AGENDA FOR THE
ENGLEWOOD CITY COUNCIL
STUDY SESSION
TUESDAY, JANUARY 4, 2011
COMMUNITY ROOM
6:30 P.M.

I. **DRCOG Natural Hazard Mitigation Plan**
Community Development Director Alan White and Senior Planner Harold Stitt will discuss the DRCOG Natural Hazard Mitigation Plan.

II. **Art Shuttle**
Community Development Director Alan White and Senior Planner Harold Stitt will discuss the *art Shuttle.*

III. **Community Specific Integrated Emergency Management Courses**
Fire Chief Mike Pattarrozzi and EMS Coordinator Steve Green will discuss the Community Specific Integrated Emergency Management Course.

IV. **City Manager's Choice**

V. **City Attorney's Choice**

Please Note: If you have a disability and need auxiliary aids or services, please notify the City of Englewood, 303-762-2407, at least 48 hours in advance of when services are needed. Thank you.

M E M O R A N D U M

TO: Mayor and City Council

THRU: Gary Sears, City Manager
Mike Pattarozzi, Fire Chief
Alan White, Community Development Director

FROM: Steve Green, EMS/Emergency Management Coordinator
Harold J. Stitt, Senior Planner

DATE: January 4, 2011

SUBJECT: 2010 Denver Regional Natural Hazard Mitigation Plan

BACKGROUND

The Federal Disaster Mitigation Act of 2000 (DMA 2000) provides the legal authority and financial support for comprehensive hazard mitigation planning. It continues the federal requirement for a State Mitigation Plan as a condition of federal disaster assistance and establishes a new requirement and funding for local government mitigation planning. DMA 2000 also provides for the preparation and adoption of multi-jurisdictional plans by local governments to meet these requirements. The Denver Regional Natural Hazard Mitigation Plan was prepared to support the requirement of a mitigation plan for the participating local governments in the Denver region. The DMA requires that each jurisdiction requesting approval of the regional plan participate in its development and document its formal adoption by the governing body of each local government. An open public involvement process that provides opportunities for the public to comment on the plan at all stages of its formation is also required.

In 2003, DRCOG began assisting its member governments with natural hazard mitigation planning through the development of a regional plan. The Denver Regional Natural Hazard Mitigation Plan was approved by the Colorado Division of Emergency Management (DEM) and by the Federal Emergency Management Agency (FEMA) on March 3, 2004. The purpose of the plan was two-fold. First, it identified the natural hazards possibly affecting this region and the people and places most at risk in the region. Second, the plan aimed to identify locally implemented actions and measures that reduce or eliminate long-term risk from natural hazards and their effects. Local government participation in preparing the plan and adopting it locally fulfills the federal requirements for qualifying for federal hazard mitigation grants.

Hazards
The 2004 Plan identified thirteen natural hazards that pose some risk to the region. The hazards addressed in the plan were:

- Avalanches
- Droughts
- Earthquakes
- Floods
- Hail
- Heat Waves
- Land Subsidence
- Landslides
- Severe Storms/Winds
- Thunderstorms/Lightning
- Tornados
- Wildland Fires
- Winter Storms/Freezing

Through collaboration between local governments and the DRCOG Natural Hazard Mitigation Plan Steering Committee, a comprehensive list of mitigation measures was developed in the Mitigation Plan. Mitigation actions, measures, and projects generally fall into one of six major categories. These are Prevention, Property Protection, Natural Resource Protection, Emergency Service, Structural Projects, and Public Information.

Four main goals were developed to express the overall, long-term vision for mitigating natural hazards in the region. The mitigation goals are:

1. Protect people, property, and natural resources.
2. Increase public awareness of natural hazards and their mitigation.
3. Strengthen communication and coordination among public agencies, non-governmental organizations (NGOs), business, and private citizens.
4. Coordinate and integrate natural hazard mitigation activities with local land development planning activities and emergency operations planning.

Denver Regional Natural Hazard Mitigation Plan - 2010 Update
For the 2010 plan update, the four mitigation goals were again reviewed by each of the participating jurisdictions to determine whether the goals still applied to their locality. In addition, each jurisdiction also determined whether there were goals that needed to be added to address issues unique to their jurisdiction. As a result, this update adds one new item, Public Health Hazards, to the original list of thirteen natural hazards.

By identifying natural hazards and the people and places at risk at a regional scale, locally implemented actions and measures to reduce or eliminate long-term risk from natural hazards and their effects can be developed and cost effectively implemented. Since the 2010 Plan Update document is over 500 pages long, the Table of Contents, the Introduction and the City's profile and planned mitigation activities have been excerpted and attached for your review. The complete plan document and attachments can be accesses through the following links:

http://www.drcog.org/documents/2010%20Denver%20Metro%20NHMP_Final.pdf

http://www.drcog.org/documents/2010%20Denver%20Metro%20NHMP_Map%20Figures.pdf

The plan provides a comprehensive set of planned local government action items to achieve regional goals of reducing risk from natural hazards. These actions include preventative measures such as increasing public awareness, and measures to protect property and natural resources, and enhance emergency services and structural assets. Having a hazard mitigation plan in place can help reduce losses in future disasters, establish priorities for loss prevention, and reduce the social and economic disruption brought on by disasters.

FEMA and DEM consider this plan a "prerequisite" activity because of its fundamental role and importance. Local governments officially adopting the regional plan is the first step in implementing the plan. Adoption of the plan demonstrates the jurisdiction's commitment to fulfilling the mitigation goals and objectives outlined in the plan, legitimizes the plan and authorizes responsible agencies to execute their responsibilities, and fulfills requirements of several federal programs (e.g. CRS, FMAP) that require local governments to adopt the mitigation strategy. Adoption of the Plan will make the City eligible to receive federal funding for natural hazard mitigation planning activities.

Denver Regional Natural Hazard Mitigation Plan

2010 Update

DRAFT

October 2010

Prepared By:

Denver Regional Council of Governments

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1. INTRODUCTION

As the regional planning commission for the Denver metropolitan region, the Denver Regional Council of Governments (DRCOG) is concerned about many issues facing the region. One area of concern is the potential effect of natural hazards on the region. Planning for such hazards and undertaking mitigation measures can reduce the loss of life and property from events such as floods or tornados. This chapter of the Regional Natural Hazard Mitigation Plan outlines the purpose and need for such a plan, the scope and authority of the planning effort, the relationship of this effort to other emergency management plans and activities, and the relationship to other planning by DRCOG and its member governments. The process for preparing the plan is also described.

Purpose and Need

Natural hazards in the Denver region historically have caused significant disasters with losses of life and property. The purpose of this plan is to identify natural hazards and the people and places at risk at a regional scale and then identify actions and measures to reduce or eliminate long-term risk. These mitigation measures are developed and implemented locally in order to protect people, structures and natural resources from natural hazards and their effects.

This plan is a 5 year update of the first Denver Regional Natural Hazards Mitigation Plan prepared in 2003 and approved by FEMA in 2004.

In recent years significant disasters caused by natural hazards in the region include: the Hayman fire in Jefferson, Douglas and neighboring counties during June and July 2002 where 138,000 acres, 133 homes, and one business burned at a cost of $39.1 million; the week-long winter storm of March 2003 where over 90 inches of new snow fell in some locations and cost over $25 million in insurance claims; and a region-wide hail storm during July 1990, which cost $625 million in insurance claims. (Rocky Mountain News, March 23, 2003).

In 2003 thirteen natural hazards were identified that present substantial risk to one or more communities. In the 2010 update another natural hazard category was added: public health threats. This category encompasses pandemic flu and West Nile virus, a locally significant public health threat. Natural hazards of primary concern in the region include: avalanches, drought, earthquakes, floods, hail, heat wave, landslides, land subsidence, thunderstorms and lightning, tornados, severe storms and winds, winter storms and freezing and wildfire. These naturally occurring events, both weather related and geophysical phenomenon, have affected nearly every city and county in the region. The rising cost of natural disasters, in terms of loss of human life and injuries, and property and natural resources damage, has led to a renewed interest in identifying effective ways to reduce vulnerability to disasters.

Scope

With the support and involvement of participating cities and counties in the Denver region, and state and federal agencies, DRCOG has prepared a multi-jurisdictional, multi-hazard, natural hazard mitigation plan. A regional, multi-jurisdictional plan is a practical way to address issues best dealt with on a larger scale which do not recognize political boundaries, to take advantage of existing planning mechanisms, such as regional planning organizations, and use economies of scale by pooling limited financial resources. Because of the large number and diversity of jurisdictions potentially involved in a regional approach, however, such a plan is necessarily general and will require local refinement and detail to be adopted and used by individual localities.

The plan identifies goals, background information, and measures for hazard mitigation and risk reduction to make communities more disaster resistant and sustainable. A mitigation plan should help reduce the cost of disaster response and recovery to property owners and government. In addition, mitigation actions can protect critical community facilities, reduce exposure to liability, and minimize community disruption. Information in the plan can also be used to help guide and coordinate mitigation activities and local policy decisions for future land use decisions within communities.

The plan provides a comprehensive set of planned local government action items to achieve the goal of reducing risk from natural hazards. These actions include preventative measures, measures to protect property and natural resources, as well as measures to enhance

emergency services and structural assets. These local mitigation goals and action items are found in Chapter 4 of the plan. Many communities have mitigation measures, projects and action strategies in emergency preparedness plans, comprehensive plans, building codes, local ordinances and capital improvement programs. The purpose of this plan is to link the specific natural hazards that present risks in each participating community with the mitigation elements found in all of these local government plans and programs together in one place.

Authority

The Federal Disaster Mitigation Act of 2000 (DMA 2000) provides the legal authority and financial support for comprehensive hazard mitigation planning. It continues the federal requirement for a State Mitigation Plan as a condition of federal disaster assistance and establishes a new requirement and funding for local government mitigation planning. DMA 2000 also provides for the preparation and adoption of multi-jurisdictional plans by local governments to meet these requirements. The Denver Regional Natural Hazard Mitigation Plan was prepared to support the requirement of a mitigation plan for the participating local governments in the Denver region. The DMA requires that each jurisdiction requesting approval of the regional plan participate in its development and document its formal adoption by the governing body of each local government. An open public involvement process that provides opportunities for the public to comment on the plan at all stages of its formation is also required.

Relationship to Other Emergency Management Activities

Mitigation is the first phase in the cyclical four-phase emergency management process. Mitigation, also known as prevention, encourages long-term reduction of hazard vulnerability. Hazard mitigation is most effective when based on a comprehensive, long-term plan that is developed before a disaster actually occurs and is integrated with plans and programs for the other three phases of emergency management. Communities with up-to-date mitigation plans will be better able to identify and articulate their needs to state and federal officials, giving them a competitive edge when grant funding becomes available.

The other three phases of emergency management are preparedness, response, and recovery. Preparedness includes plans and preparations made to save lives and property and to facilitate response operations such as Emergency Operations Plans (EOPs). Response includes actions taken to provide emergency assistance, save lives, minimize property damage, and speed recovery immediately following a disaster. Recovery includes actions taken to return to a normal or improved operating condition following a disaster. The natural hazard mitigation plan is intended to tie in with and support all of each community's emergency management plans and programs. Specific references to relevant local plans, coordinating organizations, departments or divisions can be found in the Local Government Planned Mitigation Projects listed for each jurisdiction in Chapter 4 of the plan.

Other Supporting FEMA Programs

The Federal Emergency Management Agency (FEMA) has several natural hazard grant funding programs that share similar needs and requirements with this plan. These programs can provide funds for local mitigation plans and projects. For example, the National Flood Insurance Program (NFIP) offers federally-backed flood insurance to help reduce disaster losses from flooding. It provides flood insurance to property owners for structures that otherwise would be uninsurable because of their susceptibility to flooding, in exchange for communities adopting and implementing floodplain management regulations to minimize future flood losses to new construction.

Community Rating System

The Community Rating System (CRS) is a program under NFIP that recognizes and encourages community floodplain management activities. The CRS recognizes community efforts beyond the NFIP minimum standards by reducing flood insurance premiums from 5 percent to 45 percent for the community's property owners, depending on the amount of public information and floodplain management activities that the community undertakes. The CRS 10-step planning process is consistent with the multi-hazard mitigation planning process regulations under 44 CFR Part 201. Communities receive credit under CRS for developing a flood mitigation plan. An approved multi-hazard mitigation plan that addresses floods such as this one could qualify for CRS credit.

NFIP Compliance

Jurisdictions participating in the NFIP are indicated in Table 4. Continued compliance with the NFIP was considered by these communities. Chapter 4, Local Government Profiles and Mitigation Projects, contains the mitigation projects proposed by each of the participating local governments. Local governments in the NFIP evaluated their current and planned flood and flood-relation mitigation actions as part of this multi-hazard planning process. These communities can receive additional CRS credit for this and additional planning actions.

The Flood Mitigation Assistance Program (FMAP) is a program under the NFIP that provides funding for states and communities for the preparation of mitigation plans and for flood mitigation projects. Plans required under FMAP can serve as the basis of DMA 2000 plans, and can be expanded using the criteria in the Interim Final Rule implementing DMA 2000.

For each jurisdiction, Chapter 4 also provides: the number of NFIP policies, the amount of NFIP coverage, the total NFIP claims filed, the total paid on those claims, the community CRS class rating and the date (where available) of the current Flood Insurance Rate Map (FIRM).

Relationship to Other Regional and Community Plans

All of the jurisdictions in the Denver region utilize comprehensive land use or master planning, capital improvements planning, and building codes to guide and control local building and land development. The purpose of hazard mitigation planning is to identify community policies, actions, and projects for implementation over the long term that will result in a reduction in risk and potential for future losses community-wide. When conducted in coordination with other community planning, a mitigation plan will yield the most cost-effective and efficient results, optimal use of limited resources and also serve to protect lives, property and natural resources. Mitigation planning also enables communities and states to better identify sources of technical and financial resources outside of traditional venues.

Hazard mitigation plans are most effective when coordinated with other community planning and development activities. Integrating mitigation concepts and policies into existing plans provides expanded means for implementing initiatives via well-established mechanisms. In the past, some communities have undertaken mitigation actions with good intentions but with little advance planning or coordination with other local plans. In other cases, better land use or development decisions addressing natural hazards may have been made in advance with careful consideration of the contributing factors of vulnerability and risk that natural hazards present to the community.

As comprehensive plans are reviewed and updated, and after mitigation strategies are developed, mitigation policies and activities should be incorporated into elements of the plan such as economic development, transportation, recreation, historic preservation, and housing. A natural hazards element may also be desired. Planning for future land uses by considering hazard constraints and opportunities, addressing environmental concerns, and incorporating hazard reduction into capital improvements and infrastructure elements are all potential mitigation opportunities (FEMA, 2002).

The regional hazard mitigation plan has a relationship to other regional plans involving infrastructure development. The regional plan of the metro-wide Urban Drainage and Flood Control District (UDFCD), and the DRCOG Regional Transportation Plan are two examples. The construction and maintenance of costly regional storm drainage and flood control improvements and transportation facilities such as highways, transit and bicycle and pedestrian facilities all benefit when natural hazard mitigation is considered as part of their planning and construction.

Plan Development Process, Stakeholder and Local Government Participation

DRCOG planning staff conducted the hazard mitigation planning process and prepared the updated mitigation plan document. DRCOG is the Metropolitan Planning Organization (MPO) for the Denver region and conducts regional scale land use, transportation and open space planning. Preparation of the updated Regional Natural Hazard Mitigation Plan began in 2009 and has continued into 2010.

An open public planning process that provided opportunities for the public and stakeholders to comment on the plan at all stages of its formation was conducted. DRCOG used the same

committee organization and local jurisdiction notification, public outreach, notification and involvement techniques to prepare this plan that are considered current standard best practice for federally grant-funded metropolitan planning organizations across the country that operate at a regional, or multi-county and multi-city level. Because of the great size and diversity of the Denver metropolitan region the agency relies greatly on its local member governments to inform and gather input from their general public for local planning activities.

Stakeholder Participation

Local, state and federal agencies as well as neighboring jurisdictions and special districts and interest groups participated in the plan development. Representatives from several neighboring jurisdictions that were preparing or had participated in other natural hazard mitigation plans attended the steering committee meetings and provided information and input to the plan. These included Jefferson County, Boulder County, and representatives from the City of Golden and the City of Lakewood.

State agencies who participated in the development of this plan include members of the North Central All-Hazards Emergency Management Region (NCR), Colorado Department of Local Affairs (DOLA) Division of Emergency Management and the DOLA Office of Smart Growth, the Colorado Water Conservation Board, and the Colorado Geological Society.

Several special district stakeholders participated in the flood mitigation planning. These included the Urban Drainage and Flood Control District and The Southeast Metro Stormwater Authority. Federal agencies that provided information and input towards the plan include Region VIII FEMA and the National Weather Service Office in Boulder, Colorado.

2009 Process and Local Government Participation

Like the 2004 plan, DRCOG convened a steering committee of local jurisdictions to guide preparation of the plan. A letter was sent to each city and county emergency manager and planning director in July 2009 to invite local government representatives to sit on the Steering Committee and participate in the preparation of the plan. The Steering Committee was comprised of representatives of participating city and county governments, the State Office of Emergency Management, and FEMA Region 8. Members of the Steering Committee are listed below in Table 1. While all of the nine counties and all of the cities in the region were invited to participate in the steering committee and the plan update process, not all jurisdictions chose to

participate. Table 2 lists the localities that chose to participate in the multi-jurisdictional plan steering committee and process in 2009/2010.

Public and Stakeholder Participation

The plan update was first publicly announced in the summer 2009 edition of the DRCOG Regional Report newsletter http://www.drcog.org/documents/2009%20RR%20July%20August%20with%20insert%20web.pdf). The announcement requested the input from a variety of stakeholders. This newsletter reaches over 4,000 local government officials, staff and interested public throughout the metro region. The announcement requested the input from a variety of stakeholders. The mailing/distribution list includes:

- private citizens,
- academic institutions
- homeowner associations,
- environmental organizations,
- non-governmental and non-profit organizations

All of these have expressed/ demonstrated interest at DRCOG in planning, growth, economic development, housing, transportation, environmental quality and water quality.

Announcements and requests for comments and input into the plan's development were made at subsequent DRCOG Board of Directors meetings attended by over 50 elected officials representing all of the cities and counties in the Denver region.

Information and draft copies of the 2009 Regional Natural Hazard Mitigation Plan and presentation materials were posted on the DRCOG website, http://www.drcog.org/. A public notice requesting comments and questions on the plan was featured on the agencies home webpage during the last three weeks of October 2009.

2009 Meetings

The Steering Committee met twice in 2009: August 5, 2009 and September 2, 2009. Agendas and sign-sheets are included in Appendix D, Mitigation Planning Meeting Documentation.

Local jurisdictions were represented on the Steering Committee by a combination of emergency service personnel including police, fire and emergency managers, as well as planning, community development and public works staff.

Table 1. Regional Natural Hazard Plan Steering Committee

First Name	Last Name	Jurisdiction	Title
Brian	Nielsen	City of Lakewood	Emergency Management Coordinator and Environmental Manager
Gene	Putman	City of Thornton	Assistant Public Works Director
Jim	Lancy	City of Arvada	Emergency Management Coordinator
Kathleen	Krebs	Clear Creek County	Emergency Management Coordinator
Rick	Newman	Adams County OEM	Emergency Management Coordinator
Brandon	Lawrence	Broomfield Emergency Management	Emergency Management Coordinator
John	Bales	City of Golden Fire Department	Chief
Norris	Croom	Town of Castle Rock Fire and Rescue Department	Division Chief - Operations Division
Marilyn	Gally	DOLA Colorado Division of Emergency Management	Mitigation Officer
Dave	Fisher	City of Greenwood Village Emergency Management	Emergency Preparedness Manager
Kevin	Stewart	Urban Drainage and Flood Control District	Manager, Information Systems & Flood Warning Program
Michael	Sutherland	Town of Parker	Public Works Director
Patrick	Conroy	City of Sheridan Fire Department	Captain/Fire Marshal
Carol	Maclennan	Tri-County Health Department	Environmental Policy Coordinator
Rebecca	Martinez	City of Brighton and Greater Brighton Fire Protection District	Emergency Management Coordinator
Frederick	Rollenhagen	Clear Creek County	Planning Director
Rich	Hansen	DOLA Colorado Division of Emergency Management	Mitigation Specialist
Tony	Petersen	Gilpin County	Director of Community Development
Daniel	Alexander	Denver Office of Emergency Management and Homeland Security	Director

First Name	Last Name	Jurisdiction	Title
Fran	Santagata	Douglas County OEM	Emergency Management Director
Alan	Colon	City of Commerce City Police Department	Emergency Manager
Larry	Coapland	City of Thornton	Emergency Management/Deputy Fire Chief / Emergency Manager
Jim	Hayes	City of Northglenn	Director of Planning and Development
Chuck	Stearns	Town of Georgetown	Town Administrator
Scott	Kellar	North Central Region	Homeland Security Coordinator
Deanne	Criswell	City of Aurora OEM	Coordinator
Andrew	Marsh	City of Federal Heights Fire Department	Fire Chief
Bob	Wold	Colorado DOLA Division of Emergency Management	Regional Manager
Rose	Lynch	North Central Region	
Kevin	Houck	Colorado Water Conservation Board	Senior Engineer
Andy	Hill	Colorado DOLA Office of Smart Growth-Sustainable Development	Planner
Kathleen	Krebs	Clear Creek County	Emergency Manager
Merrie	Harper	Boulder County OEM	Emergency Manager
Monica	Bortolini	SE Metro Stormwater Authority	Floodplain Manager
Frank	Kemme	City and County of Denver,	Floodplain Manager
Georgia	Simpson	City of Arvada	Floodplain Manager
Brad	Robenstein	Douglas County	Floodplain Manager
Bob	Deed	City of Littleton	Floodplain Manager
Tim	Gelston	City of Lakewood	Planning Manager
Greg	Palmer	Arapahoe County	Emergency Manager
Daryl	Hollingsworth	City of Golden	
Sherman	Feher	Arapahoe County	Planner
Stacy	Thompson	Arapahoe County	Engineer
Bruce	Beckman	City of Littleton Police Department	Division Commander
Marco	Vasquez	City of Sheridan	
Diane	Stone	City of Sheridan	
Jim	Kaiser	City of Thornton	
Tim	Johnson	Douglas County OEM	
Meredith	Reckert	City of Wheat Ridge	City Planner
Dan	Barber	Boulder County OEM	
Mike	Chard	Boulder County OEM	
Steven	Steed	Denver OEM	Planning Specialist
Harold	Stitt	City of Englewood	City Planner
Rachelle	Miller	North Central Region	Homeland Security Planner

First Name	Last Name	Jurisdiction	Title
Julie	Baxter	FEMA Region VIII	Senior Community Planner
Perry	Edman	City of Commerce City	Floodplain Manager
Stuart	McArthur	Town of Bennett	Town Administrator
Tim	Williams	City of Federal Heights	City Planner
Jenn	Koscelnik	City of Centennial	
Gregory	Weeks	City of Lone Tree	City Planner
Ron	Celentano	Jefferson County OEM	

2010

The draft multi-jurisdictional plan prepared in the fall of 2009 was reviewed by the Colorado Department of Local Affairs Division of Emergency Management and FEMA Region 8. The plan crosswalk review by FEMA found a number of required elements of the 2009 draft needed improvement and the plan was not approved. Beginning in March 2010, work on the plan draft resumed and involved an extensive series of meetings with local government stakeholders to gather more specific data for each locality as requested from the FEMA crosswalk review. Additional grant funding was obtained in July 2010 to complete the plan preparation and assist local jurisdictions prepare mitigation goals and identify mitigation projects for the plan. A series of six meetings were held with participating local governments.

The renewed regional mitigation planning process was announced again in the June 2010 edition of the *DRCOG On Board* e-newsletter to broaden awareness and support with local elected officials. Table 2 indicates the jurisdictions that chose to participate in the 2009/2010 update.

2010 Plan Participation Thresholds

Communities that participated in the 2010 Natural Hazard Mitigation Plan had to meet a minimum threshold of participation in order to become eligible for plan adoption. That threshold consisted of:

- Attendance at mitigation planning committee meetings,
- Providing data to DRCOG to improve hazard analyses,
- Developing and prioritizing new mitigation actions to reduce identified risks to hazards,
- Assisting in the development of and agreeing to the provisions outlined in the Plan Maintenance Procedures chapter.

The communities that met the participation thresholds are identified in Table 2 below.

Table 2. Participating Localities in the Denver Region

Jurisdiction	Participating in NFIP (As of 10/09)	CRS Class Rating (As of 10/09)	Participated in Regional NHMP (2004)	Participating in Regional NHMP (As of 10/10)[1]
Adams County	X	10	X	X
Arapahoe County	X	8	X	X
Aurora	X	8	X	X
Bennett	X			X- Represented by Adams County by 2009 Town Resolution No. 411, 11/24/09
Black Hawk	X			X
Brighton	X		X	X
Castle Rock	X		X	X
Centennial	X			X
Central City	X			X
Cherry Hills Village	X	8		X
City and County of Broomfield	X		X	X
City and County of Denver	X	8	X	X
Clear Creek County	X		X	X
Commerce City	X			X
Douglas County	X	9	X	X
Empire	X	9		X
Englewood	X	8	X	X
Federal Heights	X		X	X
Georgetown	X			X

[1] Note that the Counties of Boulder, Jefferson and Weld, and the localities located within them, although part of the Denver Region, and participants in the 2004 plan, have prepared their own natural hazard mitigation plans and were not participants in this plan.

Jurisdiction	Participating in NFIP (As of 10/09)	CRS Class Rating (As of 10/09)	Participated in Regional NHMP (2004)	Participating in Regional NHMP (As of 10/10)[1]
Gilpin County	X			X
Greenwood Village	X			X
Littleton	X	7	X	X
Sheridan	X	10		X
Silver Plume	X			X
Thornton	X	7		X

2010 Meetings

Six hazard mitigation planning meetings were held in 2010 with multiple local jurisdictions to discuss mitigation planning and for participating jurisdictions to identify and provide more detailed information to include in the multi-jurisdictional plan. Staff from DRCOG and DOLA-DEM attended all of these meetings. These meetings occurred on March 2, 2009 (Adams county and cities), March 30, 2009 (Arapahoe county and cities), April 5, 2010 (Douglas county and cities), June 15, 2010 (City and County of Denver and Broomfield), July 1, 2010 (City of Cherry Hills Village), July 12, 2010 (Clear Creek and Gilpin counties and cities). Agendas and sign-in sheets for those meetings can be found in Appendix D, Mitigation Planning Process Documentation.

Four worksheets were provided and discussed at each meeting:

1. Mitigation Goal Review: Jurisdictions were asked to review the four stated plan goals and determine if they were sufficient for their community or if they plan to add or replace any of them,

2. Natural Hazards Profile Review: Each jurisdiction was asked to review the estimated probable frequency, severity and significance for each of the hazards found in their community and to update them as they felt necessary,

3. Local Mitigation Actions/ Projects: Each jurisdiction was asked to complete a mitigation project worksheet for each new, completed or deferred project that were proposing to help mitigate hazards in their community. The checklist approach used in the 2009 draft

update did not provide enough detail about projects. The local mitigation actions and projects described by each participating jurisdiction can be found in Chapter 4.

4. Land Use Changes Survey: Each jurisdiction was asked to briefly describe the location of significant new land development and any relevant code or ordinance changes since the previous plan was prepared in 2004.

Each jurisdiction was asked to complete all four worksheets and return them to DRCOG for inclusion in the multi-jurisdictional plan. The results of the mitigation goal review are discussed in this section. The results of the natural hazard profile review, a list of local mitigation projects, significant land use changes and development trends, and new code or ordinance changes since 2004 are provided for each jurisdiction in Chapter 4.

Plan Goal Identification and Review Process

The 2004 Regional Natural Hazard Mitigation Plan contained four goals developed by the plan steering committee and reviewed by the participating jurisdictions. The Natural Hazard Steering Committee developed a consensus set of regional natural hazard mitigation goals. These goals are general and can be further detailed and adapted at the local government level. The goals express the overall, long-term vision for mitigating natural hazards in the region. These goals were initially used by each participating jurisdiction to identify current and planned mitigation measures.

Regional Natural Hazard Mitigation Goals

1. Protect people, property and natural resources.
2. Increase public awareness of natural hazards and their mitigation.
3. Strengthen communication and coordination among public agencies, non-governmental organizations (NGOs), business and private citizens.
4. Coordinate and integrate natural hazard mitigation activities with local land development planning activities and emergency operations planning.

For the 2010 plan update these goals were again reviewed by each of the participating jurisdictions to determine whether the goals still applied to their locality and whether there were goals that they felt needed to be added to address issues unique to their jurisdiction. A

survey form was provided to each of the individual jurisdictions as part of meetings with local representatives during 2010. These meetings are documented in Appendix D.

Table 3. Local Government Mitigation Goal Review

Jurisdiction	*Which goals apply to your jurisdiction?*	*Are there any goals that you feel need to be added for your jurisdiction?*
Counties		
Adams	All	None
Arapahoe	All	None
Broomfield	All	None
Denver	All	None
Douglas	All	None
Clear Creek	Goal #1 is most important	Add: Providing additional protection/safety for our emergency responders
Gilpin	All	No
Cities		
Aurora	All	None
Blackhawk	*	*
Brighton	All	None
Castle Rock	All, currently	None at this time
Central City	*	*
Cherry Hills Village	All	None
Commerce City	All	None
Empire	Goal #1 and #2 are most important	None at this time
Englewood	All	None noted

Jurisdiction	*Which goals apply to your jurisdiction?*	*Are there any goals that you feel need to be added for your jurisdiction?*
Federal Heights	All	None at this time
Georgetown	All	Add: Protection of historic structures, places and persons
Greenwood Village	*	*
Littleton	All	None at this time
Sheridan	All	None
Thornton	All	None at this time
Silver Plume	All	Establish a Geographic Area Coordination Center for hazards
***Survey response not provided**		

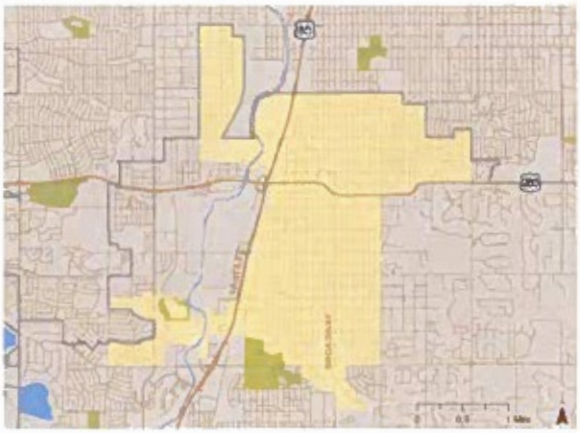
Natural Hazards Mitigation Plan Community Profile:

City of Englewood

Overview of Community:

The City of Englewood is a Home Rule Municipality located in Arapahoe County, Colorado, United States. As of 2007, the city is estimated to have a total population of 32,532. Englewood is part of the Denver-Aurora Metropolitan Area. Englewood is located in the South Platte River Valley east of the Front Range and immediately south of central Denver. Downtown is located immediately east of the confluence of Little Dry Creek and the South Platte River, between Santa Fe Drive and Broadway Street.

Area Maps



Development Trends:

Englewood's urban extent has not changed since 2000. Englewood's urban extent will grow by 0.2 sq. mi. between 2006 and 2035. This is a 0.2% annual percent increase over that time period.

Urbanization and Urban Growth	
Total Land Area (Square Miles)	6.6
2000 Urbanized Area	6.4
2004 Urbanized Area	6.4
2006 Urbanized Area	6.4
2035 Urban Growth/Boundary Area (Square Miles)	6.6
Annual Percent Increase in Urbanized Area 2006-2035	0.2%

Population and Demographics:

In 2006-2008 there were 14,000 households in Englewood. The average household size was 2.1 people. Families made up 49 percent of the households in Englewood. This figure includes both married-couple families (33 percent) and other families (16 percent). Nonfamily households made up 51 percent of all households in Englewood. Most of the nonfamily households were people living alone, but some were composed of people living in households in which no one was related to the householder.

In 2006-2008, 79 percent of the people at least one year old living in Englewood were living in the same residence one year earlier; 7 percent had moved during the past year from another residence in the same county, 8 percent from another county in the same state, 6 percent from another state, and less than 0.5 percent from abroad.

In 2006-2008, Englewood had a total of 15,000 housing units, 9 percent of which were vacant. Of the total housing units, 62 percent was in single-unit structures, 36 percent was in multi-unit structures, and 1 percent was mobile homes. Seven percent of the housing units were built since 1990.

In 2006-2008, Englewood had 14,000 occupied housing units - 6,900 (50 percent) owner occupied and 7,000 (50 percent) renter occupied. Six percent of the households did not have telephone service and 12 percent of the households did not have access to a car, truck, or van for private use. Thirty-one percent had two vehicles and another 16 percent had three or more.

The median monthly housing costs for mortgaged owners was $1,467, non-mortgaged owners $367, and renters $764. Forty percent of owners with mortgages, 18 percent of owners without mortgages, and 44 percent of renters in Englewood spent 30 percent or more of household income on housing.

In 2006-2008, 86 percent of people 25 years and over had at least graduated from high school and 28 percent had a bachelor's degree or higher. Fourteen percent were dropouts; they were not enrolled in school and had not graduated from high school.

The total school enrollment in Englewood was 6,200 in 2006-2008. Nursery school and kindergarten enrollment was 690 and elementary or high school enrollment was 3,500 children. College or graduate school enrollment was 1,900.

In 2006-2008, 13 percent of people were in poverty. Nineteen percent of related children under 18 were below the poverty level, compared with 10 percent of people 65 years old and over. Eight percent of all families and 22 percent of families with a female householder and no husband present had incomes below the poverty level.

Current Population Estimates (2008)	
Population	32,591
Average Household Size	2.15
Percent Multifamily Housing Units	38%
New Housing Units Built 2007-2008	-2
Vacancy Rate	7.80%

2000 Census Data	
Median Age	36
Percent Over Age 65	15%
Percent Under Age 18	20%
Poverty Rate	5%
Home Ownership Rate	52%
Disability Rate	23%
Language Spoken at Home	
English Only	88%
Other than English	12%
Speak English Less Than Very Well	6%

Population Growth	
2030 Population	39,139
Population Growth 1980-2005	7%
Population Growth 2005-2030	21%

Employment:

In 2006-2008, for the employed population 16 years and older, the leading industries in Englewood were Educational services, and health care, and social assistance, 17 percent, and Retail trade, 12 percent.

Among the most common occupations were: Management, professional, and related occupations, 29 percent; Sales and office occupations, 28 percent; Service occupations, 16 percent; Production, transportation, and material moving occupations, 14 percent; and Construction, extraction, maintenance and repair occupations, 13 percent. Eighty-three percent of the people employed were Private wage and salary workers; 10 percent was Federal, state, or local government workers; and 6 percent was Self-employed in own not incorporated business workers.

Seventy percent of Englewood workers drove to work alone in 2006-2008, 11 percent carpooled, 9 percent took public transportation, and 6 percent used other means. The remaining 4 percent worked at home. Among those who commuted to work, it took them on average 24.1 minutes to get to work.

The median income of households in Englewood was $43,841. Eighty-two percent of the households received earnings and 13 percent received retirement income other than Social Security. Twenty-four percent of the households received Social Security. The average income from Social Security was $15,068. These income sources are not mutually exclusive; that is, some households received income from more than one source.

Current Employment Estimates (2008)	
Employment	25,079
Employers	1,605
Average Annual Wage*	$40,565

*Workers employed in the community

Employment Growth	
2030 Employment	31,695
Employment Growth 1980-2005	15%
Employment Growth 2005-2030	11%

National Flood Insurance Program (NFIP)

Englewood participates in the NFIP. Englewood has 32 NFIP policies with $7,400,700 of coverage. A total of 6 claims have been filed since 1978. A total of $2,222 has been paid on those claims. The community has a CRS class rating of 8. The date of the current FIRM is 08/16/1995.

Natural Hazard Occurrence

The following probable frequency, severity, and significance of natural hazards was estimated for the community.

Natural Hazard	Frequency	Severity	Significance
Avalanche	N/A	N/A	**N/A**
Drought	H	EX	**H**
Earthquake	L	S	**M**
Flood	H	S	**H**
Hail	H	S	**L**
Heat Wave	M	EX	**L**
Landslide	VL	M	**L**
Land Subsidence	L	M	**M**
Thunderstorm(Lighting)	H	S	**M**
Tornado	H	EX	**M**
Severe Storm/Wind	M	S	**M**
Winter Storm/Freezing	H	S	**M**
Wildland Fire	L	S	**L**
Pandemic Flu/W. Nile Virus	L	S	**M**

Frequency and Severity Key	
Frequency	
H = High	Recurrence rate of more than 0.1/yr. (once every ten years)
M = Medium	Recurrence rate between 0.1/yr. And 0.01/yr. (once every 10 to 100 years)
L= Low	Recurrence rate between 0.01/yr. And 0.001/yr. (once every 100 to 1,000 years)
VL= Very Low	Recurrence rate less than 0.001/yr. (once in more than 1,000 years)
Severity	
Cat = Catastrophic	Multiple fatalities, complete shutdown of critical facilities for 30 days or more, more than 50 percent of the property in affected area destroyed or receiving major damage.
Ex = Extensive	Fatalities and severe injury or illness, complete shutdown of critical facilities for 14 days or less, more than 25 percent of the property in affected area destroyed or receiving major damage.
S = Serious	Injuries or illness not resulting in disability, complete shutdown of critical facilities for 7 days or less, more than 10 percent of the property in affected area destroyed or receiving major damage.
M = Minor	First aid injuries, complete shutdown of critical facilities for 1 day or less, no more than 1 percent of the property in affected area destroyed or receiving major damage.

Overall Significance Key	
H = High	Widespread potential impact; Medium or High Frequency; Serious, Extensive or Catastrophic Severity
M = Medium	Moderate potential impact; Medium or High Frequency; Minor, Serious or Extensive Severity
L= Low	Minimal potential impact; Very Low or Low Frequency; Minor or Serious Severity

Local Mitigation Actions and Projects

Jurisdiction	**City of Englewood 1 of 1**
Project Status	New
Project Name	Flood Plain Overlay District Ordinance revisions
Natural Hazard to be Addressed	Flood – NFIP Action
Priority	High
Significance of the Hazard to the Community	High
Project Need	To maintain the City's CRS rating FEMA is requiring updates to FIRM references contained in the flood plain regulations relative to the new digitized FIRM maps.
Project Location	Flood Plain Overlay District covers properties adjacent to the South Platte River, Little Dry Creek, and Big Dry Creek
Coordinating Organization	Community Development Department
Estimated Cost	N/A
Potential Funding Sources	N/A
Timeline or Schedule	To be completed by 12/31/2010
Potential Benefits	Project necessary to continue to provide for reduced flood insurance rates for affected Englewood properties.
Worksheet Completed By	Harold J. Stitt

(See also multi-jurisdictional actions at the beginning of Chapter 4.)

CITY OF ENGLEWOOD
COMMUNITY DEVELOPMENT

TO: Mayor and City Council

THRU: Gary Sears, City Manager
Alan White, Community Development Director

FROM: Harold J. Stitt, Senior Planner

DATE: December 29, 2010

RE: Art Shuttle Route Expansion

City Council has requested that staff study the feasibility and cost of expanding the Art Shuttle route. The suggested expansion is to divert the east-west alignment of the art shuttle at South Broadway and proceed north to the Kaiser Permanente Clinic at 2955 South Broadway. To analyze the proposed route expansions staff met with RTD and MV Transportation, Inc., the Shuttle operator, and discussed the technical, operational, and financial feasibility of route expansion.

To begin the discussions, RTD staff stated that the 2011 operations budget has been set and no additional funds, above the budgeted $237,602.56, are available. All additional costs associated with a route expansion will be the sole responsibility of the City. Furthermore, RTD's commitment of funds for 2011 would be subject to further review, if in their opinion an Art Shuttle route expansion impacted existing RTD services.

To determine the impact of a route expansion, staff working with RTD and MV staff developed four scenarios for testing. The four scenarios are based on the following assumptions:

1) MV Transportation's 2011 contract hourly rate remains constant,
2) RTD's financial share is fixed for 2011, and
3) All additional cost incurred due to route expansion are borne by the City of Englewood.

The table and maps on the following pages illustrate the scenarios.

To focus the analysis, staff developed a series of questions based on determining the operational and financial impact of the proposed route expansion.

1. Would 30-minute headways be acceptable to RTD?

No, based on the RTD service standards and the original design of the Art Shuttle service, RTD's financial support is based on 15-minute headways. Increasing headway to 30-minutes is a significant reduction in service level. Based on RTD's experience with other similar services, (the B Line, and Golden's Gus Bus) an increase in headway from 15-minutes to 30-minutes ultimately results in a loss of ridership. This would also be true for the Art Shuttle because transit riders will have a choice, on the Broadway legs of the route, of a free service that runs every thirty minutes (the Art Shuttle) or a fare service that runs every fifteen minutes (the 0 bus route.) National and RTD data demonstrates that transit riders will more often then not choose the convenience of the more frequent service over the less-frequent free service. In addition, on average individuals walk at a pace to cover one mile in 20-minutes. With a 30-minute headway, many transit riders would choose to walk to their destination rather than wait the extra time for the Shuttle. If the Art Shuttle switched to 30-minute headways, the decline in ridership would cause RTD to reevaluate the level of financial support provided for the Art Shuttle.

2. Does an expansion of the route to Kaiser need to be on both the eastbound and westbound legs?

Yes, from an operational standpoint expanding the service on both the eastbound and westbound legs is a matter of maintaining a consistent level of service. The effect of extending the route to Kaiser on only one leg of the route effectively will create a thirty-minute trip for many of the Shuttle riders. From RTD's perspective, this expansion competes with existing services and would likely result in transit riders choosing those other services over the Art Shuttle, again decreasing Shuttle ridership and potentially resulting in RTD reducing or eliminating funding for the Shuttle.

3. How many additional buses would be necessary to maintain 15-minute headways if all current RTD bus stops as well as Kaiser were added to the route?

There are three RTD stops between the current route and Kaiser; to maintain the 15-minute headway three buses would be required. MV would put their current "spare" bus into regular service and utilize a spare from their existing inventory.

4. Would the MV 2011contract hourly rate change if the route were extended to Kaiser and a third bus were added?

The proposed 2011 hourly rate of $42.49 would not change.

5. Are the projected fuel costs reasonable?

Yes, based on available data and projected fuel costs for 2011.

6. Are there other issues to address when considering a route expansion?

RTD requires that any service with a headway or frequency greater than 15-minutes be on a fixed published schedule. A fixed published schedule is necessary to provide a higher level of service the more infrequent the service. RTD staff also provided preliminary data on the potential demand for transit services generated by the Englewood Kaiser Clinic. The Kaiser Clinic, on average receives 150 visits per day. Based on RTD system-wide ridership analysis, approximately 4% of trips in the urbanized metro area are by transit. This translates into six of the 150 Kaiser visits are made by public transit. In and of itself, six additional riders

would be too low to justify route expansion. However, including the three existing Broadway RTD stops may add more riders. The proposed route also eliminates three existing Shuttle stops, two on West Hampden Avenue, and one in the 3400 Block of South Broadway.

Lacking substantial additional funding, an expansion of the Art Shuttle route does not appear feasible at this time. In addition to the funding issue, the proposed route expansion is a duplication of existing RTD services that, if implemented, would potentially jeopardize RTD funding for the Art Shuttle.

Art Shuttle Route Expansion Scenarios

2011 Proposed Operation

# of Buses	Service Hours	2011 Rate	Cost	Fuel	Total	RTD Base Cost	COE Base Cost	COE Cost Over Base
2	6144	$42.49	$261,058.56	$34,000.00	$295,058.56	$237,602.56	$57,456.00	$0.00

Current route length 3.6 miles.
Fuel cost is based on RTD estimate

Scenario 1 - Extend route to Kaiser Permanente Clinic, 2955 S. Broadway, on eastbound leg only with 2 buses and 30 minute headway.

# of Buses	Service Hours	2011 Rate	Cost	Fuel	Total	RTD Base Cost	COE Cost	COE Cost Over Base
2	6144	$42.49	$261,058.56	$43,520.00	$304,578.56	$237,602.56	$66,976.00	$9,520.00

Current route length 3.6 miles, scenario route length 4.6 miles
Fuel cost is based on RTD estimate and a 28% increase in route length.

Scenario 2 - Extend route to Kaiser Permanente Clinic, 2955 S. Broadway, on eastbound and westbound legs with 2 buses and 30 minute headway.

# of Buses	Service Hours	2011 Rate	Cost	Fuel	Total	RTD Base Cost	COE Cost	COE Cost Over Base
2	6144	$42.49	$261,058.56	$55,760.00	$316,818.56	$237,602.56	$79,216.00	$21,760.00

Current route length 3.6 miles, scenario route length 5.9 miles
Fuel costs is based on RTD estimate and a 64% increase in route length.

Scenario 3 - Extend route to Kaiser Permanente Clinic, 2955 S. Broadway, on eastbound leg only and 15 minute headway.

# of Buses	Service Hours	2011 Rate	Cost	Fuel	Total	RTD Base Cost	COE Cost	COE Cost Over Base
3	9216	$42.49	$391,587.84	$65,280.00	$456,867.84	$237,602.56	$219,265.28	$161,809.28

Current route length 3.6 miles, scenario route length 4.6 miles
Fuel costs are based on pro-rated RTD estimate and a 28% increase in route length.

Scenario 4 - Extend route to Kaiser Permanente Clinic, 2955 S. Broadway, on eastbound and westbound legs with 15 minute headway.

# of Buses	Service Hours	2011 Rate	Cost	Fuel	Total	RTD Base Cost	COE Cost	COE Cost Over Base
3	9216	$42.49	$391,587.84	$83,640.00	$475,227.84	$237,602.56	$237,625.28	$180,169.28

Current route length 3.6 miles, scenario route length 5.9 miles
Fuel costs are based on pro-rated RTD estimate and a 64% increase in route length.

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MAPQUEST

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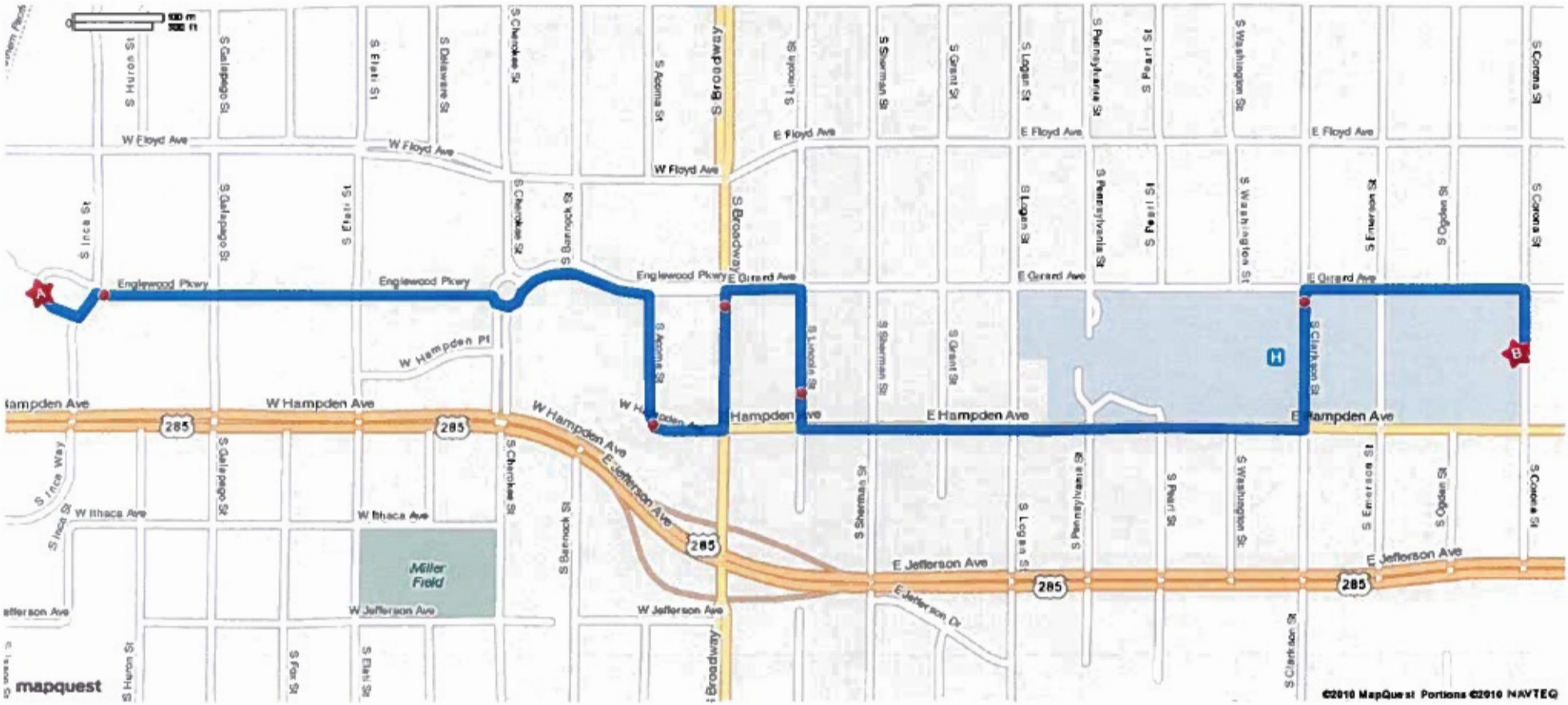
Current Art Shuttle Eastbound Route

Starting Location
1000 Englewood Pky
Englewood, CO 80110-2373

Ending Location
3455 S Corona St
Englewood, CO 80113-2810

Total Travel Estimate 7 minutes / 1.86 miles Fuel Cost Calculate



1000 Englewood Pky Edit
Englewood, CO 80110-2373

Current Art Shuttle Eastbound Route

1.	Start out going **SOUTHEAST** on **ENGLEWOOD PKWY** toward **S INCA ST**.	0.0 mi
2.	Turn **LEFT** onto **S INCA ST**.	0.0 mi
3.	Turn **RIGHT** onto **ENGLEWOOD PKWY**. Pass through 1 roundabout.	0.5 mi
4.	Turn **RIGHT** onto **S ACOMA ST**.	0.1 mi
5.	Turn **LEFT** onto **W HAMPDEN AVE**.	0.1 mi
6.	Turn **LEFT** onto **S BROADWAY**.	0.1 mi
7.	Turn **RIGHT** onto **E GIRARD AVE**	0.1 mi
8.	Turn **RIGHT** onto **S LINCOLN ST**.	0.1 mi
9.	Turn **LEFT** onto **E HAMPDEN AVE.**	0.4 mi
10.	Turn **LEFT** onto **S CLARKSON ST**.	0.1 mi
11.	Turn **RIGHT** onto **E GIRARD AVE**.	0.2 mi
12.	Turn **RIGHT** onto **S CORONA ST**.	0.1 mi
13.	**3455 S CORONA ST** is on the **RIGHT**	

3455 S Corona St Edit
Englewood, CO 80113-2810

Total Travel Estimate: 7 minutes / 1.86 miles Fuel Cost: Calculate

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Current Art Shuttle Westbound Route

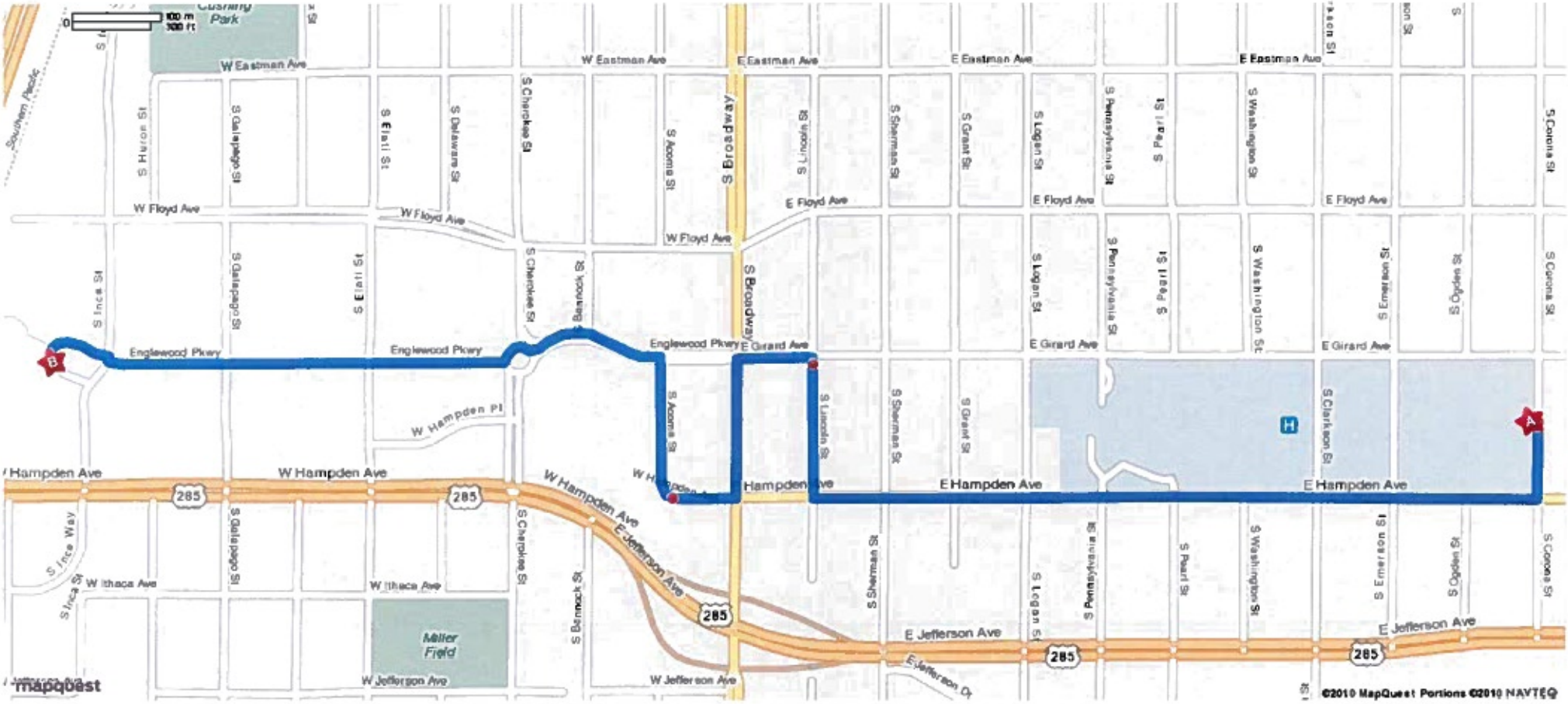
Starting Location

3455 S Corona St
Englewood, CO 80113-2810

Ending Location

1000 Englewood Pky
Englewood, CO 80110-2373

Total Travel Estimate: 6 minutes / 1.75 miles Fuel Cost: Calculate



3455 S Corona St Edit
Englewood, CO 80113-2810

Current Art Shuttle Westbound Route

1.	Start out going **SOUTH** on **S CORONA ST** toward **E HAMPDEN AVE**.	0.1 mi
2.	Turn **RIGHT** onto **E HAMPDEN AVE**.	0.6 mi
3.	Turn **RIGHT** onto **S LINCOLN ST**.	0.1 mi
4.	Turn **LEFT** onto **E GIRARD AVE.**	0.1 mi
5.	Turn **LEFT** onto **S BROADWAY**.	0.1 mi
6.	Turn **RIGHT** onto **W HAMPDEN AVE**	0.1 mi
7.	Turn **RIGHT** onto **S ACOMA ST**.	0.1 mi
8.	Turn **LEFT** onto **ENGLEWOOD PKWY**. Pass through 1 roundabout.	0.6 mi
9.	**1000 ENGLEWOOD PKY**.	

1000 Englewood Pky Edit
Englewood, CO 80110-2373

Total Travel Estimate **6 minutes** / **1.75 miles** **Fuel Cost** Calculate

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MAPQUEST

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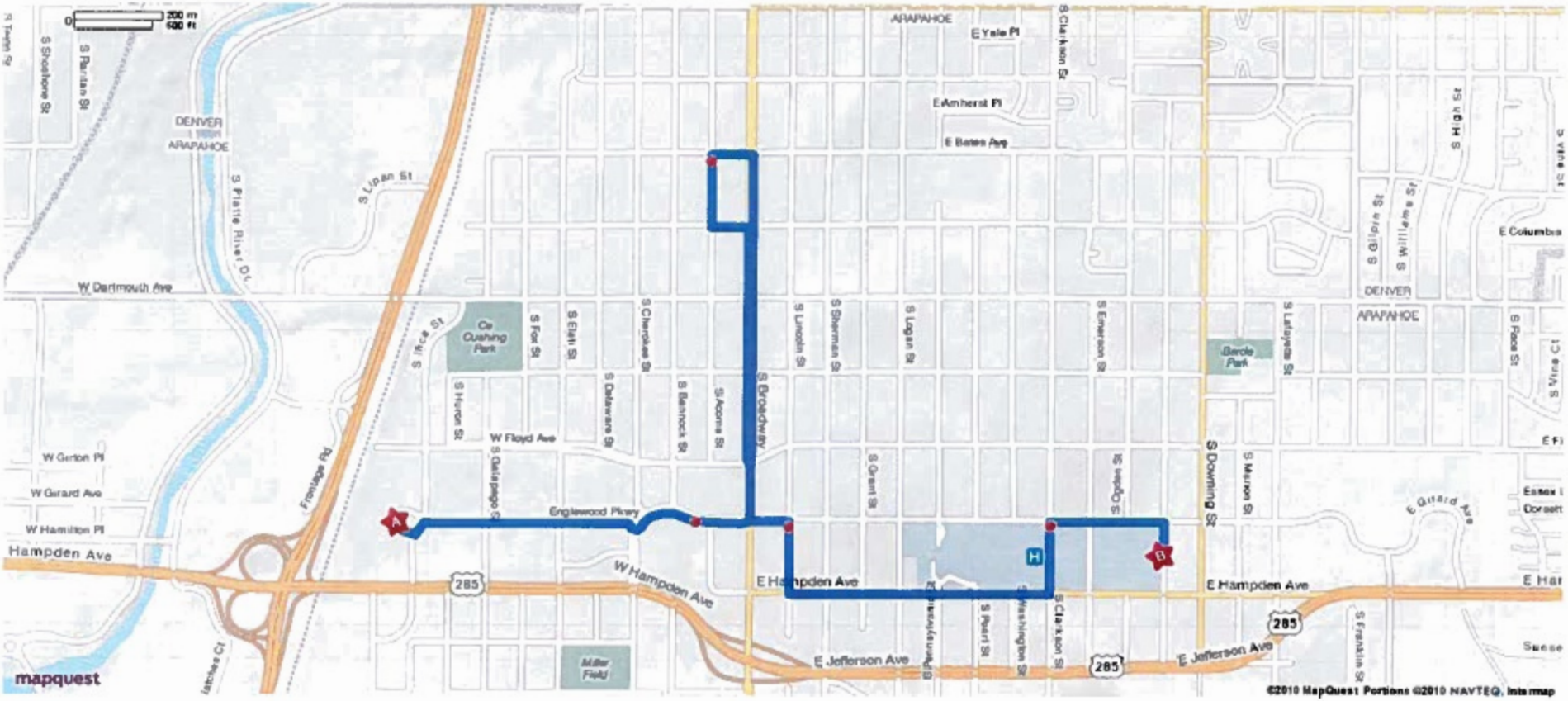
Proposed Art Shuttle Eastbound Route

Starting Location
1000 Englewood Pky
Englewood, CO 80110-2373

Ending Location
3455 S Corona St
Englewood, CO 80113-2810

Total Travel Estimate 10 minutes / 3.01 miles Fuel Cost Calculate



1000 Englewood Pky Edit
Englewood, CO 80110-2373

START	1. Start out going **SOUTHEAST** on **ENGLEWOOD PKWY** toward **S INCA ST**.	0.0 mi
	2. Turn **LEFT** onto **S INCA ST**	0.0 mi
	3. Turn **RIGHT** onto **ENGLEWOOD PKWY**. Pass through 1 roundabout.	0.6 mi
	4. Turn **LEFT** onto **S BROADWAY**.	0.6 mi
	5. Turn **LEFT** onto **E BATES AVE**	0.1 mi
	6. Turn **LEFT** onto **S ACOMA ST**	0.1 mi
	7. Turn **LEFT** onto **W CORNELL AVE**.	0.1 mi
	8. Turn **RIGHT** onto **S BROADWAY**.	0.5 mi
	9. Turn **LEFT** onto **E GIRARD AVE**	0.1 mi
	10. Turn **RIGHT** onto **S LINCOLN ST**.	0.1 mi
	11. Turn **LEFT** onto **E HAMPDEN AVE**	0.4 mi
	12. Turn **LEFT** onto **S CLARKSON ST**	0.1 mi
	13. Turn **RIGHT** onto **E GIRARD AVE**.	0.2 mi
	14. Turn **RIGHT** onto **S CORONA ST**.	0.1 mi
END	15. **3455 S CORONA ST** is on the **RIGHT**.	

B. **3455 S Corona St** Edit
Englewood, CO 80113-2810

Total Travel Estimate: **10 minutes** / **3.01 miles** **Fuel Cost:** Calculate

Directions and maps are informational only. We make no warranties on the accuracy of their content, road conditions or route usability or expeditiousness. You assume all risk of use. MapQuest and its suppliers shall not be liable to you for any loss or delay resulting from your use of MapQuest.

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Proposed Art Shuttle Eastbound Route

There's a new MapQuest - come try it out! Get started »

MAPQUEST

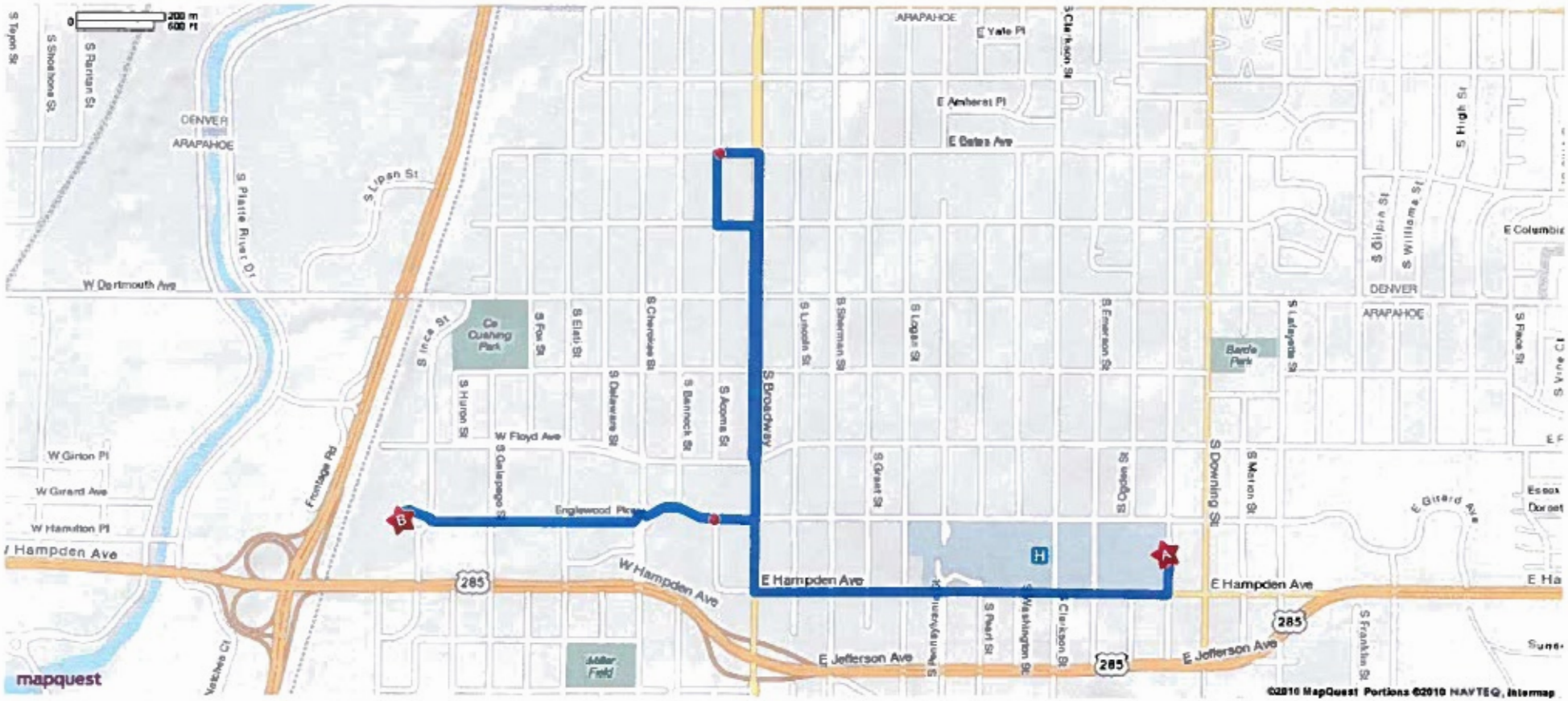
Sorry! When printing directly from the browser your directions or map may not print correctly. For best results, try clicking the Printer-Friendly button.

Proposed Art Shuttle Westbound Route

Starting Location
3455 S Corona St
Englewood, CO 80113-2810

Ending Location
1000 Englewood Pky
Englewood, CO 80110-2373

Total Travel Estimate: 9 minutes / 2.90 miles Fuel Cost: Calculate



3455 S Corona St Edit
Englewood, CO 80113-2810

1.	Start out going SOUTH on S CORONA ST toward E HAMPDEN AVE.	0.1 mi
2.	Turn RIGHT onto E HAMPDEN AVE.	0.7 mi
3.	Turn RIGHT onto S BROADWAY.	0.8 mi
4.	Turn LEFT onto E BATES AVE.	0.1 mi
5.	Turn LEFT onto S ACOMA ST.	0.1 mi
6.	Turn LEFT onto W CORNELL AVE.	0.1 mi
7.	Turn RIGHT onto S BROADWAY.	0.5 mi
8.	Turn RIGHT onto ENGLEWOOD PKWY. Pass through 1 roundabout.	0.6 mi
9.	1000 ENGLEWOOD PKY.	

1000 Englewood Pky Edit
Englewood, CO 80110-2373

Total Travel Estimate: **9 minutes** / **2.90 miles** Fuel Cost: Calculate

Directions and maps are informational only. We make no warranties on the accuracy of their content, road conditions or route usability or expeditiousness. You assume all risk of use. MapQuest and its suppliers shall not be liable to you for any loss or delay resulting from your use of MapQuest.

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Proposed Art Shuttle Westbound Route

COUNCIL COMMUNICATION

Date:	Agenda Item:	Subject:
January 4, 2011	11 c i	Integrated Emergency Management Course

Initiated By:	Staff Source:
Englewood Office of Emergency Management	Steve Green, Emergency Management Coordinator

COUNCIL GOAL AND PREVIOUS COUNCIL ACTION

This grant supports the following Council Goals:

1) Englewood as a city that is safe, clean, healthy and attractive.
2) Englewood as a progressive city that provides responsive and cost efficient services.

RECOMMENDED ACTION

Staff seeks Council's support for a resolution authorizing the City's application to the National Emergency Training Center (NETC) to participate in an Integrated Emergency Management Course at the NETC in Emmitsburg, Maryland in fiscal year 2012.

BACKGROUND, ANALYSIS, AND ALTERNATIVES IDENTIFIED

The Emergency Management Institute, located at the National Emergency Training Center, holds community-specific training to help jurisdictions develop and implement their policies, plans and procedures, in an exercise format, to assist in preparing for crises specific to that jurisdiction.

Application to attend the training is an annual competitive process, overseen in Colorado by the Department of Local Affairs, Division of Emergency Management.

As a part of the application, the senior elected official of the City is required to sign a cover letter to the application packet, indicating the support of the City in allowing employees to attend this training.

FINANCIAL IMPACT

The training is fully funded by the NETC, with the exception of meals for participants. The cost of meals for City employees is expected to be reimbursed through the EMPG grant process for Fiscal Year 2012.

LIST OF ATTACHMENTS

Cover Letter for Application
Reminder Notice for IEMC Course
Resolution

Hans Kallam, Director
Colorado Division of Emergency Management
Department of Local Affairs
9195 East Mineral Avenue
Suite 200
Centennial , Colorado 80112

January 5, 2011

Dear Mr. Kallam,

On behalf of the City of Englewood, I respectfully request consideration to receive a community-specific Integrated Emergency Management Course (IEMC). We have determined that the City of Englewood meets the criteria for application and selection for this course conducted by FEMA's Emergency Management Institute (EMI).

We understand that approval for an IEMC will require a major commitment from our community and we are prepared to meet that commitment. As such, I believe our community is an ideal candidate and would benefit significantly from participation in this course to exercise our emergency operations center (EOC) SOPs and our emergency operations plans.

Heavy rail tracks run through the city used by about 44 freight trains per day. Light rail track parallels the heavy rail through the city, carrying a large number of passengers daily. We are active regionally in both day to day activities, emergency response activities and disaster planning, mitigation and recovery activities, as detailed in our packet.

We request an IEMC program that will help to prepare us for all hazards planning, mitigation, response and recovery, as well as the specific hazards detailed in our packet. The attached documents provide detailed information concerning our current emergency management program and our disaster history.

We request your endorsement of this application to be forwarded to the FEMA Region 8 Administrator along with our application package.

I have appointed the following individual(s) as our Point of Contact for this request:

Name: Stephen Green
Position Title: Emergency Management Coordinator
Organization and Address: Englewood Fire Department
3615 S. Elati St.
Englewood, Co 80110
Telephone #/email address: 303-762-

Thank you for your consideration.

Sincerely,

James Woodward

Mayor

City of Englewood

EMERGENCY MANAGEMENT INSTITUTE

NATIONAL EMERGENCY TRAINING CENTER • EMMITSBURG, MD 21727

FEMA

Fiscal Year 2012 Community-specific Integrated Emergency Management Course (IEMC)

REMINDER: The deadline for applying to the Emergency Management Institute (EMI) for a community-specific IEMC in FY2012 is January 15, 2011.

Each year States, counties, cities, Tribal communities and specialized jurisdictions throughout the United States apply to the Emergency Management Institute (EMI) to conduct an IEMC for their jurisdictions. IEMCs are exercise-based courses that place jurisdictions' emergency operations center (EOC) personnel in realistic crisis situations within a structured learning environment. The jurisdiction selects the scenario(s) it wants to exercise (for example, a special event, hurricane, or terrorist incident), the exercises are then developed to reflect the hazards or events facing the jurisdiction, the type of EOC used by the jurisdiction, and the organizations included in the jurisdictional emergency plans.

A community-specific IEMC builds awareness and skills needed to develop and implement a jurisdiction's policies, plans, procedures, and mutual aid agreements in an EOC environment. Skilled EMI exercise specialists conduct a pre-course analysis in the jurisdiction in order to collect local information, identify critical infrastructure, study transportation systems, and analyze current response plans. From this information, exercises are built to test the jurisdiction's planned approach to specific hazards and to surface issues for which the IEMC participants may need to re-evaluate and develop corrective action plans.

IEMCs are Homeland Security Exercise and Evaluation Program (HSEEP) compliant and designed for personnel who fill specific emergency support positions within their community. Personnel who attend are officials from local, regional, State and federal emergency management agencies, senior level personnel from response agencies and organizations (e.g., law enforcement, fire, emergency medical services, and public health), managers from volunteer organizations active in disasters (VOADs), and representatives from private organizations which participate in local, regional, and state responses. Each participant is assigned a role similar to their real-life position. To view a list of positions of appropriate attendees, please go to the IEMC website at:
http://www.training.fema.gov/EMIWeb/IEMC/iemcpos.asp

Emergency personnel can attain readiness either through managing emergencies or through participating in exercises - clearly, exercises are the preferred method of gaining the necessary expertise. IEMC participants are challenged to use new ideas, skills, and abilities in addition to their own knowledge and experience. In this way, the IEMC allows individuals to rehearse their real-life roles in a realistic emergency situation, while at the same time identifying additional planning needs.

For information on how to prepare and submit an application for a community-specific IEMC, click on the link:

http://training.fema.gov/EMIWeb/IEMC/selprocess.asp

For continual updates on IEMCs, and to sign up for **our free email subscription service,** click on the link: Sign up via our free e-mail subscription service at our web site: http://www.training.fema.gov/EMIWeb/IEMC/

BULLETIN

No.: 857

Friday, December 10, 2010