

José Luis Cáceres, Associate Planner  
Sacramento Area Council of Governments  
1415 L Street, Suite 300  
Sacramento, CA 95814

**Re: Regional Bicycle Trip Planner and Bicycle Routes Map Set**

Dear Mr. Cáceres:

The Sacramento Area Council of Governments proposes to use a portion of the funds from the Bicycle and Pedestrian Funding Program to create a Regional Bicycle Trip Planner and Bicycle Routes Map Set. This project is important for the region's efforts to make bicycling a more accessible transportation option. The Trip Planner and Map Set will help potential, new, and existing cyclists locate safe and direct bicycle routes to any place in the region.

The Trip Planner and Map Set are "High Priority Education and Promotion Projects" listed in the *Regional Bicycle, Pedestrian, and Trails Master Plan*. Both projects support the goals identified in the current MTP and complement the Blueprint Planning Principles. The following application defines the scope for the Trip Planner and Map set and describes how they meet the requirements of the 2008 Bicycle and Pedestrian Funding Program.

Thank you for your consideration of funding for the Regional Bicycle Trip Planner and Bicycle Routes Map Set. Please contact Matt Carpenter with any questions.

Regards,



Matt Carpenter, Transportation Planning Manager  
Sacramento Area Council of Governments  
1415 L Street  
Sacramento, CA 95814  
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Phone: (916) 340-6276 Fax: (916) 321-9551

Auburn  
Citrus Heights  
Colfax  
Davis  
El Dorado County  
Elk Grove  
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Galt  
Isleton  
Lincoln  
Live Oak  
Loomis  
Marysville  
Placer County  
Placerville  
Rancho Cordova  
Rocklin  
Roseville  
Sacramento  
Sacramento County  
Sutter County  
West Sacramento  
Wheatland  
Winters  
Woodland  
Yolo County  
Yuba City  
Yuba County

**PROJECT SUMMARY TABLE**

Project Title	<b>Regional Bicycle Trip Planner and Regional Bicycle Routes Map Set</b>
Local agency contact information	<b>Matt Carpenter, Transportation Planning Manager Sacramento Area Council of Governments 1415 L Street Sacramento, CA 95814 mcarpenter@sacog.org Phone: (916) 340-6276 Fax: (916) 321-9551</b>
Partners	<b>Sacramento County Department of Transportation</b>
Project Number in SACOG Master Plan	<b>07-14-02 and 07-14-03</b>
Scope of project & location (not to exceed 150 words) Include aspects of project/program that contribute to blueprint implementation and other goals of the Funding Program	<b>Development and distribution of the Regional Bicycle Trip Planner and Bicycle Routes Map Set. Includes launch of fully functional web-based Trip Planner and design and production of 30,000 copies of the Map Set. Cycling is an affordable, efficient, and environmentally friendly transportation option that has significant public health benefits. The trip planner and hardcopy maps are tools that will support efforts to make cycling a more accessible transportation option. The project will help potential and existing cyclists locate bicycle facilities that are safe and suitable to their respective skill levels. The tools will also supplement the Regional Bike/Ped/Trails Master Plan by helping SACOG's member agencies locate where improvements to bicycle facilities are needed.</b>
Project Schedule & Milestones	<b>Contingent on availability of funding-</b> <ul style="list-style-type: none"> <li>➤ <b>October 1, 2008- Form Technical Advisory Committee (TAC)</b></li> <li>➤ <b>January 1, 2009- Complete formal scope of work and design guidelines. Complete Data Acquisition</b></li> <li>➤ <b>February 1, 2009- Complete software customization and programming interface for online trip planner. Complete layer creation and educational materials for hardcopy maps</b></li> </ul>

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Total funding sought and funding committed from other sources	<p><b>Funding Sought: \$250,903</b></p> <p><b>\$330,645</b></p> <ul style="list-style-type: none"> <li>- <b>\$31,490 Placer County Share (pending approval)</b></li> <li>- <b>\$15,745 El Dorado County Share (pending approval)</b></li> <li>- <b><u>\$32,507 SACOG Match (11.47% of \$283,410)</u></b></li> </ul> <p><b>\$250,903</b></p>
Local funding commitment from each partner Local match must be at least 11.47% of requested amount	<b>SACOG- \$32,507 (11.47% of \$283,410)</b>
Risks to Schedule or Cost	<b>Start date contingent upon release of funds</b>
Phases/divisibility	<p><b>Phase I- Development of the Regional Bicycle Trip Planner and Bicycle Routes Map Set. (Covered by this application)</b></p> <ul style="list-style-type: none"> <li>➤ <b>Funding from this program would pay for inclusion of Sacramento, Sutter, Yolo, and Yuba Counties in the Trip Planner and Map Set. El Dorado and Placer have their own funding programs for Bike/Ped which SACOG will apply to for inclusion of those two counties in the project.</b></li> </ul> <p><b>Phase II- Continuation and Updating of the Regional Bicycle Trip Planner and Bicycle Routes Map Set. (Pending future funding sources)</b></p>

**2008 Bicycle & Pedestrian Funding Program  
Application for Funds for:**

**DEVELOPMENT OF THE  
REGIONAL BICYCLE TRIP PLANNER  
AND BICYCLE ROUTES MAP SET**

**December 3, 2007**

**INTRODUCTION**

SACOG's Bicycle and Pedestrian Advisory Committee proposes to use a portion of the Bicycle and Pedestrian Funding Program funds to develop a web-based Regional Bicycle Trip Planner and a Bicycle Routes Map Set to encourage potential, new, and existing cyclists to commute through the region by bicycle. The Trip Planner and Map Set will be great tools for the region to make bicycling a more significant part of a complete transportation system. El Dorado County Transportation Commission and Placer County Transportation Planning Agency administer their own funding programs separate from SACOG's Bicycle and Pedestrian Funding Program. Therefore, this proposal includes funds to incorporate Sacramento, Sutter, Yolo, and Yuba Counties into the Trip Planner and Map Set. SACOG is applying separately to El Dorado and Placer to seek funding to include those two counties into the project.

**PROJECT SCOPE**

The Trip Planner will use web-based software to create an updateable and interactive mapping and route planning tool modeled after a Google-based system used on ByCycle.org for Portland, Oregon and Milwaukee, Wisconsin (See Exhibit 1). The Planner will provide turn-by-turn instructions, route suitability information, and printable maps to assist cyclists in choosing safe and direct routes between various locations within cities and across the region that fit their skill level. The trip planner will be designed to "think like a cyclist" by giving preference to right hand turns that keep the cyclist from crossing through traffic to turn left.

The Map Set will consist of 15 detailed maps that contain existing and near completed bicycle facilities and educational information designed to encourage new cyclists as well as provide useful references for all bicycle users. Each of the detailed maps will cover a specific area connecting common cycling origins and destinations and provide light rail information to help cyclists plan routes that incorporate transit into daily commutes. The maps will be designed and available as single copies for short trips or as sets that use multiple maps to plan for longer distance trips.

**PROJECT PHASES**

The creation and continuation of the Trip Planner and Map Set will occur over two phases. Bicycle and Pedestrian Funding Program money will be used to implement Phase I of the project. Phase I encompasses the development and initial launch of the Regional Bicycle Trip Planner and Bicycle Routes Map Set. SACOG will create a Technical Advisory Committee (TAC) made up of SACOG Staff, Bicycle and Pedestrian

Advisory Committee Members, and Community Group Members to guide the overall design and production of the Trip Planner and Map Set. The TAC will play an advisory role to SACOG during the design, contractor selection, and production stages of the project. Phase I will end with the launch of the Online Trip Planner and the printing of 30,000 copies of the Bicycle Routes Map Set.

In Phase II, SACOG will investigate revenue sources and partnerships that will provide the funding necessary to continue both the Trip Planner and Map Set to ensure the tools remain accessible and useful to cyclists as bicycle facilities change throughout the region. SACOG will try to meet a biannual update cycle for the Bicycle Routes Map Set. The Regional Bicycle Trip Planner will be updated continuously as bicycle projects are completed. SACOG will also investigate the incorporation of a community forum into the online trip planner that will allow residents to provide feedback and information about certain routes.

### **2008 BICYCLE AND PEDESTRIAN FUNDING PROGRAM GOALS**

The Bicycle and Pedestrian Funding Program's goals include making bicycling a more effective and attractive choice for commuters in everyday life. To accomplish this, the Program requires non-capital projects to encourage biking and walking through public information, education, and awareness. The Program cites mapping projects as one of the project types that will help make bicycles an attractive alternative transportation choice. The Regional Bicycle, Pedestrian, and Trails Master Plan lists a regional online bicycle trip planning tool and a hardcopy regional map as "High Priority Education and Promotion Projects".

The Bicycle and Pedestrian Funding Program also requires that projects support the Blueprint Planning Principles and the goals of SACOG's current Metropolitan Transportation Plan (MTP). The Blueprint encourages development that makes alternative forms of transportation more attractive through smart growth and quality design. The goals of the current MTP include improving quality of life with a multi-modal transportation system offering safe, affordable, efficient, convenient and equitable transportation choices that improve public health and environmental quality throughout the region.

An easily accessible online trip planner and hardcopy map contribute to, and complement, the principles and goals of both the Blueprint and current MTP. Cycling is an affordable, efficient, and environmentally friendly transportation option that has significant public health benefits. The use of bicycles for commuting increases as land densities increase making the accessibility of the region's bicycle facilities more important as the Blueprint is implemented. Many would-be cyclists are discouraged from using their bikes on everyday commutes because they feel unsafe traveling on roads dominated by cars. SACOG's Trip Planner and Map Set will help potential and existing cyclists locate bicycle facilities that are safe and suitable to their respective skill levels, eliminating a major barrier to increasing bicycling's mode share. The tools will also be useful to SACOG's member agencies in locating where improvements to bicycle facilities are needed.

**Insert Exhibit 1**

**COST ESTIMATE TABLE  
(EXCLUDING EL DORADO & PLACER COUNTY SHARES)**

<b>Funding Categories</b>	<b>Task</b>	<b>Cost Estimate</b>
Environmental	Environmental Studies	\$0
Engineering	Engineering & Design	\$17,550(Copyright & Design) \$17,550 (Photos) \$18,000 (software customization) \$18,000 (programming interface)
Right-of-Way	Right-of-Way acquisition	\$0
	Utility relocation & lighting	\$0
Construction	Environmental mitigation	\$0
	Grading	\$0
	Foundation & pavement	\$0
	Bridges &/or tunnels	\$0
	Drainage, curb/gutter, street furniture, planting & irrigation	\$0
	Signage, signals, & striping	\$0
	Bicycle storage/parking	\$0
	Buildings/structures	\$0
	Non-capital staff activities	\$5,850 (Photography) \$45,000 (Staff Time)
	Non-capital materials (maps, brochures, manuals, printing, etc.)	\$161,460 (30,000 Map Sets of 15 maps)
Misc.	Other project components	\$0
	Total	\$283,410

**PROJECT BENEFIT ESTIMATE (QUALITATIVE)**

(The Quantifiable Benefits Methodology does not apply to this project)

Currently, commuting by bicycle accounts for only about 1 percent of the 9 million daily trips made in the greater Sacramento area. However, nearly a quarter of all trips in the region are less than two miles creating a lot of potential to increase bicycling's mode share in the region. A study using 6 focus groups by CalTrans District 3 in 2003 identified major barriers to cycling that included a lack of public knowledge about existing bicycle facilities and limited bicycle maps available from local jurisdictions. Other factors cited by CalTrans included concerns about safety, poor connectivity, and barriers such as rivers, freeways, and cul-de-sacs.

The above mapping efforts are important to support a complete transportation system where non-recreational bicycling trips will contribute to a reduction in vehicle-miles-

traveled (VMT) throughout the region. The primary objective of these maps is to encourage commute and errand bicycle trips, which will lead to regional environmental benefits through VMT reduction and individual health benefits for bicycle riders.

Currently, there is no consistent or reliable system that monitors the use of bicycle facilities throughout the region. The online trip planner has the potential to be a useful tool for SACOG and member agencies to identify and track the use of high volume bicycle routes. Information gathered from the trip planner website will be used to identify areas suitable for conducting use counts that will help to calculate the VMT offset by bicycle trips.

### **EMISSIONS CALCULATIONS FOR CMAQ FUNDING**

It is not possible to accurately quantify the emissions benefits for this project. However, CMAQ grants an exception to projects such as public education, marketing, and other outreach programs that cannot provide accurate calculations of their emissions benefits. In these cases, a qualitative assessment based on a reasoned and logical determination that the project or program will decrease emissions and contributes to attainment or maintenance of a NAAQS is considered acceptable for CMAQ purposes. A description based on these guidelines follows:

With the SACOG region failing to meet the federal ozone standards, it is especially important to pursue planning efforts that support the reduction of regional VMT as a means of improving air quality. Providing an on-line Bicycle Trip Planner and hard-copy Bicycle Routes Map Set for the Sacramento Region will assist in the region's goal to reduce emissions through the encouragement of more non-recreational bicycle trips. The availability of maps and mapping tools offers potential and existing cyclists an opportunity to plan new bicycle routes for commute and errand trips that may have otherwise been taken in a single occupancy vehicle (SOV).

To help quantify the impact that cycling can have towards reducing air emissions. In May 2007, the Sacramento Region launched its 2nd annual bicycle education event called "Million Mile May." If the 2,784 cyclists who commuted 370,000 miles in May had chosen to drive to work instead of bicycling, they would have generated 5,216 lbs of air pollution, 343,022 lbs of CO<sub>2</sub>, and burned 17,643 gallons of gasoline. SACOG's mapping efforts provide a resource to all levels of cyclists in the Sacramento area by reducing barriers such as perceived safety and lack of knowledge on the location of existing bicycle facilities. These two projects will influence travel behavior by making cycling a more attractive and accessible alternative for the region's citizens.

### **ENVIRONMENTAL JUSTICE**

Many people—youth, elderly, disabled, low income, or those who do not have access to an automobile—are dependent on walking and bicycling to access goods, services, activities, and destinations such as transit, medical services, education and employment. The lack of public knowledge about where existing bicycle facilities exist can contribute to social, physical, economic, and social isolation of vulnerable

populations by making them feel unsafe or uncomfortable using bicycles to travel longer distances.

SACOG routinely considers environmental justice a critical component of its planning efforts. This project will have no negative impacts on environmental justice populations. However, the mapping projects will allow SACOG's member agencies to locate gaps in underserved areas in the region where improvements to bicycle facilities are needed. The Regional Bicycle Trip Planner and Bicycle Routes Map will be available to all people to help them locate safe and efficient bicycle routes from any place, to any place in the region. The Trip Planner and the Map Set will be a great benefit to lower income and minority communities that tend to use bicycles for commuting in higher proportion than other communities.

SACOG will soon begin offering training to Community Based Organizations that assist non-English speakers on how to use the region's alternative transportation options. Copies of the Map Set and information about the Trip Planner will be made available to these Organizations.

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**Re: Regional Bicycle Trip Planner and Bicycle Routes Map Set**

Dear Mr. Cáceres:

The Sacramento Area Council of Governments proposes to use a portion of the funds from the Bicycle and Pedestrian Funding Program to create a Regional Bicycle Trip Planner and Bicycle Routes Map Set. This project is important for the region's efforts to make bicycling a more accessible transportation option. The Trip Planner and Map Set will help potential, new, and existing cyclists locate safe and direct bicycle routes to any place in the region.

The Trip Planner and Map Set are "High Priority Education and Promotion Projects" listed in the *Regional Bicycle, Pedestrian, and Trails Master Plan*. Both projects support the goals identified in the current MTP and complement the Blueprint Planning Principles. The following application defines the scope for the Trip Planner and Map set and describes how they meet the requirements of the 2008 Bicycle and Pedestrian Funding Program.

Thank you for your consideration of funding for the Regional Bicycle Trip Planner and Bicycle Routes Map Set. Please contact Matt Carpenter with any questions.

Regards,



Matt Carpenter, Transportation Planning Manager  
Sacramento Area Council of Governments  
1415 L Street  
Sacramento, CA 95814  
mcarpenter@sacog.org  
Phone: (916) 340-6276 Fax: (916) 321-9551

Auburn  
Citrus Heights  
Colfax  
Davis  
El Dorado County  
Elk Grove  
Folsom  
Galt  
Isleton  
Lincoln  
Live Oak  
Loomis  
Marysville  
Placer County  
Placerville  
Rancho Cordova  
Rocklin  
Roseville  
Sacramento  
Sacramento County  
Sutter County  
West Sacramento  
Wheatland  
Winters  
Woodland  
Yolo County  
Yuba City  
Yuba County

**PROJECT SUMMARY TABLE**

Project Title	<b>Regional Bicycle Trip Planner and Regional Bicycle Routes Map Set</b>
Local agency contact information	<b>Matt Carpenter, Transportation Planning Manager Sacramento Area Council of Governments 1415 L Street Sacramento, CA 95814 mcarpenter@sacog.org Phone: (916) 340-6276 Fax: (916) 321-9551</b>
Partners	<b>Sacramento County Department of Transportation</b>
Project Number in SACOG Master Plan	<b>07-14-02 and 07-14-03</b>
Scope of project & location (not to exceed 150 words) Include aspects of project/program that contribute to blueprint implementation and other goals of the Funding Program	<b>Development and distribution of the Regional Bicycle Trip Planner and Bicycle Routes Map Set. Includes launch of fully functional web-based Trip Planner and design and production of 30,000 copies of the Map Set. Cycling is an affordable, efficient, and environmentally friendly transportation option that has significant public health benefits. The trip planner and hardcopy maps are tools that will support efforts to make cycling a more accessible transportation option. The project will help potential and existing cyclists locate bicycle facilities that are safe and suitable to their respective skill levels. The tools will also supplement the Regional Bike/Ped/Trails Master Plan by helping SACOG's member agencies locate where improvements to bicycle facilities are needed.</b>
Project Schedule & Milestones	<b>Contingent on availability of funding-</b>  ➤ <b>October 1, 2008- Form Technical Advisory Committee (TAC)</b>  ➤ <b>January 1, 2009- Complete formal scope of work and design guidelines. Complete Data Acquisition</b>  ➤ <b>February 1, 2009- Complete software customization and programming interface for online trip planner. Complete layer creation and educational materials for hardcopy maps</b>

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Project Schedule & Milestones Continued...	<ul style="list-style-type: none"> <li>➤ <b>March 2009- Award printing contract</b></li> <li>➤ <b>May 1, 2009 Launch Website and Map Set Released</b></li> </ul>
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Total funding sought and funding committed from other sources	<p><b>Funding Sought: \$250,903</b>  <b>\$330,645</b></p> <ul style="list-style-type: none"> <li>- <b>\$31,490 Placer County Share (pending approval)</b></li> <li>- <b>\$15,745 El Dorado County Share (pending approval)</b></li> <li>- <b><u>\$32,507 SACOG Match (11.47% of \$283,410)</u></b></li> </ul> <p><b>\$250,903</b></p>
Local funding commitment from each partner Local match must be at least 11.47% of requested amount	<b>SACOG- \$32,507 (11.47% of \$283,410)</b>
Risks to Schedule or Cost	<b>Start date contingent upon release of funds</b>
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**2008 Bicycle & Pedestrian Funding Program  
Application for Funds for:**

**DEVELOPMENT OF THE  
REGIONAL BICYCLE TRIP PLANNER  
AND BICYCLE ROUTES MAP SET**

**December 3, 2007**

**INTRODUCTION**

SACOG's Bicycle and Pedestrian Advisory Committee proposes to use a portion of the Bicycle and Pedestrian Funding Program funds to develop a web-based Regional Bicycle Trip Planner and a Bicycle Routes Map Set to encourage potential, new, and existing cyclists to commute through the region by bicycle. The Trip Planner and Map Set will be great tools for the region to make bicycling a more significant part of a complete transportation system. El Dorado County Transportation Commission and Placer County Transportation Planning Agency administer their own funding programs separate from SACOG's Bicycle and Pedestrian Funding Program. Therefore, this proposal includes funds to incorporate Sacramento, Sutter, Yolo, and Yuba Counties into the Trip Planner and Map Set. SACOG is applying separately to El Dorado and Placer to seek funding to include those two counties into the project.

**PROJECT SCOPE**

The Trip Planner will use web-based software to create an updateable and interactive mapping and route planning tool modeled after a Google-based system used on ByCycle.org for Portland, Oregon and Milwaukee, Wisconsin (See Exhibit 1). The Planner will provide turn-by-turn instructions, route suitability information, and printable maps to assist cyclists in choosing safe and direct routes between various locations within cities and across the region that fit their skill level. The trip planner will be designed to "think like a cyclist" by giving preference to right hand turns that keep the cyclist from crossing through traffic to turn left.

The Map Set will consist of 15 detailed maps that contain existing and near completed bicycle facilities and educational information designed to encourage new cyclists as well as provide useful references for all bicycle users. Each of the detailed maps will cover a specific area connecting common cycling origins and destinations and provide light rail information to help cyclists plan routes that incorporate transit into daily commutes. The maps will be designed and available as single copies for short trips or as sets that use multiple maps to plan for longer distance trips.

**PROJECT PHASES**

The creation and continuation of the Trip Planner and Map Set will occur over two phases. Bicycle and Pedestrian Funding Program money will be used to implement Phase I of the project. Phase I encompasses the development and initial launch of the Regional Bicycle Trip Planner and Bicycle Routes Map Set. SACOG will create a Technical Advisory Committee (TAC) made up of SACOG Staff, Bicycle and Pedestrian

Advisory Committee Members, and Community Group Members to guide the overall design and production of the Trip Planner and Map Set. The TAC will play an advisory role to SACOG during the design, contractor selection, and production stages of the project. Phase I will end with the launch of the Online Trip Planner and the printing of 30,000 copies of the Bicycle Routes Map Set.

In Phase II, SACOG will investigate revenue sources and partnerships that will provide the funding necessary to continue both the Trip Planner and Map Set to ensure the tools remain accessible and useful to cyclists as bicycle facilities change throughout the region. SACOG will try to meet a biannual update cycle for the Bicycle Routes Map Set. The Regional Bicycle Trip Planner will be updated continuously as bicycle projects are completed. SACOG will also investigate the incorporation of a community forum into the online trip planner that will allow residents to provide feedback and information about certain routes.

### **2008 BICYCLE AND PEDESTRIAN FUNDING PROGRAM GOALS**

The Bicycle and Pedestrian Funding Program's goals include making bicycling a more effective and attractive choice for commuters in everyday life. To accomplish this, the Program requires non-capital projects to encourage biking and walking through public information, education, and awareness. The Program cites mapping projects as one of the project types that will help make bicycles an attractive alternative transportation choice. The Regional Bicycle, Pedestrian, and Trails Master Plan lists a regional online bicycle trip planning tool and a hardcopy regional map as "High Priority Education and Promotion Projects".

The Bicycle and Pedestrian Funding Program also requires that projects support the Blueprint Planning Principles and the goals of SACOG's current Metropolitan Transportation Plan (MTP). The Blueprint encourages development that makes alternative forms of transportation more attractive through smart growth and quality design. The goals of the current MTP include improving quality of life with a multi-modal transportation system offering safe, affordable, efficient, convenient and equitable transportation choices that improve public health and environmental quality throughout the region.

An easily accessible online trip planner and hardcopy map contribute to, and complement, the principles and goals of both the Blueprint and current MTP. Cycling is an affordable, efficient, and environmentally friendly transportation option that has significant public health benefits. The use of bicycles for commuting increases as land densities increase making the accessibility of the region's bicycle facilities more important as the Blueprint is implemented. Many would-be cyclists are discouraged from using their bikes on everyday commutes because they feel unsafe traveling on roads dominated by cars. SACOG's Trip Planner and Map Set will help potential and existing cyclists locate bicycle facilities that are safe and suitable to their respective skill levels, eliminating a major barrier to increasing bicycling's mode share. The tools will also be useful to SACOG's member agencies in locating where improvements to bicycle facilities are needed.

**Insert Exhibit 1**

**COST ESTIMATE TABLE**  
**(EXCLUDING EL DORADO & PLACER COUNTY SHARES)**

<b>Funding Categories</b>	<b>Task</b>	<b>Cost Estimate</b>
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	Utility relocation & lighting	\$0
Construction	Environmental mitigation	\$0
	Grading	\$0
	Foundation & pavement	\$0
	Bridges &/or tunnels	\$0
	Drainage, curb/gutter, street furniture, planting & irrigation	\$0
	Signage, signals, & striping	\$0
	Bicycle storage/parking	\$0
	Buildings/structures	\$0
	Non-capital staff activities	\$5,850 (Photography) \$45,000 (Staff Time)
	Non-capital materials (maps, brochures, manuals, printing, etc.)	\$161,460 (30,000 Map Sets of 15 maps)
Misc.	Other project components	\$0
	Total	\$283,410

**PROJECT BENEFIT ESTIMATE (QUALITATIVE)**

(The Quantifiable Benefits Methodology does not apply to this project)

Currently, commuting by bicycle accounts for only about 1 percent of the 9 million daily trips made in the greater Sacramento area. However, nearly a quarter of all trips in the region are less than two miles creating a lot of potential to increase bicycling's mode share in the region. A study using 6 focus groups by CalTrans District 3 in 2003 identified major barriers to cycling that included a lack of public knowledge about existing bicycle facilities and limited bicycle maps available from local jurisdictions. Other factors cited by CalTrans included concerns about safety, poor connectivity, and barriers such as rivers, freeways, and cul-de-sacs.

The above mapping efforts are important to support a complete transportation system where non-recreational bicycling trips will contribute to a reduction in vehicle-miles-

traveled (VMT) throughout the region. The primary objective of these maps is to encourage commute and errand bicycle trips, which will lead to regional environmental benefits through VMT reduction and individual health benefits for bicycle riders.

Currently, there is no consistent or reliable system that monitors the use of bicycle facilities throughout the region. The online trip planner has the potential to be a useful tool for SACOG and member agencies to identify and track the use of high volume bicycle routes. Information gathered from the trip planner website will be used to identify areas suitable for conducting use counts that will help to calculate the VMT offset by bicycle trips.

### **EMISSIONS CALCULATIONS FOR CMAQ FUNDING**

It is not possible to accurately quantify the emissions benefits for this project. However, CMAQ grants an exception to projects such as public education, marketing, and other outreach programs that cannot provide accurate calculations of their emissions benefits. In these cases, a qualitative assessment based on a reasoned and logical determination that the project or program will decrease emissions and contributes to attainment or maintenance of a NAAQS is considered acceptable for CMAQ purposes. A description based on these guidelines follows:

With the SACOG region failing to meet the federal ozone standards, it is especially important to pursue planning efforts that support the reduction of regional VMT as a means of improving air quality. Providing an on-line Bicycle Trip Planner and hard-copy Bicycle Routes Map Set for the Sacramento Region will assist in the region's goal to reduce emissions through the encouragement of more non-recreational bicycle trips. The availability of maps and mapping tools offers potential and existing cyclists an opportunity to plan new bicycle routes for commute and errand trips that may have otherwise been taken in a single occupancy vehicle (SOV).

To help quantify the impact that cycling can have towards reducing air emissions. In May 2007, the Sacramento Region launched its 2nd annual bicycle education event called "Million Mile May." If the 2,784 cyclists who commuted 370,000 miles in May had chosen to drive to work instead of bicycling, they would have generated 5,216 lbs of air pollution, 343,022 lbs of CO<sub>2</sub>, and burned 17,643 gallons of gasoline. SACOG's mapping efforts provide a resource to all levels of cyclists in the Sacramento area by reducing barriers such as perceived safety and lack of knowledge on the location of existing bicycle facilities. These two projects will influence travel behavior by making cycling a more attractive and accessible alternative for the region's citizens.

### **ENVIRONMENTAL JUSTICE**

Many people—youth, elderly, disabled, low income, or those who do not have access to an automobile—are dependent on walking and bicycling to access goods, services, activities, and destinations such as transit, medical services, education and employment. The lack of public knowledge about where existing bicycle facilities exist can contribute to social, physical, economic, and social isolation of vulnerable

populations by making them feel unsafe or uncomfortable using bicycles to travel longer distances.

SACOG routinely considers environmental justice a critical component of its planning efforts. This project will have no negative impacts on environmental justice populations. However, the mapping projects will allow SACOG's member agencies to locate gaps in underserved areas in the region where improvements to bicycle facilities are needed. The Regional Bicycle Trip Planner and Bicycle Routes Map will be available to all people to help them locate safe and efficient bicycle routes from any place, to any place in the region. The Trip Planner and the Map Set will be a great benefit to lower income and minority communities that tend to use bicycles for commuting in higher proportion than other communities.

SACOG will soon begin offering training to Community Based Organizations that assist non-English speakers on how to use the region's alternative transportation options. Copies of the Map Set and information about the Trip Planner will be made available to these Organizations.

José Luis Cáceres, Associate Planner  
Sacramento Area Council of Governments  
1415 L Street, Suite 300  
Sacramento, CA 95814

**Re: Regional Bicycle Trip Planner and Bicycle Routes Map Set**

Dear Mr. Cáceres:

The Sacramento Area Council of Governments proposes to use a portion of the funds from the Bicycle and Pedestrian Funding Program to create a Regional Bicycle Trip Planner and Bicycle Routes Map Set. This project is important for the region's efforts to make bicycling a more accessible transportation option. The Trip Planner and Map Set will help potential, new, and existing cyclists locate safe and direct bicycle routes to any place in the region.

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Thank you for your consideration of funding for the Regional Bicycle Trip Planner and Bicycle Routes Map Set. Please contact Matt Carpenter with any questions.

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Auburn  
Citrus Heights  
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Live Oak  
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Placer County  
Placerville  
Rancho Cordova  
Rocklin  
Roseville  
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**DEVELOPMENT OF THE  
REGIONAL BICYCLE TRIP PLANNER  
AND BICYCLE ROUTES MAP SET**

**December 3, 2007**

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