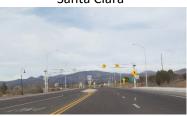
# Enhancing Southwest New Mexico Connectivity in Grant County Communities of: Silver City, Arenas Valley, Santa Clara, Bayard, & Hurley

Silver City



Santa Clara



**Bayard** 



Hurley



Natalie Villwock-Witte, Ph.D., P.E.

Karalyn Clouser

of

Western Transportation Institute

College of Engineering

Montana State University – Bozeman

P.O. Box 174250

Bozeman, MT 59717

March 2022

Prepared for:

Southwestern New Mexico Council of Governments (SWNMCOG)

United States Department of Agriculture (USDA)

National Association of Development Organizations (NADO)

#### PROBLEM STATEMENT

Located approximately 235 miles south of Albuquerque and 150 miles northwest of El Paso, Texas, Grant County, New Mexico, is an international destination for elite and recreational cyclists, and host to annual cycling events such as the Tour of the Gila Criterium Races. Silver City, the county seat, serves as a gateway to the 3.3 million acres of Gila National Forest, home of the Continental Divide National Scenic Trail's path across southwestern New Mexico. The Town of Silver City, unincorporated community Arenas Valley, the Village of Santa Clara, the City of Bayard, and the Town of Hurley, (FIGURE 1) in coordination with the county and the Southwestern New Mexico Council of Governments (SWNMCOG), are pursuing opportunities to expand on the region's natural resources (New Mexico State Park, City of Rocks State Park & National Park Service, Gila Cliff Dwellings National Monument), outdoor recreation, hospitality, retail, and tourism economies. These efforts include improving connections to hiking and cycling trails, as well as enhancing safety and active transportation access along the U.S. 180 corridor.



FIGURE 1: Grant County Focus Communities

## **OBJECTIVE**

The National Association of Development Organizations Research Foundation (NADORF) Team will work in cooperation with SWNMCOG to document the current active transportation use along the U.S. 180 corridor between Silver City, Arenas Valley, Santa Clara, Bayard, and Hurley. The NADORF Team will better document the crash experience, with a focus on the U.S. 180 corridor. This research effort will provide recommendations on improving active transportation along the U.S. 180 corridor and the

potential to improve connections to the Continental Divide Trail and the associated trailhead which will be established along Little Walnut Road in Silver City.

## RESEARCH APPROACH/WORK PLAN

This research project is divided into the six following tasks:

- Task 1: Project Management
- Task 2: Active Transportation Use Along U.S. 180 in Grant County
- Task 3: Crash Experience on U.S. 180 in Grant County
- Task 4: Economic Impact of Bicycle Tourism & Walkability
- Task 5: Planning for U.S. 180 Pathway Extension
- Task 6: Report

#### **TASK 1: PROJECT MANAGEMENT**

Task 1 consists of managing the project. Every other month conference calls (April 2021, June 2021, August 2021, October 2021, December 2021, February 2022, April 2022, June 2022, August 2022, October 2021 and December 2022) will be held between the NADORF Team and SWNMCOG to discuss progress on the deliverables.

Deliverable No. 1: Every Other Month Conference Calls

#### TASK 2: MULTI-PURPOSE PATH USE ALONG U.S. 180 IN GRANT COUNTY

There are several methods that can be used to better understand how many people (walkers, bicyclists, those on off-highway vehicles) are using the multi-purpose path along or near the U.S. 180 corridor in Grant County. A more qualitative understanding (low, medium, and high) can be undertaken using Strava data. Two quantitative options are available: factoring short-term counts or using pedestrian and/or bicycle counters. This task first involves investigating the current state of the practice of each of the three options by performing a succinct literature review, drawing from Pedestrian and Bicycle Information Center (PBIC) and University Transportation Center (UTC) resources. Then after, available technology to SWNMCOG via the state or other potential sources (i.e. a university, National Park Service's Rivers, Trails, and Conservation Assistance program) will be investigated. This task may involve some travel to perform counts or assist with siting counting equipment. However, there is also the potential that the Silver City Cycling Group or the like may be leveraged to assist. The outcome of the task will be a better understanding of the current level of use and a recommendation on how often and where to count in the future. The current preference is to use the freely available Strava data to get a general understanding of use and collect short term counts using a process that can be shared with local citizens to be replicated in future years to demonstrate changes in use over time.

Deliverable No. 2: Literature Review of Bicycle/Pedestrian Counting Methodologies Summary Table Deliverable No. 3: Infographic Summarizing Collected Counts

## TASK 3: CRASH EXPERIENCE ON U.S. 180 IN GRANT COUNTY

This task will involve a review of the crash experience along and near U.S. 180 in Grant County. The focus will be more specifically on bicyclists and pedestrians, although the search will start broadly to ensure that relevant crashes are not overlooked. This task will also involve reaching out to hospitals in the area (Gila Regional Hospital) to determine if unreported crashes that involve pedestrian, bicyclists, and off-highway vehicles on U.S. 180 may be occurring. Ideally, the researchers will be provided with crashes within Grant County by working cooperatively with SWNMCOG and consequently the New Mexico Department of Transportation (NMDOT). This page contains information regarding how crashes

may be requested by NMDOT/SWNMCOG: <a href="https://gps.unm.edu/tru/request-data">https://gps.unm.edu/tru/request-data</a> However, should access to the crash reports (property damage only, injury, and fatal) not be provided, data from the Fatal Analysis Reporting System (FARS) may be leveraged. Yet, as mentioned within the acronym for FARS, this data is only that associated with deaths, not injuries or crashes associated with damage to property. The idea behind this task is to document the information needed for an application to the Highway Safety Improvement Program (HSIP), should it be relevant. Therefore, the researchers would also reach out to the NMDOT's HSIP manager to obtain more information about the program and criteria used to evaluate potential projects.

Deliverable No. 4: Input from Hospitals within Grant County Regarding Bicyclist/Pedestrian Crashes Deliverable No. 5: Infographic Summarizing Crash Experience Along U.S. 180 in Grant County

#### TASK 4: ECONOMIC IMPACTS OF BICYCLE TOURISM & WALKABILITY

This task will include a review of recent literature on the relationship between bicycle tourism and economic development as well as the walkability of a community and the region and economic development, including identifying other rural examples. This task will also include conversations with local officials and economic development stakeholders regarding bicycle tourism. The task will also consider the economic impacts of the Tour of the Gila and Tommyknocker, two events already on-going in Grant County which have a significant impact.

Deliverable No. 6: Memo summarizing findings of the literature review and economic development-related qualitative research.

#### TASK 5: PLANNING FOR U.S. 180 PATHWAY EXTENSION

Currently, U.S. 180 has a separated pathway near Santa Clara. In order to connect the five communities of interest (Santa Clara, Arenas Valley, Silver City, Hurley, and Bayard), the current status of planning for walking and bicycling in each community needs to be better understood. Therefore, the researchers will begin by reviewing plans, particularly those focused on walking and bicycling but also potentially comprehensive plans for each community, to determine what if any plans currently exist. A review of plans include, at a minimum:

- New Mexico Department of Transportation's 2045 Long Range Transportation Plan
- 2. Southwest New Mexico COG's 2015 Long Range Transportation Plan
- 3. 2021-2026 Comprehensive Economic Development Strategy (CEDS)
- 4. 2019 Southwest New Mexico Regional Economic Development Innovation (REDI) Action Plan
- 5. New Mexico's 2016-2022 Statewide Comprehensive Outdoor Recreation Plan (SCORP)
- 6. Grant County Comprehensive Outdoor Recreation & Trails Master Plan (expected spring of 2022)<sup>1</sup>

The researchers will also look for additional relevant plans at the regional level and state level, including but not limited to Safe Routes to School plans. Plans that involve outdoor recreation and existing and planned connections, at the local, regional and state level will also be reviewed. This includes understanding how the U.S. 180 corridor can connect to the Continental Divide Trail (CDT) north of Silver City. The researchers will also seek to better understand the Five Points Initiative, which seeks to "support and expand upon county-wide development in the outdoor recreation sector." The current five points include: 1) Silver City's Water Works Building, 2) Arenas Valley's Schoolhouse, 3) Santa Clara is to be determined, 4) Bayard's Union Hall, and 5) Hurley's Old Railroad Depot. Ultimately, gaps in infrastructure will be documented. The researchers will also work to engage elected officials and leadership of the five communities. Furthermore, a review of existing right-of-way will be conducted,

<sup>&</sup>lt;sup>1</sup> https://grantcountynm.gov/grant-county-comprehensive-outdoor-recreation-trails-master-plan/

<sup>&</sup>lt;sup>2</sup> https://www.swnmact.org/our-programs

which can inform potential cross-sections and how various sections along the U.S. 180 corridor within Grant County may have similarities and differences. Additionally, the researchers will contact district state department of transportation staff to better understand barriers and opportunities to expanding the pathway along U.S. 180. For example, a study was reported as on-going along U.S. 180 starting around Hurley and continuing south. In addition, a recently completed project modified U.S. 180 to the east of Silver City, New Mexico. A recent State of New Mexico Capital Outlay funded the extension of the multi-purpose path from Hwy 152 in Santa Clara to the Maple Bridge to Bayard Street. All of the reviews and information collected via interviews will be synthesized into a task report.

Deliverable No. 7: Planning for U.S. 180 Pathway Extension Task Report

TASK 6: REPORT

In Task 6 the researchers will compile the results of the aforementioned tasks into a short final report.

Deliverable No. 8: Report Outline Deliverable No. 9: Final Report

## **DELIVERABLES**

As described in the work plan, a total of nine deliverables will be produced:

- Deliverable No. 1: Every Other Month Conference Calls
- Deliverable No. 2: Literature Review of Bicycle/Pedestrian Counting Methodologies Summary Table
- Deliverable No. 3: Infographic Summarizing Collected Counts
- Deliverable No. 4: Input from Hospitals within Grant County Regarding Bicyclist/Pedestrian Crashes
- Deliverable No. 5: Infographic Summarizing Crash Experience Along U.S. 180 in Grant County
- Deliverable No. 6: Memo on Economic Development and Bicycle Tourism
- Deliverable No. 7: Planning for U.S. 180 Pathway Extension Task Report
- Deliverable No. 8: Report Outline
- Deliverable No. 9: Final Report

# **SCHEDULE**

The project would be conducted for a duration of 20 months.

| Task                                 |     | 2022 |     |     |     |     |     |      |     |     |     |     | 2023 |     |     |     |     |     |     |      |  |
|--------------------------------------|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|--|
|                                      | Feb | Mar  | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb  | Mar | Apr | May | Jun | Jul | Aug | Sept |  |
| 1 Project Management                 |     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |     |     |     |      |  |
| Update Calls                         | Х   |      | Χ   |     | Χ   |     | Χ   |      | Χ   |     | Χ   |     | Χ    |     | Χ   |     | Χ   |     | Χ   |      |  |
| 2 Active Transportation Use          |     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |     |     |     |      |  |
| 3 Crash Experience                   |     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |     |     |     |      |  |
| 4 Economic Impact of Bike/Ped        |     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |     |     |     |      |  |
| 5 Planning for the Pathway Extension |     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |     |     |     |      |  |
| 6 Report                             |     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |     |     |     | Х    |  |