

**FINAL**

# I-225 Light Rail Transit Environmental Evaluation



## TABLE OF CONTENTS

	<u>Page</u>
<b>LIST OF ACRONYMS</b> .....	<b>i</b>
<b>GLOSSARY</b> .....	<b>vi</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>ES-1</b>
ES.1 Introduction .....	ES-1
ES.2 Purpose and Need .....	ES-3
ES.3 Alternatives Considered .....	ES-3
ES.4 Affected Environment, Impact Evaluation, and Mitigation Measures .....	ES-16
ES.5 Transportation Systems .....	ES-20
ES.6 Public Involvement and Agency Coordination .....	ES-24
ES.7 Impact and Mitigation Summary .....	ES-27
<b>1.0 PURPOSE AND NEED</b> .....	<b>1-1</b>
1.1 Introduction .....	1-1
1.2 Project Location .....	1-1
1.3 Background and Project History .....	1-4
1.4 Purpose of the Project .....	1-5
1.5 Need for the Project .....	1-5
1.5.1 Need for Multi-Modal Improvements to Provide a Reliable Multi- Modal System .....	1-5
1.5.2 Need for Improved Regional Connectivity .....	1-8
1.5.3 Need to Meet the Voter's 2004 Mandate and to be Cost-Effective and Financed as Part of the FasTracks Program Budget .....	1-9
1.5.4 Need to Reflect Community and Regional Plans and Programs .....	1-9
1.5.5 Attract New Transit Riders While Serving Traditional Transit Users .....	1-10
<b>2.0 ALTERNATIVES CONSIDERED</b> .....	<b>2-1</b>
2.1 Introduction .....	2-1
2.2 Public and Agency Involvement in Consideration of Alternatives .....	2-2
2.3 Alternatives Development .....	2-2
2.3.1 Base Concepts from Prior Studies .....	2-3
2.3.2 Alignment Alternatives in addition to (or developed from) the Initial Build Alignment .....	2-7
2.3.3 Station Location Alternatives and Parking .....	2-13
2.3.4 Operating Plan Alternatives Development .....	2-16
2.4 Alternatives Screening .....	2-17
2.4.1 Level 1 – Purpose and Need Screening .....	2-18
2.4.2 Level 2 – Screening against Detailed Criteria .....	2-18
2.4.3 Level 3 – Alternative Refinement .....	2-26
2.5 Alternatives Carried Forward for Detailed Evaluation .....	2-38
2.5.1 No-Action Alternative .....	2-38
2.5.2 Preferred Alternative .....	2-38

## TABLE OF CONTENTS (Continued)

	<u>Page</u>
<b>3.0 AFFECTED ENVIRONMENT, IMPACT EVALUATION, AND MITIGATION MEASURES</b> -----	<b>3-1</b>
3.1 Land Use -----	3-7
3.1.1 Affected Environment-----	3-7
3.1.2 Impact Evaluation -----	3-14
3.1.3 Mitigation Measures -----	3-17
3.2 Economic Considerations -----	3-18
3.2.1 Affected Environment-----	3-18
3.2.2 Impact Evaluation -----	3-21
3.2.3 Mitigation Measures -----	3-25
3.3 Right-of-Way and Relocations -----	3-26
3.3.1 Affected Environment-----	3-26
3.3.2 Impact Evaluation -----	3-26
3.3.3 Mitigation Measures -----	3-33
3.4 Social Impacts, Facilities and Environmental Justice -----	3-37
3.4.1 Social Impacts and Community Facilities -----	3-37
3.4.2 Environmental Justice-----	3-49
3.5 Cultural Resources (Historic and Archaeological Resources) -----	3-63
3.5.1 Affected Environment-----	3-64
3.5.2 Impact Evaluation -----	3-68
3.5.3 Mitigation Measures -----	3-71
3.6 Parks, Recreational Facilities, and Open Space -----	3-72
3.6.1 Affected Environment-----	3-72
3.6.2 Impact Evaluation -----	3-80
3.6.3 Mitigation Measures -----	3-85
3.7 Public Safety and Security -----	3-88
3.7.1 Affected Environment-----	3-88
3.7.2 Impact Evaluation -----	3-90
3.7.3 Mitigation Measures -----	3-92
3.8 Visual and Aesthetic Resources -----	3-95
3.8.1 Affected Environment-----	3-95
3.8.2 Impact Evaluation -----	3-97
3.8.3 Mitigation Measures -----	3-102
3.9 Air Quality and Energy -----	3-103
3.9.1 Air Quality -----	3-103
3.9.2 Energy -----	3-111
3.10 Noise and Vibration -----	3-116
3.10.1 Noise -----	3-116
3.10.2 Vibration -----	3-123

## TABLE OF CONTENTS (Continued)

	<u>Page</u>
3.11 Electro-magnetic Fields/Electro-magnetic Interference-----	3-130
3.11.1 Affected Environment-----	3-130
3.11.2 Impact Evaluation -----	3-131
3.11.3 Mitigation Measures -----	3-132
3.12 Biological Resources -----	3-134
3.12.1 Vegetation -----	3-134
3.12.2 Noxious Weeds -----	3-137
3.12.3 Wildlife -----	3-140
3.12.4 Special Status Species-----	3-144
3.13 Mineral Resources/Geology/Soils-----	3-151
3.13.1 Affected Environment-----	3-151
3.13.2 Impact Evaluation -----	3-151
3.13.3 Mitigation Measures -----	3-155
3.14 Paleontology-----	3-156
3.14.1 Affected Environment-----	3-156
3.14.2 Impact Evaluation -----	3-156
3.14.3 Mitigation Measures -----	3-157
3.15 Hazardous Materials-----	3-159
3.15.1 Affected Environment-----	3-160
3.15.2 Impact Evaluation -----	3-160
3.15.3 Mitigation Measures -----	3-166
3.16 Utilities -----	3-170
3.16.1 Affected Environment-----	3-170
3.16.2 Impact Evaluation -----	3-170
3.16.3 Mitigation Measures -----	3-172
3.17 Water Resources -----	3-173
3.17.1 Affected Environment-----	3-174
3.17.2 Impact Evaluation -----	3-178
3.17.3 Mitigation Measures -----	3-184
3.18 Floodplains-----	3-186
3.18.1 Affected Environment-----	3-186
3.18.2 Impact Evaluation -----	3-188
3.18.3 Mitigation Measures -----	3-191
3.19 Wetlands/Waters of the U.S. -----	3-194
3.19.1 Affected Environment-----	3-194
3.19.2 Impact Evaluation -----	3-196
3.19.3 Mitigation Measures -----	3-203

**TABLE OF CONTENTS (Continued)**

	<u>Page</u>
<b>4.0 TRANSPORTATION SYSTEMS -----</b>	<b>4-1</b>
4.1 Summary of Results -----	4-1
4.2 Transit Service -----	4-2
4.2.1 Existing Transit Service -----	4-2
Future Transit Service -----	4-3
4.3 Transit Impacts -----	4-7
4.3.1 No-Action Alternative -----	4-7
4.3.2 Preferred Alternative -----	4-7
4.4 Roadway Systems -----	4-11
4.4.1 Existing Roadway Conditions -----	4-11
4.4.2 Future Roadway Conditions -----	4-11
4.5 Station Area Impacts and Mitigation -----	4-11
4.6 LRT Roadway Crossing Impacts and Mitigation -----	4-18
4.7 Pedestrian and Bicycle Facilities -----	4-24
4.7.1 Existing Network and Facilities -----	4-24
4.7.2 Future Network and Facilities -----	4-24
4.8 Construction Impacts and Mitigation -----	4-26
4.9 Compatibility with Area Plans -----	4-27
<b>5.0 PUBLIC INVOLVEMENT AND AGENCY COORDINATION -----</b>	<b>5-1</b>
5.1 Public Involvement and the Decision-Making Process -----	5-1
5.2 Public and Agency Involvement and Outreach -----	5-2
5.3 Public and Agency Input -----	5-5
5.4 Next Steps -----	5-9
<b>6.0 REFERENCES -----</b>	<b>6-1</b>

**APPENDIX A PREFERRED ALTERNATIVE DETAIL**  
**APPENDIX B AGENCY COORDINATION**  
**APPENDIX C RESPONSES TO COMMENTS**

## LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADA	Americans With Disabilities Act
AMI	Area Median Income
APCD	Air Pollution Control Division
APE	Area of Potential Effect
AST	Aboveground Storage Tank
BAT	Best Available Technology
BFE	Base Flood Elevations
BMP	Best Management Practice
BRT	Bus Rapid Transit
BTU	British Thermal Unit
CBD	Central Business District
CDOT	Colorado Department of Transportation
CDOW	Colorado Division of Wildlife
CDPHE	Colorado Department of Public Health and Environment
CDPS	Colorado Discharge Permit System
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CEQ	Council on Environmental Quality
CESQG	Resource Conservation and Recovery Act Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CGS	Colorado Geological Survey
CIP	Capital Improvement Plan
CMP	Construction Management Plan
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO2	Carbon Dioxide
CORRACT	Resource Conservation and Recovery Act Corrective Action
CPTED	Crime Prevention Through Environmental Design
CR	Commuter Rail
CSP	Central Shortgrass Prairie
CWA	Clean Water Act
dBA	A-weighted Decibel
DC	Direct Current
DEIS	Draft Environmental Impact Statement
DEM	Digital Elevation Model

DIA	Denver International Airport
DOT	Department of Transportation
DRCOG	Denver Regional Council of Governments
DUS	Denver Union Station
EA	Environmental Assessment
EAC	Early Action Compact
EE	Environmental Evaluation
EIS	Environmental Impact Statement
EMF	Electro-magnetic frequency
EMI	Electro-magnetic interference
EMM	Environmental Methodology Manual
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FHAD	Flood Hazard Area Delineation
FC	Federal Candidate for Listing under the Endangered Species Act
FE	Federally Endangered Species under the Endangered Species Act
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FERG	FasTracks Environmental Resource Group
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FT	Federally Threatened Species under the Endangered Species Act
FTA	Federal Transit Administration
GIS	Geographic Information System
HOV	High-Occupancy Vehicle
HSWA	Hazard and Solid Waste Amendments
HUD	Housing and Urban Development
Hz	Hertz
ICCNA	International Cross Cultural Network of Aurora
I-225	Interstate 225
ITS	Intelligent Transportation Systems
Kg	Kilogram
Ldn	Day-Night Average Sound Level
LED	Light Emitting Diode
Leq(h)	Hourly Equivalent Sound Level
LOS	Level of Service
LPA	Locally Preferred Alternative
LQG	Resource Conservation and Recovery Act Large Quantity Generator

LRT	Light Rail Transit
LRV	Light Rail Vehicle
LUST	Leaking Underground Storage Tank
LWCFA	Land and Water Conservation Fund Act
M and E	Colorado Department of Public Health and Environment 303(d) Monitoring and Evaluation List
MBTA	Migratory Bird Treaty Act
MESA	Modified Phase I Environmental Site Assessment
MG	MilliGauss
MIS	Major Investment Study
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
MSA	Metropolitan Statistical Area
MSAT	Mobile Source Air Toxics
MUTCD	Manual on Uniform Traffic Control Devices
N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Act
NHPA	National Historic Preservation Act
NMR	Nuclear Magnetic Resonance
NOX	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
O3	Ozone
OAHP	Office of Archeology and Historic Preservation
OCS	Overhead Contact System
OSHA	Occupational Safety and Health Administration
OW	Open Waters
PA	Programmatic Agreement
PCEA	Programmatic Cumulative Effects Analysis
PHA	Preliminary Hazard Analysis
PM2.5	Particulate Matter of 2.5 microns in diameter or smaller
PM10	Particulate Matter of 10 microns in diameter or smaller
pnR	park-n-Ride

POTW	Publicly Owned Treatment Works
ppm	parts per million
PUC	Public Utilities Commission
RAQC	Regional Air Quality Council
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RTD	Regional Transportation District
RTP	Regional Transportation Plan
SB40	Senate Bill 40
SC	State Species of Special Concern
SCRGP	Sand Creek Regional Greenway Partnership
SDWA	Safe Drinking Water Act
SE	State Endangered Species
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office/Officer
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
ST	State Threatened Species
STIP	State Transportation Improvement Program
SQG	Resource Conservation and Recovery Act Small Quantity Generator
T & E	Threatened and Endangered
TAZ	Transportation Analysis Zone
TCM	Transportation Control Measure
TDM	Transportation Demand Measures
TDP	Transit Development Plan
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TOD	Transit Oriented Development
TPSS	Traction power substations
TSD	Treatment, Storage, and Disposal
TSM	Transportation System Management
TSS	Total Suspended Solids
UC Denver	University of Colorado, Denver Campus
UDFCD	Urban Drainage and Flood Control District
g/m <sup>3</sup>	Micrograms per cubic meter
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency

USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VA	Veterans Affairs
VC	Vibration Categories
VdB	Vibration Decibels
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WL	Wetlands
WQCC	Water Quality Control Commission
WQCD	Water Quality Control Division
WQCV	Water Quality Capture Volume

## GLOSSARY

Term	Definition
Accessibility	The extent to which facilities are barrier free and useable by persons with disabilities, including wheelchair users.
Affected Environment	Describes the existing environment of the area to be affected by the No-Action and Preferred Alternative.
Alternatives Screening	A range of alternatives were evaluated for station platform locations, park-n-Ride locations, and light rail alignments. These alternatives were evaluated in a multi-step screening process that built on previous planning efforts and took into account the project Purpose and Need, operations, engineering criteria, environmental considerations, and community acceptance.
AM Peak	6:30 a.m. to 8:30 a.m.
Anschutz/Fitzsimons Medical Campus	Redevelopment of the former Fitzsimons Army Medical Center into 570-acre medical and bioscience campus that includes the University of Colorado Denver, Children’s Hospital, Veteran’s Administration Hospital, and the Fitzsimons Redevelopment Authority’s Colorado Science + Technology Park at Fitzsimons.
At-grade crossing	Location where LRT alignment crosses a roadway. The crossing may include varying types of ‘treatments’ including gated and/or signalized areas or passive warning devices.
Base Corridor Alignment	Also referred to as the Initial build Alternative alignment. The initial track alignment which was refined to establish the Preferred Alternative developed from previous studies including: CDOT’s I-225 Widening from North of Parker Road to North of 6 <sup>th</sup> Avenue (Environmental Assessment [EA] July, 2000 and Finding of No Significant Impact [FONSI] March, 2001), RTD’s I-225 Major Investment Study (MIS) (September, 2001), RTD’s FasTracks Plan (2004), and RTD’s 3 Corridor Scoping Study (August, 2005).
Base Fare	The price charged to one adult for one transit ride; excludes transfer charges, zone charges, express service charges, peak period surcharges and reduced fares.
Best Management Practices	Effective, feasible (including technological, economic, and institutional considerations) conservation practices and land and water management measures that avoid or minimize adverse impacts to natural and cultural resources. BMPs may include schedules for activities, prohibitions, maintenance guidelines, and other management practices.
Bus Transit	Service provided on a repetitive, fixed-schedule basis along a specific route with vehicles stopping to pick up and deliver passengers to specific locations; each fixed-route trip serves the same origins and destinations, unlike demand responsive and taxicabs.
Catenary	Suspended overhead wire that carries high voltage for electrically powered transit vehicles (e.g. trolley coaches, light rail transit vehicles) from a central power source.

Term	Definition
Clean Air Act Amendments of 1990 (CAAA)	The comprehensive federal legislation that establishes criteria for attaining and maintaining the federal standards for allowable concentrations and exposure limits for various air pollutants; the CAAA also provides emission standards for specific vehicles and fuels.
Commuter Rail	A transit mode associated with the East Corridor that includes a multiple car electric or diesel propelled train. It is typically used for local, longer-distance travel between a central city and adjacent suburbs, and can operate alongside existing freight or passenger rail lines or in exclusive right-of-ways.
Conformity	The ongoing process that ensures the planning for highway and transit systems, as a whole and over the long term, is consistent with the state air quality plans for attaining and maintaining health-based air quality standards. Conformity is determined by metropolitan planning organizations and the U.S. Department of Transportation and is based on whether transportation plans and programs meet the provisions of a State Implementation Plan.
Corridor	A broad geographical band that connects major sources of trips and may contain a number of streets, highways, and transit route alignments.
Environmental Evaluation	This project is expected to be locally-funded through the voter approved initiative, and therefore is not subject to requirements of the National Environmental Policy Act (NEPA), which applies to federal actions. This Environmental Evaluation has been prepared in accordance with RTD guidelines, including the RTD FasTracks <i>Environmental Methodology Manual</i> , and provides a comparable level of analysis to NEPA documentation prepared for the other FasTracks corridors.
FasTracks	A mass transit expansion plan and funding program to improve and expand the Denver region's existing transit system and facilities. In November 2004, the Denver region's voters approved RTD's request to increase its sales tax by 0.04 percent, which would provide \$4.7 billion over 12 years to expand rapid transit services (light rail, commuter rail, and bus rapid transit) and park-and-Ride facilities and to enhance the existing bus network and transit hubs.
Fixed-guideway Transit	A system of vehicles that can operate only on its own guideway constructed for that purpose (e.g., rapid rail, light rail). Federal usage in funding legislation also includes exclusive right-of-way bus operations, trolley coaches and ferryboats as "fixed guideway" transit.
Grade Separation	Bridge or tunnel that would separate LRT alignment from crossing a roadway, stream, or other area of interest.
Headway	Time interval between vehicles moving in the same direction on a particular transit route.

Term	Definition
Impacts	Impacts were evaluated for direct- caused by the action and occur at the same time and place and, indirect (caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Impacts from temporary construction activities were evaluated as well as cumulative impacts. Impacts were evaluated for both the No-Action and Preferred Alternative.
Impact Evaluation	Includes potential direct, indirect, temporary construction, and cumulative impacts associated with the No-Action and Preferred Alternative.
Joint Development	Ventures undertaken by the public and private sectors for development of land around transit stations or stops.
Kiss-n-Ride	A place where commuters are driven and dropped off at a station to board a public transportation vehicle.
Level of Service (LOS)	Level of service is a measure described by a letter designation ranging from A to F, with LOS A representing almost free-flow travel, while LOS F represents congested conditions. For signalized intersections, LOS is calculated for the entire intersection while LOS for unsignalized intersections is calculated for movements which must yield right-of-way to other traffic movements.
Light Rail Transit (LRT)	Steel wheel/steel rail transit constructed on city streets, semi-private right-of-way, or exclusive private right-of-way. Formerly known as "streetcar" or "trolley car" service, LRT's major advantage is operation in mixed street traffic at-grade. The LRT vehicles can be coupled into trains, which require only one operator and often are used to provide express service.
Maintenance Area	An air quality designation for a geographic area in which levels of a criteria air pollutant meet the health-based primary standard (national ambient air quality standard, or National Ambient Air Quality Standards) for the pollutant. An area may have on acceptable level for one criteria air pollutant, but may have unacceptable levels for others. Maintenance/attainment areas are defined using federal pollutant limits set by the United States Environmental Protection Agency (USEPA).
Major Investment Study (MIS)	An alternatives analysis study process for proposed transportation investments, during which a wide range of alternatives is examined to produce a smaller set of alternatives that best meet project transportation needs. The purpose of the study is to provide a framework for developing a package of potential solutions that can then be further analyzed during an environmental process.
Mitigation Measures	Actions to be taken to avoid, minimize, or compensate for impacts identified in the impact evaluation. Mitigation may include: 1) Avoiding the impact altogether by not taking a certain action or parts of an action, 2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, 3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment, 4) Preservation, 5) Compensating for the impact by replacing or providing substitute resources or environments

Term	Definition
Mode of Access	A term that describes how many people use alternative forms of transportation. Frequently used to describe the percentage of people using private automobiles compared to the percentage using public transportation.
Mode	A particular form or method of travel distinguished by vehicle type, operation technology, and right-of-way separation from other traffic.
Multi-modal	Those issues or activities that involve or affect more than one mode of transportation, including transportation connections, choices, cooperation, and coordination of various modes.
National Environmental Policy Act of 1969 (NEPA)	A comprehensive federal law requiring analysis of the environmental impacts of federal actions such as the approval of grants; also requires preparation of an Environmental Impact Statement for every major federal action significantly affecting the quality of the human environment. NEPA does not apply to this corridor.
No-Action Alternative	The No-Action Alternative assumes the proposed project would not take place. The No-Action Alternative includes existing projects and financially committed projects within the Project Study Area. Effects or conditions resulting from the No-Action Alternative provide a baseline from which to compare effects of the Preferred Alternative in the EE.
Nonattainment Area	Any geographic region the USEPA has designated as not attaining the federal air quality standards for one or more air pollutants, such as ozone and carbon monoxide.
Off-Peak Period	Non-rush periods of the day when travel activity is generally lower and less transit service is scheduled. Also called "base period."
park-n-Ride	Designated parking areas for automobile drivers who then board transit vehicles from these locations.
PM Peak	3:00 p.m. to 6:00 p.m.
Preferred Alternative	The Preferred Alternative includes construction of a 10.5-mile LRT that connects the existing Southeast Corridor's Nine Mile Station with the planned East Corridor's Peoria/Smith Station including eight stations: Iliff, Florida, City Center, 2nd/Abilene, 13th Avenue, Colfax, Montview, and Peoria/Smith. At the Peoria/Smith Station, a cross-platform transfer to the East Corridor would provide regional connections to Denver International Airport (DIA) and downtown Denver. In addition, the Preferred Alternative would provide regional connections via the Southeast Corridor to southeastern suburban communities and downtown Denver.
Project Partners	A project partner is any federal, state, or local agency which has jurisdiction by law over right-of-way or transportation components. The Project Partners include the City of Aurora, the City and County of Denver, CDOT, the Colorado Public Utilities Commission (PUC), Denver Regional Council of Governments (DRCOG), and the Federal Highway Administration (FHWA).

Term	Definition
Project Footprint (Permanent and Temporary)	<p>The project footprint is the area in which physical impacts may occur during project implementation and construction. The project footprint consists of the permanent and the temporary project footprint as follows:</p> <p>Permanent Project Footprint includes the area that would be occupied by project facilities such as the LRT tracks, station and parking facilities and other associated facilities (such as substations, drainage facilities, etc.) that RTD would continue to maintain after construction.</p> <p>Temporary Project Footprint includes adjacent areas that may be disturbed during construction, such as construction access/staging areas.</p>
Project Study Area	<p>The Project Study Area encompasses that area in which major travel pattern changes could occur as a result of the implementation of the I-225 Corridor LRT project. The Project Study Area has been established based on the boundaries of appropriate transportation analysis zones (TAZs) from the regional model. The Project Study Area has been used to evaluate the effect of the LRT on travel patterns and also to assess indirect effects of the LRT implementation on a number of resources.</p>
Resource-Specific Study Area	<p>The resource-specific study areas vary by resource, and in many cases the EMM identifies different study areas for the assessment of direct and indirect impacts, respectively, for a given resource. The identification of resource specific study areas allows the analysis to be tailored such that it is appropriate for each resource of concern.</p>
Ridership	<p>The number of rides taken by people using a public transportation system in a given time period.</p>
Right-of-way	<p>Publicly owned land that can be acquired and used for transportation purposes.</p>
Riparian Areas	<p>Lands adjacent to waterbodies. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Riparian areas are adjacent to streams, lakes and estuarine-marine shorelines and provide a variety of ecological functions and services and help improve or maintain local water quality.</p>
Stakeholders	<p>Non-federal agencies with interest in the project are referred to as Stakeholders. The Stakeholders include: community, agency, municipal, and other representatives from Xcel Energy, Medical Center of Aurora, businesses, developers, and representatives of the Anschutz/Fitzsimons Medical Campus.</p>
State Implementation Plan	<p>A state plan mandated by the Clean Air Act Amendments that contains procedures to monitor, control, maintain and enforce compliance with national standards for air quality.</p>

Term	Definition
Transit Oriented Development (TOD)	An initiative to build transit ridership, while discouraging sprawl, improving air quality, and helping to coordinate a new type of community for residents. Situated at or around transit stops, TODs are compact, mixed-use developments that are also referred to as Transit Oriented Communities or Transit Villages.
Transit System	An organization (public or private) providing local or regional multi-occupancy vehicle passenger service. Organizations that provide service under contract to another agency are generally not counted as separate systems.
Vehicle-miles traveled (VMT)/Vehicle Hours of Travel (VHT)	Measures of travel demand and congestion.