# Incorporated County of Los Alamos Public Works Department



# **Bicycle Transportation Plan**

Council Adopted \_\_\_\_\_, 2017

# Contents

Introduction/Executive Summary
Plan Goals3
Complete Streets4
Bike Routes5
Destination Connections5
Economic Development5
Applying for a "Bicycle Friendly Community" Award6
Health & Environmental Benefits of Bicycling6
Safety7
Design Policies and Guides7
Federal Design Guidance7
Development Code
County Legislation9
Bicycle Friendly Community9
The Five E's9
Bicycle Infrastructure Inventory & Completed Improvements
Types of Facilities
Multiuse Trails and Side Paths11
Sharrows13
Bike Lanes/Shoulders14
Planned Improvements15
2005 Plan Priorities15
New Bicycle Transportation Priorities16
Supporting & Related County Reference Documents
Public Information & Involvement Tasks and Schedule17
Exhibits
References

# Introduction/Executive Summary

On July 26, 2005, County Council endorsed the Transportation Board's recommendation of the Bicycle Transportation System, a document formalizing the practice of considering bicycle improvements during major maintenance, reconstruction or construction of roadway facilities and establishes bicycle routes and priorities. This document plan was produced through the Transportation Board's Bicycle Subcommittee. Along with numerous public meetings, the subcommittee issued polls to gauge citizen interest in bicycling as a form of transportation. The polls indicated that citizens favored adding bicycle and pedestrian infrastructure throughout the County and in a percentage comparable to other bicycle friendly communities that already use their bicycles as a form of transportation to school and work. The mission of the subcommittee was to connect cyclists from their homes to their destinations, particularly through collectors and arterials, and where possible, encouraging connectivity on State and LANL routes. The routes also focus on a 1-mile radius of local schools to address "safe Routes to School" concerns.

Over the years several bicycle facility improvements were implemented countywide, including some of the priorities listed in the 2005 document. In 2016, a citizen petition was brought before the County Council concerning bicycle trail access throughout the town site for citizens of all abilities. Subsequently, a subcommittee of citizens and staff was formed at the direction of the Transportation Board. From their involvement, a planning map was developed linking points of interest within the town site utilizing the existing transportation framework with potential off-street, multi-use paths and on-road improvements. On this map, a "High-Priority Corridor" was identified. The County Council has shown its continued support by endorsing this map for inclusion in the update and development of a Bicycle Transportation Plan. In January 2017 the Transportation Board requested that a bicycle subcommittee be formed to work towards this end. In February 2017, County staff from Public Works, Parks Recreation & Open Space, Community Development, and the County Manager's Office, along with Bandelier National Park's superintendent and interested citizens, began meeting to assemble a document aimed towards creating a comprehensive transportation network focusing on bicycle facilities.

# Plan Goals

More bicycle facilities, effective system, reduced barriers to bicycling.

Subcommittee objectives:

- Enhancing quality of life, tourism, economic development, i.e. events—refer to council strategic goals and comp plan goals
- Incorporate interpretive opportunities into the bicycle transportation system (geologic, history/homesteading, etc.)
- Enhance and facilitate bike use for residents and tourists
- Higher designation as bike friendly community by League of American Bicyclists
- Create more and better bikeways as part of comprehensive network
- Improve bicycle facility safety, design, and maintenance
- Improve crossings

- Provide bicycle parking
- Remove the "fear" of bicycling
- Improve public image as a safe mode of travel
- Increase bicycle use in the County

How:

- Incorporate bike facilities in new and existing roadways
- Provide connectivity (neighborhoods to destinations via public transportation, walking, etc.)
- Provide signage and online tools for wayfinding
- Use "Safe Routes to School"
- Create incentives to ride a bike
- Integrate the plan and need for bike facilities into planning stage for new development and redevelopment
- Get Business Buy-In Plan that supports economic development, recreation, and tourism goals
- Use recreational amenities and opportunities to tie into the transportation system
- Partner with local groups
- Include bicycle community at all public events, and give opportunities to educate and encourage the community about riding safely, following rules/traffic laws, etc.
- Help to create a system where all users could use a bike as their main form of transportation.

The Comprehensive Plan approved in 2016 has identified three key areas found to be valuable and the identity of Los Alamos as seen by the community. They are "Housing, Neighborhoods, and Growth," Development, Redevelopment, and Downtown," and "Open Space, Trails, and Mobility." The Bicycle Transportation Plan is being developed with the intention of enhancing these goals through the County.

### Complete Streets

The United States Department of Transportation identifies complete streets as "streets designed and operated to enable safe use and mobility for all users, including people of all ages and abilities, regardless of whether they are traveling as drivers, pedestrians or bicyclists or riding public transportation." Complete streets designs are developed to encourage slower speeds of vehicles and prevention of conflicts between all modes of transportation. Studies carried out by the National Complete Streets Coalition have shown that by implementing the Complete Streets model, local economies are stimulated. Motor-vehicle-related crashes that impact drivers, passengers, pedestrians, and cyclists **contribute** to an estimated 180 billion dollars in property damage and health impacts, as stated by the American public health association. Further, public transit stands to be subsidized by street designs that encourage walking and bicycling for transportation. Another element of complete streets includes trees, "which remove substantial volumes of carbon dioxide and other air pollutants, catch storm water, and reduce urban heat-island effects, along with creating safer and more sociable neighborhoods, contributing to a sense of community, economic viability, environmental sustainability and healthier people."

New Mexico Senate Memorial 35 was signed in January 2017, along with New Mexico House Memorial 29, recognizing that all local and tribal governments and state agencies are committed to the safety of

all users of roadways in promoting and implementing complete streets throughout New Mexico and that complete streets be recognized for its understanding that transportation is about moving people and connecting, supporting, and building vibrant communities. National 2015 statistics show 35,092 transportation fatalities, of which 5,376 were pedestrian fatalities—an increase of 7.2% from 2014, when New Mexico had the highest rate of pedestrian fatalities in the nation. It is also estimated that by 2030, New Mexico will be fourth in the nation with a population 65 years of age or older. Complete streets will provide our aging population with increased travel options with improved safety. The State of New Mexico currently has a complete streets leadership team consisting of members statewide with technical expertise to develop and advance policy to be implemented into projects to promote safety and mobility of all users.

Locally, resolution 10-32, "Policy for the design of public streets and rights-of-way in Los Alamos County," was developed with the complete streets guiding principles in mind. The policy establishes the goals for street, right-of-way and intersection design, and land use decisions to ensure they are mutually reinforced, creating synergy through promoting safety health, economic vitality, environmental sustainability, and livability throughout the community.

### **Bike Routes**

### **Destination Connections**

It is the goal of the Transportation Board's Bicycle Plan Subcommittee to work toward creating a bicycle system that connects all notable destination within the County, including residential, commercial, and parks and open space. In the Fall of 2016, the County Council approved a "High-Priority" route, by recommendation of the Transportation Board and its subcommittee, to respond to a citizen petition to develop routes that are safe for people of all abilities to connect to notable destinations in the downtown area of Los Alamos and several other points of interest in close proximity. These destinations include Fuller Lodge, Mesa Public Library, the Bradbury Museum, the Central Business District, Ashley Pond, the Nature Center (PEEC), and the Aquatic Center.

### **Economic Development**

This plan will aid in the expansion of the bicycle system within the County, enhancing connectivity and, in turn, economic development. With the recent creation of the Manhattan Project National Park, tourism is anticipated to increase within Los Alamos. It is the town's ambition to work with the National Park to aid in the establishment of tourist sites, walking tours, and other methods of sharing the story of Los Alamos. The Canyon Rim Trail is located, and planned to be located, relatively close to many of the sites, within view or "overlook," and can connect with an ancillary trail directly to sites with historic significance. The newly adopted High Priority route connects the planned portion of Canyon Rim Trail near 15<sup>th</sup> and 20<sup>th</sup> Streets crossing Trinity Drive and following through the downtown area, where notable points of interest are located. Economic Development projects currently in process are relatively close to potential trail routes and have the potential for future commercial development, an RV Park, and residential uses. This plan will enrich these initiatives, provide further economic opportunities for bike-share programs, and enhance current and potential future bike tourism events such as Endurofest, to increase Los Alamos' appeal as a tourist destination.

# Applying for a "Bicycle Friendly Community" Award

It is the goal of the County Council and the Transportation Board to become a Bicycle Friendly Community as designated by the League of American Bicyclists. In 2016 an application was submitted to the League requesting a designation. Los Alamos County received an Honorable Mention and recommendations for achieving a higher award status for a bicycle friendly community (Bronze through Diamond). A report card and a feedback report were issued to the County, discussing where the County can improve, implement new, and enhance existing areas to provide good steps to achieve a higher award. One notable mention was the need for a current bike plan that is being implemented. Both of these documents are exhibits to the plan.

The League sent out a public survey on behalf of the County, aiming to gauge bicycling interest in the community and how to improve. The results of the survey are attached hereto in the Exhibits portion of the plan. The survey compares data received from the respondents from Los Alamos County with a database of all BFC Survey Respondents in the year of the application (2016) and 2012 respondents of a NHTSA Survey. Los Alamos County respondents were asked how often they ride their bicycles and for what reasons, if they have had any bicycle safety training in the last 5 years, the proximity of bicycle facilities, their satisfaction of local government to implement facilities, and the safety factor within the community. Overall, Los Alamos County respondents answered similarly to those nationally. The majority of respondents ride at least once a month for recreation, exercise, and to commute to work. Training opportunities were not prevalent, and transportation bike facilities were typically close to half of the respondents, within a quarter a mile. The principal request for the local government is to add more bike lanes and paths. Slightly less than half of the respondents believe it is safe to ride a bicycle within their neighborhoods, while a measure closer to 15% believe it is unsafe, and the remainder say it depends (the main reasons being distracted drivers/riders and few bike lanes and paths). The survey highlights the need and desire for additional bicycle facilities.

# Health & Environmental Benefits of Bicycling

Bicycling is healthy, and riders are known to live healthy lifestyles, get sick less often, and feel less stressed. The National Center for Safe Routes to School gives the following health benefits for kids who ride or walk to school:

- Weight and blood pressure control
- Bone, muscle, and joint health and maintenance
- Reduction in risk of diabetes
- Improved psychological welfare
- Better academic performance

Environmental benefits are many for the community. The implementation of a bicycle transportation system improves transportation options for commuters, thus reducing carbon emissions with the reduction of motorized vehicles and resulting in reduced wear on roadway system. Bicycling is also a more cost efficient mode of transportation. Transit usage may increase with the need of bicyclists to make certain connections, for example White Rock to Los Alamos. Bicycle shops and other businesses,

such as bicycle delivery services, are possible with a comprehensive system and bring higher ridership. Tourism is also supplemented with bike events, bike sharing, rentals, and bike taxis.

# Safety

At a federal level, the USDOT launched the "Safer People, Safer Streets Initiative" in 2015. From this initiative, new resources and research were rolled out to address non-motorized safety issues and help communities create safer, better-connected bicycling and pedestrian networks. Safety experts, existing and new stakeholders, local officials, and the public were engaged to help get out the materials and put them to use to encourage safety in and around our streets, including at bus stops, transit stations, and other multi-modal connections. This initiative also put into place road safety assessments in every state. Local jurisdictions have the responsibility to ensure safety in the transportation network through those who plan, design, build, and maintain these facilities, as well as ensure that the public is made aware of laws and regulations; enforcement is key in this process. Locally officials can choose to sponsor legislation to law and enhance current laws to enhance the behavior, infrastructure, and vehicular safety.

In 2007 New Mexico implemented the Child Helmet Safety Act. This act requires that all persons under 18 year of age wear helmets when riding bicycles, skateboards, scooters, skates, and tricycles while on a public facility.

The University of New Mexico's Center for Injury Prevention Research & Education (CIPRE) is conducting a project in conjunction with the NMDOT called the New Mexico Pedestrian and Bicycle Safety Initiative Program. This program supports community organizations to improve pedestrian and bicycle safety through education, engineering, and encouragement. This program also conducts training for law enforcement agencies, engineers, community leaders, and pedestrian advocates statewide. CIPRE distributes information on outreach events and initiatives. Their website has links to government agency resources such as Federal Highway Administration (FHWA) and National Highway Transportation Safety Administration (NHTSA) policies regarding bicycle safety.

# Design Policies and Guides

# Federal Design Guidance

In 2012 AASHTO published the 12<sup>th</sup> edition of the Guide for the Development of Bicycle Facilities updated from the previous volume published in 1999. This guidance manual highlights and clarifies elements needed to make bicycling safe, comfortable, and convenient as a form of transportation. Information found in this guide includes accommodating bicycle travel and operation. Sound guidelines are outlined to design facilities that will meet the needs of both bicyclists and drivers. "Good design practice involves engineering cost-effective solutions that balance safety and mobility for all transportation modes, along with preservation of scenic, aesthetic, historic, cultural, and environmental resources."

The Manual on Uniform Traffic Devices (MUTCD), incorporated by reference into the Code of Federal Regulations, is recognized as the national standard for all traffic control devices installed on any street,

highway, bikeway, or private road open to public travel. Part 9 is dedicated to traffic control for bicycle facilities, including: signing, markings, and signalization.

National Association of City Transportation Officials (NACTO) is a non-profit association representing the nation's large cities and facilitates the exchange of best practices and transportation insights. They promote sharing data and building a common vision with cities around the nation to raise the state of engineering practice for urban design. NACTO has published the Urban Bikeway Design Guide to provide cities with current solutions to create complete streets in urban settings. This guide offers treatments **define "treatments"** not referenced within the AASHTO Guide, although most are permitted under the MUTCD. FHWA issued a memorandum officially supporting the use of the document in 2013. The guide is laid out with three levels of guidance: Required, Recommended, and Optional.

These guidance manuals include many bicycle facility treatments for consideration into the local system, including, but not limited to, signal actuators for cyclists at intersections, at-grade crossings, grade-separated crossings, and Green Pavement Markings per AASHTO Guidance.

### **Development Code**

Where developments have open space, developers should be required to provide adequate pedestrian and bicycle facilities and, to the greatest extent possible, connect to public open space and the urban trail system. No impediments to future trail connections may be caused due to development.

The Comprehensive Plan as related to trails outlines several policies directed at economic vitality, land use, and infrastructure. To inspire economic vitality, the following three policies were adopted: (1) develop and expand trails connecting downtown to surrounding open space, (2) create or improve trails that serve residents of all ages, and (3) connect County trails to non-County-owned trails adjacent to/near County land. Pursuing federal and state funds; obtaining a bicycle friendly community designation; and developing policies for off-trail foot, bicycle, and equestrian travel would be strategies to fulfill the policies. Land Use policies of promoting safety for pedestrians and bicyclists on paved trails and streets and ensuring that private development is required to provide trail connections that may not create impediments to trail connections were set forth. These policies would be accomplished using the following four strategies: (1) map trails, identify gaps in trail connections, and propose connection strategies; (2) develop a strategy for the prioritization of gap connections; (3) consider alternate means of circulation, especially for the Americans with Disabilities Act (ADA) individuals, including golf carts in historic areas; and (4) consider signage or speed controls to slow bicyclists when they are on same path as pedestrians. The infrastructure policies consist of (1) creating designated, safe, convenient, and wellmaintained bike and pedestrian pathways and sidewalks; (2) incorporating multi-use trails whenever possible; (3) recognizing and acknowledging the difference between bicycling for recreation and bicycling for transportation; and (4) ensuring safe trail crossings (especially at arterials) and weigh cost/benefits of underpasses and/or overpasses. It is anticipated that by examining the potential to expand the paved and accessible Rim Trail and to link the Rim Trail to Mesa Trail while considering wider easement requirements for trails, the infrastructure policies will be accomplished.

Mobility is also a core theme of the comprehensive plan and discusses the adoption of the complete street concept while incorporating facilities that accommodate all users of all abilities. Because bicycling as a means of transportation has growth significantly nationwide through many New Mexico communities and is of great interest in Los Alamos County, it is anticipated that bicycling to work from

White Rock and around Los Alamos could become increasingly more popular. Because of the town's largest employer's proximity to housing in Los Alamos and with the economic development goal of increasing housing within the town site, the need for a more comprehensive bicycle transportation network is anticipated.

### **County Legislation**

Resolution No 10-32 established the policy for the Design of Public Streets & Right-of-Way in Los Alamos County. This policy was developed with the complete-streets guiding principles in mind. The policy establishes goals for street, right-of-way, and intersection design. The policy also ensures that all street-design and land use decisions are mutually reinforced, creating synergy throughout the County. The promotion of safety, health, economic vitality, environmental sustainability, and livability throughout the community is significant to the policy.

# **Bicycle Friendly Community**

The League of American Bicyclists was founded in the 1880s to advocate for paved roads. Today they aim to provide safer roads, stronger communities, and a bicycle friendly America for everyone. In 2016 Los Alamos County applied through the League's voluntary application process for award status, and the League presented the County an Honorable Mention as a "Bicycle Friendly Community." The award status is good for 4 years and has five award designations: Bronze, Silver, Gold, Platinum, and Diamond. Being designated a "Bicycle Friendly Community" is not clear cut, which this allows communities to play on their strengths to make bicycling better for their respective communities.

Upon adoption of this plan and several other programs, such as the completion of an ADA Transition Plan. Currently, the County is in the process of developing an ADA Transition Plan to be delivered to the New Mexico Department of Transportation in 2017.

# The Five E's

The League of American Bicyclists follow the 5 E's: Engineering, Education, Encouragement, Enforcement, and Evaluation & Planning. The surveys they have conducted indicate that the most tangible evidence of a great location for bicycling is the presence of welcoming infrastructure. The most bicycle friendly communities have well-connected bicycle networks using quiet neighborhood streets, conventional and protected bike lanes, shared-use trails, and policies to ensure connectivity that continues to shape the system with future development and infrastructure in place which is properly maintained over time. what is properly maintained over time? System? Development? Etc.

Having the skill and confidence to ride a bike is an important step in promoting the use of bicycle facilities. The League has a Smart Cycling program with over 2000 instructors around the country who deliver education programs. Public education of the laws of the road for both bicyclists and drivers are key components to educating users. Local government and state governments can promote sharing of the road through programs handed down to the public through their respective departments, such as motor vehicle and public education.

Encouragement is needed to build a bicycling community. Local businesses, universities, health organizations, and local governments can promote bicycling throughout the community in many ways. National Bike Month is in May; communities can elect to celebrate by holding community events throughout the month of May or on a certain day of the week in May. Maps of the trail and bicycle system available at local businesses and other effortless locations, as well as signage and wayfinding for users, enables people to find ease in using bicycling as a means of transportation. Bike sharing is also a way to encourage riders; tourism can drive the need for bike sharing or rentals, as most tourists do not travel with their bicycles. Los Alamos County incorporates three national parks and is rich with nature and scenic routes for bicycling.

Currently, several county departments have begun to plan "Bike to Work" events for May 2017 as a means to bring awareness and encourage bicycling as transportation. A proclamation declaring May as Bike Month and supporting Bike to Work events is being drafted for approval by the County Council. These events will be a coordinated effort between County groups, such as the Transportation Board, Planning & Zoning Board, Public Works Department, Parks Recreation & Open Space, Police, Fire, and Transit, as well as beyond the County with employers and businesses such as Los Alamos National Laboratory (LANL), Los Alamos Public Schools (LAPS), Los Alamos Medical Center, the University of New Mexico–Los Alamos (UNM-LA), the New Mexico Department of Transportation (NMDOT), the Northern Pueblos Regional Transportation Planning Organization (NPRTPO), bike shops (in Los Alamos as well as nearby communities) local bike clubs, and bike vendors.

Equitable laws and regulations for bicyclists and drivers set a good platform to ensure enforcement of the transportation system rules. Law enforcement should understand these laws and know how to enforce them to ensure public safety for all users. Officers on bicycles also ensure that law enforcement understands the issues cyclists face while using the transportation system adjacent to vehicles. For example, the "Five Foot Rule" in Chapter 38, section 545 of the Municipal Code states, "When approaching or passing any person riding on a bicycle, the operator of a motor vehicle shall proceed with caution and shall pass such bicycle rider at reasonable speed and maintain a safe distance, no less than five feet from the operator of the bicycle."

Active citizens and support by the local government contribute to a community's success in developing a seamless bicycle network. Evaluation and Planning includes compiling data and updating a comprehensive bicycle master plan to ensure dedicated funding sources and continued planning toward a more comprehensive system. Committees and a program coordinator working together can ensure decision makers prioritize bicycle system projects on a regular basis.

# Bicycle Infrastructure Inventory & Completed Improvements

### Types of Facilities

Multi-use trails are typically physically separated from vehicle traffic either by open space or a barrier. Multi-use trails can be used for pedestrians, bicyclists, and all non-motorized users.

Sidepaths are multi-use paths adjacent and parallel to a roadway and typically are intended for two-way travel.

Bike lanes are a portion of the roadway designated for exclusive use by bicyclists and are shown by pavement markings and signage. Bike lanes are intended for one-way travel adjacent to lanes designated for vehicles; a buffer may exist between the lanes to create a higher level of comfort for bicyclists.

Shared lanes are designated with signs, such as "share the road," and markings called "sharrows" or "shared lane arrows." These designations are used on low-speed streets where cyclists are encouraged to take the lane.

## Multiuse Trails and Side Paths

In 2009 the County Council approved \$1.2 million in Capital Improvements Plan (CIP) Funds for the initial phase of the Canyon Rim Trail from the Parajito Cliffs area on the south side of NM 502 to Fire Station 6, approximately a 7,600-foot-long section. This section of trail was opened to the public in the late summer of 2010. The project was very popular and brought interest for continuing the trail to the west along the Canyon; thus the Canyon Rim Trail Master Plan was created, which was adopted by the County Council in 2011. As part of the plan, new extensions were established from where it ended at the time near Fire Station 6 to Oppenheimer Drive. The goal of the plan was to give staff a mechanism to begin working on projects leading to construction of the extensions within the plan and for pursuing funding for this work.

Phase II was funded for design and construction was supplemented from County CIP funds. The project was awarded a Transportation Arterial Program (TAP) grant from the NMDOT for the remaining construction funds to construct the trail from Fire Station 6 to the east side of the Kroger property. This project was completed in the winter of 2016. As part of the Kroger development, a portion from west of DP Road to the west side of that development (near Knecht Street) was constructed, and in 2016 a connection from the trail end north to Knecht Street was built as part of the Knecht Reconstruction Project. The trail today extends a length of approximately 2.7 miles.

Efforts to continue the trail west have also begun with an engineering task order underway for easement acquisition and preliminary engineering for a portion of trail from the Knecht Street connection to 20<sup>th</sup> Street. Last, a 2018-19 TAP application has been submitted to the NMDOT for funding of an underpass at the trailhead near Camino Entrada under NM 502. A letter announcing a potential award is anticipated in March 2017. Both of these projects are identified in the Comprehensive Plan on its "Needed Trail Connections Map" as trail connections with known gaps.

At start of Construction of Canyon Rim Trail Phase II Project





After Completion









The Canada del Buey Trail is a side path paved from State Road 4 to Rover; from Rover to the Overlook Park entrance, it is a crusher fine trail. This trail was constructed in the summer of 2012.



After Construction

### Sharrows

Sharrows have been applied on many streets that have low speeds and low volumes of traffic, where bicycling and vehicle travel are expected to share a lane. Typical placements of sharrows are on streets where shoulders or bike lanes do not or cannot exist because of right-of-way restrictions, parking, or transit stops. A low-speed design of 35 mph or less is encouraged. These markings are desirable in a more urban setting, where a higher level of guidance to both bicyclists and motorist is required.

Central Avenue has been reconstructed through the downtown area with a boulevard-type design for including on street parking, streetscapes with plantings and furniture, and wide sidewalks for pedestrian traffic. The roadway is typically two lanes, aside from where turn lanes are necessary. The design evokes

a low speed where bicyclists and motorists can navigate the roadway collectively. Sharrows are used throughout this roadway to give bicyclists and motorists guidance.

Sherwood Boulevard in White Rock has sharrows installed; the segment between NM 4 and Aztec Road has no shoulders and is a low-speed roadway. Need better example. Aztec Road and NM 4 have two segments: one south, near Smith's and one north, near LANB.

### Bike Lanes/Shoulders

In 2011, NM 4 from Rover to Pajarito Road was reconstructed, and bike lanes were included in the development and construction of the project.

Before construction





After Construction







# Planned Improvements

# 2005 Plan Priorities

The table below shows the priority streets identified in the 2005 Bicycle Transportation Plan and treatments that are currently in place on these routes. When the plan was developed the list below of routes was provided as routes that would provide good connectivity to the bicycle transportation system.

Table 1.0 - 2005 Bicycle Transportation Plan "Priority Streets"

Priority 1 - Arterials:		
Route	Current Status	
Diamond Drive (San Ildefonso Road to Omega Bridge)	Bike Lanes	
Central Avenue (NM 502 to Rose Street)		
Oppenheimer to NM 502	Sharrows	
Rose to Oppenheimer	Bike Lanes	
Canyon Road (Rose Street to Diamond Drive)	Bike Lanes	
Trinity Drive - East Road from Diamond Drive to Airport Road	No Bicycle Facilities (Right of Way restrictions)	
Priority 2 – Major Collectors:		
Arkansas Avenue and North Road	Shared Use	
Grand Canyon Drive	Shared Use	
Rover Boulevard and Meadow Lane	Shared Use	
San Ildefonso North (Diamond Drive to the end of Barranca Road)		

Diamond Drive to Chamisa Street	Bike Lanes	
Chamisa Street to Barranca Road	Shared Use	
San Ildefonso Road South (Diamond Drive to Sioux Street)	Bike Lanes	
Thirty-Eighth Street	Bike Lanes	
Villa	Shared Use	
Priority 3 – Minor Collectors:		
Bryce Avenue	Shared Use	
Canyon Road (NM 502 to Central Avenue)	Shared Use/Striped Shoulders	
NM 502 to Rim Road	Shared Use	
Rim Road to Central Avenue	Striped Shoulders	
North Mesa Road	Striped Shoulders	
Sherwood Boulevard		
NM 4 to Aztec Road	Sharrows	
Aztec Road to Piedra Loop	Single Striped Bike Lane (one side of street)	
Western Area Loop: Trinity Drive from Diamond Drive to 48th Street, 48th Street to Sandia Drive, and Sandia Drive to Diamond Drive	Shared Use	
Urban (Diamond Drive to North Road)	Shared Use	

# New Bicycle Transportation Priorities

Urban Bike Path (Reference Map)

Canyon Rim Trail, Including Underpass at Camino Entrada and NM 502

NM 502 Crossings & Bike Lanes

Tract A-19

On-Road Operational Improvements

Sharrows

**Re-striping** 

**Road Diets** 

Crossings

Wayfinding

Bicycling as a means of transportation

Connections to recreational trails, recreational centers, points of intersect, etc.

# Supporting & Related County Reference Documents

- 2005 Bicycle Transportation Plan
- 2016 Comprehensive Plan
- 1998 Pedestrian Transportation Plan
- 2011 Canyon Rim Trail
- Bandelier Trail Plan

# Public Information & Involvement Tasks and Schedule

T-Board history and upcoming meetings, April 6, 2017.

Parks & Recreation Board in April 2017 and Planning and Zoning March 29, 2017

Potential for online surveys and open forum public meetings. Transportation Board review and recommendation to County Council is tentatively scheduled for May 4, 2017.

County Council review and adoption in May/June 2017

# Exhibits

2005 Bicycle Transportation Plan

# LOS ALAMOS COUNTY

### BICYCLE TRANSPORTATION SYSTEM

The Transportation Board recommends to Council that the following roads be adopted as the Los Alamos County Bicycle Transportation System. Throughout this Bicycling Transportation System, bicycling improvements (appropriate to each facility) should be implemented when major maintenance, reconstruction, or construction is performed on the roadway facilities included below.

Bicycling improvements should be appropriate to the type of roadway in question, such as wider shoulders on highways or bike lanes on arterials (if possible); and should include bicycle-friendly intersection improvements, uniform signing, and appropriate markings; and should avoid the use of bicycle unfriendly infrastructure such as parallel gratings, poorly placed rumble strips, or use of the gutter-pan as part of the travel lane. In addition to improvements, appropriate preventative maintenance must continue to be performed throughout the system such as routine sweeping, pothole patching, and snow removal. Furthermore, the County should review the Bicycle Transportation System periodically to ensure that any new developments are bicycle-friendly.

### <u>PRIORITY I</u>

#### Arterials:

- a. Diamond Drive from San Ildefonso Road to Omega Bridge.
- b. Central Avenue from NM 502 to Rose Street.
- c. Canyon Road from Rose Street to Diamond Drive.
- d. Trinity Drive East Road from Diamond Drive to Airport Road.

### PRIORITY II

Major Collectors:

- a. Arkansas Avenue and North Road.
- b. Grand Canyon Drive.
- c. Rover Boulevard and Meadow Lane.
- d. San Ildefonso North from Diamond Drive to the end of Barranca Road.
- e. San Ildefonso Road South from Diamond Drive to Sioux Street.
- f. Thirty-eighth Street and Villa.

### PRIORITY III

Minor Collectors:

- a. Bryce Avenue.
- b. Canyon Road from NM 502 to Central Avenue.
- c. North Mesa Road.
- d. Sherwood Boulevard.
- e. Western Area Loop: Trinity Drive from Diamond Drive to 48<sup>th</sup> Street, 48<sup>th</sup> Street to Sandia Drive, and Sandia Drive to Diamond Drive.
- f. Urban from Diamond Drive to North Road.

Los Alamos County supports and promotes regional bicycle transportation and therefore, encourages connectivity through adjoining jurisdictions. It is recognized that the County does not own the following "Regional Connectors" listed below. That said, the County should cooperate with neighboring government entities, to the extent possible, to develop appropriate regional bicycling infrastructure.

### REGIONAL CONNECTORS

Department of Transportation Roads:

- a. NM State Road 4.
- b. NM State Road 501.
- c. NM State Road 502.

LANL Roads:

- a. Pajarito Road.
- b. East Jemez Road (Truck Route).
- c. Diamond Drive from Omega Bridge to Pajarito Road.
- d. Bikini Atoll Road from West Jemez Road to Mercury Road.
- e. Mercury from Pajarito Road to Bikini Atoll Road.
- f. West Road from Diamond Drive to NM 501.

Motion passed, 5-0.

(End of motion text)

### Background

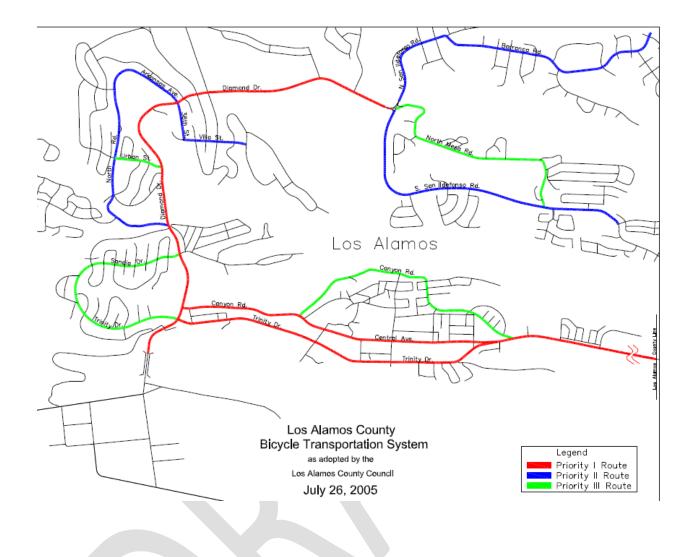
Several years ago, Los Alamos County tasked the Bicycle Subcommittee of the Transportation Board to gauge citizen interest in bicycling and to recommend a bicycle master plan to Council through the Transportation Board. As part of this task, the County commissioned two polls to gauge interest in bicycling, especially as a form of transportation, and to solicit input as to the kinds of bicycling improvements desired.

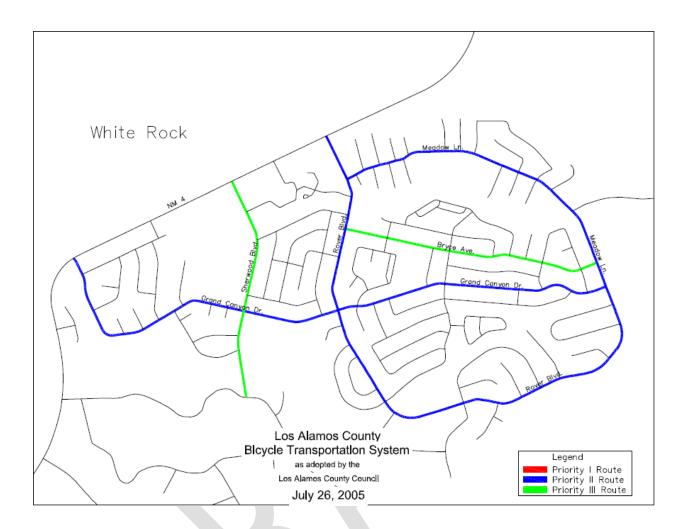
The results of these polls were encouraging. The 2002 Community Perception Study (Research and Polling, Inc.) indicated that 10% of respondents rode to work or school more than 50 times per year and another 9% rode between 6 and 50 times per year. This number compares favorably with bicycling-friendly communities such as Gainesville, Florida; Eugene, Oregon; Boulder, Colorado; and Madison, Wisconsin (FHWA-PD-92-041).

A second survey "<u>County-Wide Bike Survey Findings</u>" was commissioned by the County, sent by county mailing, and tabulated by the Bicycle Subcommittee. Drawing from 1000 questionnaire responses from households representing all age and neighborhood groups, the Bike Survey found that there is a strong desire for safe and favorable bicycle and pedestrian infrastructure throughout Los Alamos County. Over two-thirds of the respondents favor some combination of on-road and off-road bicycling improvements. Safety concerns were by far the greatest response noted by both recreational and commuter bikers with Diamond Drive, Trinity Drive, and Pajarito Road being cited as particularly dangerous routes.

Drawing on these polls, numerous public meetings and internal deliberations regarding the best match of Los Alamos' infrastructure with our desire to provide safe and efficient *bicycling as transportation*, the Bicycle Subcommittee submitted its recommendations, unanimously, to the full Transportation Board for consideration at its April 2005 meeting. The above motion is the Transportation Board's motion regarding bicycle routings. Our mission is simple: that our transportation system should connect cyclists from their homes to their destinations (schools, downtown, place of employment) in a bicycling friendly manner. Therefore, these routes were chosen to connect residential communities to destinations. Particular attention was taken to improving collectors and arterials (and to the extent possible, encourage regional connectivity on State and LANL routes) since these often have high traffic flows and sometimes lack shoulders or bike lanes. Equally important, we focused on roads surrounding our schools (approximately within a one mile radius for non-bused children) in order to address "Safe Routes to School" concerns.

A more comprehensive vision statement (<u>Creating a Bike and Walk Friendly Los</u> <u>Alamos</u>) from the Bicycling Subcommittee can be found online at the following location: <u>http://www.labikes.org/bsc/labikeplan.asp</u>.









INCORPORATED COUNTY OF LOS ALAMOS RESOLUTION NO. 10-32

### A RESOLUTION ON THE POLICY FOR THE DESIGN OF PUBLIC STREETS AND RIGHTS-OF-WAY IN LOS ALAMOS COUNTY

WHEREAS, the Los Alamos County Council has established six (6) main Strategic Goals, three (3) of which are "Enhance Environmental Quality and Sustainability", "Improve Transportation and Mobility", and "Diversify the Economy/Revitalize White Rock and Los Alamos Downtowns"; and

WHEREAS, the Council has established a series of Strategic Objectives to carry out these goals, including objectives to "Incorporate smart growth concepts", "Pursue communitywide independence from hydrocarbon energy sources", "Promote and expand regional transit organization", "Develop a Transportation Master Plan", and "Improve downtowns by attracting at least \$30 million of private investment and making available \$6 million of public funds"; and

WHEREAS, recent advances in the practice of traffic engineering and urban planning have developed new "best practices" for the design of streets that better accommodate the needs of private vehicles, transit riders, pedestrians, cyclists, and those with disabilities, while enhancing safety and convenience for all users; and

WHEREAS, a consistent policy on the development of streets and rights-of-way in the County that supports consideration of all modes of transportation during the design process will help to achieve Council's three aforementioned Strategic Goals.

**NOW, THEREFORE, BE IT RESOLVED** by the Council of the Incorporated County of Los Alamos that the "Policy for the Design of Streets and Rights-of-Way in Los Alamos County" (Attachment "A") shall be adopted as the official policy of the County.

PASSED AND ADOPTED this 9th day of November, 2010.

ARODA/

COUNCIL OF THE INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO

Name Michael Wismer

Michael Wismer Council Chair

ATTEST:

Jahet Foster Los Alamos County Clerk



# Policy on the Design of Public Streets and Rights-of-Way in Los Alamos County

#### 1. Purpose and Vision

The purpose of this policy is to ensure that in the process of designing new streets and rights-ofway or redesigning or reconstructing existing ones:

1.1. Street and right-of-way design and land use decisions are mutually reinforcing, to create effective synergy between streets and rights-of-way and land uses.

1.2. A comprehensive approach to street and right-of-way planning and design provides sufficient capacity and safe and comfortable travel for expected levels of motorists, bicyclists, pedestrians, transit riders, and operators of other evolving modes of transportation, such as low speed vehicles.

1.3. Street and right-of-way design provides transportation choices while promoting safety, health, economic vitality, environmental sustainability, and livability throughout the community.

1.4. Street and right-of-way designs incorporate published engineering and best planning practices.

#### 2. Applicability

2.1. This policy along with other related plans, codes, and regulations shall apply to the design of all new and rebuilt streets, roads, sidewalks, and similar paved public rights-of-ways. The policy does not apply retroactively to streets and rights-of-way that otherwise are being resurfaced or repaired.

2.2. All potential streets, rights-of-way and intersection elements to be considered under this policy are subject to context and appropriateness of surrounding and future land uses. Certain constraints such as lack of right-of-way, or topography may prohibit the use or require refinement of design element options.

2.2.1. Aspects of this policy may be waived if cost of accommodation is excessively disproportionate to the need or probable use.

2.2.2. A well defined process for granting exceptions will be developed that includes review by senior level department heads in DPW and Community Planning with concurrence by their respective Boards and Commissions. This policy shall also be taken into account when considering future codes and regulations.

#### 3. Implementation

3.1. This policy establishes the goals for street, right-of-way, and intersection design guidelines that will be part of the Comprehensive Transportation Plan for Los Alamos County.

3.1.1 Guidelines for cross-sections, speeds, functional and aesthetic design elements for new and reconstructed streets and rights-of-way, including the design components that create the desired character of various streets or street segments will be set appropriately considering the overall function of the street or right-of-way in the context of surrounding land uses.

3.1.2 Street and right-of-way design guidelines will include street and intersection design elements and their intended purpose, as well as outline the approach to evaluating the tradeoffs among competing users and uses of the street right-of-way.

3.1.2 Developers and designers shall document how elements of this policy were taken into consideration during design and provide justification for elements recommended by or appropriate to the project and its surrounding land uses but not included in the recommended design, subject to County review and acceptance.

3.2 The requirements for development review and approval currently required by code should be updated as needed to implement this policy.

3.2.1 The Los Alamos County Public Works Construction Standards and current designmanuals will be revised and updated in a periodic manner consistent with the evolution of best practices. The Director of Public Works will be responsible for this process. Reference should be made to existing design guides, such as those issued by AASHTO, state design standards, and the Americans with Disabilities Act Accessibility Guidelines.

3.2.2 The County's Development Code should be updated as necessary.

3.3 This policy shall be incorporated into existing and future transportation related documents.

3.4 The public will be informed and involved during all stages of the planning and design process to ensure that the perspectives of all stakeholders are heard and seriously considered.

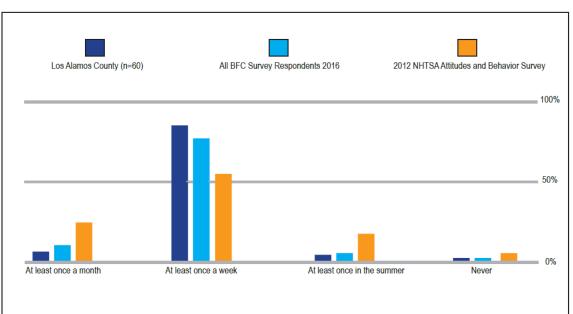
Bicycle Friendly Community Feedback Survey Results



Q1: On average during the summer months, how often do you use a bicycle?

This question approximates Question 27 from the 2012 NHTSA Attitudes and Behavior survey: "On average, during the summer months, how often do you use a bicycle?" with the answer options of:

- At least once a week
- At least once a month
- · Less than once a month
- Never





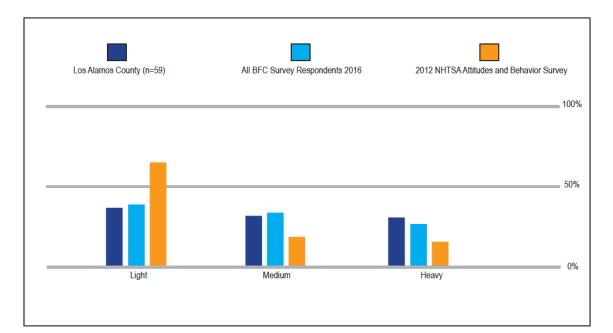
#### BICYCLE FRIENDLY ३२,₌२१ ≻₀ 🗖 **FEEDBACK**

Q2: Thinking about the past 30 days, about how many of those days did you ride a bicycle?

This question approximates Question 4 from the 2012 NHTSA Attitudes and Behavior survey: "Thinking about the past 30 days, about how many of those days did you ride a bicycle?" That question asked for numerical answers, but grouped answers into three groups:

» Light (1-7 days)
 » Medium (8-19 days)

» Heavy (20-31 days)



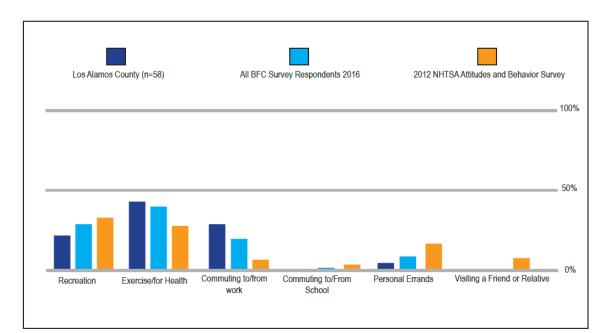


#### BICYCLE FRIENDLY -"4 **> 🛛 🖪** 💰 **FEEDBACK**

Q3: If you rode a bicycle at least once in the past 30 days, what was the main purpose of the last trip you took on a bicycle?

This question approximates Question 7 from the 2012 NHTSA Attitudes and Behavior survey: "What was the main purpose of this trip?" with the answer options of: » Commuting to work or school » Required for my job

- » Recreation
- » Exercise/for my health
- » Personal errands (to the store, post office, and so on)
- » Drop off/Pick up someone » Visit a friend or relative

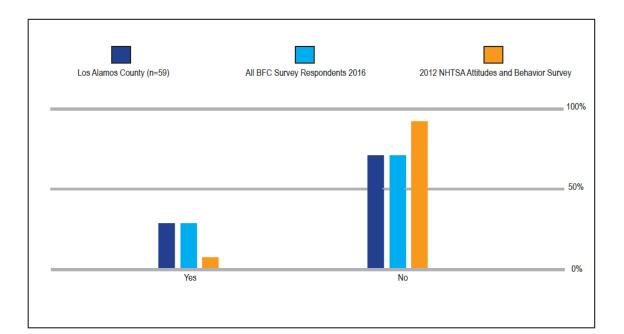


#### BICYCLE FRIENDLY ्ष 🔸 📊 **FEEDBACK**

### Q4: In the past five years, have you received any training in bicycling safety?

This question approximates Question 20 from the 2012 NHTSA Attitudes and Behavior survey: "Now I'd like to find out how people learn about bicycling safety. In the past five years, have you received any training in bicycling safety?" with the answer options of: » Yes

» No







Q5: Are bike paths, that is, paths away from the road on which bikes can travel, available within a quarter mile of where you live?

This question approximates Question 31 from the 2012 NHTSA Attitudes and Behavior survey: "Are bike paths available within a quarter mile of where you live?" with the answer options of: » Yes

» No

Los Alamos County (n=56) AI BFC Survey Respondents 2016 2012 NHTSA Attitudes and Behavior Survey

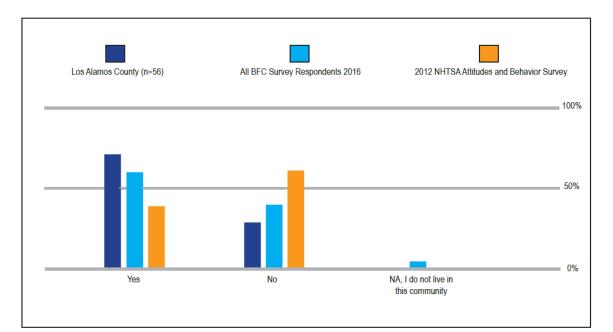


#### BICYCLE FRIENDLY 객 🔭 🖪 **FEEDBACK**

Q6: Are bike lanes, that is, marked lanes on a public road reserved for bikes to travel, available within a quarter mile of where you live?

This question approximates Question 34 from the 2012 NHTSA Attitudes and Behavior survey: "Are bike lanes available within a quarter mile of where you live?" with the answer options of:

» Yes » No



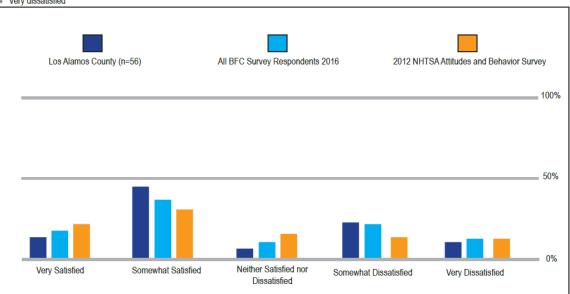


#### BICYCLE FRIENDLY ₹₹\$, ¤¶ **→ <u>n</u> |¶ (** FEEDBACK

Q7: How satisfied are you with how your local community is designed for making bike riding safe?

This question approximates Question 45 from the 2012 NHTSA Attitudes and Behavior survey: "How satisfied are you with how your local community is designed for making bike riding safe? Are you (read 5-1)?" with the answer options of:

- » Very satisfied
- » Somewhat satisfied
- » Neither satisfied nor dissatisfied
- » Somewhat dissatisfied
- Very dissatisfied »



#### BICYCLE FRIENDLY **FEEDBACK**

Q8: Please rank the changes, if any, would you like to see your local government make in your community for bicyclists?

### 1 = the change you'd like to see most

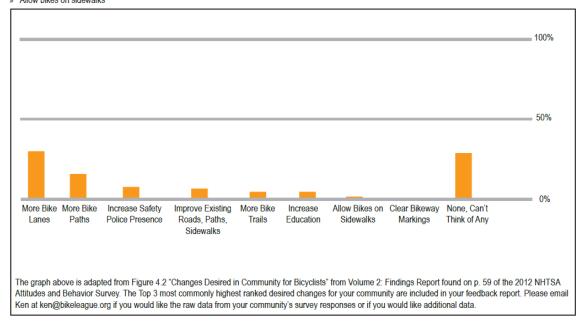
This question approximates Question 46 from the 2012 NHTSA Attitudes and Behavior survey: "What changes, if any, would you like to see your local government make in your community for bicyclists?" with the answer options of: » Don't allow bikes on sidewalks

- » More bike trails
- » More bike paths
- » More bike lanes

» Other (specify)

» Allow bikes on sidewalks

» None, can't think of any

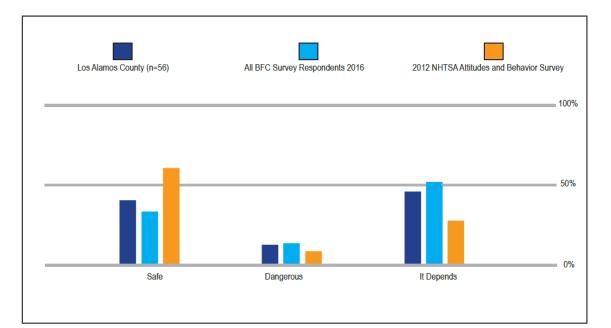


#### BICYCLE FRIENDLY A) **FEEDBACK**

Q9: Is it safe or dangerous to ride a bicycle in your neighborhood or does it depend?

This question approximates Question 91 from the 2012 NHTSA Attitudes and Behavior survey: "Is it safe or dangerous to ride a bicycle in your neighborhood or does it depend?" with the answer options of:

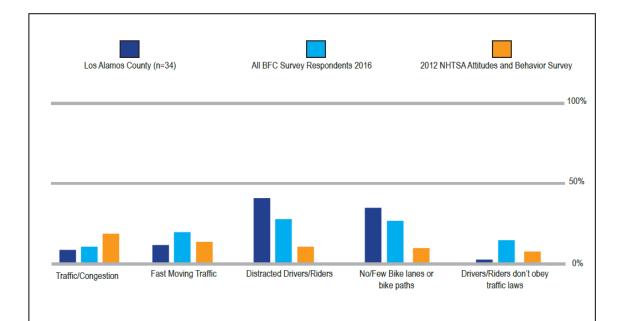
- » Safe
- » Dangerous
  » It Depends



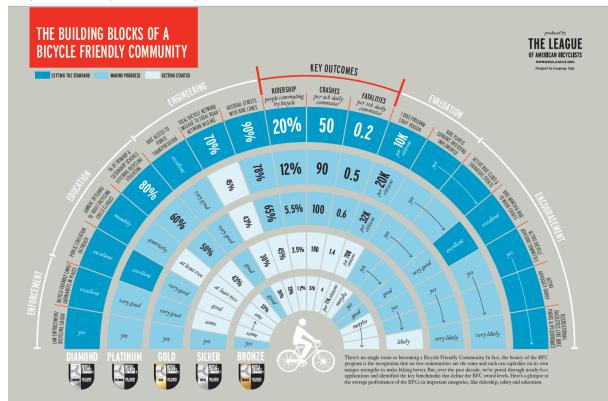


Q10: If you answered dangerous or it depends above, why do you feel it is dangerous to ride a bicycle in your neighborhood?

This question approximates Question 92 from the 2012 NHTSA Attitudes and Behavior survey: "Why do you feel it is dangerous to ride a bicycle in your neighborhood?" with the answer option to give an open-ended response.



Bicycle Friendly Community Matrix for Award Designation "The Building Blocks of a Bicycle Friendly Community"



## The League of American Bicyclists 2016 BFC Report Card



# LOS ALAMOS COUNTY, NM

TOTAL POPULATION 18000 TOTAL AREA (sg. miles) 109.0

Average Bronze

POPULATION DENSITY

Los Alamos

County

# OF LOCAL BICYCLE FRIENDLY BUSINESSES

0

# OF LOCAL BICYCLE FRIENDLY UNIVERSITIES 0

## 10 BUILDING BLOCKS OF A BICYCLE FRIENDLY COMMUNITY

	-	-
High Speed Roads with Bike Facilities	20%	110%
Total Bicycle Network Mileage to Total Road Network Mileage	25%	105%
Bicycle Education in Schools	AVERAGE	VERY GOOD
Share of Transportation Budget Spent on Bicycling	9%	20%
Bike Month and Bike to Work Events	AVERAGE	NEEDS IM- PROVEMENT
Active Bicycle Advocacy Group	YES	YES
Active Bicycle Advisory Committee	MEETS EVERY TWO MONTHS	MEETS AT LEAST MONTHLY
Bicycle-Friendly Laws & Ordinances	AVERAGE	VERY GOOD
Bike Plan is Current and is Being Implemented	YES	SOMEWHAT
Bike Program Staff to Population	1 PER 145K	1 PER 18K

## **CATEGORY SCORES**

ENGINEERING Bicycle network and connectivity	4/10
EDUCATION Motorist awareness and bicycling skills	4/10
ENCOURAGEMENT Mainstreaming bicycling culture	3/10
ENFORCEMENT Promoting safety and protecting bicyclists' rights	3/10
EVALUATION & PLANNING Setting targets and baving a plan	4/10

KEY OUTCOMES	Average Bronze	Los Alamos County
RIDERSHIP Percentage of commuters who bike	1.4%	3.6%
SAFETY MEASURES CRASHES Crashes per sok bicycle commaters	1207	o
SAFETY MEASURES FATALITIES Fatalities per vok bicycle commuters	21	o



Congratulations on approving a bicycle and pedestrian system map developed by the Transportation Board's Bicycle Subcommittee for inclusion in an updated bike plan. Continue work to create a robust bike plan that will set the stage for continual improvements for people who bike and walk in Los Alamos County.

Develop methods to clearly communicate progress on bicycle plans and other key metrics to inform citizens about the accomplishments and return on investment of improvements for bicycling and walking.

» The current on-street bicycle network includes many wide outside lanes. Consider lane diets or ways to upgrade those wide outside lanes to bicycle facilities more suitable to use by people of all ages and abilities. Better bicycle facilities will complement the bike share system that is being pursued. High quality bike facilities and wayfinding will help people who are not used to biking in Los Alamos feel comfortable and confident.

Adopt the NACTO Urban Bikeway Design Guide. This will make it easier for city staff to propose and implement bicycle facility designs that have been shown to improve conditions for people who bike in other cities throughout the United States.

Improve Bike Month activities by increasing engagement with employers, such as Los Alamos National Lab, and community groups to create a variety of events.

## LEARN MORE » WWW.BIKELEAGUE.ORG/COMMUNITIES SUPPORTED BY Planet bike. AND LEAGUE MEMBERS

The League of American Bicyclists 2016 BFC Feedback Report





#### About the Bicycle Friendly Communitys Program

The Bicycle Friendly Community (BFC<sup>5M</sup>) program provides a roadmap to improve conditions for bicycling and the guidance to make your distinct vision for a better, bikeable community a reality.

The Bicycle Friendly Community program was created in 2003 and since that time more than 800 communities have applied for recognition and for feedback on how to improve their communities for people who bike. There are five award levels that communities can reach – bronze, silver, gold, platinum, and diamond. Regardless of a community's award level, each community receives feedback and a report card providing insights into how they can improve. Bicycle Friendly Community awards are recognized for four years and each community must apply every four years to maintain their recognition. Currently recognized communities can be found in our award database: <a href="http://bikeleague.org/bfa/awards#community">http://bikeleague.org/bfa/awards#community</a>.

#### About the Bicycle Friendly America™ Program

2

The Bicycle Friendly Community<sup>au</sup>, Bicycle Friendly State<sup>au</sup>, Bicycle Friendly Business and Bicycle Friendly University<sup>au</sup> programs are generously supported by program partner <u>Planet Bike</u> and members of the League of American Bicyclists. To learn more about building a Bicycle Friendly America, visit <u>http://www.bikeleague.org/BFA</u>

The League of American Bicyclists is leading the movement to create a Bicycle Friendly America for everyone. As leaders, our commitment is to listen and learn, define standards and share best practices to engage diverse communities and build a powerful, unified voice for change.





Congratulations! The League of American Bicyclists has designated Los Alamos County, NM as a Bicycle Friendly Community at the Honorable Mention level. Our Bicycle Friendly Community review panel was very pleased to see the current efforts and dedication to make Los Alamos County a safe, comfortable, and convenient place to bicycle.

We strongly encourage you to use this feedback to build on your momentum and improve your community for bicyclists.

There may also be initiatives, programs, and facilities that are not mentioned here that would benefit your bicycling culture, so please continue to try new things to increase your ridership, safety, and awareness.

### The key steps for Los Alamos County, NM are on your Bicycle Friendly Community Report Card.

This Report includes additional feedback generated by the answers in your application and results from surveys conducted in your community.

### Contents

Engineering	
Policies and Design Standards	
End-of-Trip Facilities	
Bicycle Access to Public Transportation	
Off-Street Bicycle Facilities	
On-Street Bicycle Facilities	
Other Bicycle Accommodations	
Bike Sharing7	

Other Bicycle-related Amenities7
Education7
Youth Bicycle Education7
Adult Bicycle Education
Motorist Education
Bicycle Safety Education Resources 9
Encouragement
Encouragement Policies, Programs and Partnerships9
Route-Finding Support9
Bicycle Culture and Promotion
Access to Bicycle Equipment and Repair Services 10
Enforcement
Public Outreach 11
Bicycle-Related Training for Law Enforcement Personnel 11
Bicycle-Related Laws 12
Bicycle-Related Enforcement Practices and Programs
Bicycle Safety Policies and Programs13
Crash and Fatality Reporting
Evaluation & Planning
Staffing and Committees13
Planning, Funding, and Implementation14
Evaluating Ridership
Evaluating the Bicycle Network14



Feedback from Local Reviewers:	
Number of Local Respondents	
Top 3 Changes that local respondents would like to see in Los A	lamos
County	16
Average Top 3 Changes from all Bicycle Friendly Community ap	plicants
(nationwide)	
Other Suggested Improvements	
Barriers and Hazards	
Keep up the good work on	



## BICYCLE FRIENDLY COMMUNITY

## Engineering

The most visible and perhaps most tangible evidence of a great place for bicycling is the presence of infrastructure that welcomes and supports it. Survey after survey shows that the physical environment is a key determinant in whether people will get on a bike and ride. The most advanced Bicycle Friendly Communities have well-connected bicycling networks, consisting of quiet neighborhood streets, conventional and protected bike lanes, shared use trails; policies to ensure connectivity and maintenance of these facilities; and secure, convenient and readily available bike parking.

In this section you can find more information about how your community compares to other Bicycle Friendly Community applicants in various aspects of the Engineering category. Use this information to understand your community's strengths and weaknesses and the best places to invest in order to improve your community for people who bike.

#### **Policies and Design Standards**

Your community's score in this sub-category was 38% of the highest community score in this sub-category. This subcategory is worth 12.5% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

> Adopt bicycle facility selection criteria that increases separation and protection of bicyclists based of levels of motor vehicle speed and volume

Develop a design manual that meets current NACTO standards or endorse the NACTO Urban Bikeway Design Guide.

#### End-of-Trip Facilities

Your community's score in this sub-category was 9% of the highest community score in this sub-category. This subcategory is worth 12.5% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

Ensure that the standards for bike parking conform to APBP guidelines.

Establish a mechanism that prioritizes bicycle infrastructure investments in low-income/minority neighborhoods. Develop a protocol of engaging with low-income/minority community stakeholders prior to implementation.

Create regulations that require bike parking for new developments and major renovations of existing developments. Consider including provisions for assessing bike parking in communities that aren't currently slated for development or revitalization.

Pass an ordinance that would require larger employers to provide shower and locker facilities.

As you increase and improve bicycle parking consider how to increase the diversity of bicycle parking types, particularly to accommodate long-term and short-term parking at transit and commercial districts; larger bicycles, such as cargo bikes; and electrically-assisted bicycles.

#### **Bicycle Access to Public Transportation**

Your community's score in this sub-category was 63% of the highest community score in this sub-category. This subcategory is worth 5% of the points in the Engineering category. The recommendation(s) below would help you improve your score.



Your responses did not trigger any feedback for this subcategory. Our feedback is based upon your answers in the application. To improve your score for this subcategory please refer to your application and see where you may be able to improve or contact us at bfa@bikeleague.org with any questions.

#### **Off-Street Bicycle Facilities**

Your community's score in this sub-category was 48% of the highest community score in this sub-category. This subcategory is worth 22% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

> Your community reported fewer paved off-street bicycle facilities per square mile than the average of other applicants, which was .84 miles of paved off-street path per square mile. Bicycle networks work best when they are easily accessible and provide safe connections to important areas of a community. This data may indicate that some people in your community may find it hard to access your off-street paths or that your offstreet paths are not prevalent throughout your community. Continue efforts to build a system of on- and off-street bicycle facilities that meet the needs of your community.

#### **On-Street Bicycle Facilities**

Your community's score in this sub-category was 30% of the highest community score in this sub-category. This subcategory is worth 28% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

> Develop a system of bicycle boulevards, utilizing quiet neighborhood streets, that creates an attractive, convenient, and comfortable cycling environment welcoming to cyclists of all ages and skill levels. Bicycle

Boulevards are similar to signed bike routes, but include more pro-active changes to the roadway to make the routes low-speed and optimized for people who bike. Use the Bicycle Boulevards section of the NACTO Urban Bikeway Design Guide for design guidelines.

Create buffered bike lanes that provide additional protection for bicyclists by clearly demarcating areas to avoid, such as the "door zone," and providing increased separation on higher speed or higher volume roads. They are an important tool for creating a safe and comfortable bicycle network suitable for people of all ages and abilities.

Build protected bike lanes where possible to provide a safe option for bicyclists on roads with higher speeds, high bicycle traffic volumes, and/or factors such as multiple lanes, high traffic volumes, high speed traffic, high demand for double parking, and high parking turnover.

Build raised cycle tracks where appropriate to provide a safe option for bicyclists on roads with higher speeds, high bicycle traffic volumes, and/or factors such as multiple lanes, high traffic volumes, high speed traffic, high demand for double parking, and high parking turnover.

#### Other Bicycle Accommodations

Your community's score in this sub-category was 28% of the highest community score in this sub-category. This subcategory is worth 10% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

> Install a bicycle wayfinding system with distance and destination information at strategic locations around the community, integrating preferred on-street routes and off-street facilities.



#### Bike Sharing

Your community's score in this sub-category was 0% of the highest community score in this sub-category. This subcategory is worth 5% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

> We generally recommend bike share systems for communities with over 30,000 residents. The success of a bike share system often hinges on the density of bike share stations, potential users, and potential destinations. In smaller communities or more spread out communities it can be more difficult to have favorable conditions for a bike share system. With that said, many smaller, rural, or spread out communities have created bike share systems and providing bikes at low cost or on an as needed basis has great potential to allow more people to bike more often. Consider the needs of your community and whether a bike share system might be helpful

#### Other Bicycle-related Amenities

Your community's score in this sub-category was 58% of the highest community score in this sub-category. This subcategory is worth 2.5% of the points in the Engineering category. The recommendation(s) below would help you improve your score.

> Provide adequate lighting along streets and key shared-use paths to allow for safer bike commuting before dawn and after dusk.

#### Education

Offering a lot of ways for people to get the skills and confidence to ride is a key part to building great places for bicycling. At the community level this begins with bicycle-safety education being a routine part of public education. Communities should also offer options for adults looking to improve their biking skills with everything from online tips, brown bag lunch presentations and in-depth on-bike training opportunities. The League's Smart Cycling program, with more than 2,000 League Cycling Instructors around the country, is a great resource in delivering high quality education programs. It is also vital to make motorists and cyclists aware of their rights and responsibilities on the road through public education campaigns that promote the Share the Road message.

In this section you can find more information about how your community compares to other Bicycle Friendly Community applicants in various aspects of the Education category. Use this information to understand your community's strengths and weaknesses and the best places to invest in order to improve your community for people who bike.

#### Youth Bicycle Education

Your community's score in this sub-category was 55% of the highest community score in this sub-category. This subcategory is worth 35% of the points in the Education category. The recommendation(s) below would help you improve your score.

> Congratulations! It is a credit to your community that you ensure all elementary school students are provided with the opportunity to learn to ride a bicycle. This practice will help each student be able to make physical activity an integral part of their life.

> Work with local bicycle groups and interested parents to develop and implement a Safe Routles to School program for all schools, including middel schools, which includes in-school education and routes to school. Bicycle-safety education should be a routine part of education, for



students of all ages, schools and the surrounding neighborhoods should be particularly safe and convenient for biking and walking.

Congratulations! It is a credit to your community that you ensure all high school students are provided with the opportunity to learn to ride a bicycle. This practice will help each student be able to make physical activity an integral part of their life.

Provide on-bicycle education opportunities in schools. There is no better way to learn to ride than to experience riding a bicycle in a controlled setting with a trained instructor. Providing on-bike instruction to all students ensures that all students are able to learn to ride in the best possible setting regardless of the availability of a bicycle in their household.

Create a basic "learn to ride" class for your community. This type of class provides basic bicycle education, such as how to position yourself on the road, how to signal your intentions, how to cross a street, and how to make turns.

Provide bicycle education opportunities focused on the needs and concerns of parents and families. Parents play a key role in whether and how often children and youth ride. By providing family-oriented classes parents and children can learn safe riding practices and other bicyclerelated skills together and become more comfortable riding as a family and individuals.

#### Adult Bicycle Education

Your community's score in this sub-category was 38% of the highest community score in this sub-category. This subcategory is worth 30% of the points in the Education category. The recommendation(s) below would help you improve your score. Offer regular bicycling skills training opportunities for adults or encourage your local bicycle advocacy group or bike shop to help. There are options from short videos and 1-2 hour courses to more in-depth training incorporating in-classroom and on-bike

Provide a welcome packet for new residents that includes information on bicycle routes and bicycle commuting in your community. Studies have shown that people are most open to changes in their commute mode when they start a new job or move residences. New residents should be made aware of how they can bike in their new community so that they understand their options for recreation and transportation.

Create a Bicycle Ambassador program in your community. These programs a great way to normalize bicycling for transportation and recreation with the goal of getting more people to consider bicycling more often. Bicycle Ambassadors programs should contain at least 2 of the following elements: 1) Ambassadors are trained on safe bicycling practices, 2) Ambassadors are present at community events, 3) Ambassadors can be requested for private events, 4) Ambassadors model good behavior by riding with highly visible signage to identify themselve as ambassadors, and 5) Ambassadors are trained on public engagement to welcome questions from potential bicyclists.

Provide a variety of targeted bicycle events to engage people of color, seniors, and other demographic groups that may benefit from nontraditional or group-specific bicycle events. Targeted events may help to encourage groups that have specific concerns about bicycling or which have not previously been engaged in supporting bicycling improvements.

#### **Motorist Education**

Your community's score in this sub-category was 63% of the highest community score in this sub-category. This subcategory is worth 25% of the





points in the Education category. The recommendation(s) below would help you improve your score.

> Engage taxi drivers, and on-demand ride services, by distributing decals or other materials to remind those drivers of bicycle-vehicle collisions that are associated with taxis, such as dooring collisions with exiting taxi passengers.

#### **Bicycle Safety Education Resources**

Your community's score in this sub-category was 13% of the highest community score in this sub-category. This subcategory is worth 5% of the points in the Education category. The recommendation(s) below would help you improve your score.

> Your responses did not trigger any feedback for this subcategory. Our feedback is based upon your answers in the application. To improve your score for this subcategory please refer to your application and see where you may be able to improve or contact us at bfa@bikeleague.org with any questions.

#### Encouragement

Communities play a critical role in encouraging people to ride by giving them a variety of opportunities and incentives to get on their bikes. This can be done through the celebration of National Bike Month<sup>\*\*\*</sup> and Bike to Work Day, producing community bike maps, route finding signage, bicycle-themed celebrations and rides and commuter challenges.

In this section you can find more information about how your community compares to other Bicycle Friendly Community applicants in various aspects of the Encouragement category. Use this information to understand your community's strengths and weaknesses and the best places to invest in order to improve your community for people who bike.

#### **Encouragement Policies, Programs and Partnerships**

Your community's score in this sub-category was 17% of the highest community score in this sub-category. This subcategory is worth 10% of the points in the Encouragement category. The recommendation(s) below would help you improve your score.

> Your responses did not trigger any feedback for this subcategory. Our feedback is based upon your answers in the application. To improve your score for this subcategory please refer to your application and see where you may be able to improve or contact us at bfa@bikeleague.org with any questions.

#### **Route-Finding Support**

Your community's score in this sub-category was 78% of the highest community score in this sub-category. This subcategory is worth 5% of the points in the Encouragement category. The recommendation(s) below would help you improve your score.

> Your responses did not trigger any feedback for this subcategory. Our feedback is based upon your answers in the application. To improve your score for this subcategory please refer to your application and see where you may be able to improve or contact us at bfa@bikeleague.org with any questions.

#### **Bicycle Culture and Promotion**

Your community's score in this sub-category was 32% of the highest community score in this sub-category. This subcategory is worth 75% of the



points in the Encouragement category. The recommendation(s) below would help you improve your score.

> Create an Earn-a-Bike program that teaches essential bicycle repair skills to youth and adults. In an Earn-a-Bike program participants learn about bicycle parts and how to make necessary repairs to their own bicycle. At the conclusion of the program, participants take home their newly refurbished bicycle as well as many lifelong skills.

> Create challenges for students biking to school such as intra- or interschool competitions for the number of trips by students. Challenges could also feature different types of bicycling, such as BMX or mountain biking.

Create a community Bike to Work Day or Week to serve as a focus for Bike Month activities and involve employers within the community in promoting biking. Bike to Work Days can take many forms, with many having an event in a central public plaza, stations in the community with food and/or drinks, and promotions such as t-shirts and prizes for people who register to bike to work.

Encourage or support bike valets at public events so that more people can bike to local events. Bike valets provide secure and scaleable parking for people arriving by bike, alleviating any worry associated with locking a bike in a public place or finding a place to lock up. Encouraging more people to arrive to major events by biking and walking can improve the traffic associated with major events and reduce the parking problems that events can create.

Create a Bike to School Day or Week to organize schools, parents, and students to promote bicycling and understand how to bike to school safely. Many communities use a Bike to School Day as an inter-school competition to see which school can have the high Engage public figures to show support for bicycling and improvements that make bicycling more safe and comfortable by participating ina bicycle ride. A mayor-led or Council-led ride can highlight recreational opportunities in the community, recent or future projects, or lead up to Bike to Work Day activities. Many Bike to Work Days include elected officials speaking at centrally located plazas where bicyclists are invited to conareaate. eat breakfast. and drink coffee.

Encourage local businesses to provide discounts for customers arriving by bicycle or promote existing bicycle discount programs.

Help people consider the many ways that bicycling can be a solution for themselves and their community through a public education campaign about the benefits of biking. Bicycling has many benefits and those benefits resonate with different audiences. Target messages to resonate with the problems in your community that can be addressed by biking, such as public health issues, environmental concerns, traffic congestion, or economic development.

Offer a Ciclovia, Open Streets, or Sunday Streets type event, where a major road corridor is closed to auto traffic and that space is made available to the community, including people biking and walking. This event can also be a great place to engage people about improvements they would like in their community and barriers to biking more often that they experience.

Promote cycling throughout the year by offering or supporting more familyoriented community rides, and bicycle-themed festivals, parades or shows.

#### Access to Bicycle Equipment and Repair Services

Your community's score in this sub-category was 40% of the highest community score in this sub-category. This subcategory is worth 5% of the



points in the Encouragement category. The recommendation(s) below would help you improve your score.

> Your community may have areas that are "bike shop deserts." Bike shops are an important part of the "human infrastructure" that makes bicycling an attractive option for people in a community. Within "bike shop deserts" residents may lack access to the services and expertise needed to properly maintain their bicycles. Without these retailers bicyclists need to be entirely self-sufficient for their bicycle maintenance, a requirement that would never be expected of people who use cars or transit. Consider ways to make basic parts and services available throughout your community.

#### Enforcement

Communities have an essential role in creating safe places to bike by setting clear rules of the road to ensure safety for all road users; ensuring that law enforcement officers are knowledgeable about traffic laws related to bicycling; and setting enforcement policies that prioritize traffic safety. A good relationship between the bicycling community and law enforcement is important and can be accomplished by having a police representative on your Bicycle Advisory Committee, having police officers on bikes, and proactively addressing issues important to the bicycling community, like bike theft.

In this section you can find more information about how your community compares to other Bicycle Friendly Community applicants in various aspects of the Enforcement category. Use this information to understand your community's strengths and weaknesses and the best places to invest in order to improve your community for people who bike.

#### Public Outreach

Your community's score in this sub-category was 85% of the highest community score in this sub-category. This subcategory is worth 15% of the points in the Enforcement category. The recommendation(s) below would help you improve your score.

> Identify a law enforcement officer who would like to be a representative of the police department to the bicycling community, including engaging with city staff and bicycle advisory committee members on bicycling-related issues.

> Increase the use of bikes as a patrol or public safety tool for your community. Bicycles can increase interaction between police officers and the community and allow police and other public safety personnel increased mobility at events or in urban areas.

#### **Bicycle-Related Training for Law Enforcement Personnel**

Your community's score in this sub-category was 18% of the highest community score in this sub-category. This subcategory is worth 10% of the points in the Enforcement category. The recommendation(s) below would help you improve your score.

> Continue to ensure that police officers are educated on traffic laws as they apply to bicyclists and motorists and bicycling skills. Ensure that law enforcement officers who are not certified or trained as bicycle patrol officers nevertheless have basic training or experience with bicycling in your community in order to foster great interactions between bicyclists and police officers.

Ensure that police officers receive training on the most common bicycle crash types in general and in your community. Data on bicycle crashes in



your community can help police understand the magnitude of dangers to bicyclists in your community and the areas that are most dangerous. This knowledge should help police officers understand how to effectively enforce traffic laws in ways that will make bicycling more safe.

Ensure that police officers receive training on racial profiling awareness in multimodal transportation enforcement. Racial profiling awareness or similar training can be helpful for community-oriented policing and increasing the legitimacy of traffic enforcement.

#### **Bicycle-Related Laws**

Your community's score in this sub-category was 96% of the highest community score in this sub-category. This subcategory is worth 35% of the points in the Enforcement category. The recommendation(s) below would help you improve your score.

> There are 9 states that have passed laws that define a group of "vulnerable road users" and create penalties for seriously injuring or killing people within that group. These laws work on the idea of general deterrence - that if people know that they might suffer a harsh penalty for an action they will be more likely to avoid doing that action. If your state has not passed this type of law consider what actions affect the safety of bicyclists in your town and how you can create a local ordinance that deters people from taking those actions.

> Create or pilot a photo enforcement effort to promote safe driving behaviors. It is important that photo enforcement is deployed in a transparent and legitimate manner so that the public understands that it is used for safety, not revenue creation. School zones can be a good place to pilot photo enforcement. According to the Insurance Institute for Highway Safety, there were 430 communities with red light camera programs and 141 communities with speed camera programs as of June 2016.

Repeal your local law that require bicyclists to use bicycle lanes. Local laws that require bicyclists to use a bicycle lane undermine the safety of bicyclists. If bicycle lanes are well designed and go to places that people want to go to there is no need to require their use because studies show that bicyclists prefer to use facilities when they are available. The only reason to require bicyclists to use bicycle lanes is to ensure that motor which do not have to share the road with them.

#### **Bicycle-Related Enforcement Practices and Programs**

Your community's score in this sub-category was 22% of the highest community score in this sub-category. This subcategory is worth 15% of the points in the Enforcement category. The recommendation(s) below would help you improve your score.

> Consider whether a ticket diversion program makes sense for your community. A ticket diversion for bicyclists allows bicyclists who are ticketed to receive safety training in lieu of paying a fine or as a condition of a reduced fine. This allows bicyclists who may not have previously received safety training to learn about proper riding techniques and hopefully correct poor behavior.

Consider whether a ticket diversion program makes sense for your community. Ticket diversion programs for motorists should incorporate training on sharing the road with bicyclists and pedestrians. In some cases, educational programs can supplement other traffic citation punishments; for example, drivers who are convicted of DUI or have a suspended license can be educated on transportation alternatives, such as transit and biking, to facilitate their mobility.

Publish raw data on traffic enforcement citations and make it available to the public on a regular basis. Transparency is important so that the public understands traffic enforcement and it can help ensure that traffic enforcement is seen as legitimate and in service of public safety.



Regularly available raw data allows the public, as individuals and through organizations, to understand traffic enforcement and how the community promotes traffic safety through enforcement.

Regularly publish reports on traffic citation data to help the public understand traffic safety priorities and how those priorities are furthered by traffic enforcement. Reports can also highlight any safety issues that a community does not currently have the ability to address through enforcement, due to lacking an appropriate law, or which requires an alternative countermeasure.

#### **Bicycle Safety Policies and Programs**

Your community's score in this sub-category was 0% of the highest community score in this sub-category. This subcategory is worth 5% of the points in the Enforcement category. The recommendation(s) below would help you improve your score.

> Adopt a Vision Zero plan to improve road safety for all road users. A Vision Zero plan should articulate a goal year for reaching zero traffic fatalifies and the investments that your community will make in order to acheive that goal. To learn more about Vision Zero, visit visionzeronetwork ora.

#### **Crash and Fatality Reporting**

Your community's score in this sub-category was 100% of the highest community score in this sub-category. This subcategory is worth 15% of the points in the Enforcement category. The recommendation(s) below would help you improve your score.

> Our points based upon crashes and fatalities are a function of the annual reported crashes and fatalities and your community's estimated number of bicycle commuters, as estimated in the most recent U.S. Census

Bureau American Community Survey 5-year estimate. To gain points in this subcategory you should focus on reducing crashes on an absolute basis or reducing crashes relative to the number of bicyclists in your community. Improving bicycle routes to major community destinations is likely to address both crashes and increase the number of bicyclists, providing two positive changes in this subcategory.

### Evaluation & Planning

Metrics are essential. A comprehensive bicycle master plan, in combination with dedicated funding and active citizen/organizational support is the foundation of a great bicycling community– indeed, progress without these elements is difficult. A successful plan focuses on developing a seamless cycling network that emphasizes short trip distances, multi-modal trips and is complemented by encouragement, education and enforcement programs to increase usage. A dedicated Bicycle Program Coordinator and an effective Bicycle Advisory Committee play an important role in helping decision makers create, implement, and prioritize those bicycle programs and policies.

In this section you can find more information about how your community compares to other Bicycle Friendly Community applicants in various aspects of the Evaluation & Planning category. Use this information to understand your community's strengths and weaknesses and the best places to invest in order to improve your community for people who bike.

#### **Staffing and Committees**

Your community's score in this sub-category was 70% of the highest community score in this sub-category. This subcategory is worth 20% of the points in the Evaluation & Planning category. The recommendation(s) below would help you improve your score.



Appoint a staff member Bicycle & Pedestrian Coordinator. A Bicycle & Pedestrian Coordinator reviews development proposals to ensure that local bicycle/pedestrian requirements are incorporated and to assess bicycling and walking impacts, develop and implement educational and promotional programs, write grant proposals, serve as the public contact for bicycling/walking inquiries and complaints, educate other staff about state and federal facilities standards and guidelines, and coordinate with neighboring cities, transit agencies and other departments to implement policies and projects.

Appoint a staff member Safe Routes to School Coordinator. A Safe Routes to School Coordinator makes walking and bicycling to school safer and more accessible for children, including those with disabilities, and works to increase the number of children who choose to walk and bicycle. This may involve working with schools on site plans, working with the community on surrounding street plans, and implementing programming that teaches bicycle skills in school.

#### Planning, Funding, and Implementation

Your community's score in this sub-category was 54% of the highest community score in this sub-category. This subcategory is worth 35% of the points in the Evaluation & Planning category. The recommendation(s) below would help you improve your score.

> Ensure that there is a feedback mechanism to help the community meet goals for the implementation of your bicycle plan.

Ensure that there is dedicated funding for the implementation of the bicycle master plan. Ensure to specifically allocate bicycle-related funding to low-income/minority communities.

#### Evaluating Ridership

Your community's score in this sub-category was 45% of the highest community score in this sub-category. This subcategory is worth 20% of the points in the Evaluation & Planning category. The recommendation(s) below would help you improve your score.

> Conduct regular statistically-valid community bicycle surveys to understand the needs of bicyclists in the community and what sort of investments might entice people to bike more often or fix barriers that currently prevent them from biking more.

Conduct a travel diary survey or ensure that community over-sampling occurs in a national or state travel diary survey in order to get a statistically valid understanding of how all residents move around your community. This information is great for monitoring changes in how people move around and community goals related to active transportation.

Ensure that your bicycle counts capture the gender of cyclists. If women ride significantly less than men, this gender gap may be addressed through infrastructure improvements, and targeted education and encouragement efforts.

Adopt a target level of bicycle use to be achieved within a specific timeframe, and ensure data collection necessary to monitor progress. The most common targets are that a certain percentage of the population will bike to work or that there will be a certain increase in the number of people biking to work.

#### Evaluating the Bicycle Network

Your community's score in this sub-category was 23% of the highest community score in this sub-category. This subcategory is worth 20% of the







points in the Evaluation & Planning category. The recommendation(s) below would help you improve your score.

Conduct a GIS-based bicycle network analysis. Developing a GIS-based bicycle network map will allow you to overlay many different types of GIScoded data sets in order to undertand how your bicycle network interacts with community demographics, zoning, community resources, and other data, such as traffic crashes. This level of detail enables a community to tailor its analysis to community concerns and needs.

Conduct a "Level of Traffic Stress" bicycle network analysis. "Level of Traffic Stress" analysis focuses on low-stress connectivity, defined as "the ability of a network to connect traveler' origins to their destinations without subjecting them to unacceptably stressful links." This type of analysis is suitable for all communities, but is particularly useful for communities that have goals to increase bicycle use or encourage more "interested but concerned" riders to blike more often. Targeting investments to increase low-stress connectivity is likely to address concerns of those "interested but concerned" riders and increase their mobility to more community destinations.

For more ideas and best practices please visit the Bicycle Friendly Community Resource Page: http://www.bikeleague.org/content/resources



#### Feedback from Local Reviewers:

In this round we provided a survey that could be distributed by your community. This survey was entirely voluntary. If you chose to take advantage of it then you will receive additional information about how the public responded to that survey.

For all communities, we distributed surveys to organizations listed in your application and members of the League of American Bicyclists, both individuals and organizations, that our data indicated might be knowledgeable about your community. The information below reflects both the public survey distributed by your community and surveys distributed by the League.

#### Number of Local Respondents

61 people responded to surveys about your community

## Top 3 Changes that local respondents would like to see in Los Alamos County

- 1. More bike lanes 31.1%
- More bike paths 26.2%
- Improve public decision-making processes for transportation improvements, including bicycling improvements; Increase education for drivers - 6.6%

#### Average Top 3 Changes from all Bicycle Friendly Community applicants (nationwide)

1. More Bike Lanes - 22.2%

- 2. More Bike Paths 21.8%
- Improved Public Decision-making processes for Transportation Improvements – 7.6%

#### Other Suggested Improvements

- "Continue to connect up off road paved bicycle facilities, especially in the main townsite"
- "Work with Los Alamos National Lab so the Laboratory improves
- the physical conditions for bicyclists" » "Educate drivers"
- » Educate drivers

#### **Barriers and Hazards**

- "LANL (Los Alamos Labs) is principle employer and has done very little to improve infrastructure of Dept of Energy Roads"
- » "slow progress on road construction projects"
- "Trinity Drive/NM 502 is owned and managed by State of NM DOT and is very bicycle unfriendly"

#### Keep up the good work on ...

- » "Excellent work on spending money to expand off road bike network, including current construction of bike-ped bridge"
- » "complete streets"
- "Current study to create a bicycling network in the town center to support both tourists and locals"

## Comprehensive Plan Figure XXX : Needed Trail Connections - Townsite



Trails

Needed Trail Connections Townsite

## References

https://www.transportation.gov/safer-people-safer-streets#Responsibility of States and Local <u>Transportation and Enforcement Agencies</u>, USDOT Transportation.gov Latest update: Friday, January 20, 2017

http://bikeleague.org/ American League of Bicyclists website

http://www.saferoutesinfo.org/program-tools/what-are-health-benefits-children-who-walk-or-bicycle-school

Bicycle Awareness Brochure, NMDOT Bicycle, Pedestrian & Equestrian Advisory Committee