



### 6.1 Background & Analysis

### 6.1.1 Introduction

Those who live, work, or travel in Albuquerque understand the everyday challenges that can occur when trying to get from one place to another. Highways and arterials can quickly become congested, and there are few convenient and efficient multimodal transportation options.



The Central Ave. Bridge crossing the Rio Grande serves all travel modes.

Throughout the process of updating the Comp Plan, residents expressed a desire for improved transportation options. They want to take advantage of the latest technology, from cars that can drive themselves to a greatly enhanced transit network. They also want safe and inviting streets and trails for walking and bicycling.

The Centers and Corridors framework provides an approach to help the greater Albuquerque area achieve this multi-modal vision. Centers provide a mix of higher-intensity uses, with homes, jobs, services – all the things families need in daily life – closer together, making walking and bicycling viable alternatives to driving. Connecting Centers by transit, bikeways, and trails further provides options for residents to reach important destinations.

The expansion of major roadways may temporarily ease congestion issues, but in time, commuting patterns are expected to adapt and create new demand on these routes. This should come as no surprise. No city has solved congestion by expanding roadway infrastructure for cars. In fact, congestion should be recognized as a sign of a successful and desirable place; the focus should be on managing rather than entirely eliminating it. As the region grows, the City and County should focus on other strategies to accommodate the people who will live and work in the region.

Changing demographics are contributing to reductions in vehicle miles traveled (VMT) per capita nationally and locally. The number of seniors is expected to more than double, increasing from 13 to 21 percent of the population over the next 20 years. This demographic shift further emphasizes the need for improved public transportation and non-motorized transportation options as a growing number of people may no longer be able, or want, to drive themselves.

Lifestyle preferences are also shifting. More people want to live in urbanized locations



Each element of the Comp Plan uses guiding principles as the basis for its goals, policies, and actions. The six guiding principles and their definitions were developed from input received during the public involvement process, detailed in the Vision chapter.

Here, we apply the guiding principles to transportation goals, policies, and actions.

### **STRONG NEIGHBORHOODS**

- Complete neighborhoods with different types of housing and amenities support a greater range of transportation options.
- Good connections to Centers via walking and biking make neighborhoods more desirable.

### **MOBILITY**

- Increased transportation options improve mobility for people, goods, and services.
- Aligning local transportation with regional planning strengthens networks throughout the metropolitan area.

### **ECONOMIC** VITALITY

- Good transportation networks offer access to jobs via multiple routes and modes and allow efficient freight movement.
- Increased public transit options and shorter trip times help reduce household transportation costs.

### **EQUITY**

- Safe and connected networks for non-auto travel and public transit expands mobility for those who do not drive.
- Universally designed, ADA compliant community design allows people of all ages and abilities to access goods and services by the transportation modes of their choice.

#### **SUSTAINABILITY**

• Increased options for non-auto travel and mass transit reduce greenhouse gas emissions and reliance on fossil fuels.



### HEALTH

- Improved networks for non-auto travel increase walking and biking opportunities.
- Safer transportation options allow people to travel to more places without fear of harm or injury.

### In the future...

People will have a variety of options to travel safely and efficiently throughout the region. Innovative solutions will help to accommodate not only the automobile but all modes and all users. We will focus on maintaining and enhancing the infrastructure that we already have, while filling in the multi-modal gaps that currently exist in the network.

Transportation improvements will be tied closely with land use policy direction and emphasis will be on areas that can support multiple modes. Creating multi-modal Corridors that connect Centers will be an important element of mobility in the future. The reality is that large numbers of our population are

unable to drive personal vehicles, due to their youth, age, or economic constraints. There is also a shifting preference for many individuals to live in "Complete Communities" where they do not have to drive to meet their daily needs. These choices are resulting in different transportation patterns as well. We will adapt for these changing mobility needs for a successful future.

The City will provide access for cyclists, pedestrians, and trail users to all areas of Albuquerque. This will help encourage cycling and walking as viable transportation options and provide recreation opportunities, which result in an improved quality of life. Additional trails, wider sidewalks, and dedicated bike facilities will improve connectivity along and across major corridors. Better coordination for signals along highly congested corridors will reduce travel time and improve air quality. This multi-modal approach to connectivity will not only help movement within the region but will also help to make Albuquerque a more livable city.

with multiple transportation options. This does not specifically mean city centers, but rather complete communities where residents can live, work, learn, and play. These complete communities may be developed with enhanced infrastructure and new services within existing Centers and through the careful planning and phased development of new Centers, such as at Mesa del Sol.

Strategies for improving transportation should center on shifting trips to more energy-efficient travel modes, providing more viable multi-modal options, and helping people avoid making unnecessarily long trips altogether by continuing to bring destinations closer together. Moving toward more mixed-use development patterns that are easily accessible by multiple modes of transportation will allow our region to meet the transportation demands of the future.



To achieve our vision the City and County need to address key **challenges** and **strategies** summarized in this chapter:

### **CHALLENGES**

- Lack of coordination between land use development and transportation investments.
- Finding ways to enhance network connectivity in new development and to retrofit developed portions of the city to improve connectivity.
- Underdeveloped multi-modal links between Centers and Corridors.
- Over-reliance on the personal automobile and limited opportunities for biking, walking, and transit.
- Current options for biking, walking, and transit are often inconvenient or uncomfortable for the majority of the population.
- Disconnected bike and trail networks throughout the city and county.
- Pedestrian safety on large arterials, particularly near transit stops.
- Growing congestion in some areas of the city and county during peak commuting hours, particularly on river crossings.

- Development patterns and an escarpment that constrain connectivity on the West Side.
- Limited roadway connectivity on the West Side, particularly for trucks that serve retail and industrial activity.

### **STRATEGIES**

- Coordinating the transportation network with the regional Metropolitan Transportation Plan to plan for connectivity, street design, and funding.
- Coordinating land use development and transportation investments to be mutually supportive by matching street design to existing or desired character of land uses.
- Planning, developing, operating, and maintaining the transportation system to support the planned or desired character of land uses. This involves balancing mobility needs with the need to create livable built and natural environments.
- Improving network connectivity for pedestrians, bicyclists, and vehicles between Centers, roads, and different modes.

- Prioritizing streets to be transformed into Complete Streets and complete networks.
- Prioritizing key road network and trail improvements to increase opportunities for active transportation.
- Planning and implementing pilot projects to explore safety improvements for pedestrians and bicyclists.
- Encouraging the use of biking, walking, and transit, especially during peak hours to reduce traffic congestion, along with other travel demand management strategies.
- Expanding and improving transit options.
- Providing the community and the larger region with safe, comfortable, and efficient transportation options.
- Supporting and improving opportunities for residents to lead healthy, active lives on a daily basis through active transportation.
- Managing the transportation system in a coordinated and costeffective manner through the capital improvement process and the development review process.



SYSTEM ELEMENTS	ASSETS - PLAN/GUIDELINES	RESPONSIBLE AGENCIES	PRIMARY PURPOSE/FUNCTION
Interstate Highway System	I-40 and I-25 2015 New Mexico 2040 Plan	NMDOT	<ul><li>Trans-national freight</li><li>Local traffic</li></ul>
Freight	Highways, rail lines	NMDOT, BNSF	<ul> <li>Trucking is the dominant transport mode</li> <li>National railroad network available for long distance freight</li> <li>28 mainline railroad/highway crossings in Bernalillo County, 10 are grade-separated</li> </ul>
Aviation	Sunport, Double Eagle II 2015 Draft Sustainable Airport Master Plan	FAA, City Aviation Department	<ul> <li>Sunport is the largest airport in the state (Class I)</li> <li>Kirtland Air Force Base shares use of the runways</li> <li>Double Eagle II serves general aviation (private air services, typically corporate flights)</li> <li>Federal Aviation Administration Air Route Traffic Control Center, a facility critical to reliable aircraft operations across a major part of the Southwest</li> </ul>
Transit	Local public bus fleets, paratransit, Inter-city Park & Ride, New Mexico Rail Runner Express, interstate passenger rail	ABQ RIDE, NMDOT, Rio Metro, Amtrak	<ul> <li>Local public bus fleets provide commuter, local, and bus rapid ride service, and paratransit service, which provides origin to destination service for qualifying individuals</li> <li>Inter-city Park &amp; Ride has 11 routes in over 4,000 bus route miles that connect rural communities to the Rail Runner Express</li> <li>Rail Runner serves 14 stations along a 96.5 mile corridor that travels from Belen to Santa Fe</li> </ul>
Local Streets	Arterials, collectors, and local streets 2015 MTP; 2015 LRTS Guide	City DMD, Bernalillo County Public Works	<ul> <li>The region has around 4,150 lane miles of collector and arterial roadways (with many more miles of local residential streets)</li> <li>Focused on capacity for automobiles and reducing delay in travel times</li> <li>Also serve local freight and deliveries</li> <li>Complete Streets Ordinances passed in the City and County in 2015</li> </ul>
Bikeways and Trails	Bike routes, bike lanes, buffered bike lanes, multi-use trails 2015 Bikeways and Trails Facility Plan; 2012 Pedestrian and Bicyclist Safety Action Plan	City DMD, City Parks and Recreation, Bernalillo County Public Works, MRCOG	<ul> <li>The region has close to 600 lane miles of bikeways and trails</li> <li>Bikeways and trails provide opportunities for active transportation, which can result in healthier communities</li> </ul>

Table 6-1: Summary of Transportation System Elements

## 6.1.2 Context & Analysis

## 6.1.2.1 EXISTING TRANSPORTATION SYSTEM

Regional air, rail, and highway transportation systems are necessary for a functioning economy. They connect the region to the state, the nation, and other countries. They enable regional specialization and link spatially separated activities into an economic system. The major facilities of these systems are also important as they provide the structure for the region's physical development pattern. Albuquerque is New Mexico's major transportation center, where all the national transportation systems converge.

Since WWII, local transportation systems have been oriented to serve predominantly automobile travel, but there is increasing interest in enhancing conditions for other transportation options, such as transit, bicycling, and walking. The public transit system is a significant alternative to single-occupancy vehicle trips.



Central Ave. provides multiple options for residents and visitors to move throughout downtown and the rest of the city.

### 6.1.2.2 STREET SYSTEM & MOBILITY OPTIONS

Promoting mobility choices is a priority of both the City and County; however, maintaining efficiencies in the existing network is essential. With a growing population, areas currently developing or redeveloping, and changing demographics, the region faces critical decisions on how to accommodate the increase in trips throughout our local transportation system. The recently approved Futures 2040 Metropolitan Transportation Plan (MTP) calls for \$1.6 billion to maintain existing facilities and another \$2.2 billion to expand roadway facilities by about 330 miles in growing areas of the Central New

Mexico region and to improve gaps in the bikeway and trail network.

The MTP contemplates a much more multi-modal, layered approach to the street network than in the past, including roadway designations that reflect their land use context, such as "community arterials." Although the automobile is still the primary transportation mode in the City and the region, efforts to create a more balanced system are encouraged. The Long Range Transportation System (LRTS) Guide, a component of the MTP, identifies the location and classifications of the future street network and incorporates Complete Streets design guidelines. The

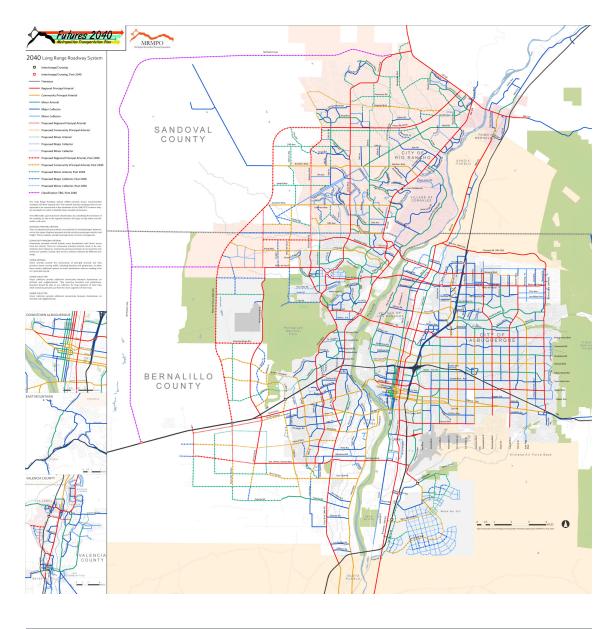


Figure 6-1: Long Range Roadway System

Source: MTP

[For illustration only. See <u>www.mrcog-nm.gov</u> for the most recent, full-scale map.]

region consists of around 4,150 lane miles of collector and arterial roadways (with many more miles of local residential streets) and close to 600 lane miles of bikeways and trails. In 2014, the regional household travel survey conducted by the Mid-Region Council of Governments (MRCOG) showed residents travel 23 miles per day on average, with about 2 percent of respondents biking, 8.3 percent walking, and 2.7 percent taking transit. The remaining residents are primarily driving vehicles, with some carpooling.

### Personal Automobile

National trends in automobile traffic have been changing in the last five years. Up until 2004, VMT and VMT per capita rose consistently. However, in the region, daily per capita VMT has decreased annually since 2004, from 24.2 to 21.7 in 2012. This change in travel patterns is increasingly associated with lower vehicle ownership rates and household preferences of younger generations shifting to relatively more urban locations.

Even though VMT per capita has been trending downward, overall VMT continues to rise in the region because of population and employment growth. Much of this growth is occurring in the suburban periphery. Extensive residential development west of

the Rio Grande has continued to generate more daily river crossings in an area where existing street deterioration is already outpacing maintenance. This increase in VMT will continue to add to congestion levels around the region, particularly at choke points such as the eight river crossings and bridges. Street efficiency can be improved by increasing emphasis upon compatible land use and street design measures and by expanding modal choices.

Often, the strategy for managing congestion in a city or a region is focused on a short period of time during the day, sometimes merely two one-hour peaks. Managing peak-hour congestion and providing more opportunities during peak hour to improve capacity will enhance network efficiency and reduce travel delay. One of the most efficient ways to reduce the peak demand is travel demand management, which includes reducing vehicle demand, providing additional public transportation service, integrating multi-modal options, and implementing strategies, such as ridesharing, telecommuting, and signal timing improvements.

Most major arterials have been built to their maximum capacity (in terms of available rightof-way), and many developed areas may likely attract infill opportunities for new housing and job centers. Better linkage between future transportation and land use decision making can improve the efficiency of the network. Transit-oriented development (TOD) around transit stations and major transfer points can accommodate significant growth without expanding roadways. Mixed-use development has also been demonstrated to significantly reduce vehicular trips.

In many cases, growing vehicular traffic issues will not be able to be solved by expanding roadways. Strategic improvements to existing corridors need to take place to shift trips to other modes, while also maintaining the functionality of the vehicular system within the current right-of-way and number of travel lanes.

The Comp Plan uses the Commuter Corridor designation to identify roads that are planned to maintain a high level of service for automobiles so they can make long distance trips to regional destinations.

### Access Management

Access management involves the systematic control of the location, spacing, design and operation of driveways, median openings, interchanges, and street connections, as well as median and auxiliary lane treatments

and the spacing of traffic signals. MRCOG has designated a number of regional arterial roadways as limited access facilities (see **Map 3-10** of the MTP for limited access facilities). Changes to access spacing require approval by resolution of the regional body, except for roads managed by NMDOT.

Access management serves two purposes: to improve mobility and to improve safety. Access management improves throughput by reducing turning movements primarily on arterial roadways. It also improves safety by reducing the potential conflict points that occur at controlled and uncontrolled intersections and driveway access locations.

### **Transit Network**

Resources for transit service must be prioritized to serve the current transportation needs of the region's diverse population, as well as to respond to shifting demographics and generational priorities. There are many people who cannot, or who desire not to, use a car every day. The younger segment of the population (made up largely of Millennials) are increasingly seeking safe and efficient alternatives to driving, while the growing retired and elderly population may need to rely on alternatives to the personal vehicle. While many older adults are

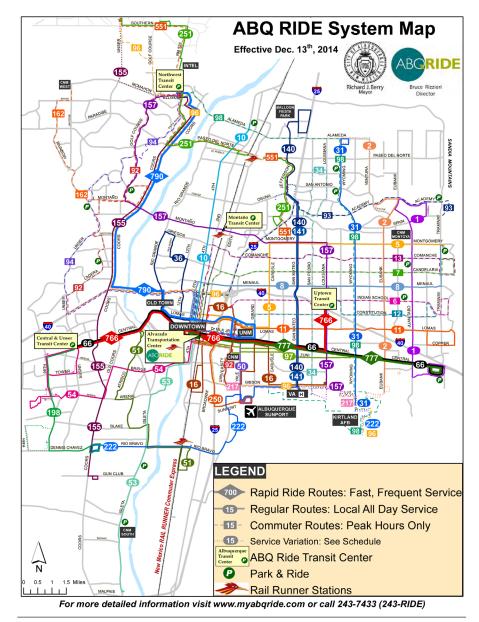


Figure 6-2: ABQ RIDE Transit System Map

Source: ABQ RIDE

making new housing choices that are more transit-oriented, many also desire to age in place and stay in their current home for as long as they are able. As the Baby Boomer generation ages, it may actually tax transit systems because of the growing demand for paratransit service. Improved regular transit service may help mitigate strains on paratransit service.

Transit use in this region has increased significantly in the last 20 years. The number of annual passenger miles has more than doubled, with major increases in 2004 when the Rapid Ride service began. Ridership has almost doubled in 20 years going from close to seven million annual rides in 1996 to over 13 million in 2014. There have been smaller, but steady, increases since 2010, generally adding about 100,000 rides per year.



ABQ RIDE buses serve much of the city and the system has a total annual ridership of around 13 million.

RAPID RIDE ROUTES	TOTAL
766 - Red Line Rapid Ride	1,449,807
777 - Green Line Rapid Ride	1,113,280
790 - Coors Blue Line Rapid Ride	472,472
Rapid Ride Total	3,035,559

COMMUTER ROUTES	TOTAL			
Commuter Routes				
96 - Crosstown Commuter	57,781			
251 - Rail Runner Shuttle (Former #151)	43,459			
222 - Rio Bravo Rail Runner Connection	31,079			
7 - Candelaria Commuter	17,060			
98 - Wyoming Commuter	15,422			
92 - Taylor Ranch Express	14,466			
250 - Airport/Downtown (Former #350)	14,162			
217 - Downtown-KAFB Ltd. (Former 317)	14,017			
93 - Academy Commuter	13,763			
12 - Constitution Commuter	12,398			
6 - Indian School Commuter	11,941			
13 - Comanche Commuter	11,046			
94 - Unser Commuter	10,196			
551 - Jefferson-Paseo del Norte Express	9,999			
34 - San Pedro Commuter	6,745			
162 - Ventana Ranch / Unser	5,609			
Commuter Total	289,143			

LOCAL ROUTES	TOTAL
66 - Central Avenue	2,806,230
5 - Montgomery/Carlisle	907,968
11 - Lomas	767,149
8 - Menaul	746,900
141 - San Mateo	686,577
157 - Cottonwood/Montano/ Uptown Transit Center	665,757
140 - San Mateo/CNM Work Force	486,860
10 - North Fourth Street	426,288
155 - Coors	324,461
1618 - University/Gibson/Broadway	266,162
31 - Wyoming	225,752
53 - Isleta	205,968
54 - Bridge/Westgate	201,732
50 - Airport/Downtown	189,285
1 - Juan Tabo-Four Hills	158,906
2 - Eubank-Ventura	139,013
198 - 98th/Dennis Chavez	125,712
40 - D-RIDE	124,943
97 - Zuni Express	94,185
51 - Atrisco/Rio Bravo	70,477
36 - 12th Street/Rio Grande	49,287
Other	14,733
Local Total	9,684,345
Grand Total	13,009,047

Table 6-2: Total ABQ RIDE Annual Ridership By Route (Fiscal Year 2014 Ridership)

Source: ABQ RIDE

A robust public transit system provides a practical and equitable alternative to a car-dependent transportation network.

Compared to owning a vehicle, transit is an affordable transportation option, and is particularly important for those who cannot drive due to age, income, or disability.

Efficiently-run transit has the ability to move more people in a smaller amount of space.

But in order for transit to be viable for many

people and attract new riders, the service must be effective, reliable, convenient, and safe. Additionally, sufficient residential density and/or commercial intensity in close proximity to transit stops increases efficiencies and feasibility of the transit system. And, in turn, enhanced transit service can catalyze development of employment and residential concentrations in locations that are well-served by transit.

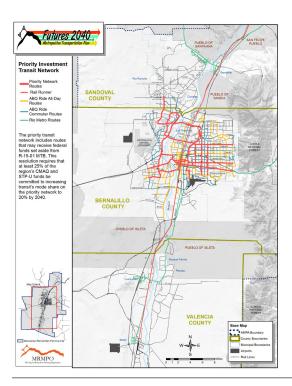


Figure 6-3: Priority Transit Network

Source: MTP

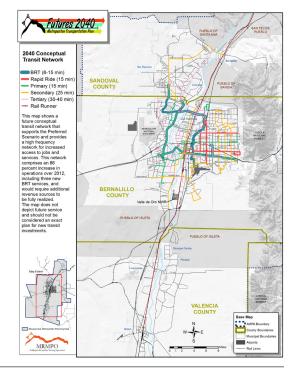


Figure 6-4: Conceptual Transit Network for the MTP Preferred Scenario

The transit options described in this section may be considered enhanced alternatives to regular fixed route or local bus transit service and may be appropriate choices for certain areas in the city and county.

### Rapid Bus (Rapid Ride)

Enhanced transit focuses on high-frequency bus service, with arrivals every 15 minutes or less during peak periods. In Albuquerque, this has taken the form of the Rapid Ride, which has frequent service with articulated buses that can carry double the number of passengers on a traditional bus. ABQ RIDE currently has three Rapid Ride routes in the region, connecting the Northwest Transit Center, the Central & Unser Transit Center, downtown and the Alvarado Transit Center, the Uptown Transit Center, and the Central & Tramway Park & Ride.

ABQ RIDE will continue to explore opportunities for new Rapid Ride services on routes with high ridership, such as San Mateo, Montgomery, and Lomas Boulevards. The Comp Plan uses the Major Transit Corridor designation to capture roads that are planned to have frequent service, such as Rapid Ride.

Rapid bus service can also be a first phase of high-capacity transit service, especially when funding is limited. In these cases, more

[For illustration only. See <a href="www.mrcog-nm.gov">www.mrcog-nm.gov</a> for the most recent, full-scale maps.]

frequent bus arrivals are commonly achieved through wider stop spacing and signal preemption at intersections, which helps Rapid Ride service maintain a higher average speed than the local bus service.

While faster service requires fewer buses to maintain the same frequency, the greatest impact on frequency for the Rapid Ride is the operational commitment, which is the number of buses put into service at any one time. Most funding for operations comes from local sources, while large capital projects involve federal funding sources.

### **High-Capacity Transit**

High-capacity transit combines high-frequency service along with more reliable and faster travel times, such as bus rapid transit (BRT) or light rail. BRT is a form of high-capacity transit that is already popular around the world for its relative ease of implementation and lower upfront costs, compared to other high-capacity transit modes.

BRT combines the flexibility and costeffectiveness of traditional bus service with the high-quality of service typically found on a dedicated transit rail line and for a fraction of the cost. A variety of characteristics make this type of bus service faster, more reliable, and attractive to a wide variety of potential riders including the use of bus-only lanes, transit signal priority systems, higher capacity bus vehicles, stops spaced at least one-half mile apart, and frequent service (arrivals every 15 minutes or less). Station areas can also be designed similarly to transit rail platforms with convenient preboarding fare collection, more shelter, bus wait time technology, and level boarding with bus doors.

Development of high-capacity transit service is often accompanied by significant public investment and streetscape improvements along these corridors that helps catalyze private investment, particularly near transit stops. High-capacity transit has the capability of shifting commuting patterns in a way that can significantly impact congestion levels on major corridors. The Comp Plan identifies corridors that have been studied for highcapacity service as Premium Transit Corridors.

Albuquerque is currently implementing BRT into the ABQ RIDE system to enhance transit service along Central Avenue, a key east-west system corridor, replacing Rapid Ride. With Rio Metro Transit District, Bernalillo County, University of New Mexico, and Central New Mexico Community College (CNM), regional transit planners are also planning a second north-south service on University Boulevard connecting UNM, CNM and the Sunport.



The Rapid Ride is currently the most frequent, highest capacity transit option in Albuquerque.

lmage credit: City of Albuquerque

### TRANSPORTATION

This is considered a high priority by the Rio Metro Regional Transit District. A future phase would comprise a BRT crossing the Rio Grande on the Paseo del Norte corridor, connecting Northwest Albuquerque and Rio Rancho to UNM and Downtown.

Great service alone does not create sustainable ridership, however. Success of these transit investments is largely dependent on the relationship to surrounding land uses. High-capacity transit should be considered in areas with higher employment and/or residential activity, diverse uses, and pedestrian-oriented design.

Additionally, policies and zoning entitlements need to be in place along high-capacity transit corridors to facilitate their evolution into higher density and intensity places. Higher-intensity and mixed use development, TOD, is most advantageous at fixed BRT station areas. Comp Plan policies provide recommendations to target more dense and intense development and a higher level of pedestrian amenities near and around BRT station locations.

The Comp Plan uses the Premium Transit Corridor designation to capture roads that are planned to have BRT service in the future. Goals, policies, and actions that guide transportation decisions along Corridors can be found at the end of this chapter. The **Land Use chapter** contains Corridor descriptions and goals, policies, and actions that guide development along corridors and at stations.

#### **Pedestrian Network**

Pedestrian systems are the primary transportation element that connects all travel modes. Activity Center destinations, increased pedestrian amenities, and well-planned pedestrian connections promote walking as a viable form of transportation.

People want to walk in an environment where they can feel safe, particularly along roadways with higher traffic volumes.

Streetside safety in areas where most travel is by vehicle is achieved by adequately separating pedestrians from other modes of travel. Safety, comfort, and convenience are all factors that will influence whether someone chooses to walk along a corridor.

Another determining factor in a person's decision whether or not to walk is walking distance. Local government can play a role in reducing walking distances by supporting land use planning and decisions that achieve a density of destinations (schools, coffee shops, daily services, etc.) within Centers that lend themselves to walking. In keeping



Sidewalks with trees, outdoor dining options, and onstreet parking make pedestrians feel more comfortable and safe.

with the Centers and Corridors framework, public transit is a primary connector between Centers. The policies portion of this chapter provides guidance on developing the "Pedestrian Priority Network." The **Urban Design chapter** contains additional discussion of and policies about pedestrian amenities.

### Sidewalk System

Many parts of the City have insufficient or poorly-maintained sidewalks or are missing them completely. Continuous and connected pedestrian facilities are important along Transit Corridors, and ideally, throughout the entire network. This ensures that destinations are accessible to all pedestrians, especially those with disabilities.

To create a better connected pedestrian network, filling gaps in the existing system and upgrading deficient sidewalks should be a high priority. Enhancing the sidewalk network is critical for the Pedestrian Priority Network – within Activity Centers, Main Streets, and within ¼-mile of transit stations. Other measures to increase pedestrian safety include marked crosswalks, roadway lighting, intersection design, and signal enhancements.

#### Multi-use Trails

Trails provide off-street connectivity to community resources such as parks, open spaces, schools, libraries, community centers, employment centers, shopping centers, bus stops, and the soft surface trails within Major Public Open Space areas. Multi-use trails are considered elements of the pedestrian and the bicycle network. They are often considered recreational corridors that people can use to access open spaces and outdoor



Multi-use trails are designed for all non-motorized modes of transportation, including horses.

experiences. They also serve as transportation facilities for bicyclists who do not have the skill level or comfort for on-street riding.

Multi-use trails are pathways that are physically separated from motor vehicle traffic and are for the use of pedestrians, bicyclists, skaters, wheelchair users, joggers, other non-motorized users, and equestrians. Not all trails may accommodate all of these uses.

Some of the challenges associated with the multi-use trail system include:

- Balancing the needs of various users, such as faster moving cyclists sharing a trail with pedestrians and equestrians.
- Addressing gaps in the system.

- Identifying and addressing the intersections of trails and major arterial roadways where there is no traffic signal or grade separation.
- Retrofitting trails to be universally accessible.

### **Bicycle Network**

Providing safe and well-connected bicycling infrastructure is crucial to encouraging more bicycling. There is a direct correlation between the amount of bicycling infrastructure that is built and the number of people who choose to bike. However, constructing bicycling infrastructure that is safe and accessible to bicyclists of all abilities is often challenging, especially within a constrained right-of-way. In addition, design standards for bicycling infrastructure are rapidly evolving as cities experiment with different configurations to learn what works best.

The following section outlines the different types of bicycle facilities. As new development occurs, it needs to include facilities identified in the City's and County's adopted plans and the MTP Long Range Bikeway System. For more guidance on determining the appropriate facility type, location, and design standards, refer to the County's *Pedestrian and Bicyclist Safety* 

### TRANSPORTATION

Action Plan and the City's Bikeways and Trails Facility Plan. The policies at the end of this chapter provide guidance on developing the Bicycle Priority Network.

#### Bike Lanes

Bike lanes are dedicated travel lanes that carry bicycle traffic in the same direction as adjacent motor vehicle traffic. Bike lanes are provided for the exclusive use of bicyclists on a roadway and are identified through signs, striping, or other pavement markings. These lanes allow bicyclists to ride at comfortable speeds and encourage a position within the roadway where they are more likely to be seen by motorists. The specific design of each facility needs to be tailored to the street type, traffic speeds and volumes, and the development context.

#### Raised Bike Lanes

Raised bike lanes are one-way facilities that are vertically separated from the roadway, located near sidewalk-level. This design is most commonly seen in areas with high levels of bicycling within more active, urban environments. The vertical separation more clearly defines the different parts of the roadway with a 1 to 3 inch grade change between the vehicular and bicycle travel lane and between the pedestrian realm.





There are many types of bike facilities that are appropriate for different roadways and contexts. Protected bike lanes are important where cyclists are close to traffic, while bike boulevards are more appropriate in low-traffic areas.

An elevated bike lane serves as a major deterrent to cars drifting into the bicycle lane, which is a common occurrence in this region. This bicycle facility type has not yet been used in Albuquerque.

#### **Buffered Bike Lanes**

Buffered bike lanes are bicycle facilities that are separated from adjacent motor vehicle travel. Typical on-street buffered bike lanes are designed similarly to standard bike lanes with one-way travel, with the addition of pavement striping between the vehicular and cycle travel lanes. Where there is adequate space in the road, such as when a vehicular lane reduction is planned, striping a buffer along the bike lane is a way to clearly allocate space. Buffered bike lanes are also

particularly useful to improve the comfort of bicycle lanes along roads with high speeds and/or volumes of traffic. One advantage of a buffered bike lane over a raised or protected bicycle lane or cycle track is that the buffered bike lane can be swept with regular street sweepers as part of routine road maintenance.

#### Protected Bike Lanes

Protected bike lanes are a type of buffered bike lane that, in addition to a horizontal separation, also have some form of a physical barrier in the buffer area, which may be designed with a variety of materials for physical protection, such as bollards, curbing, or raised planters. These on-street protected bike lanes provide even greater





Signalized bike and pedestrian crossings with a median refuge and well-marked bike lanes make it safe and easy to travel the city by bike and cross busy streets.

comfort and safety than buffered bike lanes due to the addition of a physical separation in the buffer area.

Protected bike lanes are recommended on arterials with high travel speeds, high traffic volumes, and multiple lanes or where safety issues have been noted. Protected bike lanes are complicated to design for long distances; however, other cities have found them extremely helpful providing critical links even though the link does not meet all the criteria for a bike lane, in terms of speed, volume, and vehicle travel lanes. Conventional bike lanes without protection on these types of roadways can be stressful for even the most confident riders.

### Cycle Tracks

A cycle track is an exclusive bike facility that combines the user-experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks are typically designed as two-way facilities to allow bicycle movement in both directions along one side of a roadway. These facilities should be considered in a variety of areas where a critical link is needed.

One of the challenges to implementation is that they cannot be easily retrofitted into existing streets through a road diet. This is because the design is substantially more extensive than typical restriping, and the projects take longer.

### Shared Lanes/Bike Route

Certain roads may be more desirable for shared use due to low traffic speeds and volumes and do not necessitate a separated bike facility. These roadways can be designated as shared lane bike routes with route signs, such as "bicycles may use full lane," and "sharrow" pavement markings.

Shared lanes are preferable on streets with low traffic volumes (less than 3,000 average daily vehicle trips) and low travel speeds (less than 30 mph). Occasionally shared lanes are necessary to fill a gap in the network or transition between bike facilities. They also provide low-stress routes for individuals who would prefer to watch out for slow-moving cars entering the roadway instead of riding along with traffic on busier streets.

#### Bike Boulevards

Streets that have low traffic volumes and speeds, particularly in residential areas, may be designated as bicycle boulevards. These streets can be enhanced with certain design elements to encourage bicycle use and discourage excessive through trips by motor vehicles. Measures to reduce speeds and manage traffic volumes, commonly known

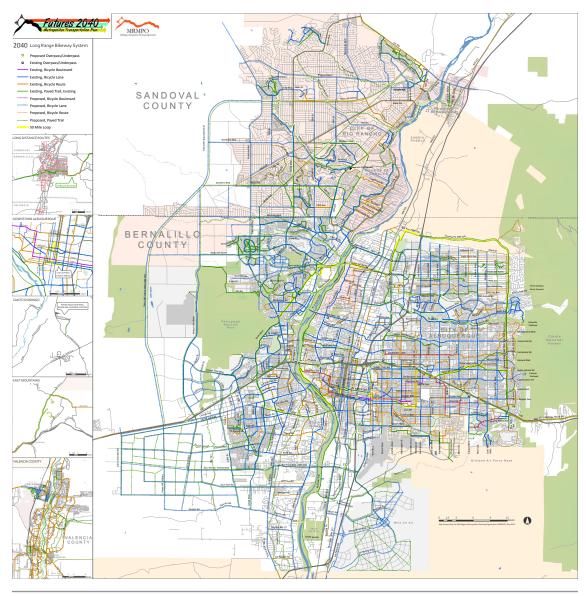


Figure 6-5: Existing and Proposed Bikeways and Trails

Source: MTP

[For illustration only. See <a href="www.mrcog-nm.gov">www.mrcog-nm.gov</a> for the most recent, full-scale map.]

as traffic calming, include such features as chicanes, median islands, mini traffic circles, and curb bulb-outs. These methods cause drivers to maintain lower travel speeds in response to visually narrower roadways or a need to navigate around curving travel lanes. Bike boulevards in Albuquerque have often been located in commercial or mixeduse corridors (e.g., Mountain Road and Silver Avenue). Bicycle boulevards are also called neighborhood greenways in some communities.

# 6.1.2.3 ENVIRONMENTAL & HEALTH IMPACTS OF THE TRANSPORTATION SYSTEM

The built environment and the transportation network that connects it can have a significant impact on individual and public health. Low-density cities with land uses spread far apart increases driving, which can negatively impact air quality. Increased vehicle emissions may increase exposure to pollutants, which is connected to higher rates of respiratory illnesses, cardiovascular diseases, and premature death. Designing transit, trail, and bikeway facilities to be convenient for everyday commuting and errands can significantly reduce our use





Whether there is a bike lane or not, signage is an important way to indicate to drivers that they should look for cyclists.

of fossil fuels, and in turn the emission of pollutants. Bicycling and transit can benefit air quality by replacing driving for short trips, typically less than 5 miles. Short driving trips are the least fuel-efficient and generate the highest emission rates per mile traveled. Encouraging alternatives to driving, including bicycling and walking, helps reduce vehicle miles traveled and air quality impacts. Reduced traffic congestion also helps improve air quality.

Beyond air quality, transportation can impact health through exposure to traffic noise, which can cause sleep disturbance, cardiovascular disease, elevated hormone levels, psychological problems, and even

premature death. Studies of children have identified cognitive impairment, worsened behavior, and diminished quality of life. Exposure to noise is one of the most common environmental exposures in the United States, and exposure to traffic noise is often high enough to be harmful to health.

Perhaps the biggest health risks related to transportation are injuries and fatalities from motor vehicle crashes. Motor vehicles are among the top five causes of death for Americans, and the leading cause of death for children, teens, and young adults in the 1 to 19 age range. In 2013, New Mexico ranked 4th in the U.S. for pedestrian fatalities and 12th for motor vehicle fatalities per

100,000 people. Improved street design can significantly reduce the incidence of crashes.

While it may seem counterintuitive, increasing the number of pedestrians and cyclists can also reduce crash rates. When pedestrians and cyclists are more visible and more expected, drivers know to look for and accommodate them. Part of the larger strategy of designating Centers and Corridors in the Comp Plan is prioritizing the areas where pedestrians and cyclists should be encouraged, including the design of street elements and the priority of funding for improvements.

In cities where driving is most prevalent, individual and public health is negatively affected by reduced opportunities for daily physical activity, which is associated with obesity, strokes, Type II diabetes, coronary heart disease, and other chronic diseases. Physical activity is directly linked to our physical and mental health. Even moderate levels of exercise have been shown to aid in weight control, the prevention of heart disease and certain cancers, and the alleviation of anxiety and depression. Not feeling safe is a commonly cited barrier to daily walking and bicycling.

The City and County can address this concern through strategies such as safety education programs, filling in gaps and enhancing the quality of walking and biking facilities, improving the quality and visibility of pedestrian crossings, and reducing traffic speeds through street redesigns. Transportation is an important part of the built environment and significantly influences physical activity and well-being, safety, and the ability of community members to access destinations that are essential to a healthy lifestyle. Policies, programs, and projects that enable community members to be more physically active in their daily routines support the active transportation network and healthier communities.

Public health professionals advocate for walkable and bikeable neighborhoods as one of the most effective ways to encourage active lifestyles. Creating communities with excellent access to nearby goods and services allows people to drive less and potentially choose active transportation options more often. A safe, well connected and attractive active transportation network of paths, sidewalks, bikeways, and transit encourages the use of non-motorized modes of transportation for everyday errands and commuting. Encouraging mixed-use districts and multi-modal transportation networks will

help make alternative transportation options more viable and convenient, providing more opportunities for residents to exercise and raise their level of daily activity.

### 6.1.2.4 CONNECTING LAND USE & TRANSPORTATION

Land use is the largest determinant of how a transportation system functions. The land use fabric of where homes, jobs, schools, retail, and services are dispersed generates peoples' need to travel either long or short distances. This in turn affects the stress on roadway capacity, the feasibility of different modes, and the impact on the environment and economy. Integrating land use and transportation is a two-way process of making both development and transportation investments in coordination to support each other.

On the regional scale, central New Mexico's long-range transportation plan, the Futures 2040 MTP, includes the Preferred Scenario. The development of the Preferred Scenario evaluates how the region might grow in order to make land use and transportation investments that best meet a variety of challenges. The Preferred Scenario includes elements that parallel the Comp Plan's vision for concentrated

development within key centers and transit nodes to create a mix of activity; a diverse mix of uses with appropriate design standards for the activity centers; an emphasis on growing employment centers west of the Rio Grande; and an emphasis on affordable and diverse housing options in proximity to jobs and services.

The MTP provides a regional understanding of the relationship between development patterns and transportation, economic, and environmental outcomes. Bernalillo County and the City of Albuquerque, as governments with land use authority play a key role in implementing the Preferred Scenario. This is why the Comp Plan, as the overarching land use plan, is uniquely tied to responding to future regional transportation challenges.

On the local scale, a mutually supportive transportation-land use system involves land use development and transportation investment being planned and implemented to complement each other. Transportation improvements need to be compatible with the existing and planned land uses that surround the roadway in order for the development to reach its full potential serving communities and supporting economic development. For example, it is reasonable to expect a roadway carrying

high volumes of commuter traffic to transition into a slower, denser network of streets as it transitions from a suburban to urban environment. In addition, decisions involving land use development need to take the planned transportation system into account. For example, a density of housing and business at transit nodes is essential for public transit to be successful.

In addition to the MTP, other plans and policies have been adopted that change our approach to connecting land use and transportation planning. Both the County and the City have adopted Complete Streets Ordinances. In alignment with the region's Centers and Corridors vision, the Metropolitan Transportation Board adopted and funded projects to achieve the ambitious mode share goal of 20 percent of trips taken by transit.

### 6.1.2.5 CORRIDOR TYPES

In 2002, Bernalillo County and the City of Albuquerque adopted a vision for future growth to be focused in designated Centers and along certain Corridors. Centers are the active hubs of a collection of complete, healthy, walkable neighborhoods, and Corridors are the linear connections between those Centers. Corridors encompass the roadways, infrastructure, and adjacent

land uses to provide a balanced circulation system and, on designated Transit
Corridors, a greater concentration and mix of employment, housing, and services. The transportation system can provide safe and comfortable travel for all modes through roadway design and network connectivity that allow for people to travel on different roads to reach important destinations, disperse congestion, slow traffic to improve safety for everyone, and maintain emergency and truck access.

The 2002 Comp Plan designated Major Transit Corridors, Enhanced Transit Corridors, and Express Corridors and included a matrix of policy objectives for each corridor type related to street design, transit service, and development form. The 2016 Comp Plan updates this vision by restructuring and adding detail to the types of Centers and Corridors to reflect best practices for coordinating land use and transportation (see Section 5.1.2.3 of the Land Use chapter for a discussion of Center and Corridor types). Corridors are streets designated in the Comp Plan to serve a particular role, beyond their transportation functional classification (i.e., arterial, collector, local street), to also include the land uses and development form along the roadway. The Corridor refers to the public

right-of-way, along with the relationship to its adjoining property and development.

The designated Corridors were developed to provide access to Centers, and have been refined to reflect more recent planning efforts. The Comp Plan designates five Corridor types: Main Street, Multi-Modal, Major Transit, Premium Transit, and Commuter. These types are illustrated on the Comp Plan Vision Map, and they are explained in the Land Use chapter. This organization reflects the importance of coordinating the Corridors with adjacent land use.

The Corridor types are tailored to respond to both transportation and land use needs. They encompass the area surrounding the roadway, and guide future land use, subdivision, and development character. One of the Comp Plan Development Areas - Areas of Change - includes designated Corridors to encourage more intense development as it is appropriate along the Corridor in the future. Land uses along Commuter Corridors and in single family neighborhoods are designated as Areas of Consistency, and they are not expected to change in intensity or use. However, Areas of Change will be operationalized in the City's IDO through different development and subdivision standards. The policies at

#### **CORRIDOR TYPE ELEMENTS**

Designated corridors where developed to provide access to Activity Centers, and have been refined in the 2016 Comp Plan to reflect more recent planning efforts. These types are illustrated on the Comp Plan Vision Map, and they are explained in the **Land Use chapter**.

#### **COMMUTER**

- Prioritizes long-distance travel at relatively high speeds
- Does not compromise the safety of all modes, but may not be as convenient for non-motorized modes
- Access control is used to promote vehicular throughput and vehicular safety
- · Least interactive with the adjacent land use
- The wide-right-of-way and limited access often make these roads good candidates for multi-use trails

#### **PREMIUM TRANSIT**

- High-capacity transit is planned along these corridors
- Premium Transit Corridors include the study alignments for BRT in the 2040 MTP Priority Transit Network

#### **MAJOR TRANSIT**

- · High-frequency transit service is planned
- 2040 MTP Priority Transit Network that are not the High-capacity transit study alignments

#### **MULTI-MODAL**

- Enhanced transit corridors from the 2013
   Comp Plan that are not part of the Priority
   Transit Network
- Corridors identified to improve multi-modal options and broaden the roadway's role beyond single-occupancy vehicle convenience

#### **MAIN STREET**

- · Linear activity center
- Most interactive with the surrounding land use
- · Access management for pedestrian safety



CiQlovia is Albuquerque's annual open streets event.

the end of this chapter apply to different Corridor types and provide guidance on process, project development, and design within the public right-of-way (see also the **Urban Design chapter** for additional policy guidance about development form and priority street elements).

In April 2015, the Metropolitan Transportation Board (MTB) adopted the LRTS Guide as a part of the MTP. This document established land use context and a street typology that applies to the four-county region. The corridor types include the Regional Principal Arterial, Community Principal Arterial, Minor Arterial, Major Collector, and Minor Collector. For each roadway type, there are guidelines for recommended street elements (landscaping/buffers, bikeways, roadway lanes, etc.) and the recommended minimum dimensions for each. Guidelines are provided for five character zones: Activity Center, Urban, Suburban, Rural, and Main Street.

The 2016 Comp Plan is intended to bridge the gap between the LRTS Guide and the 2013 Comp Plan and to provide guidance at the local level to the City and County. The Comp Plan provides direction at the policy level, and the LRTS Guide provides direction at the design level. They are intended to be compatible and complementary.

### 6.1.2.6 COMPLETE STREETS & NETWORKS

Complete Streets are streets designed for everyone - with safe access for pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The Complete Streets approach is a nationally-recognized framework for designing context-sensitive street facilities that enable efficient travel by all users, including the estimated one third of Americans who do not drive. Much of Albuquerque's existing roadway system was built to facilitate access to destinations. by personal automobile, resulting in streets that are uninviting and impractical for other users. The Complete Streets approach includes design strategies and processes for making roads more accessible for all users.

Complete Streets aim to provide good multimodal access, decrease travel times, and enhance safety. Under this approach, roadway design considers all modes and accommodates them with treatments such as enhanced sidewalks or pedestrian crossings or repurposing underused travel lanes for another mode of travel, such as bike lanes to create a transportation system that meets the needs of motorized and non-motorized travelers and persons with disabilities. Complete Streets integrate general-purpose roadways, sidewalks,



Complete Streets are designed for all modes of transportation so that cars and buses can get around while pedestrians and cyclists can safely access stores, restaurants, and nearby neighborhoods.

bike lanes, transit amenities, traffic calming, and convenient road crossings.

Streets targeted to become more balanced, or multi-modal, may see a higher level of vehicular congestion in order to accommodate enhancements to the pedestrian, bicycle, and transit systems. This is not a "one-size-fits-all" approach to road design; rather, each project must be context sensitive and respond to the surrounding land use. The framework for this context sensitive approach is discussed in the **Urban Design chapter**.

Benefits of building Complete Streets include:

- Increasing options for safe, comfortable travel to your favorite neighborhood destinations, for all ages.
- Increasing the focus on serving both our residents and those who use our streets while still providing for safe and efficient travel.
- Improving community health by reducing risk of injuries and encouraging walking and bicycling to help combat obesity and heart disease.

### PLAN ELEMENT TRANSPORTATION

- Increasing livability by creating more attractive public areas. This will create public spaces that promote health, happiness, and well-being. It will also foster private investment.
- Create inviting streets that encourage a variety of travel modes. In conjunction with appropriate land uses, this will help ease congestion and air pollution.

In January 2015, the Albuquerque City Council, and in June 2015, the Bernalillo County Commission, adopted Complete Streets Ordinances that support the implementation of Complete Streets in this region. The intent of the ordinances is to expand safe use of our streets by requiring equal consideration of the efficiency and safety of all types of travel. This can be achieved by creating a balanced transportation system that meets the needs of all users and is designed to be context-sensitive relative to adjoining land uses.

Open Streets events, such as Albuquerque's CiQlovía and Summerfest, provide another venue to normalize and expose residents and visitors to active transportation modes and Complete Streets concepts. The Complete Streets Ordinance adopted nationally-recognized standards for streets to serve existing and future development. It also established a process for an annual review

of upcoming projects and maintenance to ensure they are including Complete Streets principles. Although Albuquerque's Complete Streets Ordinance only applies to collector and arterial streets, federal guidance is for all modes to be considered during the funding, planning, and design process for all transportation projects.

### **Complete Networks**

It can be a challenge for a single roadway to accommodate freight movement, high-volume, and high-speed traffic along with pedestrian and bicyclist needs. An important means of addressing multiple needs simultaneously is through creating "complete networks." This means designing complete, layered transportation networks that allow people to reach desired destinations – although not always on the same roadway.

This Comp Plan promotes the complete network concept, and establishes policies for developing a pedestrian, bicycle, transit, automobile, and freight network. Each mode should have priority in different areas, and this plan establishes where each mode should take priority through the policies at the end of this chapter and in the **Urban Design chapter**.

Creating better connected networks for all modes of travel reduces the potential conflict

between different users. Providing lowstress routes for pedestrians and bicyclists improves accessibility by allowing people the option of reaching their destinations while avoiding traffic and potential safety issues. In addition, increasing network connectivity improves efficiency by making trips more direct and reduces congestion by providing multiple route options.

### Complete Streets & Networks Process

The Complete Streets approach also focuses on changing the project development process. The recent federal and local legislation requires transportation professionals to consider and accommodate various users at all stages of development from planning, funding, designing, operating and maintaining transportation infrastructure. The operations of these types of corridors can be measured, assessed, and ultimately better balanced using multi-modal level of service (MMLOS). MMLOS estimates the amount of delay, as well as other measures such as comfort, along a corridor for automobiles, bus, bicycle, and pedestrians using a combination of data. For more information on roadways designated as Multi-Modal Corridors, see the Land Use and Urban Design chapters.

### Vision Zero Action Plan

Vision Zero is a mindful shift in how communities think about, talk about, and approach traffic safety. Vision Zero starts with an ethical belief that no one should die or be seriously injured on our roadways. While collisions cannot always be prevented, when a collision does occur, the City is working toward making sure it does not result in death or serious injury. Vision Zero uses a data-driven and safe systems approach to create safer streets for everyone - whether they are walking, biking, driving, or taking transit, regardless of age or ability. The City's Vision Zero Year-in-Review and Prioritization establishes a road map for Albuquerque

to continue to implement best practices to address traffic safety challenges. The City's Vision Zero program uses the vulnerability (equity) index and the Prioritized High Fatal Injury Network (HFIN) to prioritize traffic safety improvements. The vulnerability index indicators include per capita income, populations older than 65 and younger than 17, non-white population, limited English proficiency, multi-family housing, and households with no vehicle. The HFIN takes five years of crash data to identify where recurring fatal and injury crashes are happening. These two tools demonstrate where safety improvements are most needed throughout the City.

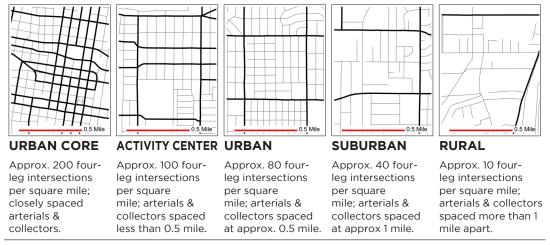


Figure 6-6: Connectivity Standards for Different Character Areas

Source: Long Range Transportation System Guide

### 6.1.2.7 CONNECTIVITY

In addition to providing improved multimodal choices and comfort through Complete Streets and Networks, appropriate street connectivity is essential to maximizing accessibility and increasing the number of route options. Well-connected streets provide shorter, more direct routes between destinations. Street connectivity also increases the efficiency and reliability of the transportation system.

A classic example of a well-connected street system is the traditional grid pattern. Grid street patterns result in dispersion of traffic throughout the system. While major arterials exist within the grid pattern, local travelers are able to use interconnected local streets, freeing the arterials for the movement of longer distance travelers.

In Albuquerque, the older developed area on the east side of the Rio Grande maintains this grid pattern, while more recent developments have created a suburban development pattern with cul-de-sacs and few access points. These areas have been designed to collect traffic from residential areas and channel most trips onto major thoroughfares. This pattern tends to require large intersections, creates greater reliance on arterials, and often discourages

pedestrian and bicycle travel. As an example, perimeter walls around subdivisions often have no openings for pedestrians to access bus stops on adjoining streets. Long blocks often mean pedestrians must go out of their way to reach neighborhood parks, schools, and nearby retail centers.

The region is faced with two challenges: ensuring new development provides enhanced network connectivity and retrofitting developed portions of the city to improve connectivity. To address the first challenge, the Comp Plan adopts policies that promote adequate connectivity to address future transportation demand. Regulations need to be developed and adopted to formalize a connectivity analysis process, measures, and minimum standards. Improving the connectivity of existing, developed areas will continue to be done through Corridor Plans, corridor specific studies, and public works projects.

### 6.1.2.8 ACTIVE TRANSPORTATION

Bicycling and walking have become increasingly important transportation modes because such trips contribute to healthy lifestyles, can be made with no environmental degradation, and the infrastructure is

supported by generally smaller investments. The choice to bike or walk is influenced by travel distance, traffic safety, weather, topography, convenience, comfort, costs, valuation of time and exercise, physical condition, family circumstances, habits, attitudes/values, and peer group acceptance. Other factors that influence a person's decision to bike or walk, and over which local government has some control, are the presence of sidewalks, trails, and bikeways, connectivity of the facilities, wayfinding signs, traffic conditions, and access and linkage to destinations. The most common reason given why an individual does not bike or walk is the lack of safe, direct, and interconnected facilities. The interconnection of bicycle and pedestrian facilities to transit service expands the opportunity to travel further distances for bicyclists and pedestrians.

The region's active transportation network is intended to provide transportation alternatives and recreational opportunities for all ages and abilities. The installation of bicycle and pedestrian facilities can be the most visible element of a city's multi-modal transportation program. It shows that the community is a welcoming place for non-motorized transportation and supports the safe use of streets by all users.

The use of active transportation modes, such as bicycling, walking, and taking transit, benefits personal health and reduces traffic congestion. Providing safe options for these forms of travel enhances quality of life and can help address public health issues. Interest in bicycling for commuting or recreation is increasing, but many beginner or potential riders do not feel comfortable riding on-street with vehicular traffic. Concerns about safety, barriers, and lack of infrastructure often lead to the use of cars for completing trips, including short ones. Increasing the number of bicycle and pedestrian facilities not only addresses safety, but also enhances longterm community livability, creates welcoming streets and neighborhoods, improves public health, and strengthens local economic competitiveness.

Bicycling and walking can improve quality of life by increasing opportunities for social interaction within the community.

An active bicycling population is often considered a measure of livability for a city. Providing enhanced bicycle facility design allows residents to stay connected to their community, and integrating bicycle facilities into existing streets can have a positive effect on attracting business and maintaining property values.







Albuquerque and Bernalillo County residents have many options for active transportation.

Eliminating travel barriers is critical to accommodating bicycling and walking. The primary physical barriers in the region are the river crossings and the Interstate Highways. Other major barriers that the region should endeavor to improve involve network connectivity and continuous facilities to serve riders of all ages and abilities.

In 2013, New Mexico was ranked 4th in the nation for pedestrian fatalities per capita. As the largest metropolitan area in the state, Albuquerque has high rates of crashes involving pedestrians and cyclists. Since 2012, both the city and the state have been identified as one of the Federal Highway Administration Focus Cities and States, which receive funding and technical assistance to aggressively reduce the number of pedestrian and bicycle fatalities.

Adopted plans include the City's *Bikeways* and *Trails Facility Plan* and the County's *Pedestrian and Bicyclist Safety Action Plan*, which will remain stand-alone plans. These planning documents identify existing non-motorized facilities and prioritize future capital improvement projects to be funded using local bond, state capital outlay, and federal grants (see also the **Parks & Open Space chapter**).

## 6.1.2.9 AGENCY/ DEPARTMENT ROLES & RESPONSIBILITIES

The success of implementing the plan and achieving the vision as it relates to transportation in the City of Albuquerque and Bernalillo County is dependent on the coordination and commitment of agencies and departments within and outside of local government in the region. To understand the role of each of the responsible departments and agencies, below is a description of how their work is related to mobility implementation in the Albuquerque region.

The complexity of inter-agency and interdepartmental coordination is that many of the various agencies and departments maintain their own processes related to street design, implementation, planning, and project delivery. In addition, agencies and departments have their own schedule for capital improvements and project delivery.

### City of Albuquerque

### Planning Department

The Planning Department maintains the Development Process Manual (DPM), which is the policy document that sets the standards for infrastructure development

### PLAN ELEMENT TRANSPORTATION

in the City of Albuquerque including transportation-related standards.

### Department of Municipal Development

Department of Municipal Development (DMD) is the department that oversees and conducts capital projects within the City, making sure that these projects are completed efficiently, on-time, and to high standards. In addition, the department provides the operation and maintenance of city streets, storm drains, and traffic signals. DMD uses the DPM to ensure development standards are achieved. DMD also designs, constructs, and maintains on-street bicycle facilities, such as bike routes and bike lanes.

### Parks & Recreation Department

The Parks and Recreation Department maintains all of the park facilities in the City of Albuquerque. The department is also responsible for the off-street facilities including multi-use trails and bike paths. The department worked in coordination with the Planning Department and DMD to develop the *Bikeways and Trails Facility Plan*. (See also **Parks & Open Space chapter**.)

### Transit Department/ABQ RIDE

ABQ RIDE, the City's Transit Department, provides public transportation throughout the city and North and South Valley areas

of the unincorporated county. The transit department's purpose is to provide effective, affordable, and diverse transportation alternatives to the single-occupant vehicle.

ABQ RIDE operates bus service across the city and parts of the county, including local routes, commuter routes, and Rapid Ride routes. The Rapid Ride service uses 24 60-foot articulated buses on Central Avenue and segments of Coors, Lomas, and Louisiana Boulevards. ABQ RIDE provides para-transit service to persons residing in or visiting the metro area whose impairment makes it impossible to ride the fixed route service. The service is origin-to-destination from any address in Albuquerque and most of Bernalillo County, with advance reservations.

### **Aviation Department**

The City's Aviation Department is responsible for the management, operation, and development of the City's two municipal airports. The Sunport is owned by the City, but has been developed in conjunction with the Department of Defense for use by the Kirtland Air Force Base. Double Eagle II Airport on the West Side, approximately 8 miles north of I-40, provides commercial service for private, charter, corporate, military, training, and air ambulance flights. Commercial service airports provide local and regional access to the

national and international aviation systems.
As such, these airports are vital to interstate commerce as well as a key component to local and regional economic infrastructure.
These facilities support and drive growth in all socioeconomic categories.

The Airport Advisory Board acts in an advisory capacity to the Director of Aviation, Mayor, and City Council. The Advisory Board is comprised of nine members who are appointed by the Mayor with the advice and consent of the City Council. The Draft Sustainable Airport Master Plan, 2015, and Draft Double Eagle II Master Plan Update were developed to evaluate the airports' capabilities and role, to review forecasts of future aviation demand, and to plan for the timely improvement of facilities that may best meet that demand and maintain compatibility with the environs. The airport master plan will provide systematic guidelines for the airport's overall development, maintenance, and operation for the next 20 years.

### Department of Senior Affairs

The City's Department of Senior Affairs provides transportation to individuals 60 years of age and older. Transportation is limited and is offered on a donation basis during weekdays. Their current initiative to designate Albuquerque as an age-

friendly city is called ABQ Together (see the **Infrastructure**, **Community Facilities**, **and Services chapter** for more about this department and its programming).

### **Bernalillo County**

### **Public Works Division**

The County's Technical Services Department of the Public Works Division enforces infrastructure and street standards in new development and administers the construction of roadways and trails. The Operations and Maintenance Department maintains the roadway and trail network in the unincorporated area. The Infrastructure Planning and GEO Resources Department (IPGR) participates in developing the regional Transportation Improvement Program (TIP) and long-range MTP and partners with Planning and Development Services on corridor planning as well as bicycle and pedestrian planning.

The Capital Improvement Program (CIP) identifies, programs, and funds transportation improvements including roadways and trails. CIP coordinates with the Public Works Division on local GO bond, state capital outlay, and federal transportation funding.

### MRCOG/MRMPO

The Mid-Region Council of Governments (MRCOG) is the umbrella organization for the Mid-Region Metropolitan Planning Organization (MRMPO). MRMPO facilitates transportation improvements and long-range transportation planning across the metropolitan area through a collaborative, continuous, and comprehensive process.

MRMPO is governed by a board of representatives from the jurisdictions, tribal entities, and other key stakeholders located within the metropolitan planning area. These representatives, including the City of Albuquerque and Bernalillo County, have worked closely together in planning and programming transportation investments throughout the metropolitan area. MRMPO's role as a transportation planning organization is significant as it relates to mobility in Albuquerque.

Every four years, MRMPO is federally required to update its long range (20+ years) transportation plan, the MTP. This plan is multi-modal in nature. In addition, MRMPO maintains the LRTS Guide, a part of the MTP that guides roadway design and right-of-way requirements for future roadways in various land use contexts. This document is referenced in the City's DPM and County

Infrastructure/Street Standards to guide roadway classification and development. Agency members also work closely with MRMPO to identify transportation projects from the MTP for federal funding through the six-year TIP.

The MTP demonstrates that making land use and transportation decisions collectively, and focusing new growth in activity centers and along key corridors, is an effective way to bring residents and destinations closer together and to get the most out of the existing transportation network.

The 2040 MTP is the regionally and federally approved long-range transportation



MRCOG/MRMPO Long Range Transportation System Guide provides guidance on roadway design

planning document for the Albuquerque metropolitan planning area. As the largest entity in the metropolitan area, Albuquerque plays a critical role in regional transportation decision making, and is conversely affected by land use and transportation decisions made outside its boundaries. Therefore the need to consider Albuquerque's place within the larger region is critical.

The plan emphasizes increasing transportation options, maximizing the utility of the existing infrastructure, and the various benefits resulting from linking land use and transportation by bringing residents and destinations closer together. Much of the emphasis of the Preferred Scenario developed as part of the 2040 MTP is encouraging future development in activity centers and along key commercial and transit corridors. In this way, the recommendations of the MTP and the Comp Plan are consistent and mutually supportive.

There are a variety of policies passed as part of the MTP and regional tools and opportunities that can be leveraged to implement the plans and action items contained in the Comp Plan.

### **Rio Metro Regional Transit District**

Rio Metro Regional Transit District (Rio Metro) is a regional transit provider comprised of 13 member governments, including the City of Albuquerque and Bernalillo County. While headquartered at the MRCOG building, Rio Metro is a distinct agency that is overseen by its own board of directors. In 2015, the board adopted Rio Metro's Long-Term Strategic Vision, a bold, forward-thinking, consensus vision for transit's future role in the region.

In addition to the Rail Runner, Rio Metro operates several commuter bus routes and the Community Transportation Program (previously Job Access Reverse Commute) within Bernalillo County. Rio Metro also contracts with ABQ RIDE to provide bus routes that connect with all Rail Runner



NM Department of Transportation Long Range, Multi-Modal Transportation Plan

stations in Bernalillo County. Outside of Bernalillo County, Rio Metro offers demand response and commuter bus routes in Sandoval and Valencia counties, and provides connections to other transit providers serving locations as far away as Los Alamos, Santa Fe, and Taos.

### New Mexico Department of Transportation

New Mexico Department of Transportation (NMDOT) is the statewide government agency that owns, operates, and plans for the state highway system, including the interstate highways, U.S. highways, and state highways. In addition to construction and maintenance of these facilities, NMDOT facilitates long-range planning for statewide mobility initiatives.

The Statewide Transportation Improvement Plan (STIP) is the primary program that identifies funding for mobility projects on the state transportation network. NMDOT has also adopted a multi-modal transportation plan, The New Mexico 2040 Transportation Plan that provides a strategic framework to guide the agency's transportation decision-making in the years to come. There are regional transportation corridors within the Comp Plan area that are owned and/or managed by NMDOT. They are coordinated

through memoranda of understanding with local governments, and are not subject to the policies of this plan. The City and County participate in the development of plans and projects initiated by NMDOT.

### **Endnotes**

 City of Albuquerque Council Bill O-14-27, Enactment No. O-2015-003.

### 6.1.2.10 RELATED PLANS & RESOURCES

The following documents are used within the region to guide the design, development, and maintenance of transportation systems.

### **Local Resources & Documents:**

- Bernalillo County and City of Albuquerque, Complete Streets Ordinances, 2015
- Bernalillo County, Pedestrian & Bicyclist Safety Action Plan, 2012 <a href="http://www.bernco.gov/public-works/">http://www.bernco.gov/public-works/</a> <a href="pedestrian-bicycle-safety-study-action-plan.aspx">pedestrian-bicycle-safety-study-action-plan.aspx</a>
- City of Albuquerque, *Bikeways & Trails* Facility Plan, 2015

- www.cabq.gov/planning/bikeways-trails-facility-plan
- City of Albuquerque, Development Process Manual (DPM)
   https://www.cabq.gov/planning/boardscommissions/development-processmanual-executive-committee
- City of Albuquerque, Neighborhood Transportation Program (NTMP) Policy Manual, 2015 <a href="https://www.cabq.gov/traffic">https://www.cabq.gov/traffic</a>
- MRMPO, Futures 2040 Metropolitan
   Transportation Plan (MTP), 2015

   <a href="http://www.mrcog-nm.gov/transportation/metro-planning/long-range-mtp">http://www.mrcog-nm.gov/transportation/metro-planning/long-range-mtp</a>
- MRMPO, Long Range Transportation
   System (LRTS) Guide, 2015
   http://www.mrcog-nm.gov/transportation/metro-planning/long-range-transportation-system-guide

### **State Resources & Documents:**

- NMDOT, New Mexico 2040 Plan, 2015 http://dot.state.nm.us/content/nmdot/en/ Planning.html
- NMDOT, Guide to Context Sensitive Solutions, 2006
- NMDOT, New Mexico Architectural and Visual Quality Design Guidelines for

Context Sensitive Design and Context Sensitive Solutions, 2006

### **Federal Resources & Documents:**

- American Association of State Highway and Transportation Officials (AASHTO), Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004 <a href="https://bookstore.transportation.org/">https://bookstore.transportation.org/</a> imageview.aspx?id=549&DB=3
- AASHTO, Guide for the Development of Bicycle Facilities, 2012
- Federal Highway Administration (FHWA), Context Sensitive Design and Context Sensitive Solutions http://contextsensitivesolutions.org/
- FHWA, Manual on Uniform Traffic Control Devices
   <a href="http://mutcd.fhwa.dot.gov/">http://mutcd.fhwa.dot.gov/</a>
- Institute of Transportation
   Engineers (ITE), Designing Walkable
   Urban Thoroughfares: A Context Sensitive
   Approach, An ITE Recommended
   Practice, 2010
   http://www.ite.org/css/
- National Association of City Traffic Officials (NACTO), Urban Street Design Guide, 2013

### PLAN ELEMENT TRANSPORTATION

http://nacto.org/publication/urban-street-design-guide/

 United States Access Board, Proposed Rights-of-Way Guidelines (PROWAG), 2011 <a href="https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way">https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way</a>

### **6.2 Goals, Policies & Actions**

for Transportation

## **Goal 6.1 Land Use - Transportation Integration**

Plan, develop, operate, and maintain a transportation system to support the planned character of existing and future land uses.



Encourage walking, biking, and transit, especially at peak-hour commuting times, to enhance access and mobility for people of all ages and abilities.

### **Goal 6.3 Safety**

Plan, develop, operate, and maintain a transportation system that provides safe access and mobility for all roadway users.

### **Goal 6.4 Public Health**

Promote individual and community health through active transportation, noise mitigation, and air quality protections.

### **Goal 6.5 Equity**

Expand mobility by providing safe and connected networks for non-auto travel and public transit for low-income and vulnerable populations.

### **Goal 6.6 Economy**

Invest in a transportation system that stimulates and supports job creation and business development and improves the movement of people, goods, and services.

## **Goal 6.7 System Effectiveness**

Implement and maintain an effective and efficient transportation system in a coordinated and cost-effective manner.

### **Goal 6.8 Context**

Provide transportation investments that are responsive to context and natural setting.

Policies are organized to support each Goal. Many Policies have supporting Sub-polices, cross-references to other relevant policies, and implementing Actions to more clearly guide decision making.

[ABC] indicates a policy or action for both the City and County
[BC] indicates a policy or action for Bernalillo County
[A] indicates a policy or action for the City of Albuquerque

# **Goal 6.1 Land Use - Transportation Integration**

Plan, develop, operate, and maintain a transportation system to support the planned character of existing and future land uses.

### **POLICY 6.1.1**

Matching Land Use: When designing and improving streets, prioritize transportation-related accommodations and amenities to match the desired development context (e.g. urban, suburban, or rural) and/or the intended intensity of land uses. [ABC]

- a) In urban areas, accommodate pedestrians as the highest priority travel mode, provide frequent transit service, limit or prohibit curb cuts, lower auto travel speeds, and accept auto congestion. [ABC]
- b) On major streets in suburban areas, prioritize auto through-put, allow more frequent curb cuts, design for higher auto travel speeds, emphasize pedestrian safety at intersections, and provide less

- frequent transit service geared more toward long-distance commuting. [ABC]
- c) On local streets, design for the slowest auto travel speeds to best accommodate pedestrians and cyclists and to protect livability and safety of established residential neighborhoods. [ABC]
- d) In rural areas, plan streets based on functional classification for a variety of travel conditions, balancing access to destinations with auto throughput, allowing more frequent curb cuts and moderate auto travel speeds, emphasizing pedestrian safety at intersections, and provide less frequent transit service geared more toward long-distance commuting. [BC]
- e) See **Policies 6.1.4-6.1.9** below for individual Corridors.

- f) See **Goal 6.2** below for multi-modal considerations.
- g) See Land Use Policies 5.1.3-5.1.12 for land use priorities in Centers and along Corridors.
- h) See **Urban Design chapter Section 7.1.2.1** for discussion of development context.
- See Urban Design Goal 7.1 for hierarchy of Centers and Corridors policy application and for development form guidance.

### **ACTIONS**

6.1.1.1 Update street design standards in the City and County to better integrate with desired land use context, such as through Complete Streets and context-sensitive design solutions. [ABC]

- 6.1.1.2 Design and retrofit residential streets, as well as collectors and arterials where they serve and pass through residential areas, for multiple modes of travel to reduce speed, volume, and auto through-traffic while maintaining safety and enhancing neighborhood character. [ABC]
- 6.1.1.3 Consider the HFIN, vulnerability index, safety, land use, and development context when designing new or retrofitting existing roadways and incorporating design principles to discourage drivers from speeding. [A]

### **POLICY 6.1.2**

### Transit-Oriented Development: Prioritize transit-supportive density, uses, and building design along Transit Corridors. [ABC]

a) Identify transit-oriented development opportunities when planning transit service on Major Transit and Premium Transit Corridors. [A]

- b) Prioritize pedestrian amenities and a higher level of connectivity within 660 feet of transit stations. [A]
- c) Design streets to best accommodate transit vehicles and pedestrians, with bicycle accommodation focused on direct connections to the stations/stops, rather than along the travel way. [A]
- d) See **Policy 6.2.7** below for transit network policies.
- e) See Land Use Goal 5.1 for policies about development in Centers and along Corridors.

### **POLICY 6.1.3**

Auto Demand: Reduce the need for automobile travel by increasing mixed-use development, infill development within Centers, and travel demand management (TDM) programs. [ABC]

- a) See Community Identity Goal 4.2 for the CPA assessment process.
- b) See Land Use Goals 5.1 and 5.2 for desired growth patterns and land uses.

c) See also **Urban Design Goal 7.1** for streetscape design and development form in Centers and along Corridors.

#### **ACTIONS**

- 6.1.3.1 Engage stakeholders through
  the CPA assessment process
  to evaluate the transportation
  network, the needs for and impacts
  of developments within the area,
  and TDM opportunities, such as
  ridesharing. [A]
- **6.1.3.2** Encourage TDM programs that establish rewards or incentives for reducing peak-hour congestion. [A]

Premium Transit Corridors:
Prioritize transit vehicles within
the travel way and transit users in
street design and improvements,
incorporating pedestrian amenities,
such as bulb-outs, pedestrianactivated signals, and refuge
medians at intersections and near
transit stations. [ABC]

- a) Within Centers or within 660 feet of transit stations, follow policy objectives in the "Centers & Stations" column in **Table 6-3**.
- b) For the remainder of the Corridor, follow policy objectives related to the relevant underlying designation in **Policies 6.1.4-6.1.9**.
- c) For Corridors without an underlying designation, follow policy objectives in the "Other" column in **Table 6-3**.
- d) See **Land Use Goal 5.1** for policies about Centers & Corridors.
- e) See **Urban Design Goal 7.1** for policy hierarchy for Centers & Corridors and Development Form and Priority Street Elements Matrices.

POLICY OBJECTIVE	CENTERS & STATIONS	OTHER
POLICI OBSECTIVE	CENTERS & STATIONS	OTHER
Access Management: Intersection Spacing: Left-in/Left-out Access: Right-in/Right-out Access:	Limited Access Frequent intersections None None	Moderate Access Moderate intersections None Few
Design Speed	30-35	35-40*
Minimum Peak Hour Auto Level of Service (LOS)	E-F	D-E
Priority Travel Mode	Transit	Transit
Transit Accommodation	Dedicated lane Queue jump	Dedicated lane Queue jump
Signalized Intersections	Priority signals for transit No right turn lanes	Priority signals for transit Few right turn lanes
On-Street Parking	Preferred in Centers, outside of station areas	On a case-by-case basis
Recommended Pedestrian Realm Elements	High priority	Medium priority
Pedestrian Connections	Maximize pedestrian connections to transit stations/stops, between adjacent developments, and across the street	Maximize pedestrian connections to transit stations/stops and between adjacent developments
Clear Sidewalk Width	10-12 feet	8-10 feet
Furnishings/Landscaping/ Buffer Zone	6-8 feet	6 feet
Bicycle Facilities	See City, County, or Re	gional Bike Facility Plans

#### Table 6-3: Street Design – Premium Transit Corridors

<sup>\*</sup> Exception: Where traveling through Areas of Consistency, reduce design speed objective by 5 mph.

Main Street Corridors: Prioritize pedestrians in street design and improvements, emphasizing safety, accommodation, and amenities by slowing auto traffic, providing on-street parking, limiting or prohibiting curb cuts, and requiring primary auto access to parking lots to be provided from intersecting, auto-oriented streets. [ABC]

- a) Design streets within Main Street Corridors according to **Table 6-4**.
- b) See **Land Use Goal 5.1.9** for additional policies on Main Streets.
- c) See Urban Design Goal 7.1 for policy hierarchy for Centers & Corridors and Development Form and Priority Street Elements Matrices.

POLICY OBJECTIVE	STREET DESIGN
Access Management: Intersection Spacing: Left-in/Left-out Access: Right-in/Right-out Access:	Limited Access Frequent intersections Few Few
Design Speed	25-30
Minimum Peak Hour Auto Level of Service (LOS)	Е
Priority Travel Mode	Pedestrian
Transit Accommodation	See corridor type
Signalized Intersections	No right turn lanes
On-Street Parking	Preferred
Recommended Pedestrian Realm Elements	High priority
Pedestrian Connections	Maximize pedestrian connections to transit stations/stops, between adjacent developments, and across the street
Clear Sidewalk Width	10-12 feet
Furnishings/Landscaping/ Buffer Zone	7 feet, with walkable tree well grates.
Bicycle Facilities	See City, County, or Regional Bike Facility Plan

Table 6-4: Street Design – Main Street Corridors

Major Transit Corridors: Prioritize transit users in street design and improvements, encouraging pedestrian amenities, such as bulbouts, pedestrian-activated signals, and refuge medians at intersections and near transit stops and stations. [ABC]

- a) Explore multi-modal and operational opportunities to manage congestion on river crossings, such as limited directional traffic during peak hours.
- b) Within Centers or within 660 feet of transit stations, follow policy objectives in the "Centers & Stations" column in **Table 6-5**.
- c) For the remainder of the Corridor, follow policy objectives in the "Other" column in Table 6-5.
- d) See **Land Use Policy 5.1.10** for additional policies on Major Transit Corridors.
- e) See **Urban Design Goal 7.1** for policy hierarchy for Centers & Corridors and Development Form and Priority Street Elements Matrices.

POLICY OBJECTIVE	CENTERS & STATIONS	OTHER
Access Management: Intersection Spacing: Left-in/Left-out Access: Right-in/Right-out Access:	Limited Access Frequent intersections Few Few	Full Access Moderate intersections Few Moderate
Design Speed	30-35	35-40*
Minimum Peak Hour Auto Level of Service (LOS)	Е	D-E
Priority Travel Mode	Transit	Balance
Transit Accommodation	Dedicated lane Queue jump Shared lane	Dedicated lane Queue jump Shared lane
Signalized Intersections	Priority signals for transit No right turn lanes	Priority signals for transit Few right turn lanes
On-Street Parking	Preferred in Centers	On a case-by-case basis
Recommended Pedestrian Realm Elements	High priority	Medium priority
Pedestrian Connections	Maximize pedestrian connections to transit stations/stops, between adjacent developments, and across the street	Maximize pedestrian connections to transit stations/stops and between adjacent developments
Clear Sidewalk Width	10-12 feet	6-10 feet
Furnishings/Landscaping/ Buffer Zone	6-8 feet	6 feet
Bicycle Facilities	See City, County, or Re	gional Bike Facility Plans

#### Table 6-5: Street Design – Major Transit Corridors

<sup>\*</sup> Exception: Where traveling through Areas of Consistency, reduce design speed objective by 5 mph.

Multi-Modal Corridors: Balance the competing needs of pedestrians, bicyclists, autos, and transit in street design and improvements by slowing auto traffic, minimizing curb cuts, and encouraging primary auto access to parking lots to be provided from intersecting streets. [ABC]

- a) Accommodate all users, providing safety and mobility for pedestrians, bicyclists, and people with physical disabilities.
- b) Where insufficient right-of-way exists within the Corridor, provide enhanced facilities for bicyclists and pedestrians along parallel streets.
- c) Within Centers or within 660 feet of transit stations, follow policy objectives in the "Centers & Stations" column in **Table 6-6**.
- d) For the remainder of the Corridor, follow policy objectives in the "Other" column in **Table 6-6**.
- e) See **Land Use Policy 5.1.11** for additional policies on Multi-Modal Corridors.
- f) See Urban Design Goal 7.1 for policy hierarchy for Centers & Corridors and Development Form and Priority Street Elements Matrices.

POLICY OBJECTIVE	CENTERS & STATIONS	OTHER
Access Management: Intersection Spacing: Left-in/Left-out Access: Right-in/Right-out Access:	Moderate Access Frequent intersections Few Few	Full Access Moderate intersections Moderate Moderate
Design Speed	30-35	35-40*
Minimum Peak Hour Auto Level of Service (LOS)	Е	D-E
Priority Travel Mode	Balance	Balance
Transit Accommodation	Shared	Shared
Signalized Intersections	Priority signals for transit No right turn lanes	Priority signals for transit Moderate right turn lanes
On-Street Parking	Preferred in Centers	On a case-by-case basis
Recommended Pedestrian Realm Elements	High priority	Medium priority
Pedestrian Connections	Maximize pedestrian connections to transit stations/stops and between adjacent developments	Maximize pedestrian connections to transit stations/stops and between adjacent developments
Clear Sidewalk Width	10-12 feet	6-10 feet
Furnishings/Landscaping/ Buffer Zone	6-8 feet	6 feet
Bicycle Facilities	See City, County, or Regional Bike Facility Plans	

Table 6-6: Street Design – Multi-Modal Corridors

<sup>\*</sup> Exception: Where traveling through Areas of Consistency, reduce design speed objective by 5 mph.

Commuter Corridors: Prioritize automobile travel in street design and improvements by allowing higher traffic speeds, managing access for autos and pedestrians, and improving safety for pedestrians at signalized intersections. [ABC]

- a) Within Centers or within 660 feet of transit stations, follow policy objectives in the "Centers & Stations" column in **Table 6-7**.
- b) For the remainder of the Corridor, follow policy objectives in the "Other" column in Table 6-7
- See Land Use Policy 5.1.12 for additional policies on Commuter Corridors.
- d) See Urban Design Goal 7.1 for policy hierarchy for Centers & Corridors and Development Form and Priority Street Elements Matrices.

POLICY OBJECTIVE	CENTERS & STATIONS	OTHER
Access Management: Intersection Spacing: Left-in/Left-out Access: Right-in/Right-out Access:	Moderate Access Frequent intersections Few Few	Limited Access Few intersections None Moderate
Design Speed	30-35	40-50*
Minimum Peak Hour Auto Level of Service (LOS)	D-E	D
Priority Travel Mode	Balance	Auto
Transit Accommodation	Shared	Shared
Signalized Intersections	Few right turn lanes	Moderate right turn lanes
On-Street Parking	Not preferred	Not preferred
Recommended Pedestrian Realm Elements	High priority	Low priority
Pedestrian Connections	Required from development to transit stations/stops and to adjacent developments	Required from development to transit stations/stops and to adjacent developments
Clear Sidewalk Width	10 feet	6 feet
Furnishings/Landscaping/ Buffer Zone	6 feet	6 feet
Bicycle Facilities	See City, County, or Re	egional Bike Facility Plans

#### Table 6-7: Street Design - Commuter Corridors

<sup>\*</sup> Exception: Where traveling through Areas of Consistency, reduce design speed objective by 5 mph.

#### Other Arterials: Coordinate transportation planning at the regional level for arterials not designated as corridors in the Comp Plan. [ABC]

- a) Plan land adjacent to arterial streets to minimize harmful effects of traffic on nearby roadways and development.
- b) Reduce the frequency of curb cuts along principal and minor arterials.
- c) Within Centers or within 660 feet of transit stations, follow policy objectives in the "Centers & Stations" column in **Table 6-8**.
- d) For the remainder of arterial streets, follow policy objectives in the "Other" column in **Table 6-8**.
- e) See also **Goal 6.2** below for multi-modal system policies.
- f) See Urban Design Goal 7.1 for policy hierarchy for Centers & Corridors and Development Form and Priority Street Elements Matrices.

POLICY OBJECTIVE	CENTERS & STATIONS	OTHER
Access Management: Intersection Spacing: Left-in/Left-out Access: Right-in/Right-out Access:	Moderate Access Frequent intersections Few Few	Full Access Moderate intersections Moderate Moderate
Design Speed	30-35	35-40*
Minimum Peak Hour Auto Level of Service (LOS)	D-E	D
Priority Travel Mode	Balance	Auto
Transit Accommodation	Shared	Shared
Signalized Intersections	Few right turn lanes	Moderate right turn lanes
On-Street Parking	Not preferred	Not preferred
Recommended Pedestrian Realm Elements	High priority	Low priority
Pedestrian Connections	Required from development to transit stations/stops and to adjacent developments	Required from development to transit stations/stops and to adjacent developments
Clear Sidewalk Width	10 feet	6 feet
Furnishings/Landscaping/ Buffer Zone	6 feet	6 feet
Bicycle Facilities	See City, County, or Regional Bike Facility Plans	

#### Table 6-8: Street Design - Other Arterial Streets

<sup>\*</sup> Exception: Where traveling through Areas of Consistency, reduce design speed objective by 5 mph.

## **Goal 6.2 Multi-Modal System**

Encourage walking, biking, and transit, especially at peak-hour commuting times, to enhance access and mobility for people of all ages and abilities.

#### **POLICY 6.2.1**

Complete Networks: Design and build a complete, well-connected network of streets and trails that offer multiple efficient and safe transportation choices for commuting and daily needs. [ABC]

- a) Prioritize investment in facilities for walking, biking, and transit.
- b) Provide safe and efficient transfers between transportation modes.
- c) Improve connectivity to provide route options and decrease distance to services for all users, particularly vulnerable populations, by reinforcing the street grid, providing pedestrian access points through subdivisions, and discouraging right-of-way vacations, etc.

- d) Discourage dead ends in order to improve pedestrian and bicycle access to transit and other destinations and reduce congestion by dispersing automobile traffic.
- e) Improve connections between transit stops and where people live and work through increasing active transportation options.
- f) Improve safe trails and biking infrastructure and ensure that these improvements are equitably distributed to increase access to and enjoyment of open space by all residents.

#### **ACTIONS**

6.2.1.1 Evaluate demand and capacity of bike, pedestrian, and transit service on a project-by-project basis for roads that experience or are designed to encourage a range of transportation modes. [ABC]

- **6.2.1.2** Follow FHWA guidance to identify, analyze, and prioritize opportunities for road diets, lane configuration changes, or other traffic calming projects. [ABC]
- **6.2.1.3** Revise subdivision standards to encourage and reinforce the complete transportation network and street grid for all travel modes. [A]
- 6.2.1.4 Implement design and traffic operation techniques to reduce travel times, such as priority signal timing, ITS, and for buses queue jumps and dedicated transit lanes.

  [A]
- 6.2.1.5 Fill bicycle and pedestrian network gaps to expand these network by prioritizing improvements along the HFIN and in vulnerable communities. [A]

**6.2.1.6** Leverage existing funding for roadway projects, Complete Streets, and other traffic-safety related projects/programs. [A]

#### **POLICY 6.2.2**

Complete Streets: Incorporate Complete Streets concepts and policies into the development, retrofit, and rehabilitation of all transportation infrastructure at all phases, including planning, scoping, design, implementation, and performance monitoring. [ABC]

- a) Use best practices for multi-modal design.
- b) Minimize conflicts between vehicular traffic and pedestrians and cyclists and incorporate traffic calming and safety measures for pedestrians and bicyclists.
- c) Apply best practices and national design guidance from sources such as the ITE Manual for Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities, NACTO Urban Street Design Guide, AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, NACTO Urban

- Bikeway Design Guide, and AASHTO Guide for the Development of Bicycle Facilities.
- d) See Street Design guidance in **Policies 6.1.4-6.1.9** above.
- e) See also Urban Design Goals 7.1 and 7.1 for streetscape and pedestrianaccessible design.

#### **ACTIONS**

- 6.2.2.1 Incorporate pedestrian and bicycle amenities and improvements, transit accommodations, and landscaping when designing and retrofitting arterials. [ABC]
- **6.2.2.2** Update the DPM to reference current best practice and design guidance to achieve Complete Streets principles. [A]

#### **POLICY 6.2.3**

Pedestrian & Bicycle Connectivity: Provide direct pedestrian and bicycle access to and circulation within Centers, commercial properties, community facilities, and residential neighborhoods. [ABC]

- a) Design streets, streetscapes, and sidewalks to enhance pedestrian and bicyclist mobility for commuting, recreation, and activities of daily living. [ABC]
- b) Preserve and maintain pedestrian, biking, and equestrian opportunities on neighborhood streets, in alleys, and along acequias. [ABC]
- c) Provide comfortable, barrier-free, direct pedestrian and bicycle routes to Transit Centers, transit stations, and transit stops. [ABC]
- d) Ensure pedestrian connections to private open space and civic spaces in Centers.
   [ABC]
- e) Design subdivisions to provide multiple vehicular and pedestrian access points. [ABC]
- f) Design pedestrian and bicycle circulation systems within private developments to fit the character of the site and minimize conflicts with vehicular traffic. [A]
- g) Invest in City-funded sidewalk improvements for safety and accessibility for all users, and especially people with limited mobility.

- h) See **Policy 6.2.1** above for complete networks.
- i) See Policy 6.2.4 Pedestrian Network below.
- j) See **Policy 6.2.5** Bicycle Network below.
- k) See Policy 6.5.2 below for ADA compliance.
- See Infrastructure, Community Facilities & Services Policy 12.4.2 for ADA compliance.

- 6.2.3.1 As development occurs along
  Commuter Corridors, consider
  grade-separated crossings,
  special signalization, and/or other
  alternatives that improve access
  for pedestrians and cyclists and
  improve safety for all modes of
  transportation. [ABC]
- **6.2.3.2** Analyze gaps in connectivity, prioritize improvement projects, and assess progress over time. [ABC]

#### **POLICY 6.2.4**

Pedestrian Network: Prioritize pedestrian travel, safety, and amenities above all other transportation modes on Main Street Corridors and streets within

## Downtown, Urban Centers, and Activity Centers. [ABC]

- a) Develop and maintain a safe, convenient, and visually pleasing pedestrian environment, ensuring adequate facilities for all users, especially children, senior citizens, and people with disabilities. [ABC]
- b) Encourage small-scale uses, pedestrianoriented site layout and design, and safe crossings at intersections and transit stops, stations, park and ride locations, and transit centers. [ABC]
- c) Prioritize pedestrian level of service, accommodations, and amenities over auto traffic speeds at transit stations, within Centers, and at crossings of limited-access and high-traffic arterials. [ABC]
- d) Implement and update the County's Pedestrian and Bicycle Safety Action Plan: http://www.bernco.gov/public-works/ pedestrian-bicycle-safety-study-actionplan.aspx. [BC]
- e) See Policy 6.5.2 below for ADA compliance.
- f) See **Land Use Goal 5.1** for Centers and Corridors policies.
- g) See **Urban Design Goal 7.1** for the Priority Street Elements Matrix.

h) See Infrastructure, Community Facilities & Services Policy 12.4.2 for ADA compliance.

#### **ACTION**

- 6.2.4.1 Develop and implement sidewalk and street design standards that define pedestrian level of service and improve pedestrian comfort and safety. [ABC]
- **6.2.4.2** Increase awareness of sidewalk repair rules, regulations, and reporting. [A]

#### **POLICY 6.2.5**

Bicycle Network: Promote an areawide bicycle and trail network for transportation and recreation that emphasizes connections among Centers and safe crossings at intersections. [ABC]

- a) Create a comprehensive, safe, and convenient network of bike routes, lanes, and trails, by incorporating bicycle facilities into all future transportation planning. [ABC]
- b) Prioritize safe and convenient connections for bicyclists among Centers, existing parks, trails, and Open Space that will

- result in a continuous and interconnected system of bikeways and trails. [ABC]
- c) Require bike facilities and trails as part of private developments to implement Rank
   2 Bikeways Facilities Plans. [ABC]
- d) Where bikeways and trails are planned along streets with high traffic speeds or volumes, including Commuter and Multi-Modal Corridors, provide buffered bike lanes and/or off-street trails to allow the greatest separation between cyclists and automobiles. [ABC]
- e) Prioritize trail and bikeway improvements in the County's Pedestrian and Bicycle Safety Action Plan and the City's Rank 2 Bikeways & Trails Facility Plan. [ABC]
- f) Design and develop bicycle facilities to meet safety considerations as provided in the LRTS Guide, ITE, NACTO, and/or AASHTO standards. [ABC]
- g) Incorporate the best and most innovative facilities that can be provided within right-of-way, project, and budget constraints. [A]
- h) Improve bicycle parking options in commercial areas, civic spaces, and recreation destinations. [A]
- i) See Policy 6.2.3 above for connectivity.

- k) See **Policy 6.7.2** below for coordination of the regional bicycle and trail network.
- k) See Land Use Goal 5.1 for Centers & Corridors policies.
- See Urban Design Goal 7.1 for the Priority Street Elements Matrix.
- m) See Infrastructure, Community Facilities & Services Policy 12.4.5 for Facility Plans.

- 6.2.5.1 Update design standards to reflect best practices and most recent City, County, and regional bicycle planning efforts. [ABC]
- **6.2.5.2** Add on-street bicycle facilities when existing arterials and collectors are reconstructed, resurfaced, or the median is rebuilt and sufficient right-of-way exists. [ABC]
- **6.2.5.3** Support and promote bike share programs in Centers and near transit stations. [A]

#### **POLICY 6.2.6**

Equestrian Network: Follow guidance on equestrian facilities in the *Bikeways & Trails Facility* 

Plan; the Bicyclist and Pedestrian Safety Action Plan; and the Parks, Recreation, and Open Space Plan. [ABC]

#### **POLICY 6.2.7**

## Transit Network: Prioritize transit travel and pedestrian safety, especially near transit stops and stations and intersections. [ABC]

- a) Locate Park and Ride facilities to serve areas with high auto congestion and design facilities to maximize auto access and minimize adverse impacts on single-family residential areas. [ABC]
- b) Design and invest in an efficient and reliable transit system that serves existing development and provides premium service in Centers and along Transit Corridors, with the highest level of service Downtown and in Urban Centers. [A]
- c) Make transit access easy, comfortable, convenient, safe, and more viable by providing direct routes, increasing frequency, achieving acceptable systemwide travel speeds, and employing new technology. [A]

- d) Provide the highest level of transit service, dedicated transit lanes, and amenities on corridors with transit-supportive land uses, intensities, and design; where ridership is expected to be greatest; or where auto congestion signals the greatest need for additional transportation options. [A]
- e) Employ strategies and technology, such as signal preference and preboarding fare systems, to improve travel times for transit on Premium and Major Transit Corridors, particularly for peak-hour travel. [A]
- f) Locate transit stations to maximize the number of residences and businesses within ¼-mile to expand and sustain transit ridership. [A]
- g) Design transit centers and stations to provide good lighting, shade, seating, information and wayfinding, and bicycle storage. [A]
- h) Improve safety of buses and bus stops for vulnerable populations (e.g., women and children, people with disabilities, other persons) by incorporating safe design strategies.
- i) See Policy 6.1.2 above for transitoriented development.

- j) See **Policy 6.2.3** above for pedestrian and bicycle connections to transit.
- k) See **Policy 6.2.4** above for the pedestrian network.
- See Goal 6.3 below for safe transportation systems.
- m) See **Policy 6.7.2** below for policies on regional transit coordination.
- n) See Land Use Goals 5.1 and 5.2 for policies to encourage high-density residential development, mixed-income residential, and a mix of employment and services near transit service.
- o) See **Urban Design Goal 7.1** for policies related to pedestrian and transitsupportive streetscape design.

- 6.2.7.1 Participate in regional efforts to coordinate transit planning and implementation among agencies and area jurisdictions, including identification of corridors for the MTP's Priority Transit Network.

  [ABC]
- **6.2.7.2** Prioritize investment to achieve regional mode share goals and to

- enhance service to Comp Plan and MTP Centers. [ABC]
- **6.2.7.3** Develop standards for transitsupportive mitigation measures for Transit Corridors as part of a Traffic Impact Study. [A]
- **6.2.7.4** Explore and invest in strategies to add capacity through priority signal timing queue jumps, and bus stop rebalancing to reduce travel times for buses. [A]

#### **POLICY 6.2.8**

# Auto Network: Prioritize automobile travel on Commuter Corridors and balance it with other travel modes on other streets. [ABC]

- a) Provide continuous, safe, and convenient vehicular circulation to achieve and maintain smooth traffic flow at steady, moderate speeds. [ABC]
- b) On Commuter Corridors and other autooriented arterials, provide convenient access to auto-oriented uses, minimize conflicts with pedestrians and cyclists, and

- provide safe and convenient pedestrian crossings. [ABC]
- c) On Commuter Corridors within Centers, prioritize the pedestrian network. [ABC]
- d) On transit and pedestrian-oriented arterials, balance auto traffic flow with other travel modes to achieve multimodal, mixed-use, environments. [ABC]
- e) Coordinate vehicle circulation throughout development sites, clearly define access points, and provide safe and convenient pedestrian walkways. [A]
- f) Encourage ridesharing programs. [A]
- g) Improve signal timing to improve circulation. [A]
- h) See MRCOG Access Control Policy for access-controlled arterials and intersections and Development Process Manual for access and intersection spacing standards for non-access controlled arterials. [A]
- i) See **Policy 6.1.3** above for auto demand.
- j) See also **Policy 6.1.8** above for Commuter Corridors.
- k) See **Policy 6.2.3** above for guidance on location of trails and bikeways.

- See Land Use Goal 5.1 for Centers & Corridors policies.
- m) See **Urban Design Goal 7.1** for the Priority Street Elements Matrix.

Freight Network: Prioritize truck routes and rail facilities as identified in the Metropolitan Transportation Plan, providing safe pedestrian crossings at intersections and limiting conflicts with roadways and abutting land uses. [ABC]

- a) Plan future rail spurs to minimize adverse impact on nearby single-family neighborhoods.
- b) Consider design interventions, such as grade-separated roadways, where there are documented safety issues at railroad crossings.
- c) See **Policy 6.6.3** below for freight infrastructure.
- d) See Land Use Policy 5.2.1 for the impacts of development on surrounding communities.
- e) See **Urban Design Goal 7.1** for the Priority Street Elements Matrix.

f) See MTP Map 3-14 for the Primary
Freight Network and Truck Restrictions:
<a href="http://www.mrcog-nm.gov/transportation/metro-planning/long-range-mtp">http://www.mrcog-nm.gov/transportation/metro-planning/long-range-mtp</a>

#### **POLICY 6.2.10**

Aviation: Provide adequate accommodations for domestic travel, shipping, and military purposes. [ABC]

- a) See Sunport Master Plan and Double Eagle II Master Plan.
- b) See MRCOG Joint Land Use Study.

#### **ACTIONS**

- 6.2.10.1 Study and plan the future of Double
  Eagle Airport II, including roadway
  alignments, interface with the
  Petroglyph National Monument,
  economic development impacts,
  environmental impacts, and
  selection for other reliever airport
  sites on a regional basis. [ABC]
- **6.2.10.2** Study and plan the future of the Albuquerque Sunport, including roadway alignments, interface with the Kirtland Air Force Base, economic development impacts,

environmental impacts, and selection for other reliever airport sites on a regional basis. [A]

## **Goal 6.3 Safety**

Plan, develop, operate, and maintain a transportation system that provides safe access and mobility for all roadway users.

#### **POLICY 6.3.1**

All Users: Use engineering, education, encouragement, enforcement, and evaluation to improve safety for pedestrians, cyclists, transit users, and motorists. [ABC]

- a) For each mode, minimize potential transportation/emergency response hazards such as grade crossings, obsolete street geometry, and inadequate street lighting. [ABC]
- b) Design streets for posted speed limit to align driver behavior with the intended character of the street and to maintain safe vehicular speeds, particularly in areas with high levels of pedestrian activity. [ABC]
- Signalize mid-block crossings of major streets at intersections with multiuse trails or bike routes, particularly

- in locations with high numbers of pedestrians and cyclists. [ABC]
- d) Incorporate on-street and reverse-angle parking to provide traffic calming and enhanced pedestrian and cyclist safety in areas with retail. [A]
- e) See **Urban Design Section 7.1.2.4** and **Policy 7.4.4** for description of and policy for reverse-angle parking.
- f) Prioritize equity, transparency, and accountability when making investments to improve transportation safety.

#### **ACTIONS**

- **6.3.1.1** Improve roadway and trail safety by reviewing and updating signage and striping. [ABC]
- **6.3.1.2** Coordinate with APD and/or BCSO on enforcement activities and programs. [ABC]

- 6.3.1.3 Support and expand bike education programs that encourage safety such as Bike to Work Day or community bicycle education centers. [ABC]
- **6.3.1.4** Perform before and after studies for projects involving complete streets improvements, lane reduction, restriping, signalization changes, or safety improvements. [ABC]
- 6.3.1.5 Maintain an all-weather roadway system, with improvements prioritized to achieve year-round access to existing and planned development in rural areas. [BC]
- 6.3.1.6 Establish a permanent funding source for the Vision Zero program to plan, design, implement, and maintain transportation infrastructure. [A]
- **6.3.1.7** Dedicate staff to implementing a Vision Zero program. [A]
- 6.3.1.8 Incorporate Vision Zero and proven safety countermeasures into scoping, planning, design, implementation, and evaluation for all transportation projects, with

- particular emphasis on projects along the HFIN and in vulnerable communities. [A]
- 6.3.1.9 Implement signal and/or operational modifications proven to reduce serious crashes at high crash intersections along the HFIN and in vulnerable communities. [A]
- 6.3.1.10 In the near term, implement low-cost, high impact safety countermeasures along the HFIN and vulnerable communities, while also planning for future, more costly transportation safety improvement projects. [A]
- 6.3.1.11 Convene an internal City of
  Albuquerque Vision Zero
  Working Group to coordinate
  and collaborate on traffic
  safety projects and ensure new
  transportation projects include
  safety countermeasures. [A]
- **6.3.1.12** Convene recurring fatal crash review meetings to understand fatal crash trends. [A]
- **6.3.1.13** Construct/reconstruct corridors and intersections using proven safety

- countermeasures to prioritize safety and vulnerable road users, and to provide more opportunities to better accommodate all roadway users. [A]
- **6.3.1.14** Continue to improve neighborhood traffic safety through the City's Neighborhood Traffic Management Program (NTMP). [A]
- 6.3.1.15 Train law enforcement officers on Vision Zero priorities, including equity, data, and reporting needs, and develop best practices for traffic enforcement focused on the most dangerous behaviors and locations. [A]
- **6.3.1.16** Support efforts to augment crash data with information on actual speeds, medical data, and traffic citation data. [A]

Pedestrians: Improve safety for pedestrians through street design. [ABC]

- a) Improve the comfort and safety of pedestrians in areas with high pedestrian volume, particularly at signalized and unsignalized crosswalks on arterials and collector streets, near schools, and in Centers. [A]
- b) Provide buffers between pedestrians and traffic (e.g. on-street parking, landscaped buffers, etc.). [A]
- c) Prioritize and incentivize public and private pedestrian-scale lighting to increase pedestrian visibility and security. [A]
- d) See **Policy 6.2.4** above for safety improvements for pedestrians.
- e) See Policy 6.5.2 below for ADA compliance.
- f) See **Urban Design Policy 7.2.1** for policy on pedestrian refuges in medians for wide and high-traffic streets.
- g) See Infrastructure, Community Facilities & Services Policy 12.4.2 for ADA compliance.

**6.3.2.1** Implement FHWA proven safety countermeasures, such as medians and pedestrian crossing islands,

- at intersections with high auto and pedestrian traffic levels and sufficient right-of-way. [ABC]
- 6.3.2.2 Coordinate with FHWA and MRMPO on pedestrian road safety assessments and implement recommended improvements at priority intersections. [A]
- 6.3.2.3 Remove obstructions and barriers to walking during transportation improvement projects, particularly in areas with narrow sidewalks and high levels of pedestrian activity. [A]

#### **POLICY 6.3.3**

## Cyclists: Improve safety for cyclists through street design. [ABC]

- a) See **Policy 6.2.5** Bicycle Network above for safety improvements for cyclists. [A]
- See Infrastructure, Community Facilities & Services Policy 12.4.5 for facility planning
- c) See County Pedestrian & Bicycle Safety Action Plan. [BC]
- d) See City Rank 2 Bikeways & Trails Facility Plan. [A]

## **Goal 6.4 Public Health**

Promote individual and community health through active transportation, noise mitigation, and air quality protections.

#### **POLICY 6.4.1**

Active Transportation: Promote options and mobility for walking, biking, and other non-motorized travel. [ABC]

- a) See Policy 6.2.3 Pedestrian & Bicycle Connectivity above for pedestrian and bicycle connections and mobility.
- b) See **Urban Design Goal 7.2** for policies that promote walkability.

#### **ACTION**

- 6.4.1.1 Continue and expand city and county programs and events that encourage and educate on the use of active transportation and pedestrian and bike safety. [ABC]
- **6.4.1.2** Elevate Vision Zero to a citywide policy that is coordinated with City

- leadership so that ongoing support is provided.
- **6.4.1.3** Track and document projects that support Vision Zero and develop best practices that can be included in other transportation projects.
- 6.4.1.4 Pair traffic/transportation education with roadway construction projects to educate the community on the importance of infrastructure changes, how to safely utilize and navigate those changes, and share information on how the community can support these efforts.
- 6.4.1.5 Educate City staff on and incorporate traffic safety best practices and countermeasures into the infrastructure project development and planning development review processes.

**6.4.1.6** Support walking, riding a bicycle, and taking transit among City employees through workplace programs, outreach and incentives.

#### **POLICY 6.4.2**

Air Quality: Reduce the adverse effects of automobile travel on air quality through coordinated land use and transportation that promote the efficient placement of housing, employment, and services and improve the viability of multi-modal transportation options. [ABC]

 a) Coordinate with MRMPO to track performance measures for the regional MTP Preferred Scenario for growth over time. [ABC]

- b) Coordinate with MRMPO and member agencies to work toward cooperative solutions to regional air quality issues. [ABC]
- c) Sustain efforts to convert city fleet vehicles to electric where feasible.
- d) See Policies 6.1.1 and 6.1.3 above for matching transportation and land use and reducing auto demand.
- e) See **Goal 6.2** above for policies to encourage a multi-modal system.
- f) See Land Use Goal 5.1 for Centers and Corridors policies.
- g) See also Resilience & Sustainability Goal13.5 for community health considerations.

- **6.4.2.1** Incorporate technologies to lower fleet vehicle emissions. [A]
- **6.4.2.2** Provide parking incentives for alternative fuel vehicles. [A]
- **6.4.2.3** Transition mass transit to zero emissions fuel sources. [A]

#### **POLICY 6.4.3**

Noise: Mitigate traffic noise along roadways using measures that represent a reasonable balance between public expenditure and social, economic, and environmental values of the community. [ABC]

#### **ACTIONS**

- 6.4.3.1 Require applicants to analyze noise impact of roadways on proposed noise-sensitive uses (e.g. hospitals, daycares, schools, and residences) adjacent to existing arterial streets. [ABC]
- 6.4.3.2 Analyze and mitigate projected traffic and noise impacts of proposed street widening and similar projects upon adjacent neighborhoods and uses. [ABC]

## **Goal 6.5 Equity**

Expand mobility by providing safe and connected networks for non-auto travel and public transit for low-income and vulnerable populations.

#### **POLICY 6.5.1**

Equitable Transportation Systems: Consider the needs of people of all ages and abilities in the design, construction, and operation of transportation systems. [ABC]

- a) Reduce household transportation costs by improving mobility and choice among modes. [ABC]
- b) Prioritize active transportation investments to underserved and underrepresented neighborhoods to respond to distinct needs within CPAs. [A]
- c) Prioritize transportation investments in Metropolitan Redevelopment Areas and in areas underserved by private development. [A]
- d) See **Policy 6.3.1** above for safety improvements.

e) See **Community Identity Goal 4.3** for priorities within each CPA.

#### **ACTIONS**

- **6.5.1.1** Assess transportation infrastructure and service within CPAs and engage communities to identify priorities. [A]
- **6.5.1.2** Track transportation investments in CPAs to ensure equitable public investment. [A]
- 6.5.1.3 Collaborate with a broad range of local community groups, including advocates for walking, riding bicycles, and vulnerable road user groups, to engage more stakeholders and expand the reach of Vision Zero initiatives. [A]
- **6.5.1.4** Collaborate with local organizations and support events that promote and advocate for walking, riding a

- bicycle, using mobility devices, and taking transit. [A]
- **6.5.1.5** Increase opportunities for people to take transit to events, including free fares and park-and-rides. [A]

#### **POLICY 6.5.2**

ADA: Exceed the minimum requirements of the Americans with Disabilities Act in order to provide reliable and comfortable mobility options. [ABC]

- a) Provide barrier-free sidewalks and curb ramps.
- b) Design intersections to accommodate people with different mobility levels and/ or physical impairments.
- Follow national best practices and apply PROWAG where appropriate for

- transportation infrastructure within the public right-of-way.
- d) See Infrastructure, Community Facilities & Services Policy 12.4.2 for ADA compliance.

## **Goal 6.6 Economy**

Invest in a transportation system that stimulates and supports job creation and business development and improves the movement of people, goods, and services.

#### **POLICY 6.6.1**

Accessing Jobs: Align transportation investments to improve connections to Centers and employment clusters. [ABC]

- a) See **Policy 6.6.3** below on improving freight connections.
- b) See Land Use Goal 5.1 for development patterns in Centers and along Corridors.
- c) See **Land Use Goal 5.4** for policies related to improving the jobs-housing balance.

#### **POLICY 6.6.2**

Transportation Options: Provide a balanced transportation system with effective transportation options to help retain and attract the workforce. [ABC]

- a) See **Goal 6.2** above for complete networks and multi-modal priorities.
- b) See **Land Use Goal 5.1** for land uses that support a balanced transportation system
- c) See Economic Development Goal 8.1 for attracting talent and businesses.

# Freight Movement: Manage congestion, especially along freight corridors, in order to allow efficient movement of goods and services. [ABC]

- a) Support freight movement so all areas of the city and county have access to goods and services. [ABC]
- b) Improve connectivity of airports to the freight and rail networks and support land uses and development patterns that bolster nearby employment opportunities. [A]
- c) See **Policy 6.2.9** above for the freight system.
- d) See Economic Development Goal 8.1 for attracting talent and businesses.

#### **ACTIONS**

6.6.3.1 Coordinate with other jurisdictions through MRMPO to explore solutions to improve freight access to Activity and Employment Centers on the West Side. [ABC]

- 6.6.3.2 Coordinate public and private efforts to develop regional capabilities to support cargo-oriented and logistics development. [A]
- 6.6.3.3 Work with constituent jurisdictions and the Mid-Region Council of Governments to assess whether there is adequate truck access to serve employment and commercial activities in the Volcano Heights Urban Center. Any proposed changes to truck restrictions should be considered with input from local stakeholders to ensure that such access does not impact adjacent neighborhoods or roadway design regulations. [A]

#### **POLICY 6.6.4**

Redevelopment: Leverage transportation investments to spur redevelopment and private investment along commercial corridors and Interstates. [ABC]

- a) Encourage streetscape and landscape design that provides a positive image at interchanges and access points. [ABC]
- b) Encourage the screening of equipment storage from the public right-of-way.
  [ABC]
- See Goal 6.1 above for land use and transportation integration, including policies about Corridor types.
- d) See **Urban Design Policy 7.3.3** for enhancing district identity.
- e) See **Urban Design Policy 7.6.2** for matching transportation infrastructure with development context.
- f) See **Economic Development Goal 8.1** for attracting talent and businesses.

## **Goal 6.7 System Effectiveness**

Implement and maintain an effective and efficient transportation system in a coordinated and cost-effective manner.

#### **POLICY 6.7.1**

Public-Private Coordination: Coordinate public and private sector investment, development, and transportation decisions so that future investments are consistent with the vision and principles of the Comp Plan and the regional MTP. [ABC]

- a) Integrate all transportation modes as development occurs, coordinating as necessary with property owners, City DMD, County Public Works, ABQ RIDE, MRMPO, and Rio Metro.
- b) Prioritize transportation projects that show high return on investment from lower construction and maintenance costs and higher property values and gross receipts taxes.

c) Increase the efficiency of existing streets in already developed areas before considering adding new roadway lanes.

#### **POLICY 6.7.2**

Regional Systems: Coordinate across transportation agencies to plan a transportation system for the region. [ABC]

- a) Coordinate with MRMPO to update and implement the MTP. [ABC]
- Follow design recommendations in the LRTS Guide for functional classification and appropriate access management strategies, roadway design guidelines, and guidance on right-of-way width. [ABC]
- c) Coordinate with MRMPO to provide regional connections for on-street bike lanes and multi-use trails. [ABC]

- d) Improve the energy efficiency of the transportation system over time, promoting a variety of transportation modes such as transit, para-transit, and railway systems; bicycle facilities and multi-use trails; and infrastructure for fuel efficient automobiles. [ABC]
- e) Work with MRMPO to assess the adequacy of river crossings based on the population projections and distribution. [ABC]
- f) Coordinate with Rio Metro and MRMPO to provide regional transit service. [A]
- g) See **Goal 6.2** above for policies related to mobility and transportation options throughout the region.

#### **ACTIONS**

6.7.2.1 Coordinate with MRMPO and Rio Metro to assess costs and benefits of regional transportation projects and assign cost sharing among affected jurisdictions. [ABC]

- 6.7.2.2 Coordinate with MRMPO to forecast travel demand and analyze transportation system capacity for CPAs to guide future transportation options and investments. [ABC]
- 6.7.2.3 Coordinate with MRMPO
  to implement the Preferred
  Scenario through recommended
  transportation strategies and action
  items in the MTP. [ABC]
- **6.7.2.4** Coordinate with MRMPO to assess needs for and alignments of additional major streets for undeveloped and underserved areas. [ABC]
- 6.7.2.5 Coordinate with Rio Metro,
  MRMPO and Bernalillo County to
  develop a region-wide, long-range
  transit plan. [A]
- 6.7.2.6 Explore the option of allowing
  Sun Van and DSA transportation
  to travel outside Albuquerque city
  limits to medical facilities more
  convenient for patrons living on the
  edge of city limits. [A]

Schools: Collaborate with Albuquerque Public Schools and State-chartered schools to provide safe access to school sites for all transportation modes. [ABC]



### **Goal 6.8 Context**

## Provide transportation investments that are responsive to context and natural setting.

#### **POLICY 6.8.1**

Natural and Cultural Context: Locate, design, and construct roads to minimize their impact to natural, historic, archaeological, or other cultural resources, including view corridors. [ABC]

- a) Design roadways to fit the topography of the area traversed as well as the scale of travel needs. [ABC]
- b) Limit vehicular crossings of arroyos. [A]
- c) Encourage "Scenic Corridors" and/or single-loaded streets as the preferred edges for Major Public Open Space and the Petroglyph National Monument. [A]
- d) See **Heritage Conservation Goal 11.3** for cultural landscapes.
- e) See Resilience & Sustainability Policy 13.1.3 for infrastructure design that considers climate change.

#### **POLICY 6.8.2**

Community Planning Areas: Provide transportation investments that are responsive to the distinct needs of each neighborhood and sub-area. [ABC]

- a) Consider policies and actions for individual corridor priorities within the context of the needs of the broader transportation network.
- b) Consider the needs for priority corridors in each CPA throughout ongoing planning efforts.
- See Community Identity Goal 4.3 for CPA priorities.
- d) See **Implementation Strategy 2** for CIP prioritization and regional coordination.



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