

# Bikeways & Trails Facility Plan

**Part I: Introduction, Policy Framework, Existing Conditions/Current Issues**



April 2014

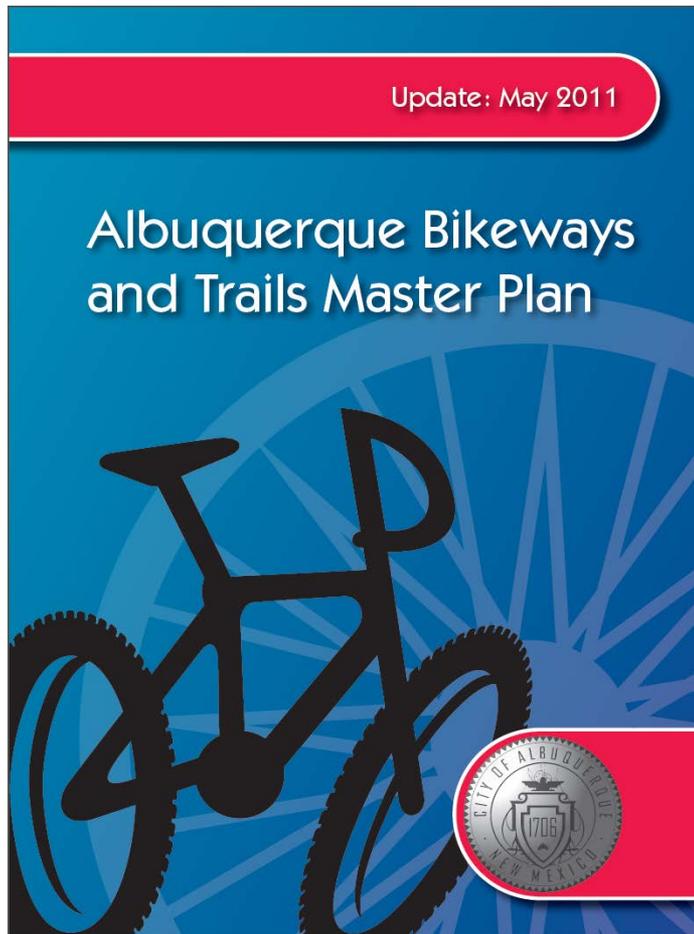
# Project Overview



# Background

- ☞ **2008.** Desire to update & combine the City's two plans:
  - *Trails & Bikeways Facility Plan, 1993*
  - *Comprehensive On-Street Bicycle Plan, 2000*
  
- ☞ **2009.** The City hired Gannett Fleming & Alta Planning
  
- ☞ **2010.** Public Outreach
  - Three public open house meetings – May 2010
  - Two stakeholder workshops – June 2010
  - Thirteen User and Agency Interviews – June-July 2010
  
- ☞ **2011.** Draft Master Plan was completed

# Background



- ∞ The *Draft Master Plan* needed content, format, and organization editing for a Rank II Facility Plan
- ∞ A working group with Staff from P&R, DMD & Planning have been working since September 2014 to address the concerns raised
- ∞ We have completed Part I: Introduction, Policies, and Existing Conditions/Current Issues
- ∞ Additional outreach & public meetings will occur when the new Draft is complete.

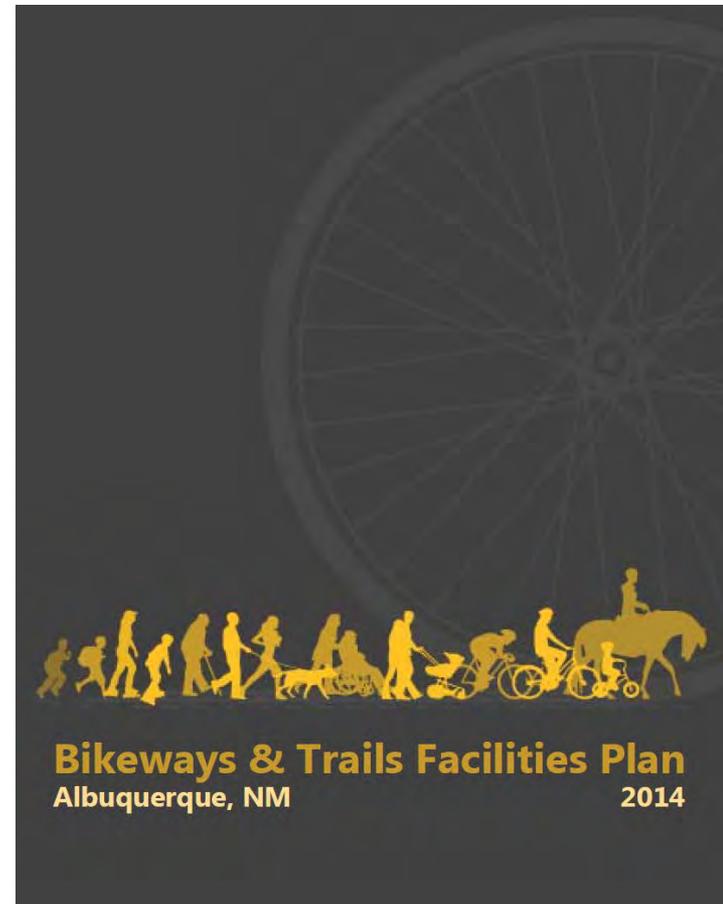
# Plan Organization

## ∞ Part I

- Introduction
- Planning & Policy Framework
- Existing Conditions & Current Issues

## ∞ Part II

- Recommended Network
- Recommended Programs
- Implementation Strategies
- Design Guidelines/Standards



# Introduction



Chapter 1

# Road Map

## ☞ Chapter 1: Introduction

- A. Planning Purpose
- B. Background & History of System
- C. Bikeways & Trails Benefits
- D. The Planning Process
- E. Using the Plan
- F. Definitions

# Planning Purpose

## ∞ Planning Purpose:

- Assess the current system
- Make recommendations for:
  - new facilities
  - management processes
  - education & outreach programs
- Connect Parks, Open Space and Trails for recreation
- Improve non-motorized transportation system



# Recent Efforts

- ✎ Since September 2013, the Working Group has:
  - Reviewed, updated, & consolidated relevant content from the existing plans (1993, 2000, 2011)
  - Reviewed public input from 2010 & recent GABAC/GARTC meetings:
    - to inform new/revise Goals & Policies
    - to inform “Current Issues” which will be tied to the recommendations
    - to inform research of other jurisdictions’ administrative practices
  - Re-working the mapping & geographic databases
  - Working on integrating P&R Design Guideline document
  - Developing Implementation Strategies, linked to the department responsible and timeline

# History of Bikeways & Trail Development



1920s Photograph "Ray Schmidt," Chloride, NM  
Source: Center for Southwest Research, University Libraries,  
University of New Mexico

- ∞ **1974.** The Bikeway Study
  - Estb. GABAC at this time
  - facilities are still not complete!
- ∞ **1993.** Trails & Bikeways
  - Estb. GARTC at this time
  - Estb. Two staff positions
  - 39 miles of paved trails
- ∞ **2000.** Comprehensive On-Street Bikeway Plan
  - Additional bicycle lanes & routes
  - Design standards & implementation plan

# Accomplishments

## Early Accomplishments

- 24 Miles of Bike Lanes
- 39 Miles of Trails
  - Paseo del Bosque
  - Paseo del Nordeste
  - Tramway Trail

## Recent Accomplishments

- Tripled the extent of the system
- Three Bicycle Boulevards
- Major Trail Projects
  - Gail Ryba Bridge
  - Bear Canyon Arroyo Bridge
  - Four new North Diversion Channel Trail Underpasses

Bikeways & Trails	1974	1993	2000	2010	2014	Total Proposed System
Multi-Use Trails	0	39	55	161	177	520
Unpaved Trails	-	-	-	-	100	100
Bike Boulevards	0	0	0	6	6	14
Bike Lanes	0	24	48	170	203	359
Bike Routes	0	0	56	134	134	212
<b>Total System Length</b>	<b>0</b>	<b>63</b>	<b>159</b>	<b>471</b>	<b>520*</b>	<b>1105</b>
Total System (incl. unpaved)	-	-	-	-	620	1205
Grade-Separated Crossings	0	10	15	26	31	46

# Bikeways & Trails Benefits

## ∞ Economic

- community building
- personal health
- vehicle expense
- traffic congestion

## ∞ Traffic Safety

- improved traffic flow for motorists
- designated facilities enhance cyclist safety & comfort

## ∞ Social Equity in Mobility

- 1/3 of Americans do not drive
- trails & bikeways provide mobility options

## ∞ Public Health

- facilitate physical activity
- decrease obesity & chronic diseases
- enhanced mental health

## ∞ Environmental/Natural & Cultural Resource Protection

- way to preserve open space
- reduce fossil fuel consumption
- reduce emissions/improve AQ

## ∞ Quality of Life

- attract new businesses
- less traffic in neighborhoods
- variety of options for travel

# The Planning Approach

- ∞ Public Involvement
  - 3 Public open house meetings
  - 2 Stakeholder workshops
  - 13 User and agency interviews
  - Recent regular attendance @ GABAC/GARTC
- ∞ User Counts
- ∞ Crash Analysis
- ∞ Bicycle specific analyses:
  - Bike Quality Index
  - Cycle Zone Analysis
  - User Survey
  - Street Plan GIS analysis
  - Engineering Gap analysis
- ∞ Survey of other jurisdictions



# Planning & Policy Framework



Chapter Two

# Road Map

## ∞ Chapter 2: Planning & Policy Framework

- A. Plan Vision, Goals & Policies
- B. Relationship to Other Plans

# Planning & Policy Framework

## ∞ Plan Vision:

The City will provide access for *cyclists, pedestrians, and trail users* to all areas of Albuquerque, in order to provide *recreation opportunities* and to encourage cycling and walking as a *viable transportation* options, which result in an improved *quality of life* in the Albuquerque Metropolitan Area.



# Planning & Policy Framework

## ∞ 7 Plan Goals



- ∞ Improve bicycle and pedestrian safety.
- ∞ Develop a continuous, interconnected, and comprehensive system of bikeways & trails.
- ∞ Enhance maintenance of all bikeways & trails.
- ∞ Increase use of the bikeways & trails network.
- ∞ Increase public awareness and education related to bikeways & trails.
- ∞ Recognize and leverage the bikeway & trail network as an integral part of economic development and quality of life.
- ∞ Streamline administrative practices and coordination.

# Planning & Policy Framework

## ∞ Plan Goals

- Methods to achieve the vision.

## ∞ Plan Policies

- Guidance to achieve the goal and vision.

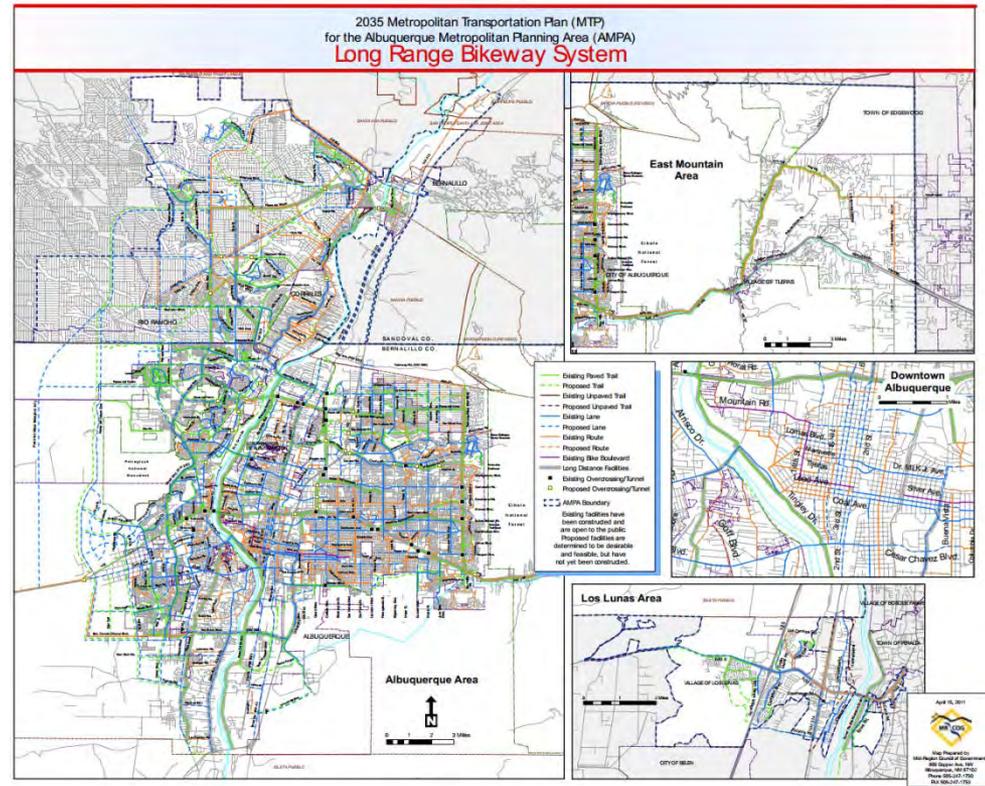
## ∞ Improve bicycle and pedestrian safety.

- **Policy:** Develop a **legible and predictable** bikeway and trail system **through** planning, design, and implementation of physical improvements.
- **Policy:** Provide engineering and multi-disciplinary **reviews for user safety** in all new and reconstructed bicycle and pedestrian facilities.
- **Policy:** **Improve the utility** of bikeway and trail facilities **through** programmatic activities, such as safety audits and assessments, education, outreach, and maintenance practices.
- **Policy:** Provide a more **welcoming and comfortable environment** for all travelers along roadways and trails.
- **Policy:** Balance the need to discourage unauthorized motorized vehicle access on a trail with the need to provide the trail users a facility without unnecessary obstructions **through application of the best practice guidance for bollard placement** in the design guidelines.

# Planning & Policy Framework

## ☞ Relationship to other Plans

- City Plans & Policies
  - Comprehensive Plan
  - Facility Plan for Arroyos
  - Sector Plans
  - Code of Ordinances, including the Traffic Code
  - Development Process Manual
- Regional Plans
  - 2035 Metropolitan Transportation Plan
- Statewide Plans
  - NM Bicycle, Pedestrian, Equestrian Advisory Plan
- Federal Policies & Programs
  - MAP-21 Funding & Policies



# Existing Conditions & Current Issues



Chapter Three

# Road Map

## ☞ Chapter 3: Existing Conditions & Current Issues

### A. User Needs

- Existing Conditions
- Current Issues

### B. Existing Facilities

- Existing Conditions
- Current Issues

### C. Bikeway & Trail System Analysis

- Existing Conditions
- Current Issues

# User Needs – Existing Conditions

## Existing Conditions:

- Population:
  - 555,500 people in ABQ
  - 902,800 in AMPA
- Variety of cyclists, with different needs
  - Advanced users
  - New riders, children
  - Traffic intolerant adults
- Pedestrians, equestrians (slower travel speeds)
- Needs of utilitarian users & recreational users are similar: safe, comfortable, direct routes



# User Needs — Current Issues

## ∞ Current Issues/Challenges:

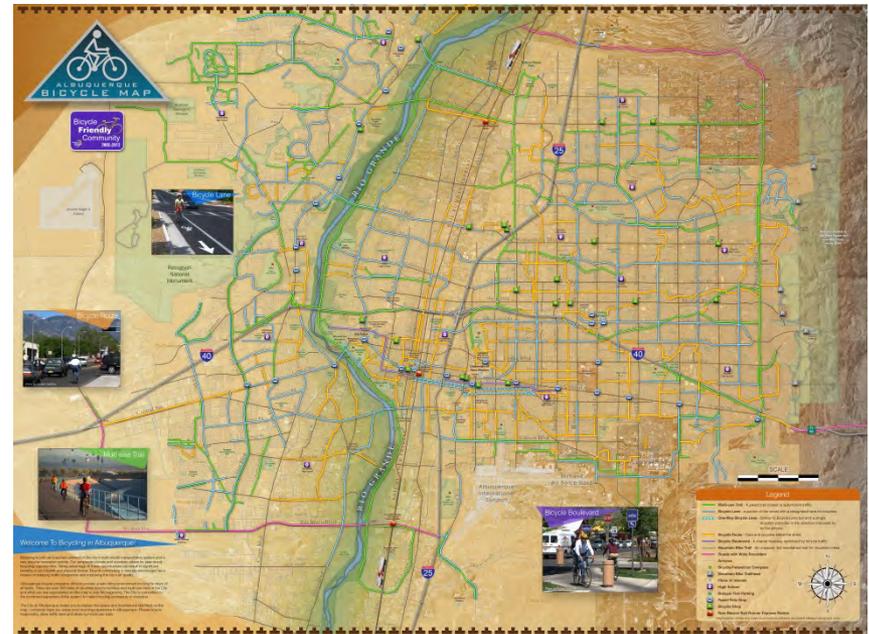
- Balancing the Needs of the Various Users (Multi-Use Trails)
  - Speed differences
  - Trail etiquette
  - Equestrian Trails
  - Education/wider trails
- Conflicts between cyclists/trail users & vehicles
  - Education for cyclists & motorists
  - Traffic Laws
  - Predictable Behavior



# Existing Facilities – Existing Conditions

## Existing Conditions:

- Facility Types
  - Multi-use trail - 177 miles
  - Bicycle lane - 203 miles
  - Bicycle route - 134 miles
  - Bicycle boulevard - 6 miles
- Support facilities
  - Signage
  - Bicycle detectors
  - Parking & trailheads
  - Intersections & Crossings



# Existing Facilities — Current Issues

## ∞ Current Issues/Challenges:

- Retrofitting trails to be universally accessible
- Evaluate facilities against design standards
- Bollard placement evaluation
- Trail bollard inventory
- Bike Blvd. assessment
- End-of-trip facilities & programs



# System Analysis – Existing Conditions

## ∞ Assets & Challenges:

- Land Use & Destinations
  - Major employment centers
  - Civic buildings such as libraries
  - Transit stations
  - Major retail and commercial centers
  - Schools/Universities
  - Parks and regional recreation areas
- Multi-Modal Connections



# System Analysis – Existing Conditions

## ∞ Assets & Challenges:

- Physical Constraints
  - Rio Grande
  - Interstate Highway, Arterials & Rail Road
  - Open Space, Arroyos, & West Mesa Escarpment
  - Gated Communities
  - Golf Courses
  - Indian Pueblos
  - Airports
  - Military Base



# System Analysis – Existing Conditions

## System Use:

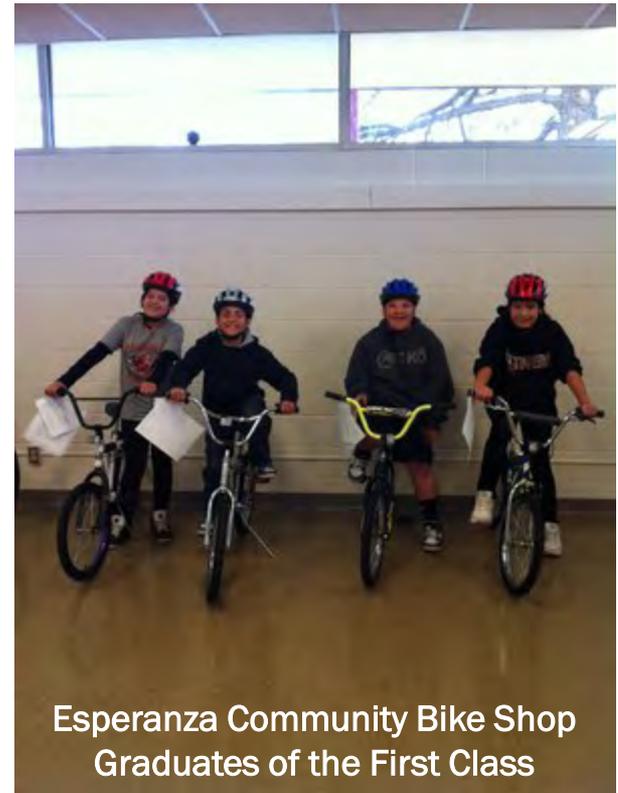
- Bikeway & Trail User Counts
- Bicycle Commuting Data
- On-Street Needs Assessment
  - BQI/CZA/StreetPlan and other techniques...
  - Gap Closure Analysis: intersections & missing links



# System Analysis – Existing Conditions

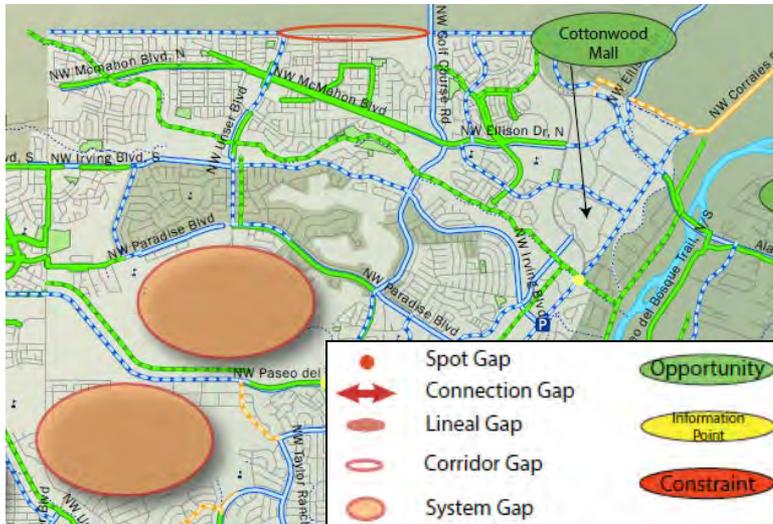
## System Use:

- Bikeway & Trail User Programs
  - Education, Encouragement & Enforcement
  - Review existing programs & determine if new ones are needed
- Current Studies
  - 50 Mile Activity Loop
  - Bicycle boulevard assessment
  - Bike route signage assessment
  - Wayfinding sign project



Esperanza Community Bike Shop  
Graduates of the First Class

# System Analysis – Current Issues



## Current Issues/Challenges:

- Coordination between City Departments & Other Agencies
- Advisory Groups
- Wayfinding & Orientation
- Discontinuous Network
- Trail Counts (more needed)
- Maintenance Concerns

# Questions? Comments?



Source: Palace of the Governors Photo Archives, New Mexico History Museum, Santa Fe, NM  
From left to right: Stikey, Widmeyer, unidentified, Rev. E.L.H. Griswold, Hood, and Phil Harroun

# Planning & Policy Framework

## ∞ Goal 1: Improve bicycle and pedestrian safety.

- **Policy:** Develop a **legible and predictable** trail and bikeway system through planning, design, and implementation of **physical improvements**.
- **Policy:** Provide engineering and multi-disciplinary **reviews for user safety** in all new and reconstructed bicycle and pedestrian facilities.
- **Policy:** **Improve the utility** of trail and bikeway facilities through programmatic activities, such as safety audits and assessments, education, outreach, and maintenance practices.
- **Policy:** Provide a more **welcoming and comfortable environment** for all travelers along roadways and trails.
- **Policy:** Balance the need to discourage unauthorized motorized vehicle access on a trail with the need to provide the trail users a facility without unnecessary obstructions through application of the **best practice guidance for bollard placement** in the design guidelines.

# Planning & Policy Framework

- ∞ **Goal 2: Develop a continuous, interconnected, and comprehensive system of bikeways and trails.**
  - **Policy:** Consider **connections** between transit and bicycle and pedestrian facilities and reduce barriers where possible.
  - **Policy:** **Reduce implementation costs** by including bicycle facilities in all new and rehabilitation street projects.
  - **Policy:** Include **paralleling paths** and **safe crossings** for bicycles, pedestrians, and equestrians where appropriate in street and highway projects.
  - **Policy:** Create a **multi-purpose network of open areas and trail corridors** along arroyos and appropriate ditches. Acquire, regulate, or appropriately manage trail corridors to protect natural features, views, drainage and other functions or to link other areas within the Open Space network.

# Planning & Policy Framework

- ∞ **Goal 2: Develop a continuous, interconnected, and comprehensive system of bikeways and trails.**
  - **Policy:** Develop **an integrated system of bikeways and trails**, with facilities distributed City-wide. A metropolitan area-wide recreational and commuter bicycle and trail network which emphasizes connections among Activity Centers shall be constructed and promoted.
  - **Policy:** Focus on achieving **connectivity of the existing bikeway and trail system** when planning and programming all trail and bikeway improvements.
  - **Policy:** Work towards addressing and **improving challenging intersections and physical barriers**, and consider pedestrian and bicycle movement in the planning stages for new or reconstructed facilities.
  - **Policy:** Provide **convenient access to destinations**, such as Activity Centers, schools, parks, open space, shopping areas, and employment areas, for pedestrians and cyclists as part of a multi-modal approach.

# Planning & Policy Framework

- ∞ **Goal 3: Enhance maintenance of all bikeways and trails.**
  - **Policy: Develop maintenance practices** appropriate for each facility type.
  - **Policy: Implement prioritization of maintenance** as appropriate for each facility type, including trail corridors and bikeways, based on the recommendations in Chapter 6, Section C, Maintenance and Operations.

# Planning & Policy Framework

- ∞ **Goal 4: Increase use of the bikeway and trails network.**
  - **Policy:** Support the development of **an integrated bikeways and trails system** that serves the interests and needs of transportation and recreation.
  - **Policy:** Support use of non-motorized infrastructure as **part of everyday life for daily activities.**
  - **Policy:** Accommodate **all ages and abilities** of users in a comfortable manner throughout the system, although not necessarily on each individual facility.
  - **Policy:** Support the development of bikeways and trails as **in integral part of the City's transportation infrastructure.**
  - **Policy:** Facilitate and encourage **commuter cycling and utilitarian trips.**

# Planning & Policy Framework

- ∞ **Goal 4: Increase use of the bikeway and trails network.**
  - **Policy:** Reduce conflicts between vehicular traffic and trail and bikeway users.
  - **Policy:** Reduce conflicts between different types of trail users.
  - **Policy:** Accommodate the following users in the trail system recognizing that not all can be accommodated on every trail: cyclists (including upright, recumbent, and children), pedestrians (including walkers, runners, people using wheelchairs, people with baby strollers, people walking dogs), skaters, equestrians, and physically challenged individuals.
  - **Policy:** Support the development of bikeways and trails as in integral part of the recreation Parks, Open Space, and Trails system (POST), including recreational loops, secondary trails, and neighborhood-scale connecting routes.
  - **Policy:** The bikeways and trails network should connect with public transit, providing flexibility and choice for travel options and enhancing recreational opportunities.

# Planning & Policy Framework

- ∞ **Goal 5: Enhance maintenance of all bikeways and trails.**
  - **Policy:** Implement a comprehensive program to **increase public awareness** of bicycling and trail use and to encourage healthy living and active lifestyles through use of the City's trail and bikeway system.
  - **Policy:** Educate all bicyclists, pedestrians, and other trail users on **legal, safe, and predictable behavior** including the rights and responsibilities of each mode of travel.
  - **Policy:** Educate motorists on the **rights of pedestrians and cyclists.**

# Planning & Policy Framework

- ∞ **Goal 6: Recognize and leverage the bikeway and trail network as an integral part of economic development and quality of life in Albuquerque.**
  - **Policy:** **Promote** bikeway and trail use as a non-polluting, cost-effective and healthy mode of **transportation and recreation**.
  - **Policy:** Promote pedestrian and cycling opportunities and **integrate into development** to foster safe and pleasant non-motorized travel conditions.
  - **Policy:** Maintain a dedicated **local funding source for construction and maintenance** of bikeways and trails. Establish specific budget line items to support the provision of on-street and off-street bicycle systems and programs.
  - **Policy:** **Increase the attractiveness and activity** along this system through enhanced streetscape and trail aesthetics, landscaping, and amenities along bikeways and trails where feasible.
  - **Policy:** **Plan, design, construct, operate and maintain City roads to promote safe and convenient access** to all legal users of roads, streets and highways in a manner that promotes efficient movement of people and goods whether by car, truck, transit, assistive device, foot or bicycle.
  - **Policy:** Institutionalize walking and bicycling as **legitimate forms of transportation** in all planning, design, and programming efforts.

# Planning & Policy Framework

## ∞ Goal 7: Streamline administrative practices and coordination.

- **Policy:** Provide **adequate staff as necessary to implement** the Bikeways and Trails Facility Plan with appropriate office budgets to promote bicycling and trail use.
- **Policy:** **Foster ongoing coordination** among critical departments within the City to communicate and coordinate activities related to design of bikeways and trails.
- **Policy:** Organize and **coordinate implementation** of this Plan among City Departments and other agencies to produce well-designed facilities and a connected network of bikeways and trails that are **safe and enjoyable** for the public to use.
- **Policy:** **Coordinate** with Bernalillo County, NMDOT, AMAFCA, MRGCD, and MRCOG and other local jurisdictions as appropriate **regarding connectivity, design, implementation, and maintenance.**

# Planning & Policy Framework

## ∞ Goal 7: Streamline administrative practices and coordination.

- **Policy:** **Develop and maintain databases** useful for trail and bikeway planning, inventory, prioritization of improvements, and accident reduction.
- **Policy:** Develop and implement a **traffic law education and enforcement program** that teaches pedestrians, bicyclists, and motorists about relevant laws for each mode of travel.
- **Policy:** Create and support opportunities for public and **user input and engagement** into the bikeways and trail system. Advisory groups and/or ad hoc committees should support the City's efforts to implement these policies and this Plan.
- **Policy:** **Bicycles and pedestrians should be regularly accommodated**, while recognizing that these facilities may not be appropriate on every roadway, and should be considered in the planning of every road project and by all departments when setting policy and programs.