

**RESOLUTION NO. 2007-13**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE ADOPTING  
THE ELK GROVE TRAILS MASTER PLAN**

**WHEREAS**, the City of Elk Grove supports the development, maintenance and enhancement of parks and trails serving a variety of needs at the neighborhood, area and citywide level; and

**WHEREAS**, General Plan Parks, Trails, and Open Space Element Parks and Trails Policy 2, Action 3 states that the City shall adopt a comprehensive Parks and Trails Master Plan; and

**WHEREAS**, the City of Elk Grove General Plan states that the trails system in Elk Grove should provide for connectivity, so that all trails are linked to the extent possible for greater use as recreational and travel routes; and

**WHEREAS**, the City of Elk Grove needs a Trails Master Plan in order to identify existing improvements, refine the adopted Trails Map, provide an implementation strategy and identify potential funding sources for trail construction, maintenance and operation; and

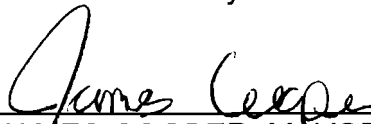
**WHEREAS**, the Elk Grove City Council directed staff at the July 13, 2005 City Council meeting to prepare a Trails Master Plan that would include these elements; and


**WHEREAS**, the Elk Grove Trails Committee recommends approval of the Elk Grove Trails Master Plan; and


**WHEREAS**, the Elk Grove Planning Commission recommends approval of the Elk Grove Trails Master Plan;

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Elk Grove hereby adopts the Elk Grove Trails Master Plan.

**PASSED AND ADOPTED** by the City Council of the City of Elk Grove this 10th day of January 2007.

  
\_\_\_\_\_  
JAMES COOPER, MAYOR of the  
CITY OF ELK GROVE

ATTEST:  
  
\_\_\_\_\_  
PEGGY E. JACKSON, CITY CLERK

APPROVED AS TO FORM:  
  
\_\_\_\_\_  
ANTHONY B. MANZANETTI,  
CITY ATTORNEY



CITY OF ELK GROVE

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# TRAILS

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MASTER PLAN

DRAFT  
NOVEMBER 2006



# City of Elk Grove



## Trails Master Plan

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**Adopted by the City Council**

**\_\_\_\_\_, 2006**

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## **1.0 INTRODUCTION**

### **1.1 Purpose and Need**

The Elk Grove General Plan states that the City shall adopt a comprehensive Elk Grove Trails Master Plan (EGTMP). The EGTMP is the expression of the City's desire to have an exemplary off-street multi-use trail system that provides connectivity throughout the City and the wider Sacramento region in order to offer recreational opportunities and an alternative method for transportation for Elk Grove residents. In order to achieve this exemplary trail system, the City acknowledges that it is necessary to provide direction on where trails should be located, design standards and guidelines to describe the desired characteristics of trails, identify funding sources for trail planning, construction and maintenance, establish prioritization criteria for which trail projects to implement first, and to describe the City and inter-agency collaborative actions required to create the trail system. The Elk Grove Trails Master Plan (EGTMP) was adopted by the City Council in \_\_\_\_\_, 2006, but it will be continually updated as goals are achieved, as new funding sources become available, and in order to ensure consistency with the Elk Grove General Plan.

### **1.2 Relationship to Existing Plans and Policies**

The Elk Grove Trails Master Plan (EGTMP) bears relation to numerous other Elk Grove plans, policies, and codes.

- **City of Elk Grove General Plan.** The City of Elk Grove General Plan contains basic trail policies and an initial location map of where trails should be built within the City. This EGTMP is consistent with, builds upon, and refines these General Plan policies and initial map.
- **City of Elk Grove Bicycle and Pedestrian Master Plan (BPMP).** The City of Elk Grove Bicycle and Pedestrian Master Plan was adopted in July of 2004. It is a sister document to the EGTMP that addresses on-street bicycle and pedestrian facilities.
- **City of Elk Grove Transportation Capital Improvement Program (TCIP).** The EGTMP lists projects that can be included within the TCIP, which is regularly updated by the Elk Grove City Council.
- **City of Elk Grove Specific Plans and Approved Development Guidelines.** There are numerous Specific Plans and approved development guidelines that cover large areas within the City of Elk Grove. Many of these Specific Plans and approved development guidelines were in existence prior to Elk Grove's incorporation. In instances where they provide direction for the development of off-street, multi-use trails, those plans and guidelines take precedence over the standards contained in the EGTMP. However, given its comprehensiveness, the EGTMP provides additional policies, refinements, and implementation actions

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that should be implemented within those areas covered by Specific Plans and approved development guidelines.

- **The City of Elk Grove Municipal Code.** The City of Elk Grove Municipal Code, which includes Zoning Ordinances, contains many requirements viewed as central to trail implementation and increasing trail usage. For example, zoning ordinances establish the development project approval process and require that development projects include the installation of bicycle parking spaces.
- **Elk Grove Community Services District Master Plan.** The EGTMP calls for a collaborative relationship between the City and the Elk Grove Community Services District for the construction and maintenance of trails and calls for the construction of trails additional to those that are shown on the CSD's Master Plan Map.

The development of off-street, multi-use trails is subject to other regional, California, and Federal regulations, codes, and planning documents. As such, these documents have been reviewed, consulted, studied for consistency, and where appropriate, folded into the EGTMP. There may be instances where trail designers should reference these specific documents to clarify site-specific trail design requirements. A brief list is included below:

- The Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) Part 9 Traffic Controls for Bicycle Facilities and the 2003 MUTCD California Supplement as put forward by the U.S. Department of Transportation Federal Highway Administration.
- ADA Standards for Accessible Design and Americans with Disabilities Act Accessibility Guidelines (ADAAG) as put forward by the U.S. Dept. of Justice/U.S. Dept. of Transportation and the U.S. Access Board, respectively.
- Chapter 1000 of the Caltrans Highway Design Manual as put forward by the California Department of Transportation.
- The Regional Bicycle, Pedestrian, and Trails Master Plan as adopted by the Sacramento Area Council of Governments in November 2004 and as amended in September 2005.
- The 2010 Sacramento City/County Bikeway Master Plan as adopted by Sacramento County in November 1993 and by the City of Sacramento in April 1995.

Lastly, it is important to note that the EGTMP provides a well-defined framework that supports City of Elk Grove collaboration and planning regarding the creation of regional trails, such as those proposed for Upper Laguna Creek and the Central California Traction Railroad alignment.

Please refer to **Appendix A** for a further list of specific Elk Grove and regional policies that are related to Elk Grove trail planning, design, and implementation.

### **1.3 Elk Grove Trails Master Plan Planning Process**

Active participation of the Elk Grove Trails Committee and City staff has facilitated the Elk Grove Trails Master Plan planning process, which began in July 2005. The EGTMP is also the continuation of multiple community dialogs occurring in the context of the City of Elk Grove General Plan and the Elk Grove Bicycle and Pedestrian Master Plan (BPMP) processes.

In 2003, the City of Elk Grove conducted an on-line survey which examined, among other items, whether respondents currently commute via bicycle and how the amount of cycling could be increased. Residents responded that currently most cycling in Elk Grove is for fitness and recreation (29 percent of those who responded said this is the type of cycling they do most), fun and recreation (23 percent), and riding with children (15 percent). At that time, "not enough safe routes" was also the most common reason cited by respondents as limiting their cycling—65% of persons responding to the survey selected this as the most significant impediment to increasing their cycling. Providing more off-street bicycle trails was ranked the most important bicycling improvement.

Public workshops were held during the fall of 2005 in order to solicit information on the performance of the existing trails in Elk Grove, understand goals for trail development, identify the locations of priority trail improvements and examples of successful trail implementation, and receive recommended implementation strategies.

The most frequently mentioned best examples of trail implementation included those existing trails that offered longer continuous mileage, offered direct and/or scenic access to natural areas, offered access to popular destinations, and were well maintained, especially those trails along Elk Grove Creek, trails in the Stonelakes neighborhood, trails along Poppy Ridge Road, and trails in Camden Park.

The major themes mentioned most frequently during the Public Workshops regarding trail system improvements included:

- The desire for more off-street trails in order to increase recreation opportunities for all types of trail user groups, especially along the creeks within the City,
- The desire for more off-street trails in order to provide safe transportation corridors for bicyclists, pedestrians, and equestrians away from roadways – especially for children and around schools,
- The desire for more off-street trails that lead to popular destinations within Elk Grove, such as major commercial centers, employment centers, schools, and parks,
- The desire for filling in gaps within the existing trail system so that trails can be as long and continuous as possible,



## City of Elk Grove Trails Master Plan

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- The desire for an off-street means of crossing Highway 99 in multiple locations,
- The desire for more off-street trails that connect to alternative transportation modes and that connect to regional trails to promote regional connectivity,
- The desire for trail signage that clarifies trail etiquette and increases the ease of navigating the trail system,
- The desire for continual maintenance of the trails in order to remove debris, remove hazardous landscaping, and maintain trail surface quality, and
- The desire for trail education and publicity programs to increase trail safety and usage, respectively.

The ideas contained in the above-mentioned best examples of trail implementation and themes for trail improvements were directly incorporated into the EGTMP vision and goals.

According to the recent "Envision Elk Grove" public outreach results, more than two-thirds (69%) of the on-line survey respondents said they considered community planning projects that incorporate elements such as open space and walking trails to be very important in determining a community's quality of life. Another 25 percent considered this type of project to be somewhat important to determining quality of life. When given the opportunity to list top priorities for quality of life, "Envision Elk Grove" phone survey participants cited community parks, open spaces, outdoor recreation opportunities and walking trails. "Envision Elk Grove" public workshop participants cited that having increased opportunities for recreation, walking, and bicycling were important to their conception of a high quality of life within Elk Grove.

The Elk Grove Trails Committee has hosted opportunities for public comment on interim versions of the EGTMP throughout the entire planning process at regular Trails Committee meetings and at a Fall 2006 Public Workshop. Members of the public contributed comments on the EGTMP goals, trail system map, trail standards and guidelines, prioritization criteria for trail construction projects, funding sources, and implementation strategies. These comments were directly incorporated into the body of the EGTMP and Appendices. Providing interim versions of the EGTMP for public comment allowed for feedback that was more specific in nature. Comments often pertained to:

- identifying further opportunities to increase trail connectivity throughout the City,
- identifying ways to increase recreational and transportation opportunities,
- ensuring that the trail system was accessible to people with disabilities,
- identifying the desired trail tread widths and surface materials/quality,
- the design of at-grade and grade-separated trail crossings,

- the desired content for signage,
- identifying additional implementation strategies, and
- the need for City staff time to pursue trail project funding and coordinate implementation.

#### **1.4 Elk Grove Trails Master Plan Contents**

The Elk Grove Trails Master Plan contains a brief introduction and a description of existing off-street, multi-use trails in Chapters 1 and 2, respectively. Chapter 3 provides direction on where trails should be located and provides design standards and guidelines to describe the desired characteristics of trails. Chapter 4 identifies funding sources for trail planning, construction and maintenance, establishes prioritization criteria for which trail projects to implement first, and describes the City and inter-agency collaborative actions required to create the trail system.

# City of Elk Grove Trails Master Plan

## 2.0 EXISTING CONDITIONS

### 2.1 Setting

The City of Elk Grove originated as a small community that sprang up around James Hall's Elk Grove Hotel and Stage Stop. This hotel existed primarily to serve travelers along the Monterey Trail that ran through Elk Grove, which linked the future state capital, Sacramento, with the former state capital, Monterey. Trails remain an ideal means by which to efficiently commute between the City's destinations, especially due to Elk Grove's relatively level topography and milder four-season climate.

The City of Elk Grove is now approximately 42 square miles and is located in the southern portion of Sacramento County and approximately 15 miles from downtown Sacramento. (Figure 1: Elk Grove Regional Context Map). In connection with the population growth experienced by the wider Sacramento Region as a whole, Elk Grove has grown from a population of 109,100 in 2000 to a population of 130,874 in 2005.

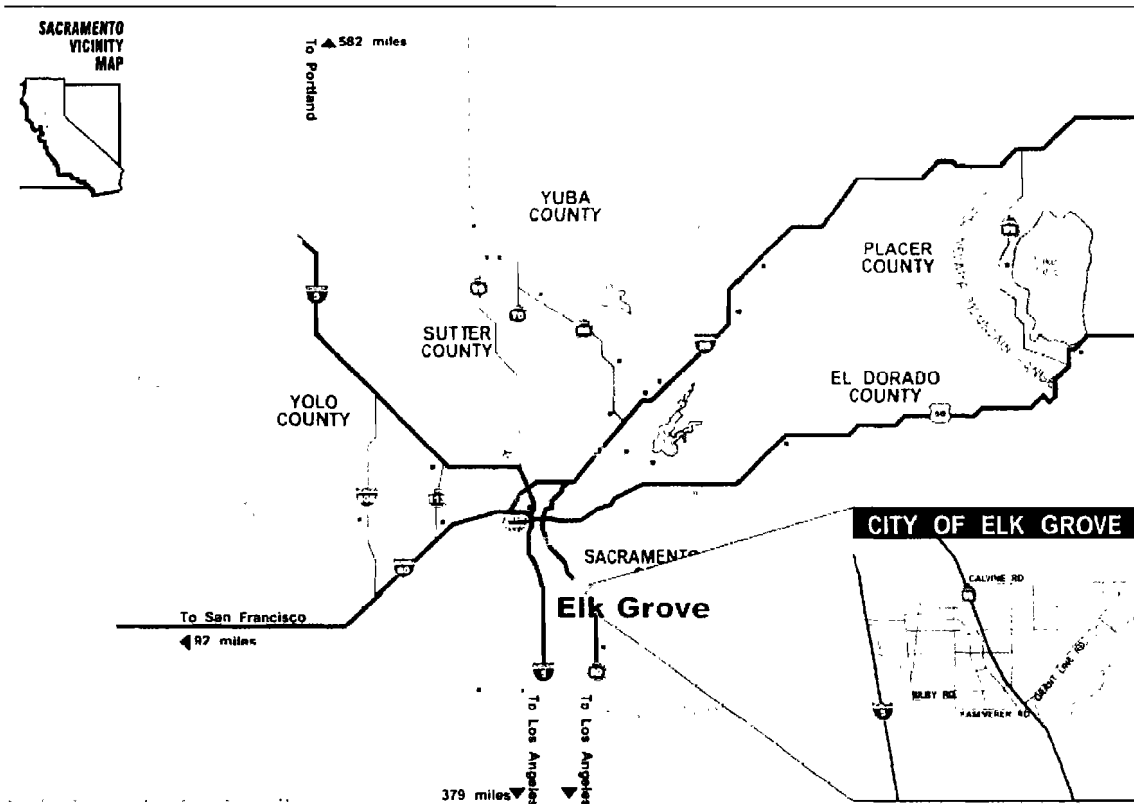


Figure 1: Elk Grove Regional Context Map

(Source: Elk Grove, City of. Elk Grove California: Business and Quality of Life Meet Here. Brochure. 2004. Elk Grove, CA.)

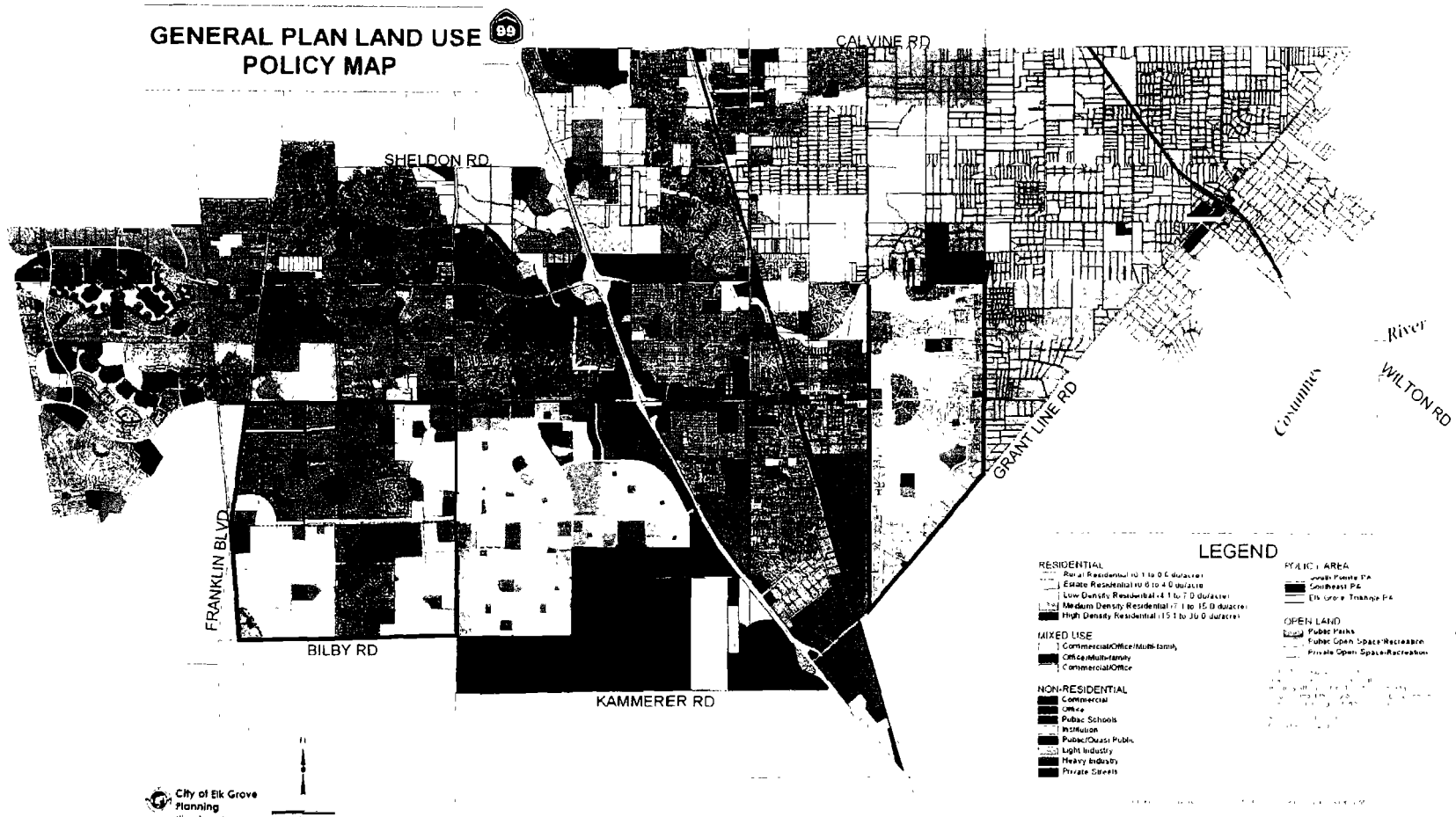


Figure 2 General Plan Land Use Policy Map

(Source: Elk Grove, City of City of Elk Grove General Plan Land Use Policy Map November 2003 Elk Grove, CA.)

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There are many unique areas within the City of Elk Grove due to its different periods of development and that reflect a diversity of land uses from agriculture, low-density residential areas, higher density residential areas, parklands, shopping areas, and employment centers. (Figure 2: General Plan Land Use Policy Map). Single-family homes are the predominant residential land use throughout the City with densities primarily ranging from 4 to 10 dwelling units per acre. These homes are typically within subdivisions that are connected to the main north/south and east/west thoroughfares by arterial streets. The largest commercial and employment centers are located at the intersections of the major thoroughfares and also near the north/south running Highway 99, which bisects the City. The western, central, and northern portions of the Elk Grove are largely developed with some infill opportunities, whereas the eastern and southern portions of Elk Grove are undergoing current development.

## 2.2 Existing Trails

There are approximately 23 miles of existing off-street multi-use trails within Elk Grove. (Figure 3: Existing Elk Grove Trails). The great majority of these trails are owned and all are maintained by the Elk Grove Community Services District. Many of these trails are exceptionally attractive in that they provide scenic vistas, provide views of parkland and creeks, or have well-maintained landscaping. These existing trails are also reasonably well distributed across the City, providing a strong foundation for building continuity and connectivity.



Example bike lane

It is important to note that trails are only one facility in an interconnected network of transportation facilities, including sidewalks and other existing on-street bicycle facilities, which are the subject of the Elk Grove Bicycle and Pedestrian Master Plan. Bike Lanes are on-street



Example bike route

bikeways that provide a designated, marked lane for one-way, on-street bike travel. Bike Routes provide shared bicyclist use with pedestrian or motor vehicle traffic and are identified only by signage. Sidewalks are designed to only accommodate pedestrians. In contrast, trails provide an entirely separate right-of-way from on-street facilities and are designed to accommodate pedestrians, bicyclists, equestrians and other trail user groups.

The strongest constructive critique of the existing trail system is in regards to its navigability.



First, the existing trail system is only partially completed at this time; existing trails are not yet continuously connected, but are instead more internal to various subdivisions and/or park areas.

# City of Elk Grove Trails Master Plan

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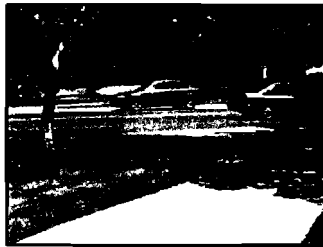
Second, there are smaller gaps in the trail system that reduce connectivity.



Third, the trail system still needs to address trail obstacles, such as providing off-street means of crossing Highway 99 in order to connect the City from east to west.



Fourth, there are some existing trails that are not marked with signage and that are not aligned such that it is clear that a trail continues on the other side of a roadway.



Fifth, there are some existing trails that continue on either side of an existing roadway, but a safe crossing is not provided.



Sixth, trail rights of way are not clarified, such that there is more of a likelihood of trail user conflicts resulting in an informal social disincentive to using trails.













Seventh, the capacity of the trail system differs along its existing trail segments; many of the existing trails were constructed prior to the City's incorporation and in accordance with a subdivision's approved development guidelines and, as such, existing multi-use trails have differing dimensions and surface materials that make it difficult to differentiate what is a sidewalk and what is a trail.

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**Figure 3**  
Existing Elk Grove Trails  
(DRAFT, NOVEMBER 2006)

- LEGEND**
- Trails**
-  Existing Multi-use Trails (2006)
  -  Equestrian Trails (2006)
- Other Features**
-  Existing Commercial or Employment Center
  -  Proposed Commercial or Employment Center
  -  Proposed Park
  -  Proposed School
  -  Elk Grove Parks
  -  Elk Grove Schools
  -  Elk Grove City Limits
  -  Creeks





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### 3.0 ELK GROVE TRAILS MASTER PLAN

#### 3.1 Elk Grove Trail System Long-term Vision and Goals

The long term vision for the Elk Grove trail system is as follows:

*Elk Grove will become a community known for its exemplary trail system because it will consist of attractive, accessible, well-used, and cost-effective trails that connect neighborhoods, schools, and other community destinations safely and efficiently. The design of the trail system will accommodate a wide variety of trail user groups with varying levels of abilities, expertise, and comfort levels. These trail user groups will also be able to enjoy the trail system simultaneously for both recreation and transportation.*

The EGTMP vision and goals directly incorporate the themes encountered during the Elk Grove Trails Master Plan planning process, including those pertaining to best examples of trail implementation and the themes for trail improvements. These goals have influenced the recommended locations of trails, the prioritization criteria for which trail projects to implement first, and implementation strategies. It is important to note that these goals are not ranked.

- **Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails.**
- **Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas.**
- **Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience.**
- **Goal: The Elk Grove Trail System accommodates a variety of trail user groups with varying levels of ability, expertise, and comfort levels.**
- **Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security.**
- **Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation.**
- **Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled-content.**

## City of Elk Grove Trails Master Plan

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- **Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts.**
- **Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage.**
- **Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding.**
- **Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs.**

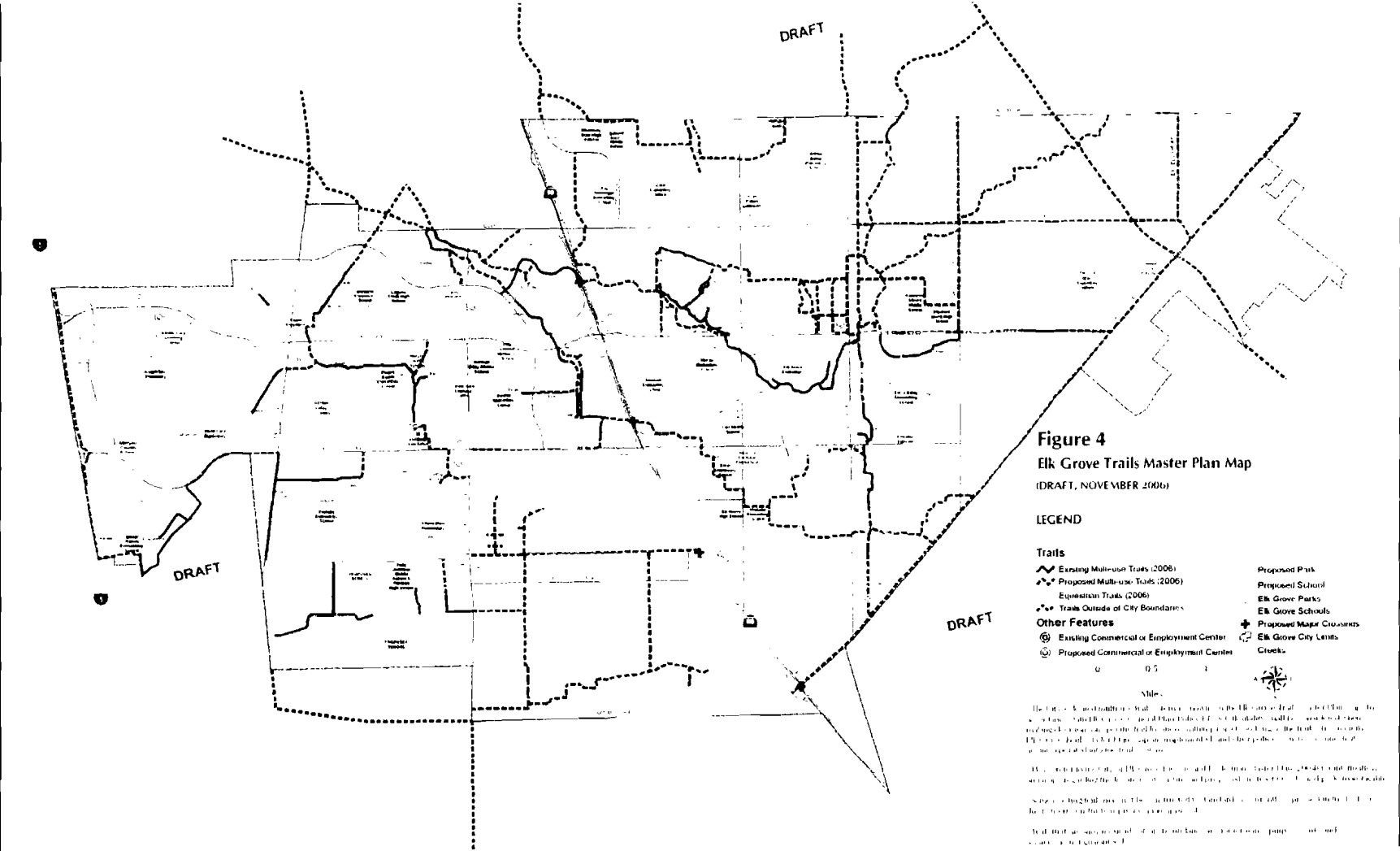
### 3.2 Elk Grove Trails Master Plan Map

The purpose of the Elk Grove Trails Master Plan map is to clearly identify the City's desired trail system to all parties, including residents, property owners, developers, City staff, and other entities that the City might collaborate with to implement the EGTMP. The EGTMP Map displays existing, publicly-owned, off-street multi-use trails in Elk Grove in combination with those trails that are proposed for implementation in the future (Figure 4: Elk Grove Trails Master Plan Map). The construction of this trail system will require, at minimum, the acquisition of trail right-of-way, construction of trail crossings, and trail corridor improvements.

In total, the EGTMP Map proposes the construction of at least 17 trail crossings and approximately 72 miles of off-street, multi-use trails. The completed Elk Grove trail system would then total approximately 95 miles of off-street, multi-use trails. Please refer to the EGTMP trail standards and guidelines for information on how the trail system is to be designed and maintained. It is also important to note that some existing trails may not be constructed to the standards currently expressed in the EGTMP because they were constructed prior to EGTMP approval.

Please refer to the City of Elk Grove Bicycle and Pedestrian Master Plan (BPMP) for information and maps regarding the locations of existing and proposed on-street bicycle and pedestrian facilities.

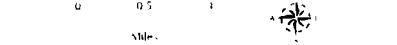
Trails are defined as publicly-owned, off-street linear facilities that accommodate two or more modes of transportation, as opposed to sidewalks that only allow for pedestrian usage. All of the proposed off-street, multi-use trails will accommodate pedestrians, joggers, bicyclists, and other trail user groups, and many of the proposed trails will accommodate equestrians.



**Figure 4**  
Elk Grove Trails Master Plan Map  
(DRAFT, NOVEMBER 2006)

**LEGEND**

- Trails**
- Existing Multi-use Trails (2006)
  - Proposed Multi-use Trails (2006)
  - Equestrian Trails (2006)
  - Trails Outside of City Boundaries
- Other Features**
- Existing Commercial or Employment Center
  - Proposed Commercial or Employment Center
  - Proposed Park
  - Proposed School
  - Elk Grove Parks
  - Elk Grove Schools
  - Proposed Major Crossroads
  - Elk Grove City Limits
  - Creeks



The City of Elk Grove is a trail-rich community with 18 miles of trails. This plan is the first comprehensive plan for the City of Elk Grove to address the needs of its residents for trails. The plan will help the City of Elk Grove to meet the needs of its residents for trails and to provide a safe and enjoyable trail system.

The City of Elk Grove is a trail-rich community with 18 miles of trails. This plan is the first comprehensive plan for the City of Elk Grove to address the needs of its residents for trails. The plan will help the City of Elk Grove to meet the needs of its residents for trails and to provide a safe and enjoyable trail system.

This plan is a draft and is subject to change. It is not intended to be used for legal purposes.

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The trail system was identified based upon those trail segments suggested on the Elk Grove Community Services District Master Plan map, the Elk Grove General Plan map, the East Elk Grove Specific Plan Map, and the Laguna Ridge Specific Plan Map. Additional trail segments were proposed by the Elk Grove Trails Committee and members of the public during the preparation of the Elk Grove Bicycle and Pedestrian Master Plan in 2004, and during the ongoing EGTMP planning process.

The trail segments represented on the EGTMP map are not attributed to specific parcels in keeping with Elk Grove General Plan Policies PTO-1 through PTO-14, and especially PTO-8, which states "The City's desired trails system is shown in Figure PTO-2. Flexibility shall be considered when making decisions on specific trail locations within projects, so long as the trails shown in Figure PTO-2 are implemented and other policies (such as connectivity) are incorporated into the trails system." It is also important to note that, while the standards for trail tread widths are established through the EGTMP, the EGTMP Map does not specify the trail corridor width.

The EGTMP map does not clarify what entity will be responsible for trail construction, ownership, and/or maintenance, as this determination will be made on a case-by-case implementation basis. In all likelihood, the majority of the proposed multi-use trails may be constructed, owned, and/or maintained by the Elk Grove Community Services District, but other trails may be constructed, owned, and/or maintained by developers, the City of Elk Grove, or some other entity.

### **3.3 Trail Development Contexts**

There are various contexts within which trails will be implemented. As previously mentioned, Elk Grove has undergone different periods of development, and as such, existing trails were built according to the policies contained in Specific Plans and/or approved development guidelines within subdivisions. In instances where these Specific Plans and development guidelines provide direction for the development of off-street, multi-use trails, those plans and guidelines take precedence over the those standards in the EGTMP. However, given its comprehensiveness, the EGTMP provides additional policies, refinements, and implementation actions that should be implemented within those areas covered by Specific Plans and approved development guidelines.

In addition to responding to the above-mentioned policy context, the EGTMP trail standards and guidelines also respond to the following physical implementation contexts:

# City of Elk Grove Trails Master Plan

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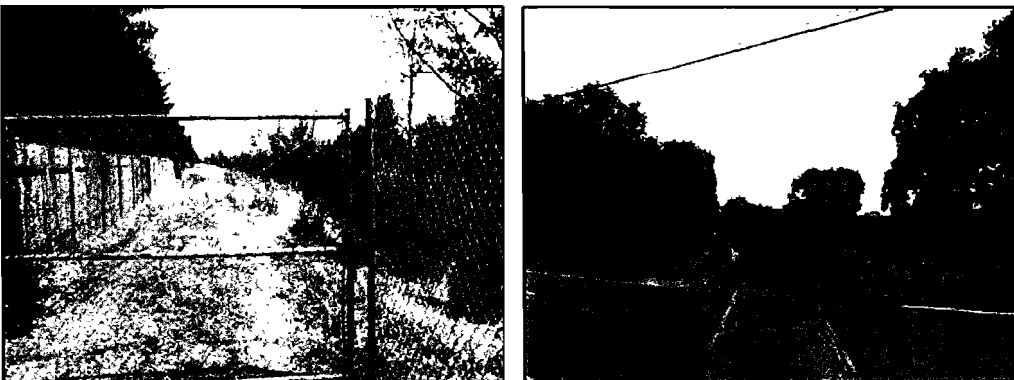
- Constructing trails in existing developed areas where no trails currently exist ("infill") (please see below for illustrative photos),



- Constructing trails to the EGTMP standard in locations where trail users would benefit from the improvement in the existing trail ("retrofit") (e.g. where trails are too narrow relative to usage, where site conditions could be changed to improve safety, where trail usage would be increased with the provision of additional amenities, et cetera) (please see below for an illustrative photo),

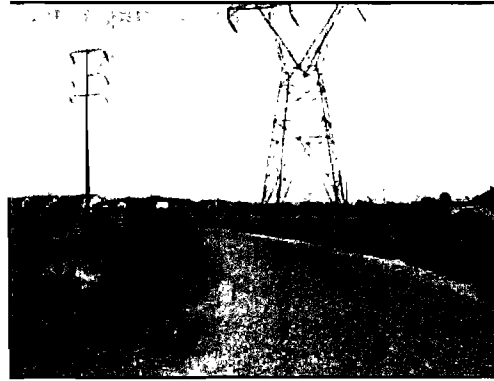


- Constructing trails where some physical improvements already exist, but where the right-of-way has not been opened for public use (e.g. flood control channels) (please see below for illustrative photos),



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- Construction of new trails in developing areas as new development occurs (*please see below for illustrative photos*),



- Construction of trails in correspondence with road construction projects (*please see below for an illustrative photo*), and



- Construction of either at-grade or grade separated trail crossings with roadways, creeks, or other physical obstacles (*please see below for illustrative photos*).





### **3.4 Multi-use Trail Standards and Guidelines**

The City of Elk Grove has adopted the following trail standards and guidelines below to direct the planning, design, construction, and maintenance of trails within the City. Some items are mandatory (e.g. standards typically utilize the word "shall"), whereas others are advisory (e.g. guidelines typically utilize the word "may").

#### **General Trail Siting and Design Standards**

**Motorized vehicle restriction.** Motorized vehicles are restricted from trails, except those motorized or mechanized vehicles used by people with disabilities, for trail maintenance, or for emergency purposes.

**Trail design character and compatibility with natural resources.** In general, the character of trails shall be understated, shall use materials and colors that are not in contrast to the surrounding context, and, where possible, shall have alignments that are in conformance with land contours and geomorphology. Trail design and locations shall avoid site-specific hazardous conditions, avoid impacting potential habitat or other sensitive areas, and not exacerbate flood conditions. It is encouraged that trail design enhance habitat for native species. Trails that parallel streams shall be located beyond wetlands, the riparian corridor, and the 10 to 25-year floodplain, where possible. Environmental sensitivity shall also inform the design of any trail crossing over a drainage channel; crossings should be arched wherever possible to minimize impacts and maintenance costs. Consultation with City Engineers and regional resource agencies may be necessary in order to develop trail designs that minimize environmental impacts.

**Trail safety and security.** Trail design, amenities, and maintenance shall provide for trail safety and security. Trails shall not create physical entrapment areas, shall allow for trail user defensible space, and shall provide adequate sight distances for trail users.

**Trail connectivity with surrounding land uses.** Trail connectivity shall be provided to surrounding land uses. Where trail corridors abut commercial and office areas, trail access shall be provided to those areas where appropriate. Where trail corridors abut residential neighborhoods, trail access shall be provided at regular intervals of approximately 600 feet. Where possible, trails shall be incorporated into parks and open spaces. The School District should be encouraged to include trails or trail connections in their school sites.

**Trail compatibility with surrounding land uses.** Trail design shall be compatible with surrounding land uses. The design of trails shall provide a degree of privacy to surrounding residences, but still allow for informal monitoring of the trail. Trails shall not be placed adjacent to or on farmland if feasible alternative routes exist elsewhere in the vicinity. However, if no other feasible routes exist, trails shall be designed in cooperation with adjacent property owners in order to minimize adverse impacts on farming practices.

### **Trail Dimensions and Clearances**

**Trail corridor width.** A trail corridor is defined as the area within which a trail tread is constructed and which also contains landscaping and any other improvements necessary to ensure the functioning of the trail. In general, trail corridors shall be as wide as possible, and at minimum, take into account the need for trail maintenance and emergency access where appropriate. Trail corridors shall be wider than trail tread widths to ensure flexibility in alignment possibilities for aesthetic value, safety considerations due to site conditions, and avoidance of possible habitat or other sensitive areas. Boundaries of trail corridor easements shall coincide, where possible, with easement boundaries to ensure flexibility in alignment possibilities. In some cases, trail corridors will need to be narrower than would be typically desired—for instance, in infill situations where limited space is available to complete a trail connection or along a roadway where the right-of-way is narrow. In these cases, it is specifically intended that a narrow trail corridor may be used, if needed. Similarly, accessibility by emergency vehicles, although desired, may not be possible on all trails.

**Trail capacity.** The capacity of the trail system shall be a primary design focus. Trails shall be designed to accommodate expected demand, in which case trail features, such as the trail tread width, may need to be increased beyond the minimum specified in order to design the appropriate capacity. Trails shall be designed to accommodate two-way traffic for all user groups. Trails shall be designed to accommodate as many trail user groups as possible. In order to facilitate increased access to trails for users of varying abilities, rest areas and other trail amenities shall be provided and steep grades shall be avoided (while in some limited circumstances the grade may be up to 8.3% for short distances, the maximum recommended grade is 5% and it is recommended that sustained grades be limited to a maximum of 2%). Trails shall be compliant with Federal and State access requirements.

**Trail design to minimize potential user conflicts.** The design of trails shall reduce potential conflicts between different user groups. To the greatest extent possible, equestrian trails shall be separated from other user groups, either through distance, vegetation, and/or grade separation. Pedestrian and bicycle trail users may share combined facilities. However, additional trail tread width may be required to allow generous passing areas on those portions of the trail where high pedestrian use is expected.

**Opportunities for Caltrans Highway Design Manual Chapter 1000 Standards.** Wherever possible and especially where regional funding is desired, the design of combined bicycle and pedestrian facilities shall meet the Caltrans Highway Design Manual Chapter 1000 standards for Class I bikeways. These standards pertain to trail tread widths, horizontal and vertical clearances, design speeds, cross-slopes, stopping distances, et cetera.

# City of Elk Grove Trails Master Plan

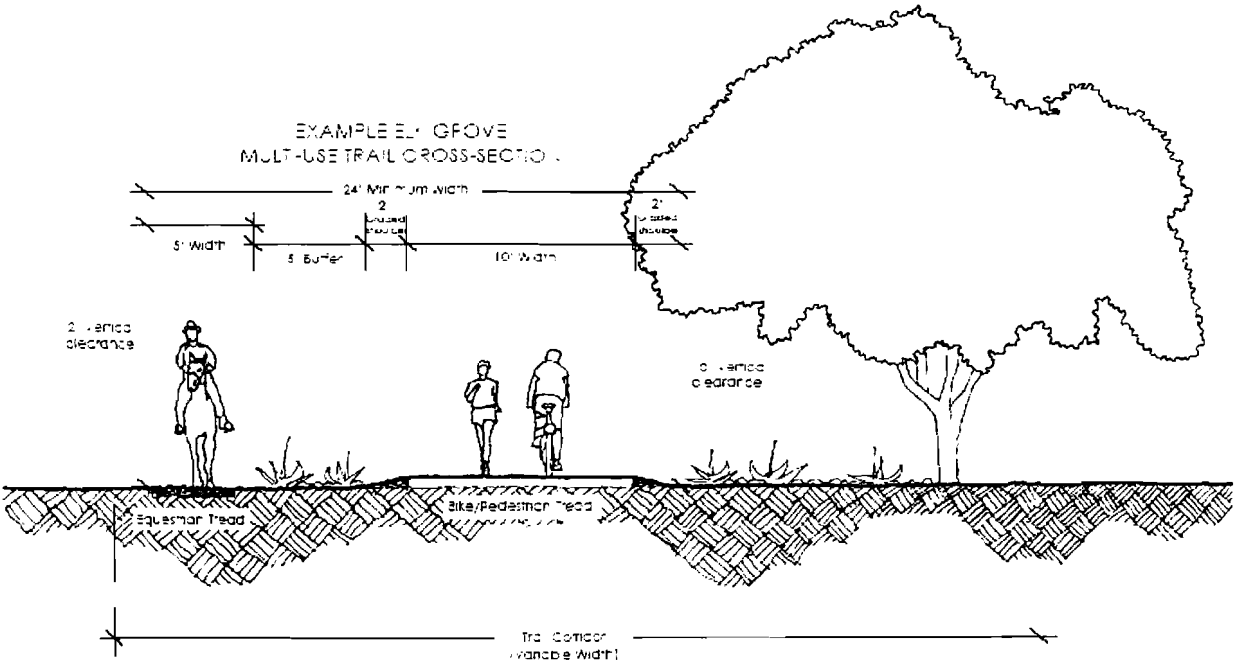
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**Equestrian trails.** Equestrian trail treads shall be separated from other user trail treads by a minimum of 5 feet horizontal-distance wherever possible; a wider separation is encouraged. The minimum equestrian trail tread width is 5 feet. Only when there are site constraints shall the equestrian trail tread width be as narrow as 3 feet, and in those cases, passing areas shall be provided at reasonable intervals. The trail tread width shall be clear of all obstructions. Trail horizontal clearances/shoulders are not required unless site conditions require them for safety. The minimum vertical clearance for equestrian trail tread widths is 12 feet above the tread and any horizontal clearances/shoulders. At site-specific locations, a lower clearance may be allowed (e.g. at bridge undercrossings), but in no case shall clearance be less than 10 feet.

**Bicycle and pedestrian trails.** The minimum bicycle and pedestrian trail tread width is 10 feet of paved trail, although an increased trail tread width of up to 12 feet may be required in order for the trail to provide appropriate capacity relative to expected demand. There shall also be a 2-foot graded shoulder immediately adjacent to either side of the paved surface. These dimensions shall be clear of all obstructions. Additional shoulder and horizontal clearance width is not required except where there are site conditions that necessitate additional horizontal clearance for safety. The minimum width for the paved surface may be as narrow as 8 feet and the graded shoulders may be eliminated only in special site-specific circumstances where the terrain makes the implementation of these standards unsafe or impossible. For example, this exception may be granted if the trail is to be placed in a narrow trail infill situation where development on either side has already occurred, or if there are continuous site constraints such as a narrow creek channel, or if the bicycle and pedestrian tread width goes between two objects (e.g. railings; bridge supports). The minimum vertical clearance for bicycle and pedestrian trail tread widths is 10 feet above the tread and any horizontal clearances/shoulders. At site-specific locations, a lower clearance may be allowed (e.g. at bridge undercrossings), but in no case shall clearance be less than 8 feet.



*Pedestrians along Laguna Creek*



Refer to Elk Grove Trails Master Plan Multi-Use Trail Standards and Guidelines for cross slope materials, landscaping signage and accessibility requirements.

Figure 5: Example Elk Grove Trail Cross-Section.

## City of Elk Grove Trails Master Plan

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### Trail Surface Materials

**Surface materials for equestrian trail treads.** Equestrian trail treads are required to be of decomposed granite or native material that is thoroughly harrowed and free from debris (roots, gravel, cobble, et cetera).

**Surface materials for bicycle and pedestrian trail treads.** The graded shoulder immediately adjacent to the paved surface shall be of decomposed granite or native material that is harrowed and free from debris (roots, gravel, cobble, et cetera). The paved surface of bicycle and pedestrian trail treads shall be of environmentally friendly recycled content wherever possible. Permeable pavement may also be considered, as well as other materials that may aid in safety, landscaping maintenance, and/or trail user comfort. Trail surfaces shall be a minimum of 2-inches of asphalt concrete or of a material that is of similar or greater durability and smoothness. Surface materials shall also be skid-resistant. Increased thicknesses and content of surface materials shall be considered in order to improve durability. In limited circumstances, it may be permissible to temporarily open a trail prior to the installation of paving.

**Surface quality.** All trail treads shall have continuous surface quality. If repairs are made to trail surfaces, then the repairs shall provide for a surface that is as smooth and as of high-quality as the original surface. Additionally, drainage grates, manhole covers, driveways, et cetera shall be located and installed to promote safety of trail users. Considerations include the design of all drainage grates and avoiding the construction of vertical lips between materials or keeping them to the maximum allowed by accessibility standards.

**Soil sterilant.** Use of a soil sterilant is required below all paved tread widths in order to preclude possible weed growth through trail surfaces.

**Root guards.** Root guards shall be installed wherever trees are planted closer than 4 feet to paved tread widths. Root barriers shall be installed to extend at least 24" deep and to a distance of 10 linear feet from either side of the tree's trunk along the paved tread width or as approved by the City Engineer.

**Trail Foundation.** All trails shall be designed with consideration given to the structural characteristics of underlying soils and expected loadings. Trail foundations shall assure trail longevity and shall support the weight of motorized vehicles required for emergencies. Compressible, saturated, or other adverse subsurface foundation conditions should be mitigated prior to construction.

### Trail Drainage

**Trail Runoff.** Trail treads shall be designed to prevent runoff from being erosive to their surface or of surrounding soils and vegetation. If collected, trail runoff shall be discharged in such a manner that prevents erosion and impacts to surrounding vegetation and should be conveyed to an area where natural treatment can occur

prior to discharge to creeks or streams. Any drainage ditches and grates that are used shall be placed in locations so as to not present obstacles or hazards to trail users.

**Trail Cross-slope.** Trails shall have a cross-slope of 2% or shall be as needed to ensure proper drainage but still conform to accessibility guidelines. Sloping in one direction only is preferred.

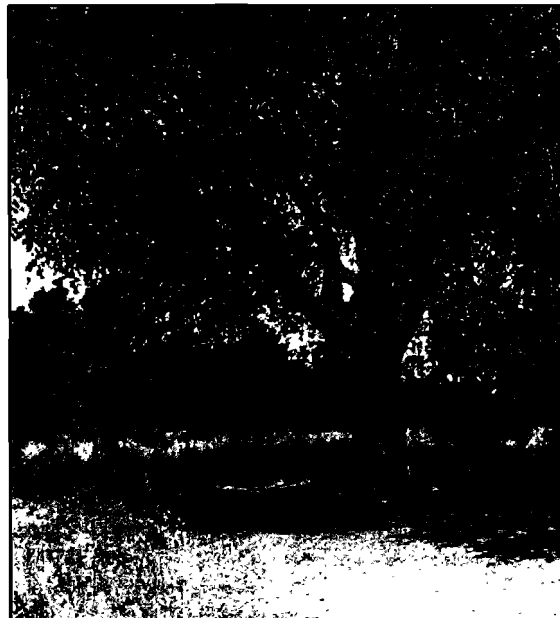
**Landscaping**

**Planting palette.** Plant materials shall be selected for their year-round vigor and shall be planted to have an immediate and on-going aesthetic effect. Preference should be given to use of native plants which are consistent with the trail location and provide habitat suitable for native species. Plant materials shall range in sizes from groundcovers, small shrubs (minimum size - 1-gallon), large shrubs (minimum size - 5-gallon), and trees (minimum large growing trees - 15-gallon and 24' box for small growing trees).

The trail planting palette may incorporate plants used elsewhere in the surrounding developed areas. Projects are also welcome to recommend landscape plant materials that meet the City's criteria for approval. Plant materials are being tested all the time and new or hybridized plants are welcome.

Care shall be given to not utilize surface rooting trees near trails in order to lessen the likelihood of tree roots affecting the trail surface. Plant materials used shall not be toxic to horses, pets, or children.

The plant litter of plant materials used shall not pose a hazard to trail users (e.g. eucalyptus trees drop branches and leaves that can be trip hazards, some grasses and bushes have thorny seeds that can cause bicycle tires to burst).



*Oak tree along Laguna Creek*

Please refer to **Appendix B** for a list of City of Elk Grove recommended plant materials. These trees, shrubs, perennials, and grasses are found to be drought tolerant or low water use plants. There are two sizes of trees in the palette - trees that are large and can overhang the trails and small trees for trails in electrical power line corridors. The different power line companies have special lists for plant materials within their easements. Many of the trees listed in the palette have some sort of fruit, berry, cone or acorn. It is difficult to find a tree that does not have any some sort of fruit/pod. The shrubs and perennials listed in the palette are plants that are low spreading plants or

## City of Elk Grove Trails Master Plan

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grow 3 feet high or less. Smaller growing plants may have to be planted in masses but will require less maintenance.

**Design for low maintenance, water efficiency, and drought tolerance.** Landscaping along trails shall be designed for low maintenance, water efficiency, and drought tolerance, especially through the broad use of native and drought tolerant plant materials, the use of efficient/water-conserving irrigation systems, the grouping of plants with similar water needs, and the use of mulch. Three-inch deep wood chip mulch is recommended around and under shrubs and trees. The mulch helps retain moisture in the ground and help reduce weed growth and maintenance. Most plant materials grown in plant nurseries are watered daily or more often depending on the climate. Also, most drought tolerant plants will have to be weaned from the nursery watering and an automatic spray, bubbler or drip irrigation system will need to be installed. One of the problems with a drip irrigation system is emitters plug up and the plants usually die before maintenance staff realizes there is an irrigation problem. A spray or bubbler irrigation system allows the maintenance staff to visually inspect the system and the amount of water being applied. The City has water conservation ordinance for new and remodeled commercial developments that may be adapted to meet trail planting and irrigation. Irrigation systems should be designed to ensure the establishment and perpetuation of plant materials.

**Placement of plant materials.** Consideration shall be given to the placement of trees and shrubs in order to provide shade at regular intervals and to not obscure views of significant features. Shrubs and trees may also be used to help screen undesirable views or ground-mounted equipment from the trail. Plant materials should be carefully placed at trailheads, staging areas, and trail crossings so that they do not interfere with necessary sight distances.

**Height of vegetation.** In order to enhance visibility and reduce hiding places, the minimum vertical clearance for trees is 6 feet and shrubs should not exceed 3 feet in height.

### **Lighting**

**Lighting.** Lighting shall only be used where necessary for trail safety and security. Lighting shall be considered where there are trail crossings with streets, potential conflicts along paths, where riding at night is expected, and through undercrossings/tunnels for security concerns. Trail lighting shall be designed to not create off-site spillage.

### **Fencing**

**Fencing.** Fencing shall not be a component of trails unless necessary for safety reasons, avoidance of sensitive areas, or if directly adjacent to private property. When fencing is necessary and the trail is adjacent to open space, the fencing shall be open, see-through material (e.g. wrought iron) for scenic and safety reasons and to deter illegal dumping into the natural area.

### **Trail Signage and Markings**

**Types of trail signage.** A variety of signage types may be installed along trails. Signage shall be attractive, easily readable at varying speeds and distances, and provide a hierarchy of information. Signage can be:

- **Regulatory in nature** (e.g. clarifies rights-of-way at intersections, lists hours of operation, lists activities that are restricted),
- **Safety-oriented** (e.g. provides notification of potential hazards, identifies when there is a convergence of trail user types, lists emergency contact information),
- **Behavioral** (e.g. lists codes of trail conduct, clarifies trail user rights-of-way and yield information, clarifies trail etiquette),
- **Informational** (e.g. identifies trail amenities and characteristics, lists trail maintenance and graffiti/vandalism abatement contact information, lists contact information to find out more about the Elk Grove trail system),
- **Directional/wayfinding** (e.g. differentiates the way of the trail and signalizes that the trail is publicly owned, identifies distances to popular destinations, provides mileage information), and
- **Educational/interpretive** (e.g. provides descriptions of adjacent natural features or cultural resources, provides information on local watersheds).

**Required signage standards.** Trail signage shall meet all applicable signage standards where necessary, including Americans with Disabilities Act Accessibility Guidelines (ADAAG) and Applicable Title 24 California Codes, Chapter 1000 of the *California Highway Design Manual* produced by the California Department of Transportation for Class I bikeway facilities, and *The Manual on Uniform Traffic Control Devices (MUTCD)* produced by the U.S. Department of Transportation Federal Highway Administration. Standards cover topics such as signage shapes, colors, dimensions, lettering, symbols, word messages, borders, and signage placement locations, heights, orientation, and offsets.

**Signage locations.** Signage shall be provided at all of the following locations:

- **Trail at-grade street and railroad crossings and transitions.** Signage at trail at-grade street crossings and transitions shall conform to all applicable standards. Detectable warnings shall be installed to assist trail users with visual impairments. The use of audible traffic signals shall also be considered. Prior to at-grade trail crossings with streets, trail users shall also be notified of the crossing, if the trail continues beyond the street or ends at the street, and if the crossing offers an opportunity to transition to an on-street facility, such as sidewalks or bicycle lanes. Signage shall be installed to notify motorists of upcoming trail crossings.



## City of Elk Grove Trails Master Plan

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- **Convergence of user groups.** Prior to any bicycle and pedestrian trail convergences with an equestrian trail, notification shall be posted along both trails regarding the convergence.
- **Horizontal and vertical clearances.** There may be instances where the minimum horizontal and vertical clearances cannot be accommodated, such as at bridge undercrossings. In these instances, either side of the obstruction shall incorporate a warning design feature and notification shall be posted in advance of the obstruction to inform trail users of such conditions and appropriate use conditions to follow, such as reducing speeds or dismounting.
- **Trail inundation.** Notification shall be posted in advance of all possible trail inundation locations.
- **Trailheads and staging areas.** Notification of any trail regulations, trail codes of conduct, trail amenities and characteristics, emergency contact information, and trail maintenance contact information shall be posted at trailheads and staging areas. Brochures and maps may also be placed at these locations. The use of audible informational signs shall also be considered.

**Signage placement frequency.** The frequency of signage locations shall be dependent upon the signage type/purpose. The number and location of signs shall be carefully considered, as a lack of signage or poorly located signage can create hazardous situations for trail users and an overabundance of trail signs can affect the aesthetic quality of the trail experience and decrease signage effectiveness. Signage may be placed at alternating sides of the trail and may be double sided. In general, directional signage shall be placed at all trailheads/staging areas, at all major intersections, at all turns, and approximately every quarter mile as necessary.

**Signage materials, construction, and installation.** Trail signage shall be of durable materials and shall be constructed and installed to be weather, vandalism, and theft resistant.

**Trail striping.** Trail striping is typically done through the use of reflective paint to help trail users judge distances to obstacles or hazards. Striping is recommended when a trail is likely to be heavily used by two-way traffic, on curves with restricted sight distance, and where the trail is not illuminated and where nighttime ridership is expected. Striping is also recommended when tread widths run along continuous fixed objects (e.g. walls, fencing) so that users have improved ability to navigate their proximity to the object.

**Trail entrance barriers.** Low landscaping, knock-down trail bollards, or a similar removable entrance barrier shall be used at trail entrances as an unauthorized motorized vehicle deterrent. The spacing of entrance barriers shall be wide enough to permit the passage of wheelchairs, bicycle-towed trailers, adult tricycles, et cetera, but shall not be wide enough to accommodate the typical motorized vehicle. Care shall be taken to carefully mark and ensure the visibility of this low landscaping or other entrance barriers through the use of pavement markings and reflective material on

barriers. Experience has shown that the installation of a single knock-down trail bollard at the middle of the trail entrance is an appropriate deterrent, allows maintenance and emergency vehicles to quickly get on the trail, and prevents trail users from having to navigate multiple bollards, as many trail users see the trail as a two-way pattern.

### **Trail Amenities**

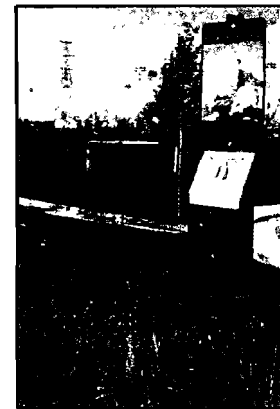
**Trail staging area and trailhead general considerations.** Care must be given to the design and maintenance of trail staging areas and trailheads because they give an impression to the potential trail user of the condition of the trail and the amenities that might be provided.

- **Staging areas.** Staging areas are defined as being located near roadways and as having parking spaces and other trail amenities. At a minimum, staging areas shall provide parking spaces and signage. Equestrian staging areas should incorporate additional pull-through horse trailer parking spaces. Staging areas shall be reasonably distributed throughout the overall trail system, and especially where multiple trail segments diverge toward different destinations. Care shall be taken in locating staging areas such that they do not serve as spillover parking lots for nearby land uses. The number of required parking spaces at staging areas should be based upon expected demand at that staging area location relative to other nearby trail entrance points and should also conform to accessibility guidelines. Ideally, equestrian staging areas would have at least three pull-through horse trailer parking spaces.
- **Trailheads.** Trailheads are defined as entrances to the trail system where a trail crosses a roadway. At a minimum, trailheads shall provide signage.

**Trail amenities.** Trail amenities shall be provided for all potential trail user groups. Amenities include year-round shade areas/structures, water fountains, trash cans, pet-waste bag stations, benches, public art, emergency equipment (e.g. one way phones), signage, bicycle racks, equestrian hitching posts, restrooms, picnic facilities, warm-up/stretching areas, and dog parks. These amenities should be provided frequently, but their locations, especially restrooms and water fountains, may be influenced by their availability in parks within close proximity to trails. Trail amenities shall also be located such that they can be monitored easily for security and lighted if necessary. Trail amenities



Example shade area/structure



Example Pet Waste Station

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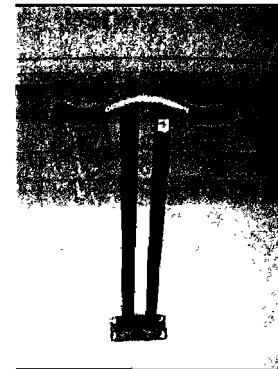
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shall be designed to be easy to maintain and weather and vandalism resistant. Trash facilities and cans shall be designed to be serviceable by currently available equipment.

**Accessibility considerations for trail amenities.** Picnic areas, restrooms, parking areas, and other facilities along trails and at staging areas shall provide for accessibility for all trail users. Rest areas with benches shall be provided at reasonable intervals, the frequency of which shall vary depending on the terrain and intended use and especially where there are grade changes. Benches at rest areas shall have backrests and armrests to assist in resting and getting up from the bench.

**Shade trees.** Given the climate of Elk Grove, it is important to provide shade trees along trails at regular intervals. Native trees should be provided along creeks and other natural drainages to help provide comfortable streamside viewing.

**Bicycle parking.** Bicycle parking shall be installed such that bicycle racks accommodate the dimensions of a bicycle in length and width and provide maneuverability during parking actions. Bicycle racks shall have few moving parts, shall accommodate high security U locks, and shall allow for the locking of bicycle wheel and frame.



*Example bicycle rack*

### **Trail Crossings**

**Priorities for trail crossing types.** Grade-separated trail crossings<sup>1</sup> shall be planned for and pursued wherever they are site-specifically feasible in order to promote trail safety and ease of trail usage. High priority areas for grade-separated crossings include those areas that would increase efficiency for trail users who are commuting, safety around schools and parks where there are young trail users, and trails that are particularly high in usage. In limited instances where public funding for a grade-separated crossing might not be immediately forthcoming, it may be permissible to construct an interim at-grade crossing.

**General grade-separated crossing design considerations.** In order to ensure that grade-separated crossings are well used, these crossings shall be located such that they allow for a direct route of travel relative to any nearby at-grade crossings, shall have a grade that is flat enough to accommodate differences in trail user abilities, and shall be designed so that trail user entrapment areas are not created. In general, the trail shall not narrow at overpasses or underpasses and approaches may be flared to

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<sup>1</sup> Grade-separated trail crossings are those that allow for a crossing over or under an obstacle, such as a highway, roadway, railroad, or creek. At-grade trail crossings are those that allow trails to cross a roadway or other obstacle at the same grade, in which case a trail user will need to treat the crossing as an intersection and may need to navigate the crossing by using a crosswalk, traffic control signal, or by watching for cars.

allow for improved clearance. Other trail user provisions shall be especially considered for at least another 1000 feet on either side of the bridge to ensure a safe transition. Planking for overpasses and underpasses shall be a minimum of 45 degrees or more to prevent diversion of bicycle wheels.

**General at-grade trail crossing design considerations.** The design of at-grade trail crossings must afford the safe passage of all trail user groups and users of varying abilities through the crossing. The design must relate to the intersection of motorized with non-motorized trail users and must accomplish the crossing in a manner that will minimize confusion by motorists and trail users and permit both to operate in accordance with the normal rules of the road. As each crossing is unique, sound engineering judgment will be required for each at-grade crossing design.

**At-grade trail crossing locations.** All at-grade trail crossings must occur in predictable locations and where trail users will be clearly visible. Locations of at-grade road crossings may be influenced by motorized traffic volume, speeds, and road widths. Trails should cross at right angles with roadways and railroad tracks.

- In general, trail at-grade crossings with arterial roads will be at the closest major intersection or a new intersection may be designed. Regarding at-grade trail crossings at intersections, a trail user is faced with a variety of motorist turning movements such that it is important to consider opportunities to adjust corner turning radii to slow motorists making right turns across the crossing and adjustments to traffic signals, such as restricting permissive left turning arrows, restricting right turns on red, or establishing an all-red phase to allow for path crossings.
- It is generally permissible for trail at-grade crossings with collector and local streets to occur at mid-block locations if conditions allow for safety. In these situations, careful consideration shall be given to traffic control devices, the possibility for the use of refuge islands, access control, and pavement markings and illumination. If raised crossings are used, then care shall be made to differentiate the edges of the crossing.

**At-grade crossing accessibility considerations.** At-grade crossings shall be accessible to the full range of trail users, which requires that its design reflects the navigability and crossing times required for trail users of various abilities and modes of trail use. Among others, considerations shall include the dimensions of the path of travel, grades and surfacing at curbcuts, the availability of detectable warning signals, and the maintenance of a clear crossing free of barriers, obstacles, and hazards. Refuge islands shall be considered where high volume roadway traffic and /or speeds create unacceptable conditions for path users, roadway width is excessive given the available crossing time, or the crossing will be used by a number of people who will cross more slowly, such as elderly, schoolchildren, and persons with disabilities. Refuge islands shall be large enough to accommodate platoons of users and provide enough distance from passing motorists for trail users to feel safe.

## City of Elk Grove Trails Master Plan

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**Clear assignment of rights-of-way.** The rights-of way at at-grade crossings shall be clearly assigned, given that there is the potential for conflicts because motorists often expect bicyclists to yield to motorists and efforts to require or encourage bicyclists to yield or stop at each cross street are often ignored. In assigning rights-of-way, consideration shall be given to the behavior of some trail users who may have low delay tolerance, the desire to maintain momentum, and have little traffic knowledge (e.g. children).

**Provision of adequate and unobstructed sight distances and trail user visibility.** Intersection sight distances, decision sight distances, and stopping sight distances for motorists and trail users are important design safety considerations for at-grade crossings. Sight distances provided to trail users shall reflect the distance a motorist would travel in the time it takes for a trail user to clear an intersection. Adequate warning signs shall be provided to allow bicyclists to stop before reaching the intersections, especially on downgrades. Stop signs shall be located as close as possible to the actual stopping point. Signage shall be placed so that signage for motorists or trail users is not confusing to motorists or trail users.

**At-grade crossing traffic control devices.** Crossing traffic control devices shall be installed such that trail users can use them without dismounting, if possible.

**Crossing approaches and transitions.** Crossing approaches shall have a relatively flat grade. Ten foot non-skid paved aprons at crossings shall be provided where trail treads are otherwise unpaved to accommodate the transition in trail tread surface type out of the crossing area. Roadway surfaces near crossings shall be maintained such that roadway debris is not blown into the trail surfaces. Crossings can be entrance and exit points for the trail system, so likely turning movements shall be accommodated by flaring curb cuts to facilitate right turns for bicycles. Ramps and curbcuts at crossings shall be the same width as the trail or wider in order to minimize user conflicts. Ramps and curbcuts shall also provide a smooth transition to the crossing surface and comply with accessibility guidelines.

**At-grade trail crossings at railroads.** The most desirable crossing is a perpendicular crossing. If an angle is required, then the use of durable flangeway filler strips could be used on low-speed rail road tracks to increase crossing safety for trail users. The trail could also be widened (which might necessitate acquiring additional right of way) at the crossing so that users can choose their desired crossing angle.

### **Trail Maintenance, Stewardship, and Security**

**Regular trail maintenance.** Trail maintenance shall be oriented towards creating a consistent and predictable trail condition. All trails shall be on a regular maintenance cycles that recognize the need for both on-going maintenance and variable maintenance. Maintenance needs include weed abatement, pruning of vegetation for adequate clearances and sight distances, sign installation and removal, tread improvements, addressing any damage received from weather conditions, and general trail clean-up. All trail infrastructure, including irrigation and lighting systems

shall be repaired if damaged or if not working as designed. Plantings shall be replaced if dead or dying. Trails shall be maintained for continued aesthetic effect, security, and safety.

**Timing of maintenance operations.** Maintenance operations shall be timed to minimize trail user conflicts and to avoid excessive noise and other possible nuisance effects on adjacent neighbors.

**Trail stewardship.** Regular maintenance of each trail shall be clearly assigned to a responsible party (e.g. City of Elk Grove, Elk Grove Community Services District, Homeowner's Associations). Trails shall be evaluated regularly to ensure that their conditions remain to standard and achieve the desired goals of the Elk Grove trail system. Maintenance needs can be provided for through partnership arrangements and shall be fully explored.

**Trail security.** Trail security on the trail system will largely be provided through the informal monitoring of the trail by trail users. Security shall also be facilitated through the design of the trail system elements (e.g. horizontal clearances, signage, landscaping, lighting, et cetera) and through the enforcement of security by the Elk Grove police department.

## **4.0 IMPLEMENTATION**

### **4.1 Potential Funding Sources for Elk Grove Trails**

With the passage of Proposition 13 in 1978, with general increases in infrastructure needs and costs, and with increased competition for funding at the state and federal levels, California municipalities have needed to develop local financing mechanisms and programs and rely on them more heavily in order to provide public facilities, including trail projects. Therefore, the trend for financing trail projects has been for local governments to become more innovative, act locally to develop new revenue streams, and increase their share of local revenue contributions to building and maintaining public facilities. For many municipalities, the General Fund continues to be a significant source of local revenue. Additionally, municipalities have developed other programs to provide dedicated and specific funds. Examples of these programs include those that capture households through special property related taxes, developers through development fees, and consumers through retail sales taxes and user-based fees.

Every funding source has some degree of challenge to accessing or developing the revenue, which should be considered as part of pursuing a trail project funding strategy. Challenges to overcome include the likely need for property owner approval of increased assessments or the need to complete and submit competitive grants juxtaposed with limitations on City staff time and resources. However, in the Sacramento region, forging partnerships with regional entities including the Sacramento Area Council of Governments (SACOG), as well as with State agencies such as Caltrans and Department of Parks and Recreation, could increase the likelihood of success with several funding sources that are administered by these agencies.

Revenue usage limitations are an additional factor to consider in pursuing a trail project funding strategy. Many revenue sources, especially grant funds, require the use of funds for capital only, and not operations and maintenance. State law also limits certain developer fees to capital expenditures. Consequently, it is challenging to fund on-going operations and maintenance from non-general fund sources. However, some local, non-grant based revenue sources can be used for operations and maintenance, such as certain land based assessments and a local formula allocation from the Sacramento Transportation Authority Local Measure "A" sales tax program.

**Appendix C** provides a list of potential funding sources for trail projects within Elk Grove. The list also indicates if the funding source has been utilized in the past by the City or other entity that has constructed or maintained trails within the City and the likelihood of securing the source in the future. Furthermore, the list clarifies other important details, such as the types of qualifying projects, if there are any local funding matches required, and if the funding can be used for operations and maintenance.

It is common that there is a delay between the time when a desired trail system is identified and the time when funding sources for both the construction and the maintenance of the trail system segments are clearly identified. However, some trail segments shown on EGTMP Figure 4: Elk Grove Trails Master Plan Map can be funded

through the implementation of construction projects, such as road construction or park development. Other trail segments must be funded by the City's Capital Improvement Program. In general, the City has adopted an approach to building trails which keeps costs very low for taxpayers; the City approves a map showing a planned trail system and then requires developers to dedicate and build trail segments within their development project area in accordance with the approved map in much the same way that it requires developers to fund improvements to streets and other infrastructure affected by their project. A great number of the proposed trails shown on the EGTMP Figure 4: Elk Grove Trails Master Plan Map will be funded in this manner. Regarding funding trail maintenance, a portion, but not all, of trail maintenance costs are eligible for funding via existing Community Facilities Districts and Landscaping and Lighting Districts.

#### **4.2 Trail Prioritization Criteria, Priority Projects, and Project Costs**

The City of Elk Grove allocates available funding to off-street, multi-use trail-related projects on an annual basis as part of the Capital Improvement Plan Process. Future allocations will be based, in part, upon the prioritization criteria outlined below. In general, projects which receive a higher priority ranking (that is, meet more of the criterion) will be assigned a higher priority for construction. These criteria are to be used as a tool to assist with project prioritization and should not be considered the sole determinants. Other important factors include public input/support for a project, project costs/cost effectiveness (i.e. "biggest bang for the buck"), funding availability/limitations of funding sources, equality of distribution of funds across the City, and the ability to include the trail project within a road construction project or adjacent development.

**Criterion: Trail Connectivity for Transportation and Recreation**

- Opens a trail in an existing developed area where no trail currently exists (i.e. "infill" trail or trail that closes a gap in the existing trail system): 5 points
- Opens a trail where some physical improvements already exist, but where the right-of-way has not been opened for public use: 3 points
- Constructs a trail to the EGTMP standard in locations where trail users would benefit from the improvement in the existing trail (i.e. "retrofit" trail): 2 points
- Provides a crossing over a highway, roadway, railroad, or creek: 5 points
- Provides a connection to a trail outside of Elk Grove: 3 points
- Provides a staging area or a connection to another mode of transportation (e.g. bus stop, rail station, park and ride lot): 4 points
- Provides a connection to another on-street bicycle lane or route: 3 points



## City of Elk Grove Trails Master Plan

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### **Criterion: Trail Linkages to Destinations**

- Provides linkage to a natural area: 4 points
- Provides linkage to schools, parks, libraries, or community centers: 5 points
- Provides linkage to commercial centers: 3 points per center
- Provides linkage to employment centers: 3 points per center
- Provides linkage to high density residential housing: 3 points per site

### **Criterion: Trail Safety**

- Improves or remedies an existing trail safety hazard (e.g. sight distance, crossing, obstacles, narrow trail, etc): 2 points
- Promotes safer commuting to schools: 4 points

### **Criterion: Trail Geographical Distribution**

- Distance to nearest trail 0-0.5 miles: 1 point
- Distance to nearest trail 0.5-1 mile: 2 points
- Distance to nearest trail 1-1.5 mile: 3 points
- Distance to nearest trail 1.5-2 miles: 4 points
- Distance to nearest trail 2 miles or over: 5 points

Please refer to **Appendix D** for the current list and a map of priority trail projects to be implemented in the nearer term. This list and map of priority projects will be regularly updated as projects are completed and project descriptions become more refined. The Trails Committee has the authority to update Figure 4: Elk Grove Trails Master Plan Map, Figure D-1: Priority Elk Grove Trail Projects, and the list of priority projects by resolution. However, updates to all other aspects of the EGTMP require City Council approval and would be considered amendments.

Project construction costs vary widely depending on the amount of planning and engineering required, site constraints, fluctuations in material costs, and the ability to obtain economies of scale relative to the size of the project. The following trail cost estimates do not include contingencies and/or cover the cost of design work. As a rough approximation for trail costs, the cost of new trail construction can range from approximately \$300,000 to \$530,000 per mile. Repaving can range from approximately \$50,000 to \$100,000 per mile. Widening is less expensive; costs can range from approximately \$30,000 to \$50,000 per mile. Regarding grade-separated trail crossings, under-crossings are generally less expensive than over-crossings. Undercrossings can

range from approximately \$250,000 to \$1 Million, whereas over-crossings can range between \$1.5 Million to \$4 Million or more. Regarding at-grade crossings, crosswalks are generally inexpensive to install and traffic signals require approximately \$150,000 in initial costs (Konopka, 2006; Knolling 2006).

### **4.3 Implementation Strategies**

The actual implementation of the Elk Grove Trails Master Plan will occur incrementally over time through undertaking the strategies outlined in **Appendix E**. These implementation strategies have been cross-referenced with the EGTMP goals to demonstrate how the goals will be accomplished. Among other items, these implementation strategies pertain to the construction of the trail system, to trail maintenance, and to policies and programs that help promote trail safety and increase trail usage. Members of the public are welcome to suggest further implementation strategies. City staff, the Elk Grove Trails Committee, and the City Council will update and refine these implementation strategies on a regular basis. Please note that these implementation strategies are not ranked or listed in order of priority.

### **4.4 Implementation Roles and Responsibilities**

In considering implementation of the Elk Grove Trails Master Plan, it is important to consider not just the construction aspect of trail development, but also trail ownership and maintenance responsibilities. For example, it is possible for a developer or the Elk Grove Community Services District (EGCSD) to construct a trail, for the City, the Elk Grove Community Services District or a Homeowner's Association to own the trail, and for the Elk Grove Community Services District or another entity to maintain the trail under a contractual agreement. The EGTMP clearly identifies the City's desired trail system to all parties, including residents, property owners, developers, City staff, and other entities that the City might collaborate with to implement the EGTMP. In adopting the EGTMP, the City is expressing its desire for an exemplary trail system and is prepared to play both a larger role in trail development within the City and to collaboratively work with other local jurisdictions (e.g. EGCSD) and regional agencies regarding the funding, construction, ownership, and maintenance of trails.

The City is prepared to either condition trail construction as part of a development project or construct all trails identified in the EGTMP Map that are not included in the EGCSD Master Plan, or will partner with the EGCSD for trail construction. Similarly, the City will maintain all new trails identified in the EGTMP Map that are not included in the EGCSD Master Plan, or will partner with the EGCSD for trail maintenance.

In preparing the Elk Grove Trails Master Plan, the City understands that the EGCSD plans to construct and maintain all new all trails included in its Master plan and will continue to maintain the trails that it currently owns or is under contract to maintain. The City also understands that it is current EGCSD policy to maintain trails which it owns and that the EGCSD is willing to condition future trails in East Elk Grove, Laguna, and East Franklin for EGCSD ownership and maintenance. The City understands that it is current EGCSD policy that, with the exception of a few "in-progress" trails, the EGCSD requires EGCSD

## **City of Elk Grove Trails Master Plan**

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ownership of a trail in order for the EGCS D to maintain the trail. The City also understands that the EGCS D would like to have the opportunity to review and add conditions of approval upon those trail projects that the EGCS D would maintain. Lastly, the City understands that the EGCS D would like to own and maintain trails where there is an existing assessment district that would provide reliable funding for trail construction/maintenance.

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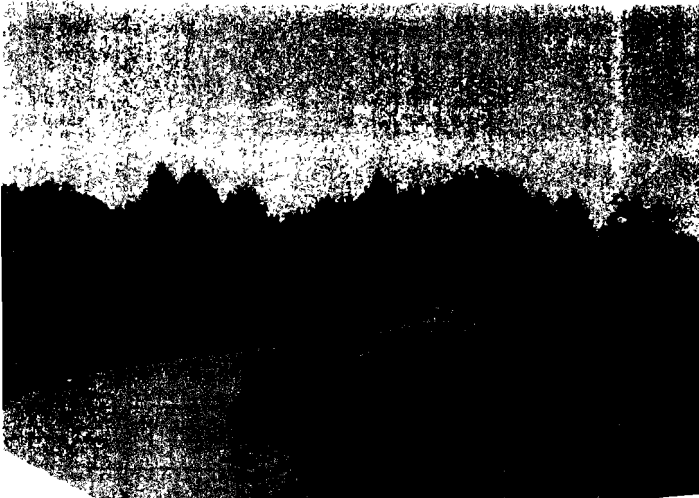
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APPENDIX A:  
SPECIFIC ELK GROVE  
AND REGIONAL POLICIES  
RELATED TO  
ELK GROVE TRAILS



## Appendix A:

# Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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### Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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#### **Elk Grove Bicycle and Pedestrian Master Plan**

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##### **Goal: Increase Cycling and Walking**

- Objective: Increase the percentage of trips in Elk Grove made on bike or foot.
  - Objective: Show the locations of the Caltrans Park & Ride lots, major bus stops, and the light rail stop near the city limits on a City Trails and Bikeways map. Reference that bike lockers are available at the Park & Ride lots and light rail stop and that city buses are equipped with bike racks. Should light rail become available within the City, the map will be updated to include the locations of any new light rail stops.
- 

##### **Goal: Educate the Public on Bicycle and Pedestrian Opportunities and Safety Issues**

- Objective: Support educational programs to teach children and adults safe bicycling techniques.
  - Objective: Provide literature and current bicycle route maps for public use.
    - Update the City Bicycle and Pedestrian Facilities Map for public use.
    - Prepare a City Trails and Bikeways map to distribute to employers, bike shops, public buildings, and schools free of charge.
    - Acquire or develop literature promoting appropriate bicycle laws, safety tips, bike commuting, etc., for dissemination to the general public.
- 

##### **Goal: Enhance Enforcement of Bicycle Regulations**

- Objective: Continue the enforcement of bicycle rules and regulations by cyclists and motorists in order to reduce violations and crashes. Such violations include wrong way riding, riding at night without lights or reflectors, disregarding traffic signals, and violating the right-of-way of cyclists by motorists.
- 

##### **Goal: Improve Connectivity**

- Objective: Complete a network of bikeways that serves bicyclists' needs, especially for travel to employment centers, commercial districts, transit stops, institutions, and recreational destinations. Support the creation of bikeways:
    - Between, through, and within neighborhoods;
    - To regional and local public transit systems (including the proposed rail extension) at stops, stations, and terminals;
    - To carpool/vanpool park-and-ride lots
    - To regional and local activity centers such as schools, libraries, community centers, hospitals, medical offices, senior residences, parks, athletic facilities, government services, employment centers, high-density residential areas, and commercial centers.
    - Fill in gaps in existing, planned, or proposed local and interregional bicycle and pedestrian routes.
    - Connect with and complement regional bicycle and pedestrian routes.
    - Provide safe bicycle and pedestrian access across barriers such as arterial roads, highways, freeways, creeks, and railroads.
- 

##### **Goal: Encourage Use of Non-Motorized Transportation**

- Objective: Provide capital facilities that support bicycling, such as storage, parking, or bike stations.
  - Objective: Encourage biking and walking through public information, education, and awareness.
- 

##### **Goal: Implement Bicycle and Pedestrian-Friendly Site and Roadway Designs**

- Objective: Ensure that bicycle routing is an integral part of street design so that lanes and pathways form an integrated network.
  - Objective: Compile information on preferred bicycle parking facilities to disseminate to developers and the public.
-



## Appendix A: Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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### Elk Grove Bicycle and Pedestrian Master Plan

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#### Goal: Improve Safety for Bikeway Facilities

- Objective: Maintain roadways and bicycle related facilities so they provide safe and comfortable conditions for the bike rider.
    - Continue a routine street sweeping program which includes on-street bike lanes and routes.
  - Objective: Consider adequate and appropriate lighting in the design of new facilities.
  - Objective: Incorporate bicycle and pedestrian safety features in the design of new freeway interchange safety improvements.
  - Objective: Provide signage, alternative routes, etc. during construction activities affecting bikeways to ensure the safety of cyclists.
- 

### City of Elk Grove General Plan

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**CI-1** Circulation planning for all modes of travel (vehicle, transit, bicycle, pedestrian, etc.) shall be coordinated with efforts to reduce air pollution.

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**CI-2** The City shall coordinate and participate with the City of Sacramento, Sacramento County and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations. This may include joint transportation planning efforts, roadway construction and funding.

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**CI-3** The City's efforts to encourage alternative modes of transportation will therefore focus on *incentives* to reduce vehicle use, rather than *disincentives* (which are generally intended to make driving and parking less convenient, more costly, or both). Incentives may include: 1) Preferential carpool and vanpool parking; 2) Bus turnouts; 3) Pedestrian-friendly project designs.

---

**CI-4** Specific Plans, Special Planning Areas, and development projects shall be designed to promote pedestrian movement through direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area.

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**CI-5** The City shall encourage the use of transportation alternatives that reduce the use of personal motor vehicles.

---

**CI-5-Action 1** Funding for development, operations, and maintenance of facilities for mass transit, bicycle, pedestrian modes of transportation shall be given appropriate priority in the City's budgeting process.

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**CI-5-Action 2** Implement policies and actions in the Conservation/Air Quality Element which seek to encourage nonvehicle transportation alternatives in Elk Grove.

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**CI-5-Action 3** The City will support positive incentives such as carpool and vanpool parking, bus turnouts, and pedestrian-friendly project designs to promote the use of transportation alternatives.

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**CI-5-Action 4** The City shall participate in the preparation and implementation of a Congestion Management Plan (CMP) consistent with legal requirements which gives priority to air quality goals, alternatives to automobile travel, and the development of demand reduction measures over additional road capacity.

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**CI-5-Action 5** The City shall develop and implement Pedestrian and Bikeway Master Plans to provide safe and convenient pedestrian and on- and off-street bicycle facilities throughout the City.

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**CI-6** The City shall require that transit service is provided in all areas of Elk Grove, including rural areas, so that transit dependent residents of those areas are not cut off from community services, events, and activities.

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**CI-6-Action 1** The City shall require that RT or any other local or regional transit agency serving Elk Grove include bus service to the rural areas of Elk Grove.

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**CI-7** The City shall encourage an approach to public transit service in Elk Grove which will provide the opportunity for workers living in other areas of Sacramento County to use all forms of public transit—

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## Appendix A:

# Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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### City of Elk Grove General Plan

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including bus rapid transit and light rail—to travel to jobs in Elk Grove, as well as for Elk Grove workers to use public transit to commute to jobs outside the city.

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**CI-16** Where a development project is required to perform new roadway construction or road widening, the entire roadway shall be completed to its planned width from curb to- curb prior to the operation of the project for which the improvements were constructed, unless otherwise approved by the City Engineer. Such roadway construction shall also provide facilities adequate to ensure pedestrian safety as determined by the City Engineer.

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**CAQ-26** It is the policy of the City of Elk Grove to minimize air pollutant emissions from all City facilities and operations to the extent feasible and consistent with the City's need to provide a high level of public service.

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**CAQ-26-Action 1** The City shall encourage all its employees to use transportation alternatives such as public transit, bicycling, walking, and carpooling for commute and other work-related trips. The City shall provide information on these and other applicable programs to all employees.

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**PTO-1** The City of Elk Grove supports the development, maintenance, and enhancement of parks and trails serving a variety of needs at the neighborhood, area, and citywide level. The City may seek to accomplish the provision of parks and trails in cooperation with the Elk Grove Community Services District.

---

**PTO-1-Action 1** As part of the review of development projects, ensure that public parks and trails are provided which meet the City's criteria and which implement the City's Parks and Trails Master Plan.

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**PTO-2-Action 2** To the extent consistent with applicable state law, the City shall develop criteria defining the types of parks and trails to be developed, including criteria defining desired: 1) Park types and sizes; 2) Park facilities by type; 3) Locational criteria; 4) Spacing; 5) Trails and related facilities by type and function

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**PTO-2-Action 3** The City shall adopt a comprehensive Parks and Trails Master Plan which provides information on parks criteria, planned parks, and offstreet recreational, walking, equestrian, and multi-use trails. Prior to the adoption of the parks standards and the Parks and Trails Master Plan, the City shall require the provision of parks as part of development projects to implement the City's parkland standards. The size, location, and facilities provided in these parks may be determined on a case-by case basis.

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**PTO-3** Funding for maintenance of parks and/or trails shall be assured to the City's satisfaction prior to the approval of any Final Subdivision Map which contains or contributes to the need for a public parks and facilities.

---

**PTO-3-Action 1** The City shall pursue the implementation of funding mechanisms to provide for the long-term maintenance of parks and/or trails in those instances where funding is not available from other sources. Such mechanisms may include local or regional assessment districts, homeowners associations, or other methods as determined appropriate by the City.

---

**PTO-7** The trails system in Elk Grove should provide for connectivity, so that all trails are linked to the extent possible for greater use as recreational and travel routes. The following features should be included in the trails system in Elk Grove: 1) Trails should link residential areas with parks, commercial and office areas, and other destinations; 2) Trails along major roadways should avoid meanders or other design features which make bicycle use less convenient or safe; 3) Trails should be located off-street to the extent possible; Easements such as access roads should be placed in joint use as trails.

---

**PTO-8** The City's desired trails system is shown in Figure PTO-2. Flexibility shall be considered when making decisions on specific trail locations within projects, so long as the trails shown in figure PTO-2 are implemented and other policies (such as connectivity) are incorporated in the trails system.

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**PTO-8-Action 1** As part of the review of development projects, ensure that trails are provided which meet the City's criteria and which implement the City's desired trails plan.

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## Appendix A: Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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### City of Elk Grove General Plan

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**PTO-9** Funding for maintenance of City trails shall be assured prior to the approval of any project which contains a City-owned trail.

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**PTO-10** Trailheads should be provided at appropriate locations to provide safe starting points on the trails system for equestrians, cyclists, and pedestrians.

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**PTO-10-Action 1** Develop standards for and locations of potential trailhead locations, including sufficient space for the off-street parking of equestrian trailers and vehicles.

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**PTO-10-Action 2** To the extent possible, coordinate with the Elk Grove CSD in the review of projects containing trails.

---

**PTO-11** Trails which parallel streams should be primarily located beyond the riparian corridor and wetlands to minimize wildlife impacts and shall be restricted to non-motorized traffic.

---

**PTO-12** Trails should be designed with the safety of users and adjacent property owners in mind. To the extent possible, the bicycle trails system should provide safe, off-street options suitable for use by children and less-experienced riders.

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**PTO-12-Action 1** Involve the Elk Grove Police Department in the review of proposed trail locations and designs.

---

**PTO-13** Recreational trails should not be placed adjacent to or on farmland if feasible alternative routes exist elsewhere in the vicinity. However, if no other feasible routes exist, trail facilities should be designed in cooperation with adjacent property owners to minimize adverse impacts on farming practices.

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**PTO-14** The City supports the use of volunteers and community groups to provide maintenance and safety patrols on trails.

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**PTO-16** Stream corridors, floodways, electrical transmission corridors, and similar features shall be considered for inclusion in the citywide trails and open space system.

---

**PTO-16-Action 1** Involve the Elk Grove CSD in the identification of appropriate open space and trails corridors which could be identified in this General Plan and the Elk Grove CSD's Master Plan.

---

**PTO-17** The City encourages the creation of a regional trail/open space system which links the Cosumnes River with the Sacramento River and provides for trail connections between Elk Grove and these open space areas. The City's vision for regional open space and trails is shown in Figure PTO-1 and in the "Planning Area Land Use Concept" in the Land Use Element of this General Plan.

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**PTO-17-Action 1** Within the Cosumnes River floodplain, the City will encourage the dedication or acquisition of easement or fee title for trails as part of an overall trail system linking the Cosumnes and Sacramento rivers. *Note: This policy affects lands within the planning area but outside of the 2002 city limits only.*

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**SA-27** The City shall initiate as well as cooperate in improvements at existing railroad-at-grade crossings to improve public safety. This may include construction of grade-separated crossings and other appropriate safety features.

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**SA-28** The City shall take all appropriate measures to ensure that railroad crossings in Elk Grove are made as safe as possible.

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**SA-28-Action 1** The City will coordinate with the railroads operating in Elk Grove to ensure that all appropriate safety measures are implemented in their operations in the city.

---

**SA-28-Action 2** The City will seek to improve the safety at rail crossings by continuing to investigate improvements in crossing gates and warning devices.

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**SA-28-Action 3** The City will make available information on railroad crossing safety at City Hall and on the City's web site to encourage safe practices by Elk Grove residents and businesses.

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## Appendix A:

# Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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**The Regional Bicycle, Pedestrian, and Trails Master Plan. (Note: Adopted November 2004 by the Sacramento Area Council of Governments. Amended September 2005.)**

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### Specific Goals for Capital Projects

1. Provide bicycle/pedestrian connections
    - a. Between, through, and within all cities and towns of the six-county region.
    - b. To regional and local public transit systems (including rail) at stops, stations, and terminals.
    - c. To carpool/vanpool park-and-ride lots.
    - d. To regional and local activity centers such as schools, libraries, community centers, colleges, universities, hospitals, medical offices, senior residences, parks, athletic facilities, government services, employment centers, high-density residential areas, and commercial centers.
  2. Provide bicycle and pedestrian access within or through the central business districts of the region.
  3. Fill gaps in existing, planned, or proposed interregional bicycle or pedestrian routes.
  4. Provide bicycle and pedestrian access across barriers such as arterial roads, highways, freeways, rivers, canals, creeks, and railroads.
  5. Improve the time convenience of walking and bicycling, for example with shortcuts or special facilities such as bike/pedestrian boulevards.
  6. Improve the safety and security of walking and bicycling where needed for utilitarian purposes.
  7. Provide an aesthetic, pleasant, or more comfortable biking or walking experience.
  8. Provide capital facilities that support bicycling, such as storage, parking, or bike stations.
  9. Complement projects funded with other regional or state sources such as the Community Design or Safe Routes to School programs, thereby improving bicycle and pedestrian access provided by those programs.
  10. Complement bicycle and pedestrian plans and projects in an adjacent region.
- 

### Specific Goals for Non-capital Projects and Programs

1. Encourage biking and walking through public information, education, and awareness.
  2. Where needed, perform studies and plans that support the goals for capital facilities stated above.
  3. Increase the level of public agency staff expertise on bicycling and walking.
- 

### Design Guidelines

The State Streets and Highways Code, chapter 8 section 891 requires that local agencies must comply with design criteria set forth in Chapter 1000 of the Caltrans Highway Design Manual "Bikeway Planning and Design". These shall govern design standards for all new bicycle projects. For all new pedestrian projects locally adopted pedestrian design standards shall govern. If specific pedestrian design guidelines have not been adopted the City of Sacramento's "Pedestrian Safety Guidelines" shall govern. Additionally AASHTO's "Guide for the Development of Bicycle Facilities", and FHWA's "Design Guidance for Accommodating Bicycle and Pedestrian Travel", and "Pedestrian Facilities Users Guide – Providing Safety and Mobility" are also useful references for the planning and design of bicycle and pedestrian facilities.

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**The 2010 Sacramento City/County Bikeway Master Plan. (Note: Adopted 1993. The City of Sacramento updated this plan in 2001 in terms of format, statistical information, and to answer key questions. The City of Sacramento amended this plan in 2004 to add more bikeways. The update and amendments do not exist in consolidated form as per interview with the City.)**

---

**Coordination Objective.** To develop and maintain a coordinated approach by City/County and other agencies to implement the plan as funding becomes available or as development occurs. Policy (1) Integrate efforts of planning, recreation, public works, and other departments of city and county government and other agencies that are involved in planning, construction or operational elements of the bikeway system.

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## Appendix A: Specific Elk Grove and Regional Policies Related to Elk Grove Trails

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**The 2010 Sacramento City/County Bikeway Master Plan. (Note: Adopted 1993. The City of Sacramento updated this plan in 2001 in terms of format, statistical information, and to answer key questions. The City of Sacramento amended this plan in 2004 to add more bikeways. The update and amendments do not exist in consolidated form as per interview with the City.)**

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**Safety and Security Objective.** To achieve the highest possible level of safety and security for cyclists. Policy (1) Provide a network of safe and convenient bikeways. (2) Promote law enforcement and educational awareness programs which would improve bicycling safety.

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**Design Objective.** To provide adequate design consideration for bicycle facilities in all development plans and programs. Policy (1) Incorporate adequate street widths into street plans and developments to ensure a reasonable level of safety for bicyclists and motorists. (2) Design on-street and off-street parking facilities for maximum security and, when possible, for protection from the elements. (3) Provide adequate signing, and other traffic control measures in all bikeway design plans to insure a reasonably high level of safety for the bicyclist and motorist. (4) Provide appropriate bicycle signing for parking and storage facilities.

---

**Maintenance Objective.** To develop a comprehensive bikeway maintenance program. Policy (1) Promote and fund an effective maintenance program for bikeways and related facilities. (2) Bikeway maintenance should provide a safe, clean, smooth riding surface.

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**Aesthetics Objective.** To develop a bikeway system which incorporates aesthetics and the historical characteristics of the Sacramento area. Policy (1) Bikeways should take full advantage of the beauty and natural features of the Sacramento area by blending with the terrain and topography.

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**Implementation Objective.** To take necessary actions to implement the preceding Sections 1 thru 5. Policy (1) Actively support legislation, which will promote the policies of this plan. (2) Require future developments to conform to the Bikeways Master Plan. (3) Promote bicycling as a feasible transportation alternative which conserves energy, improves air quality, reduces traffic congestion, and improves public health. (4) Develop new financing mechanisms to construct and maintain bikeways. (5) At the time of new street construction, pavement overlays, or seal coat operations, all bikeways within the project limits as detailed in this master plan shall be implemented.

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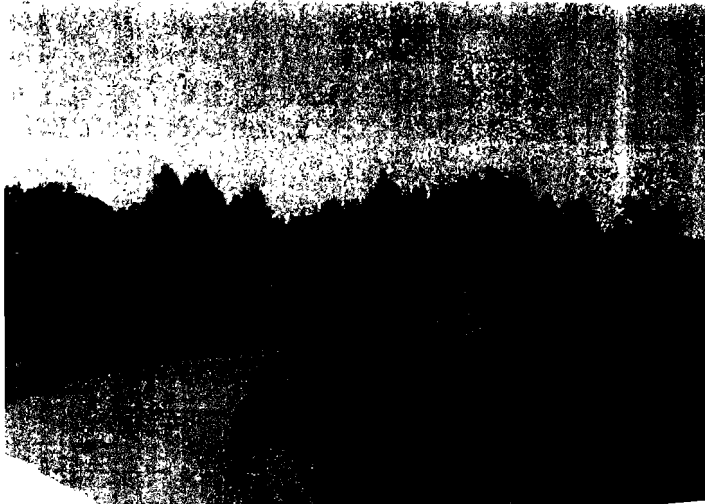
### Regional Air Quality

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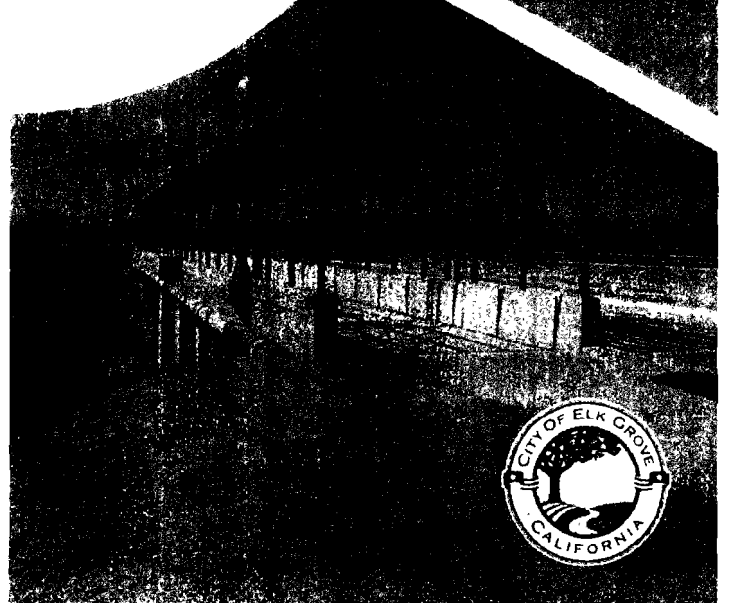
The Sacramento Metropolitan Air Quality Management District does not currently have a district-wide management plan. However, the district does actively promote bicycling and walking and the development of bicycle and pedestrian facilities to reduce emissions. The district develops Air Quality Mitigation Plans on a case by case basis for new development projects which exceed the District's adopted CEQA threshold for operational emissions by 15 percent or more. The District has also developed bicycle and pedestrian friendly development principals and a Model Air Quality Element, advocating for alternative transportation modes, for use by local jurisdictions in their general plans.

*Source: Personal communication with Rachel Dubose, SMAQMD, September 28, 2006.*

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APPENDIX B:  
RECOMMENDED PLANT  
MATERIALS FOR  
ELK GROVE TRAILS



## Appendix B: Recommended Plant Materials for Elk Grove Trails

### Recommended Plant Materials for Elk Grove Trails

| Botanical Name<br>COMMON NAME              | Minimum<br>Distance to<br>Trail:<br>(* plant with<br>root barrier) | Height To: | Diameter To<br>in 15 Years: | Growth:   | Remarks:  |
|--|--|------------|-----------------------------|---|---|
| <b>TREES</b>                               |  |            |                             |   |   |
| Calocedrus decurrens<br>INCENSE CEDAR      | 5*   | 75'        | 20'                         | Slow at 1 <sup>st</sup> , moderate<br>after established | Evergreen, small brown<br>cones   |
| Casuarina equisetifolia<br>BEEFWOOD        | 5*   | 50'        | 20'                         | Moderate  | Evergreen, small cone-like<br>fruit (1/4" to 1")                                    |
| Celtis australis<br>EUROPEAN HACKBERRY     | 5*   | 50'        | 35'                         | Moderate  | Deciduous, small pod fruit  |
| Celtis sinensis<br>CHINESE HACKBERRY       | 5*   | 40'        | 35'                         | Moderate to<br>Fast                                     | Deciduous, small pod fruit  |
| Geijera parvifolia<br>AUSTRALIAN WILLOW    | 5*   | 25'        | 20'                         | Moderate  | Evergreen, plant in power<br>line easements, tends to<br>blow over in shallow soils |
| Koelreuteria paniculata<br>GOLDENRAIN TREE | 5*   | 20'-35'    | 30'                         | Moderate  | Deciduous, papery fruit<br>capsules, fall color                                     |
| Lagerstroemia indica<br>GRAPE MYRTLE       | 5'   | 25'        | 25'                         | Slow  | Deciduous, brilliant colored<br>flowers, fall color, good<br>tree under power lines |
| Laurus nobilis 'Saratoga'<br>SWEET BAY     | 5*   | 30'        | 30'                         | Slow  | Evergreen, 1/2" – 1" fruit,   |
| Pinus canariensis<br>CANARY ISLAND PINE    | 10**   | 50'+       | To 30'                      | Fast  | Evergreen, 4"-9" cones,   |
| Pinus eldarica<br>AFGHAN PINE              | 10**   | 50'+       | To 25'                      | Fast  | Evergreen, 4"-9" cones  |

## Appendix B: Recommended Plant Materials for Elk Grove Trails

| Botanical Name<br>COMMON NAME                     | Minimum<br>Distance to<br>Trail:<br>(* plant with<br>root barrier) | Height To:                       | Diameter To<br>in 15 Years: | Growth:          | Remarks:   |
|---|--|----------------------------------|-----------------------------|------------------|--|
| Pistacia chinensis<br>CHINESE PISTACHE            | 5'*  | 50'                              | 35'                         | Slow to Moderate | Deciduous, small red fruit,<br>fall color                                    |
| Platanus racemosa<br>CALIFORNIA SYCAMORE          | 5'*  | 50-100'                          | 30'+                        | Fast             | Winter deciduous   |
| Quercus agrifolia<br>COAST LIVE OAK               | 5'*  | 50'                              | 50'+                        | Moderate         | Evergreen, exchanges<br>leaves in Spring, Acorns                             |
| Quercus douglasii<br>BLUE OAK                     | 5'*  | 50'                              | 35'                         | Slow to Moderate | Deciduous, bluish leaves,<br>Acorns  |
| Quercus lobata<br>VALLEY OAK                      | 5'*  | 50'                              | 35'                         | Slow to Moderate | Deciduous, Acorns  |
| Quercus morhus<br>ORACLE OAK                      | 5'*  | 20-40'<br>(sometimes a<br>shrub) | 20'                         | Moderate         | Evergreen  |
| Quercus wislizenii<br>INTERIOR LIVE OAK           | 5'*  | 50'                              | 35'                         | Moderate         | Evergreen  |
| Rhus lancea<br>AFRICAN SUMAC                      | 5'*  | 25'                              | 20'                         | Slow             | Evergreen, pea size fruit  |
| Robinia pseudoacacia 'Idahoensis'<br>IDAHO LOCUST | 5'*  | 40'                              | 25'                         | Moderately Fast  | Deciduous, bright magenta<br>rose flowers, 4" long bean<br>like pods         |
| Schinus Molle<br>CALIF. PEPPER TREE               | 10'*   | 40'                              | 35'                         | Fast             | Evergreen, copious litter,<br>greek surface roots, small<br>pea size berries |
| Schinus terebinthifolius<br>BRAZILIAN PEPPER      | 5'*  | 30'                              | 20'                         | Moderate         | Evergreen-deciduous, small<br>pea size berries that are<br>invasive          |

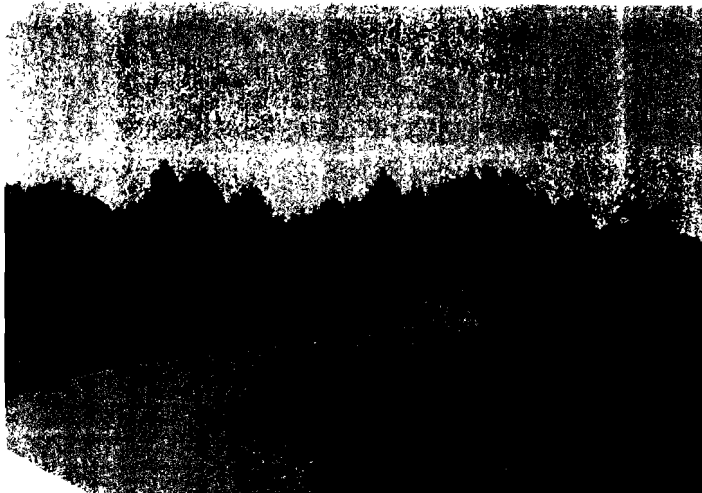


## Appendix B: Recommended Plant Materials for Elk Grove Trails

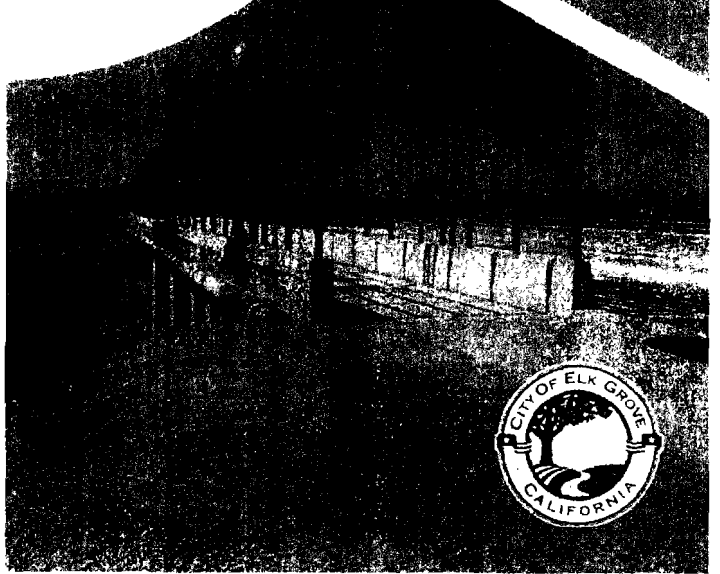
| Botanical Name<br>COMMON NAME                    | Minimum<br>Distance to<br>Trail:<br>(* plant with<br>root barrier) | Height To:          | Diameter To<br>in 15 Years: | Growth:          | Remarks:   |
|--|--|---------------------|-----------------------------|------------------|--|
| <b>LOW SHRUBS / GROUNDCOVERS</b>                 |  |                     |                             |                  |  |
| Arctostaphylos 'Emerald Carpet'<br>NCN           | 3'   | 8"-14"              | 5'                          | Moderate         | Evergreen, needs deep watering weekly                              |
| Arctostaphylos uva-ursi<br>BEARBERRY             | 5'-7'  | 12"                 | 15'                         | Moderate         | Evergreen, small red pea sized berries                             |
| Arctostaphylos uva-ursi 'Point Reyes'            | 5'-7'  | 12"                 | 15'                         | Moderate         | Evergreen, small red pea sized berries                             |
| Baccharis pilularis<br>DWARF COYOTE BUSH         | 3'   | 8"- 24"             | 6'                          | Moderate         | Evergreen, Also 'Twin Peaks' and 'Pigeon Point' are good varieties |
| Cistus crispis<br>ROCKROSE                       | 3'   | To 3'               | 5'                          | Moderate         | Evergreen. Also 'Descano' and 'Santa Cruz' – Showy flowers         |
| Cistus salviifolius<br>SAGELEAF ROCKROSE         | 3'   | To 2'               | 6'                          | Moderate         | Evergreen, Showy flowers   |
| Cistus 'Sunset' (Brilliancy)                     | 4'   | To 2'               | 6'-8'                       | Moderate         | Evergreen, showy flowers   |
| Juniperus (many species)                         | 3' to 5'   | Prostrate varieties | 6' - 12'                    | Slow to Moderate | Evergreen, Variety of green to blue colored foliage                |
| Mahonia repens<br>CREPING MAHONIA                | 2'   | To 1'               | 3'                          | Moderate         | Evergreen  |
| Myoporum parvifolium<br>NCN                      | 4'   | 1'                  | 8'                          | Moderate to Fast | Evergreen  |
| Rosemarinus officinalis 'Prostratus'<br>ROSEMARY | 3'   | 2'                  | 4' – 8'                     | Moderate         | Evergreen  |

**Appendix B:  
Recommended Plant Materials for Elk Grove Trails**

| <b>Botanical Name<br/>COMMON NAME</b>                          | <b>Minimum<br/>Distance to<br/>Trail:<br/>(* plant with<br/>root barrier)</b> | <b>Height To:</b> | <b>Diameter To<br/>in 15 Years:</b> | <b>Growth:</b>   | <b>Remarks:</b>  |
|--|---|-------------------|-------------------------------------|------------------|--|
| <b>PERENNIALS</b>  |   |                   |                                     |                  |  |
| Eriogonum grand rubescens<br>RED BUCKWHEET                     | 2'  | 12"               | 30"                                 | Moderate         | Evergreen, Showy flowers,<br>Plant in mass   |
| Gazania hybrids<br>NCN (Clumping)                              | 1'  | 6"                | 12"                                 | Moderate         | Plant only 1 gallon sized<br>plants for survival, showy<br>flowers, plant in mass              |
| Gazania hybrids<br>NCN (Trailing)<br>'uniflora' & 'leucolaena' | 2'  | 6"                | To 3'                               | Moderate to Fast | Per Plant on 1 gallon sized<br>plants, showy flowers, Plant<br>in mass                         |
| Origanum libanoticum<br>SHOWY OREGANO                          | 2'  | 2'                | 2'                                  | Moderate         | Plant in mass  |
| <b>GRASSES</b>   |   |                   |                                     |                  |  |
| Carex barberae<br>SANTA BARBARA SEDGE                          | 2'  | 1' - 3'           | Clumps                              | Moderate         | Plant in mass  |
| Cortaderia 'Pumila' ('Ivory Feathers')                         | 5'  | 3'                | 4'                                  | Moderate         | Plant signally or in mass  |
| Leymus arenarius 'Findhorn'<br>Lyme Grass                      | 3'  | 3'                | 3'                                  | Moderate         | Plant in mass, Can<br>withstand some<br>considerable heat                                      |
| Muhlenbergia caillaris<br>PINK MUHLY                           | 4'  | 3'                | 6'                                  | Moderate         | Plant in mass, Also use the<br>following varieties: M.<br>emersley, M. pubescens, M.<br>rigida |
| Panicum virgatum<br>SWITCH GRASS                               | 3'  | 2' - 4'           | 2' - 4'                             | Moderate         | Plant in mass  |



APPENDIX C:  
POTENTIAL FUNDING  
SOURCES FOR  
ELK GROVE TRAILS



**Appendix C:  
Potential Funding Sources for Elk Grove Trails**

**Potential Funding Sources for Elk Grove Trails**

| Revenue Category/ Source | Source of Funds                            | Revenue Source to City (Previous or Current) | Implementation Feasibility <sup>(1)</sup> | Grant Competitive | Eligible Uses | Provides Capital \$   | Provides O&M \$ | Restrictions/ Local Match | Approximate Annual Funding  | Application  | Approval  | Program Mgmt   | Other (Geographic Limitations)  |   |
|--------------------------|--|--|---|-------------------|---------------|---|-----------------|---------------------------|---|--|---|--|---|---|
| <i>Local</i>             |  |  |   |                   |               |   |                 |                           |   |  |   |  |   |   |
| 1                        | Developer Construction of Trails           | N/A - Part of construction costs             | N/A - not considered "revenue"            | 1                 | N/A           | Construction of trails, trail crossings, and trail amenities  | X               | Not usually               | N/A   | N/A  | N/A   | N/A  | Project Area Within City Limits   |   |
| 2                        | Mello Roos Community Facilities District   | Annual Special Tax Revenue                   | X <sup>(2)</sup>                          | 1                 | No            | Finance the construction and maintenance of parks, community centers, parkways, landscape setbacks, landscaped medians, bicycle and other paths, and open space. Bonding capacity                                     | X               | X                         | No restrictions or local match necessary. Can be used as local match for other programs | Limited to taxing capabilities established in city's goals and policies for Mello Roos financing   | Process started with an application by property or member of the governing body   | First approved by governing body then, if less than 12 registered voters within the proposed district boundaries, vote by acreage otherwise 2/3 majority | Districts administered by local agency with special taxes placed on property tax rolls for bi-annual collection | Limited to within formation agency boundaries. Can be formed with other jurisdictions with each agency's approval |
| 3                        | 1972 Act Lighting and Landscaping District | Annual Assessments                           | X   | 1                 | No            | Acquisition and Maintenance of land and equipment for park, recreational, or open space   | X               | X                         | No restrictions or local match necessary. Can be used as local match for other programs | No statutory limit. Limits become practical and based on need  | Process started with an application by property or member of the governing body   | First approved by governing body then, subject to the provisions of Prop 218 and requires a 2/3 vote of the property owners                              | District administered by local agency with assessments placed on property tax rolls for bi-annual collection    | Limited to within formation agency boundaries   |
| 4                        | 1913/15 Act Assessment Districts           | Annual Assessments                           | X   | 3 <sup>(3)</sup>  | No            | Finance the construction of parks, parkways, and open space. Bonding capacity   | X               |                           | No restrictions or local match necessary. Can be used as local match for other programs | No statutory limit. Limits become practical and based on need  | Process started with an application by property or member of the governing body   | First approved by governing body then, subject to the provisions of Prop 218 and requires a majority vote of the property owners                         | Districts administered by local agency with assessments placed on property tax rolls for bi-annual collection.  | Limited to within formation agency boundaries   |
| 5                        | Art in Public Places                       | Payments by developers                       |   | 2                 | No            | Funding source for public art, such as sculpture, monuments, murals, fountains, etc. in public places. Public art would be considered a trail amenity if it is installed along trail segments, at staging areas, etc. | X               | X                         | No restrictions or local match necessary. Can be used as local match for other programs | "Percent-for-art" programs usually provide a percentage of the value of private and/or public construction for the acquisition and commission of artworks. Percentages are from 5% to 5% | Usually initiated with report by consultant recommending a percentage and showing examples from other programs. An agreement between the city and developer could include the maintenance of the art by the owner |  |   |   |

**Appendix C:  
Potential Funding Sources for Elk Grove Trails**

| Revenue Category/Source | Source of Funds                          | Revenue Source to City (Previous or Current)  | Implementation Feasibility (1) | Grant Competitive | Eligible Uses | Provides Capital \$   | Provides O&M \$ | Restrictions/Local Match | Approximate Annual Funding  | Application   | Approval   | Program Mgmt  | Other (Geographic Limitations) |
|-------------------------|--|---|--------------------------------|-------------------|---------------|---|-----------------|--------------------------|---|---|--|---|--------------------------------|
| 6                       | Development Impact Fees                  | Payments by developers  | X                              | 1                 | No            | Capital facilities and infrastructure identified in the impact fee study  | X               |                          | Nexus must be established between new development and its fair share impact on the facility. Revenues can not be used to fund deficiencies from existing development, not O&M   | No statutory limit. Revenues derived from impact fee study.   | Development Impact Fee Study updated and approved by City Council upon recommendation by City staff.   |   |                                |
| 7                       | Quimby Dedication/In-Lieu Fees           | Donation of land or in-lieu payments by developers  | X                              | 1                 | No            | Parks and Open Space  | X               |                          | Dedications of land based on city approved standard (such as # of park acres required per 1,000 residents). Land could be used for trail development. In-lieu fees are paid as part of the Development Impact Fee   | Dependent on developer in-lieu payments                       | Must be administered in conformance with state law. Development Impact Fee Study updated and approved by appropriate local entity upon recommendation by its staff   |   |                                |
| 8                       | Revenue Operations                       | Trails-related fees. On-site property rental (e.g. bike lockers) and Leases   |                                | 2                 | No            | Capital improvements, O&M of trails infrastructure and services   | X               | X                        | User fee related revenues that could be used as a local match for non-local funds   | Dependent on rates and usage of trails facilities and rentals | Must be approved by City Council upon recommendation by City staff.  |   |                                |
| 9                       | Measure "A" Sales Tax                    | 1/2 cent local transportation sales tax, renewed by voters through year 2039  | X                              | 1                 | No            | Funding programs include for safety, streetscaping, pedestrian and bicycle facilities   | X               | X                        | Example improvements include installing and maintaining safe pedestrian sidewalks (ADA), and installing and maintaining safe bike and pedestrian ways near schools  | 5% of sales tax revenues                                      | Funds are distributed to local jurisdictions based 75% on relative population and 25% on total street/road mileage. The formula will be updated annually based on California Department of Finance population estimates for cities and counties  |   |                                |
| 10                      | General Fund                             | General Fund  | X                              | 2                 | No            | Typically any city service or project   | X               | X                        | None  | Annual General Fund Budget                                    | Must be approved by City Council upon recommendation by City staff.  |   | City-wide use of revenues      |
| <b>SACOG</b>            |  |   |                                |                   |               |   |                 |                          |   |   |  |   |                                |
| 11                      | Transportation Development Act Article 3 | Local Transportation Fund (1/4 cent sales tax)  | X                              | 1                 | No            | Pedestrian and bicycle facilities   | X               |                          | SACOG earmarks 2% of LTF towards bike and pedestrian projects and allocates by population.  | \$108,000   | SACOG administers LTF revenue and allocates by relative county population  |   |                                |
| 12                      | Bicycle and Pedestrian Funding Program   | Federal SAFETEA-LU Congestion Mitigation and Air Quality: Surface Transportation Program, and Transportation Enhancements | X (1)                          | 2                 | Yes           | Projects must be contained in the 2004 SACOG Regional Bicycle, Pedestrian and Trails Master Plan. Non-capital programs (public education, master plans) are low priority for funding. | X               |                          | For projects not listed in the SACOG plan, or for projects ranked "medium" or "low" in the plan, applicant must provide detailed justification for funding. Minimum project size is \$150,000 and requires a minimum 11.47% local match. Non-eligible projects include facilities that serve only a recreational (rather than a transportation) function, "good practices" in new development according to FHWA guidelines, facility maintenance school | \$4.9 million available from last funding cycle               | SACOG issues a call for applications when federal funding arises, typically every two or three years. Last call for projects cycle ended January 2006. Project proposals within Sacramento County must first be presented as information to the Sacramento Transportation Authority before being reviewed by SACOG. The SACOG Bicycle and Pedestrian Working Group and a Grant Overview Committee, formed from existing SACOG committees and staffed by SACOG, recommend project selection to the Board for funding. Grant application must address environmental justice. In addition to being ranked as a "high" priority project in the SACOG Regional Bicycle, Pedestrian and Trails Master Plan, the project or program must also be ready for inclusion in the Metropolitan Transportation Improvement | Bicycle and pedestrian facilities in new developments are expected to be paid for by developers in cooperation with the City. The Federal Highway Administration's Design Guidance for Accommodating Bicycle and Pedestrian Travel provides a list of good practices in |                                |

**Appendix C:  
Potential Funding Sources for Elk Grove Trails**

| Revenue Category/ Source       | Source of Funds                         | Revenue Source to City (Previous or Current)  | Implementation Feasibility (1) | Grant Competitive | Eligible Uses | Provides Capital \$ | Provides OLM \$ | Restrictions/ Local Match  | Approximate Annual Funding                           | Application | Approval | Program Mgmt | Other (Geographic Limitations)  |  |
|--------------------------------|---|---|--------------------------------|-------------------|---------------|---------------------|-----------------|--|--|-------------|----------|--------------|---|--|
|                                |   |   |                                |                   |               |                     |                 | education programs, long term staff positions, transit operations, law enforcement, and bicycle racks for carpools, vanpools or private vehicles   |  | Program     |          |              | new developments for which the SACOG program is not intended to fund  |  |
| <i>Caltrans</i>                |   |   |                                |                   |               |                     |                 |  |  |             |          |              |   |  |
| 13                             | Safe Route to Schools (SRTS)            | Federal SAFETEA-LU Safe Routes to School Program funds  | X (5)                          | 2                 | Yes           |                     | X               | Infrastructure projects that substantially improve the ability of students to walk and bicycle to school. Projects are located in the vicinity of schools (approximately 2 miles). Between 10% and 30% of funding can be used for non-infrastructure activities such as public awareness and training.   | \$22 to \$32 million                                 |             |          |              |   |  |
| 14                             | Bicycle Transportation Account (BTA)    | State transportation funds  |                                | 2                 | Yes           |                     | X               | Projects contained in an approved local Bicycle Transportation Plan.   | \$5 million  |             |          |              |   |  |
| <i>Other State/Federal (6)</i> |   |   |                                |                   |               |                     |                 |  |  |             |          |              |   |  |
| 15                             | California River Parkways Grant Program | Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 - Proposition 50 |                                | 2                 | Yes           |                     | X               | Eligible River Parkway Projects must provide public access or be a component of a larger parkway plan that provides public access. Projects include Recreation, Habitat, Flood Management, Conversion to River Parkways, and Conservation and Interpretive Enhancements. Priority will be given to River Parkway Projects that are implemented pursuant to approved Watershed Plans and include water quality and watershed protection benefits as required by the California Water Code, Section 79541. | 2nd round of funding is approximately \$32.5 million |             |          |              | Applications are scored and selected for funding by the State Resources Agency. Scoring is based on points for meeting the following 8 criteria: Statutory Conditions and Project Benefits, Statewide Resource Priorities Access and Location, Project Readiness, Sustainability & Capacity, Community & Regional Impacts, Other Sources of Funds, and Water Quality & Watershed Protection (if applicable, for priority points). Applications for 2nd round funding are due by October 17, 2006. | Applications that include hardscape such as restroom and parking lots may be subject to additional technical review to determine that engineering of that hardscape is compatible with environmental issues and geomorphic constraints and considerations. |

**Appendix C:  
Potential Funding Sources for Elk Grove Trails**

| Revenue Category/ Source  | Source of Funds              | Revenue Source to City (Previous or Current) | Implementation Feasibility (1) | Grant Competitive | Eligible Uses  | Provides Capital \$ | Provides O&M \$ | Restrictions/ Local Match   | Approximate Annual Funding | Application | Approval | Program Mgmt | Other (Geographic Limitations)   |
|---|------------------------------|--|--------------------------------|-------------------|--|---------------------|-----------------|---|----------------------------|-------------|----------|--------------|--|
| 16<br>Environmental Enhancement and Mitigation Program (EEMP) (Pending Reauthorization) | State/federal gasoline tax   |  | 3                              | Yes               | Environmental enhancement and mitigation projects that are directly or indirectly related to the environmental impact of modifying existing transportation facilities, or for the design, construction or expansion of new transportation facilities. EEMP projects must be over and above what is called for in NEPA and CEQA   | X                   |                 | River Pathways - Convert existing developed riverfront land into uses consistent with River Pathways. 5. Conservation and Interpretive Enhancement - Provide facilities to support or interpret river or stream Restoration or other conservation activities.<br><br>General categories of projects include Highway Landscape and Urban Forestry; Resource Lands, and Roadside Recreation (bicycle facilities, parks, trails and trailheads) 40% of annual funds to northern California/60% to southern California. Maximum grant not to exceed \$250,000 | \$10 million               |             |          |              | EEMP is a <i>statutorily mandated program</i> . Applications are scored and selected for funding by the State Resources Agency. Scoring is based on General Merit (Regional and Community Enhancement and Cost Effectiveness) and Project Specific (impact on wildlife, and degree of scenic or aesthetic resource development). The recommended project list is forwarded to the California Transportation Commission for approval. Caltrans then administers the approved grants. Applications are due in November of each year. |
| 17<br>Office of Traffic Safety (OTS)  | Federal Highway Safety Funds |  | 3                              | Yes               | The program has an objective to reduce motor vehicle fatalities and injuries through a national highway safety program. One of the eligible programs is for bicycle and pedestrian safety. A bicycle and pedestrian community program should be designed to increase safety awareness and skills among pedestrians and bicyclists and should also address driver behaviors. A comprehensive program should include both elements. 1) education and 2) enforcement.   |                     |                 | Previous grants related to bicycle and pedestrian projects are for safety awareness and education programs.   | \$56 million               |             |          |              | OTS makes funding decisions. Evaluation criteria include potential traffic safety impact, collision statistics and rankings, seriousness of identified problems and performance on previous grants. The applicant must follow the OTS Blueprint for submission of concept papers. Applications are due in January of each year. Grants are awarded in October.   |
| 18<br>Habitat Conservation Fund   | State Funds                  |  | 3                              | Yes               | Acquisition of, Deer and lion habitat, including oak woodlands, Habitat for rare and endangered, threatened, or fully protected species, Wildlife corridors and urban trails; Wetlands, Aquatic habitat for spawning and rearing of anadromous salmonids and trout resources; and Riparian habitat Enhancement and Restoration of Wetlands; Aquatic habitat for spawning and rearing of anadromous salmonids and trout resources; Riparian habitat. Programs that provide for interpretation of the State's park and wildlife resources; and programs which bring urban residents into park and wildlife | X                   |                 | The following categories will be funded during the upcoming FY 2007-08 grant cycle: Deer/Mountain Lion Habitat; Rare, Threatened, Endangered, or Fully Protected Species Habitat, Wetland Habitat, and Riparian Habitat. Projects that are legally required as mitigation by a regulatory agency as a condition for a permit or to proceed with construction, will not be funded under this program. However, a proposal which is in addition to any required mitigation, and a part of   | \$2 million                |             |          |              | Grant program is administered by the State Department of Parks and Recreation (DPR). Applications due in October each year. A list of projects selected for funding by DPR is submitted to the Legislature. The funds are then included in the State Budget for the upcoming fiscal year. Applicants are notified of the final selections by January.  |

**Appendix C:  
Potential Funding Sources for Elk Grove Trails**

| Revenue Category/ Source | Source of Funds   | Revenue Source to City (Previous or Current)  | Implementation Feasibility (1) | Grant Competitive | Eligible Uses  | Provides Capital \$ | Provides O&M \$ | Restrictions/ Local Match   | Approximate Annual Funding   | Application | Approval | Program Mgmt | Other (Geographic Limitations)  |
|--------------------------|---|---|--------------------------------|-------------------|--|---------------------|-----------------|---|--|-------------|----------|--------------|---|
| 19                       | Recreational Trails Program                               | Federal funds   | 2                              | Yes               | <p>areas including nature interpretation programs that are designed to increase the peoples' awareness and appreciation for park and wildlife resources</p> <p>Acquisition of easements and fee simple title to property for Recreational Trails or Recreational Trail corridors. Development and Rehabilitation of trails, Trailside and Trailhead Facilities, and Construction of new trails</p> | X                   |                 | <p>an overall undertaking, would be eligible 50% local match</p> <p>Applicant must have management responsibilities over public lands. Ineligible projects include properly condemned, motorized usage provisions for non-motorized trails and sidewalks and paths adjacent to roads 11 74% local or state match</p> <p>Ineligible projects include restoration of historic structures construction of employee residences development of convention facilities, community centers and gymnasiums 50% local match This program will continue through January 2015 Grants for local agencies are divided 60% for southern California and 40% for northern California</p> | \$3.6 million (no minimum or maximum grant amount)   |             |          |              | <p>Non-motorized projects administered by the State Department of Parks and Recreation Office of Grants and Local Services State Park and Rec reviews annual applications on a competitive basis Applications due in October each year</p>  |
| 20                       | Land and Water Conservation Fund                          | Federal motorboat fuels tax, Outer Continental Shelf mineral receipts, federal recreation fees and sales of federal surplus real property | 2                              | Yes               | <p>Acquisition or development of outdoor recreation areas and facilities. Priority development projects include trails, campgrounds picnic areas, natural areas and cultural areas for recreational use. Property acquired or developed under the program must be retained in perpetuity for public outdoor recreation use (2)</p>   | X                   |                 | <p>Evaluation criteria include conserve a significant community resource, foster cooperation among agencies, serve a large number of users encourage public involvement use of innovative techniques, and focus on lasting accomplishments</p>  | \$10,000 to \$200,000 per project (Each project a maximum of 5% of the local agency share) |             |          |              | <p>Administered by the National Park Service and the State Department of Parks and Recreation State Park and Rec reviews annual applications on a competitive basis. Projects ranked by priority statewide outdoor recreation needs including bicycling, local needs, and cost-benefit. Applications are due in May each year.</p>  |
| 21                       | Rivers, Trails and Conservation Assistance Program (RTCA) | Federal funds   | 3                              | Yes               | <p>National Park Service (NPS) program that provides technical assistance (direct staff consultation) to establish and restore greenways rivers, trails, watersheds and open space</p>   | X                   |                 | <p>Evaluation criteria include conserve a significant community resource, foster cooperation among agencies, serve a large number of users encourage public involvement use of innovative techniques, and focus on lasting accomplishments</p>  | NPS staff assistance   |             |          |              | <p>RTCA ranks projects highly that focus on conservation and community partnerships Contact the RTCA to discuss possible assistance, then submit brief letter of request. Application due generally in August for Federal fiscal year beginning October 1</p>   |
| 22                       | California Conservation Corp. (CCC)                       | Labor assistance from young men and women enrolled in the CCC program Project partner for the labor component                             | 2                              | Yes               | <p>Labor assistance on project sites that must be public land or public accessible</p>   | X                   |                 | <p>The CCC does not perform regular maintenance</p>   | Some grants may offer extra points for using a youth service corps such as the CCC         |             |          |              | <p>The Recreational Trails Program encourages applicants to develop cooperative agreements with qualified youth conservation or service corps to perform trail construction and maintenance. The CCC is one of the many organizations that can assist with trail construction repair and restoration. The CCC is interested in being a project partner and being written into grants as the labor component</p> |



**Appendix C:  
Potential Funding Sources for Elk Grove Trails**

| Revenue Category/ Source    | Source of Funds                          | Revenue Source to City (Previous or Current) | Implementation Feasibility (1) | Grant Competitive | Eligible Uses                       | Provides Capital S | Provides O&M S | Restrictions/ Local Match   | Approximate Annual Funding | Application | Approval | Program Mgmt  | Other (Geographic Limitations) |
|-----------------------------|--|--|--------------------------------|-------------------|-------------------------------------|--------------------|----------------|---|----------------------------|-------------|----------|---|--------------------------------|
| Private                     |  |  |                                |                   |                                     |                    |                |   |                            |             |          |   |                                |
| 23 Foundation and Corporate | Donations, Adopt-A-Trail, Memorial Funds |  | 3                              | No/Yes            | Trail facilities and infrastructure | X                  | X              | Ability to campaign for private donations, allowance for programs such as Adopt-A-Trail and naming of facilities. | Varies based on donations  |             |          | Might require local grass roots or non-profit organization to steer private contribution efforts. |                                |

- (1) Implementation Feasibility ranks the likelihood that the City of Elk Grove could utilize the funding source to implement the Trails Master Plan, based on factors such as staff effort required, limited fund availability, and/or program eligibility "1" indicates a higher likelihood of use, "2" indicates a moderate likelihood of use, and "3" indicates a lower likelihood of use
- (2) The City of Elk Grove uses CFDs to fund a portion of the maintenance costs associated with facilities located in Laguna Ridge using the maintenance component of CFD 2005-1 and certain facilities with citywide benefit through CFD 2006-1. The Laguna Ridge CFD No. 2005-1, will eventually include all developing properties within Laguna Ridge and the Maintenance Services CFD 2006-1 covers new developing portions of the City located outside of the Laguna Ridge Specific Plan area. Both CFDs have varying levels of special taxes that are adjusted annually for inflation.
- (3) The City of Elk Grove and the Elk Grove Community Services District do not currently rely upon this funding mechanism, but it remains a funding option.
- (4) The City of Elk Grove received \$1 million for the Elk Grove Creek/SR 99 Trail Crossing Project in the last cycle of funding ending January 2006. The City provided a local match of an additional \$1 million.
- (5) The City of Elk Grove received \$450,000 in FY 2005-06 for the Elk Grove Elementary School/Jetta Middle School to construct pedestrian/bike bridge over Laguna Creek, and to construct curb extensions
- (6) Federal and State funding programs not administered by SACOG or Caltrans. Most other federally funded programs are administered by state agencies
- (7) The Elk Grove Community Services District was awarded a grant of \$24,557 for the Laguna Creek Trail Development.



APPENDIX D:  
PRIORITY  
ELK GROVE TRAIL  
PROJECTS



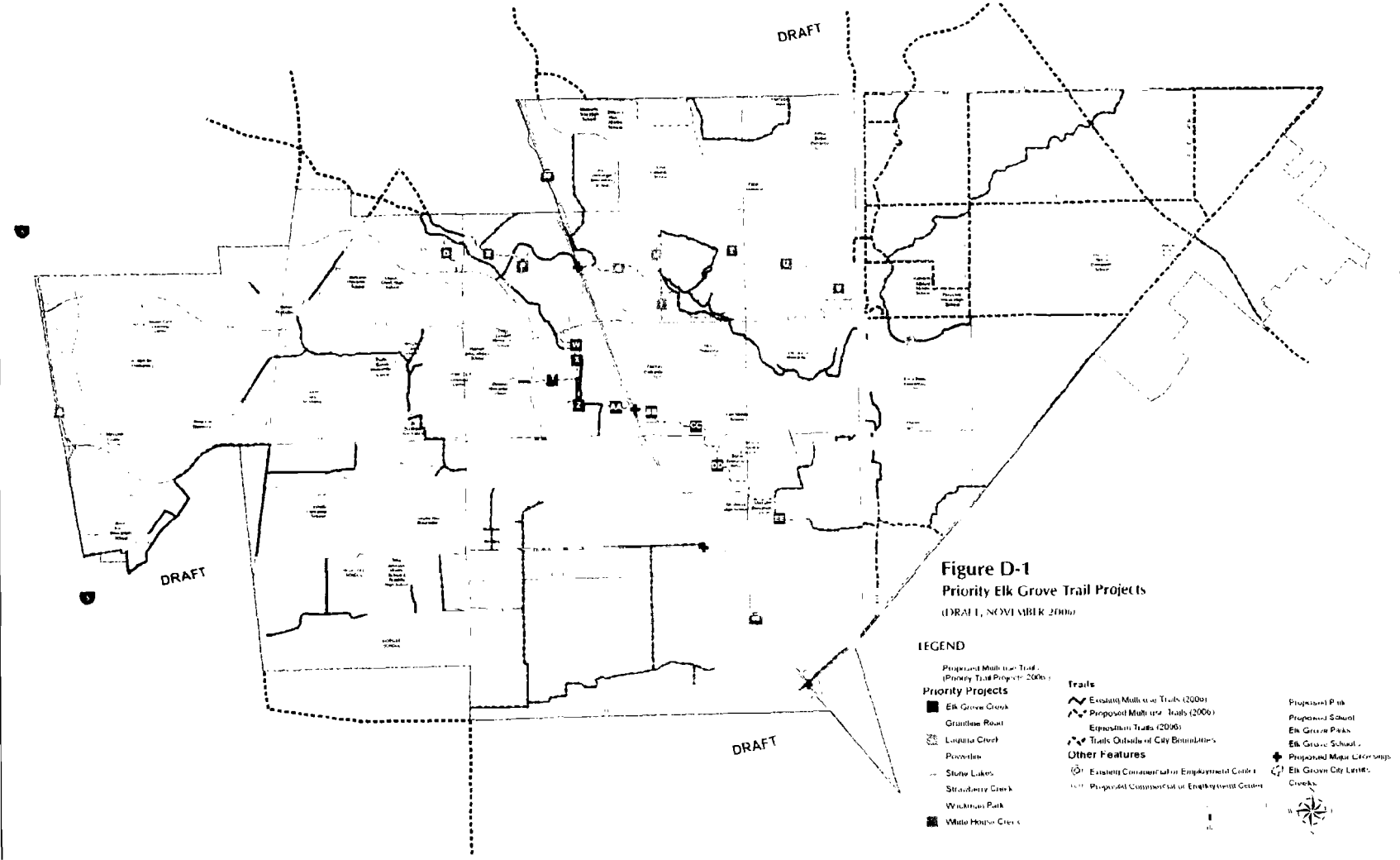
## Appendix D: Priority Elk Grove Trail Projects

### Priority Elk Grove Trail Projects

| Project ID | Trail Project  | Area of Project Location | Approximate Mileage | Level of Priority | Estimated Cost |
|------------|--|--------------------------|---------------------|-------------------|----------------|
| A          | Levee along I-5  | Stone Lakes              | 2.57                | 2                 | \$\$           |
| B          | Tegan Road Connector   | Wackman Park             | 0.24                | 1                 | \$\$\$         |
| C          | Betschart Park to Big Horn                                     | Wackman Park             | 0.38                | 2                 | \$\$\$         |
| D          | Bruceville to Sheldon Road                                     | Laguna Creek             | 0.39                | 3                 | \$\$\$         |
| E          | Lewis Stein to Bruceville                                      | Laguna Creek             | 0.54                | 1                 | \$\$\$         |
| F          | Connect Guttridge Park to Laguna and/or Elk Grove Creek Trails | Laguna Creek             | 0.22                | 1                 | \$\$           |
| G          | SR 99 Overcrossing (Connecting Camden area to West Stockton)   | Laguna Creek             | 0.77                | 1                 | \$\$\$\$\$     |
| H          | Garrity Drive to Camden Trail                                  | Laguna Creek             | 0.35                | 1                 | \$\$\$         |
| I          | Camden Passage to Cal-Fit                                      | Laguna Creek             | 0.41                | 1                 | \$\$\$         |
| J          | Pave at Water Basin, Tributary at Stonebrook                   | Laguna Creek             | 0.11                | 1                 | \$             |
| K          | Waterman & Bond Bridges undercrossing w/street connectors      | Powerline                | 0.11                | 2                 | \$\$\$\$       |
| L          | Waterman & Bond Bridges to Powerline South                     | Powerline                | 0.12                | 2                 | \$\$\$         |
| M          | Misty Springs Court to Hambly Circle                           | Powerline                | 0.47                | 1                 | \$\$\$         |
| N          | Pave Connector and curb cuts at Waterman Grove                 | Powerline                | 0.17                | 1                 | \$             |
| O          | Equestrian Staging area at Waterman Grove                      | Powerline                | -                   | 1                 | \$             |
| P          | Railroad Overcrossing  | Grantline Road           | -                   | 2                 | \$\$           |
| Q          | Waterman 75  | Grantline Road           | 0.25                | 2                 | \$\$           |
| R          | DiBenedetto Acres  | Grantline Road           | 2.11                | 2                 | \$\$           |
| S          | Lowes to Jones Park, Service Road and Wetlands                 | Strawberry Creek         | 1.67                | 2                 | \$\$\$         |
| T          | Springhurst to EG-Florin (new Rail Station)                    | White House Creek        | 0.28                | 3                 | \$\$\$\$       |
| U          | Vintara Park to EG-Florin                                      | White House Creek        | 0.66                | 3                 | \$\$\$         |
| V          | Vintara Park   | White House Creek        | 3.35                | 2                 | \$\$\$         |
| W          | Sirocco Way to Laguna Blvd (East Side)                         | Elk Grove Creek          | 0.31                | 1                 | \$\$\$         |
| X          | Oneto Park to Laguna Blvd (West Side)                          | Elk Grove Creek          | 0.34                | 2                 | \$\$\$         |
| Y          | Big Horn to EG Creek at Miwok Park                             | Elk Grove Creek          | 0.42                | 2                 | \$\$\$         |
| Z          | Low Water creek crossing at Oneto Park                         | Elk Grove Creek          | 0.06                | 1                 | \$\$\$         |
| AA         | Laguna Springs to W. Stockton                                  | Elk Grove Creek          | 0.28                | 1                 | \$\$\$         |

## Appendix D: Priority Elk Grove Trail Projects

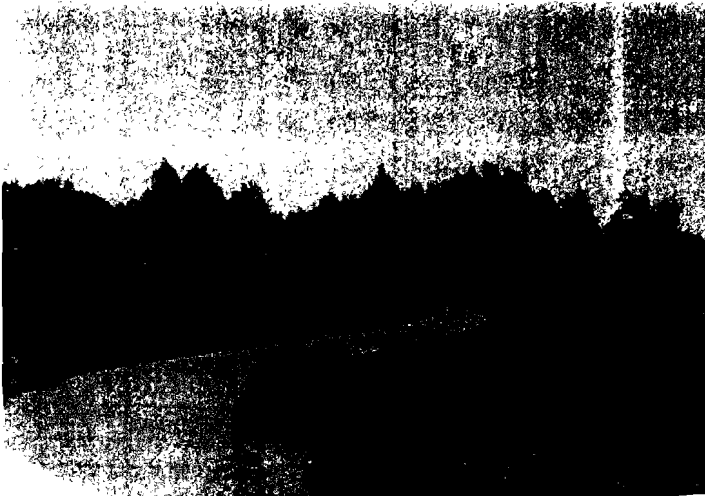
| Project ID | Trail Project                                    | Area of Project Location | Approximate Mileage | Level of Priority | Estimated Cost |
|------------|--|--------------------------|---------------------|-------------------|----------------|
| BB         | SR 99 Overcrossing                               | Elk Grove Creek          | 0.37                | 1                 | \$\$\$\$\$     |
| CC         | EG Blvd to Emerald Vista, Service Road           | Elk Grove Creek          | 0.39                | 1                 | \$\$           |
| DD         | Elk Grove-Florin to Elk Grove Blvd, Service Road | Elk Grove Creek          | 0.75                | 1                 | \$\$           |
| EE         | Falcon Meadow to EG-Florin, Service Road         | Elk Grove Creek          | 0.82                | 1                 | \$\$           |



**Figure D-1**  
Priority Elk Grove Trail Projects  
(DRAFT, NOVEMBER 2006)

**LEGEND**

|   |  |   |
|---|--|---|
| <p>Proposed Multi-Use Trail (Priority Trail Project 2006)</p> <p><b>Priority Projects</b></p> <ul style="list-style-type: none"> <li>█ Elk Grove Creek</li> <li>--- Granite Road</li> <li>~ Lanetta Creek</li> <li>--- Powderline</li> <li>~ Stony Lakes</li> <li>~ Steadfast Creek</li> <li>■ Wackmeyer Park</li> <li>~ White Horse Creek</li> </ul> | <p><b>Trails</b></p> <ul style="list-style-type: none"> <li>--- Existing Multi-Use Trails (2006)</li> <li>--- Proposed Multi-Use Trails (2006)</li> <li>--- Exposition Trails (2006)</li> <li>--- Trails Outside of City Boundaries</li> </ul> <p><b>Other Features</b></p> <ul style="list-style-type: none"> <li>□ Existing Commercial or Employment Centers</li> <li>□ Proposed Commercial or Employment Centers</li> </ul> | <p><b>Proposed Parks</b></p> <ul style="list-style-type: none"> <li>□ Proposed School</li> <li>□ Elk Grove Park</li> <li>□ Elk Grove School</li> <li>□ Proposed Major Greenways</li> <li>□ Elk Grove City Limits</li> <li>~ Creeks</li> </ul> |
|---|--|---|



APPENDIX E:  
ELK GROVE TRAILS  
MASTER PLAN  
IMPLEMENTATION  
STRATEGIES



Elk Grove Trails Master Plan Implementation Strategies

Implementation Strategies

- Adopt a Resolution that adopts the Elk Grove Trails Master Plan and commits the City of Elk Grove to building a continuously connected trail system through pursuing the construction of trails as shown on the EGTMP map
- Consistently implement all trail standards and apply guidelines for projects with trail components within the City of Elk Grove.
- Continue to review all development projects within 1,000 feet of a trail segment shown on the EGTMP map for opportunities for trail implementation.
- Continue and establish trail safety and enforcement programs and publicity efforts. This program could include the institution of a Bicycle Patrol Officer position to help in patrolling trails, promoting safety education, and organizing with schools to build more safe routes.
- Continue and establish trail user safety and education programs and publicity efforts. Programs could be tailored to different venues (e.g. schools, community fairs), audiences (e.g. youth, adults, motorists, et cetera) or different topics (e.g. trail etiquette and regulations, helping kids commute to school using trails, effects of vandalism, interpretation of natural resources).
- Continue direct coordination amongst planning efforts undertaken by City departments that bear relation to trail implementation.

|   | Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails. | Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas. | Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience. | Goal: The Elk Grove Trail System accommodates a variety of user groups with varying levels of ability, expertise, and comfort levels. | Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security. | Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation. | Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled-content. | Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts. | Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage. | Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding. | Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs |
|---|--|--|--|---|---|--|---|---|--|--|---|
| Adopt a Resolution that adopts the Elk Grove Trails Master Plan and commits the City of Elk Grove to building a continuously connected trail system through pursuing the construction of trails as shown on the EGTMP map   | X  | X  | X  | X   | X   | X  | X   | X   | X  | X  | X   |
| Consistently implement all trail standards and apply guidelines for projects with trail components within the City of Elk Grove.  | X  | X  | X  | X   | X   | X  | X   | X   | X  | X  | X   |
| Continue to review all development projects within 1,000 feet of a trail segment shown on the EGTMP map for opportunities for trail implementation.   | X  |  |  |   |   |  |   |   |  |  |   |
| Continue and establish trail safety and enforcement programs and publicity efforts. This program could include the institution of a Bicycle Patrol Officer position to help in patrolling trails, promoting safety education, and organizing with schools to build more safe routes.  |  |  |  | X   | X   |  | X   | X   | X  | X  | X   |
| Continue and establish trail user safety and education programs and publicity efforts. Programs could be tailored to different venues (e.g. schools, community fairs), audiences (e.g. youth, adults, motorists, et cetera) or different topics (e.g. trail etiquette and regulations, helping kids commute to school using trails, effects of vandalism, interpretation of natural resources). |  |  |  | X   | X   |  | X   | X   | X  | X  | X   |
| Continue direct coordination amongst planning efforts undertaken by City departments that bear relation to trail implementation.  | X  |  |  |   |   |  |   |   |  |  | X   |

**Appendix E:  
Elk Grove Trails Master Plan Implementation Strategies**

| Implementation Strategies  | Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails. | Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas. | Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience. | Goal: The Elk Grove Trail System accommodates a variety of user groups with varying levels of ability, expertise, and comfort levels. | Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security. | Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation. | Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled content. | Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts. | Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage. | Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding. | Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs. |
|--|--|--|--|---|---|--|---|---|--|--|--|
| <ul style="list-style-type: none"> <li>Continue providing a program through which residents can submit a request for evaluation of crosswalks or intersection improvements at specific locations. Public Works Department staff would evaluate the need for the requested crosswalks, et cetera.</li> </ul>  | X  |  |  | X   | X   |  |   | X   | X  | X  |  |
| <ul style="list-style-type: none"> <li>Continue pursuing joint and collaborative efforts with other local and regional jurisdictions/agencies and non-profits regarding trail implementation, funding, and maintenance. Publicity initiatives, safety education programs, and demand reduction programs could also be collaboratively pursued.</li> </ul>  | X  |  |  |   |   |  |   | X   | X  | X  |  |
| <ul style="list-style-type: none"> <li>Continue the implementation of Municipal Code Section 23.58.060 that allows for parking space reductions in connection with the provision of bicycle parking facilities, showers, and lockers.</li> </ul>   |  | X  |  |   |   |  |   |   | X  | X  |  |
| <ul style="list-style-type: none"> <li>Continue the implementation of Municipal Code Section 23.58.100 that requires the installation of bicycle parking facilities within residential, commercial, industrial, and public development projects.</li> </ul>  |  | X  |  | X   |   |  |   |   | X  | X  |  |
| <ul style="list-style-type: none"> <li>Update and create new funding sources for trail construction and maintenance, including development impact fee programs, park fee programs, landscaping and lighting and other special area and City-wide financing/assessment districts, property taxes and other miscellaneous general fund revenue sources, development agreements, requirements for dedication of land for trails and/or trail construction as a condition of project development approval, and grants. Some funding sources could be pursued collaboratively with other entities.</li> </ul> |  |  |  |   |   |  |   | X   | X  | X  |  |
| <ul style="list-style-type: none"> <li>Continue the practice of including priority trail projects in the updates to the City of Elk Grove Capital Improvements Program.</li> </ul>   |  |  |  |   |   |  |   | X   |  | X  |  |





**Appendix E:  
Elk Grove Trails Master Plan Implementation Strategies**

| Implementation Strategies  | Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails. | Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas. | Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience. | Goal: The Elk Grove Trail System accommodates a variety of user groups with varying levels of ability, expertise, and comfort levels. | Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security. | Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation. | Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled content. | Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts. | Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage. | Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding. | Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs. |
|--|--|--|--|---|---|--|---|---|--|--|--|
| <ul style="list-style-type: none"> <li>▪ Consider establishing speed limits for off-street trails.</li> <br/> <li>▪ Create and continue to refine a trail maintenance program and schedule. The maintenance program could be translated into a GIS system. The program could also include a means for trail users to quickly and easily notify the City of Elk Grove regarding trail maintenance issues, such as problems with paving/potholes/grates/drainage ditches/manhole covers, lighting, debris build-up, tree-trimming/vegetation control, vandalism, speed bump maintenance, signs, curb cuts and other transitions, paint, and bicycle parking facilities, which could help reduce maintenance response times and potentially other cost savings.</li> <br/> <li>▪ Develop a map/brochure that highlights all of the existing and proposed public trails within the City of Elk Grove, as well as their connectivity to on-street facilities and trails outside of the Elk Grove city boundaries. Locations of destinations, trailheads, staging areas, and trail amenities, such as restrooms, should also be included. Ensure wide distribution of the map/brochure.</li> <br/> <li>▪ Initiate a trail education and publicity effort oriented towards City of Elk Grove residents and businesses to highlight trails as a special Elk Grove community feature, to help build a constituency for trail construction, and help increase trail system usage. Special emphasis should be placed on how trail design, location, and usage could contribute toward public health, environmental health, recreational experiences, watershed stewardship, and how trails can be used for transportation to provide an alternative method of getting to destinations, which would result in air quality benefits.</li> </ul> | X  | X  | X  | X   | X   | X  | X   | X   | X  | X  |  |

Elk Grove Trails Master Plan Implementation Strategies

| Implementation Strategies   | Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails. | Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas. | Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience. | Goal: The Elk Grove Trail System accommodates a variety of user groups with varying levels of ability, expertise, and comfort levels. | Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security. | Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation. | Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled-content. | Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts. | Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage. | Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding. | Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs. |
|---|--|--|--|---|---|--|---|---|--|--|--|
| <ul style="list-style-type: none"> <li>Establish a City of Elk Grove resident and business email notification initiative, wherein residents/businesses can indicate to the City what types of development projects they would like to be notified about, including projects with trail components.</li> </ul>   | X  |  |  |   |   |  |   |   |  |  |  |
| <ul style="list-style-type: none"> <li>Establish programs that promote volunteer trail maintenance and stewardship, such as Adopt-A-Trail programs and Safe Routes to Schools Programs.</li> </ul>  |  |  | X  |   |   |  |   |   |  |  |  |
| <ul style="list-style-type: none"> <li>Establish a process to ensure that the EGTMP is successfully implemented and a process by which to regularly update the Elk Grove Trails Master Plan, including a procedure for updating the goals, trail standards and guidelines, and the priority project list. Ensure that the EGTMP evolves in coordination with General Plan amendments and updates. The Trails Committee has the authority to update Figure 4: Elk Grove Trails Master Plan Map, Figure D-1: Priority Elk Grove Trail Projects, and the list of priority projects by resolution. However, updates to all other aspects of the EGTMP require City Council approval and would be considered amendments</li> </ul> | X  |  |  |   |   |  | X   |   |  |  |  |
| <ul style="list-style-type: none"> <li>Establish an on-going, annual, and dedicated trail easement acquisition, construction, operation, and maintenance budget.</li> </ul>   |  |  | X  |   |   |  |   |   | X  |  |  |
| <ul style="list-style-type: none"> <li>Identify and pursue implementation of three (3) priority grade-separated trail crossings within the City of Elk Grove. Each site should be strategically located so as to facilitate an increase in trail usage and promote safety around school and/or park destinations.</li> </ul>  | X  |  |  |   |   | X  |   |   |  | X  |  |
| <ul style="list-style-type: none"> <li>Identify and pursue implementation of three (3) priority trail staging area sites within the City of Elk Grove. Each site should be strategically located so as to facilitate an increase in trail usage.</li> </ul>   | X  | X  |  |   |   |  |   |   |  | X  |  |

**Appendix E:  
Elk Grove Trails Master Plan Implementation Strategies**

|  | Implementation Strategies | Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails. | Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas. | Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience. | Goal: The Elk Grove Trail System accommodates a variety of user groups with varying levels of ability, expertise, and comfort levels. | Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security. | Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation. | Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled-content. | Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts. | Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage. | Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding. | Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs. |
|--|---------------------------|--|--|--|---|---|--|---|---|--|--|--|
| <ul style="list-style-type: none"> <li>Include a list of required trail design information to the development project application submittal checklist. Information provided should allow staff to check for project conformance with the trail standards and guidelines contained in the Elk Grove Trails Master Plan.</li> </ul>  | X                         |  |  |  |   |   |  |   | X   |  | X  |  |
| <ul style="list-style-type: none"> <li>Include detailed trail construction and maintenance provisions in development project Conditions of Approval. Conditions of Approval shall include a description trail components and address the required timing of trail construction. As a general rule, trails should be completed by the time the development is ready for occupancy unless, on a case-by-case basis, the developer has bonded for the trails or otherwise provided assurances to the satisfaction of the City.</li> </ul> | X                         |  |  |  |   |   |  |   | X   |  | X  |  |
| <ul style="list-style-type: none"> <li>Install bicycle parking facilities at all multi-modal connections, including major bus stops and Elk Grove Park and Ride lots where they are not currently provided.</li> </ul>   |                           | X  |  |  |   | X   |  |   | X   |  | X  |  |
| <ul style="list-style-type: none"> <li>Undertake a needs assessment to determine if and where existing trails could be better served by amenities, such as public art, signage, drinking fountains, street furniture, and restrooms. Pursue a similar needs assessment for proposed trails so that these amenities can be incorporated into development project plans.</li> </ul>  |                           | X  | X  |  |   | X   |  |   | X   |  | X  |  |
| <ul style="list-style-type: none"> <li>Undertake a needs assessment to identify locations where trails could be retrofitted to increase safety. Focus could be on trails that are narrow relative to the degree of usage, those trails containing a steep slope, those trails that have less visibility due to high walls or fencing, and those trails that would benefit from clearer demarcation.</li> </ul>   |                           |  |  | X  | X   | X   |  |   | X   |  | X  |  |

**Appendix E:  
Elk Grove Trails Master Plan Implementation Strategies**

| Implementation Strategies   |  |
|---|--|
| <ul style="list-style-type: none"> <li>Undertake the development of a trail signage program, including a needs assessment and public process for trail signage aesthetics, design types, content, and placement locations. The signage program could provide regulatory, safety-oriented, behavioral, informational, directional/wayfinding, and educational/interpretive content. The scope of work for the signage program should include the development of a consistent aesthetic, mock-up of signage content, compliance with all signage regulations and design standards, material/construction/installation details, the identification of placement locations and standards for placement locations, high and low cost estimates, and a test fabrication of the preferred signage</li> </ul> | X  |
|   | Goal: The Elk Grove Trail System provides continuous connections between neighborhoods and destinations and also provides linkages to regional trails.   |
|   | Goal: The Elk Grove Trail System users find it easy to transfer between transportation modes due to connection support facilities, such as transit stops, park and ride lots, and staging areas  |
|   | Goal: The Elk Grove Trail System is attractive and maximizes access to and views of scenic and natural areas. Ample landscaping and amenities, such as public art by local artists, signage, drinking fountains, street furniture, and restrooms, enhance the trail system experience. |
|   | Goal: The Elk Grove Trail System accommodates a variety of user groups with varying levels of ability, expertise, and comfort levels   |
|   | Goal: The Elk Grove Trail System is safe due to trail design standards, a low frequency of trail user group conflicts, and provisions for security.  |
|   | Goal: The Elk Grove Trail System is easily navigable due to the provision of direct routes, smooth transitions between trail types, and effective signage and trail demarcation.   |
|   | Goal: The Elk Grove Trail System is characterized by the use of low maintenance landscaping and construction materials that emphasize environmentally friendly, recycled-content.  |
|   | Goal: The Elk Grove Trail System users are aware of the opportunities and benefits of the trail system through City education and outreach efforts.  |
|   | Goal: The City of Elk Grove creates and implements policies, best practices, and programs that support trail system development and usage.   |
| Goal: The City of Elk Grove collaborates with other jurisdictions and regional agencies concerning trail projects and funding.  |  |
| Goal: The City of Elk Grove ensures adequate staffing and funding to meet trail needs   |  |



*Incorporated July 1, 2000*

8380 Laguna Palms Way  
Elk Grove, California 95758

**CITY OF ELK GROVE**

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## **City of Elk Grove – City Council NOTICE OF PUBLIC HEARING**

**NOTICE IS HEREBY GIVEN** that on **Wednesday, January 10, 2007 at the hour of 6:30 p.m.**, or as soon thereafter as the matter may be heard, the Elk Grove City Council will conduct a public hearing at City Hall in the Council Chambers, 8400 Laguna Palms Way, Elk Grove, California, to consider the following matter:

### **Adopt the proposed Elk Grove Trails Master Plan**

Information regarding this item may be obtained in the office of the Planning Department, 8401 Laguna Palms Way, Elk Grove, California. All interested persons are invited to present their views and comments on this matter. Written statements may be filed with the City Clerk at any time prior to the close of the hearing scheduled herein, and oral statements may be made at said hearing.

If you challenge the subject matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the City Clerk, 8380 Laguna Palms Way, Elk Grove, CA, 95758, at or prior to the close of the public hearing.

Dated/Published: December 29, 2006

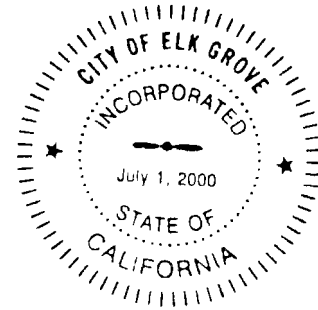
PEGGY E. JACKSON  
CITY CLERK, CITY OF ELK GROVE

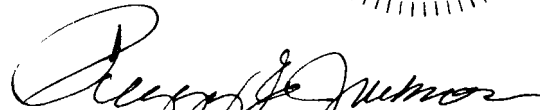
**CERTIFICATION  
ELK GROVE CITY COUNCIL RESOLUTION NO. 2007-13**

STATE OF CALIFORNIA            )  
COUNTY OF SACRAMENTO        )     ss  
CITY OF ELK GROVE                )

*I, Peggy E. Jackson, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on January 10, 2007 by the following vote:*

**AYES :**           **COUNCILMEMBERS:**     **Scherman, Cooper, Davis, Hume**  
**NOES:**           **COUNCILMEMBERS:**     **None**  
**ABSTAIN :**       **COUNCILMEMBERS:**     **None**  
**ABSENT:**        **COUNCILMEMBERS:**     **Leary**



  
\_\_\_\_\_  
**Peggy E. Jackson, City Clerk  
City of Elk Grove, California**