parking facilities. Parking for residential and commercial development will be provided when the projects are built according to the standards in the zoning ordinance. All projected need for parking should be met by these regulations.

## Glossary and Definitions

**Airport Master Plan** The plan developed for most of the airports in the County that restricts the allowed uses, and residential densities in areas that would impact aircraft operations

**Capital Improvement Plan (CIP)** A plan that identifies and prioritizes capital expenditures for the County for the next five-years.

**Greater Eureka Area Travel Model (GEATM)** A county-wide travel demand forecasting model used to assess impacts of land use and transportation changes, and help determine the effectiveness of potential improvements to the road system.

**Level of Service (LOS)** Most often, this term describes a measure of the adequacy of the road to accommodate vehicle traffic, however, the measure can also be applied to non-motorized transportation facilities as well.

**Modified Overall Condition Index (MOCI)** A measure developed by consultants to apply the OCI more broadly to all roads in the Urban Study Areas. Like the OCI, the MOCI will be used to prioritize road maintenance projects.

**Multi-Modal Transportation.** A balanced multi-modal transportation system is one that accommodates public transit, bicycles, and pedestrians, as well as motorized vehicles.

**Northern Counties Logging Interpretive Association (NCLIA)** An organization formed to create a logging and timber technology museum in Humboldt County, coupled with an operating steam-powered "Humboldt Bay Scenic Railroad" excursion train.

**Non-motorized transportation facilities** Improvements for bicycles and pedestrians, and for the mobility-challenged, including sidewalks, crosswalks, and bicycle lanes associated with the road system.

**Overall Condition Index (OCI)** A measure used by Humboldt County to rate the condition of a sample of arterial and collector roadway surfaces on a scale from 0-100. This measure is used to prioritize road maintenance projects.

**Pathways** Developed portions of rights-of-way from which motor vehicles are excluded.

**Pavement Management System (PMS)** The system used by Humboldt County to generate pavement distress data for a representative sample of arterial and collector roadways in Humboldt County. This data forms the basis of an "Overall Condition Index" (OCI), which rates roadway surfaces on a scale from 0-100.

**Regional Transportation Plan (RTP)** A regional transportation plan developed updated every two (2) years by the Humboldt County Association of Governments (HCAOG).

**Trail** A surfaced pedestrian walkway, bicycle path, semi-improved recreational trail for walkers, bicyclists, and equestrians, an unimproved rural trail for hikers, mountain biking, and horseriding.

**Volume to Capacity Ratio (V/C Ratio)** A measure of the volume of traffic on a road and its capacity to move traffic efficiently.