Alternate Modes of Transportation
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Are high gas prices driving you out of your vehicle?
Are traffic nightmares driving you out of your mind?
Do you get home from work and feel more exhausted after navigating traffic?
Are alternative modes of transportation not really alternatives for you?

Several viable alternatives to driving a POV (privately owned vehicle) exist in Albuquerque and most urban areas of New Mexico, including walking, biking, and riding the bus. In recent years, the New Mexico Rail Runner has provided another option for those willing to trade the road for the rails on their daily commute. Every year, bonds are issued for such improvements as additional bike trails/lanes, walking paths, pedestrian bridges, and bus/rail stops. The city of Albuquerque continually upgrades pedestrian modes of transportation—for example, adding bike and walk paths along some of our busiest roads, like the recent upgrades to the Tramway bike paths and bike paths additions to I-40 over the Rio Grande River. City planners try to make these modes accessible to as many people as possible.

The city of Albuquerque is making the effort to create alternate modes of transportation throughout the area; however, even a broad range of alternatives may not meet the needs of every commuter. Walking to work may be impractical for many because of the distance and time involved. The fact that most of the city is uphill from the downtown area can impose the added burden of a strenuous end-of-day trek back home. Biking may involve the same issues as walking, in addition to the challenge of sharing the streets with Albuquerque drivers. Bike-and-ride options are available for city buses and the Rail Runner, but mass transit cannot accommodate all routes and schedules.

So what can a person do when alternative modes of transportation are not sufficient? Residents can offer alternatives to traffic planners, options that could improve transportation in the community. The Census Bureau’s OnTheMap product can assist residents in providing analysis to support their case. Here’s the scenario: The State of New Mexico’s Department of Transportation (DOT) provides “Park and Ride” bus service from several heavily commercial/industrial areas of town, including Sandia Labs and Downtown. The DOT should provide an additional pick-up/drop-off location for their service near the east side of Albuquerque through the East Mountains. The additional pick-up/drop-off location could serve many residential areas in the Sandia Foothills/Four Hills canyon area (hereafter referred to as “the canyon”).

The only entry point to the city of Albuquerque from the east is through the canyon. Residents of Tijeras and Moriarty working in Albuquerque must travel this route to and from work each day. Additionally, several residential areas are interspersed near the entry of the canyon, including Four Hills, North Four Hills, and several large apartment complexes. A pick-up/drop-off location in this area of the canyon could be a great addition to the “Park and Ride” program, and data from LED’s OnTheMap tool can show DOT why this additional stop would be beneficial.

The zip code of the canyon area is 87123, which encompasses Sandia Foothills, Four Hills, North Four Hills, Central and Tramway, Central and Juan Tabo, and Central and Eubank. Approximately 27,000 workers live inside or within a mile of this zip code, 23,000 of whom commute to other zip codes. Of those commuters, almost 9 percent (or 2,000 workers) are employed in downtown Albuquerque (87102), which is one of the stops for the “Park and Ride” bus service. Downtown Albuquerque isn’t the most popular destination for workers from 87123; it is actually the fourth most popular destination following 87110 (the Uptown area), 87109 (the 25 Way area), and 87106 (the airport area). By adding a “Park and Ride” stop in the canyon area, approximately 9 percent of commuters in the area will have an alternative to POV for travel to work.

Downtown Albuquerque is also a stop for the Rail Runner for those who work near a Rail Runner station. By including those zip code 87123 workers who work near Rail Runner stations, the potential of assisting commuters increases substantially. Census information from the socioeconomic database can be added to show how many workers in the area currently use alternative modes of transportation. According to recent Census Bureau data1, 75 percent of people in the 87123 area commuted in an SOV (single occupancy vehicle) and 14 percent carpooled. Only 3.5 percent used public transportation.

Providing and marketing a pick-up/drop-off location at the canyon will greatly benefit many residents living in the canyon area. Using this information as support, people can lobby for DOT “Park and Ride” planners to add this stop to their route. The LED OnTheMap tool can show statistical support for their suggestion. Below is information to assist others in doing this type of analysis.

LED OnTheMap Transportation Data

OnTheMap is becoming more user-friendly. Every version adds enhancements to make the data tools more functional and easy to understand. The analysis involved several tools from OnTheMap, including an InFlow/OutFlow analysis, a Destination analysis, a Distance/Direction analysis, and a Paired Area analysis. The first three analysis types are simple analyses that can be done using the standard selection tools. The paired analysis is more complicated and requires additional steps to complete. Here are instructions on how to do a paired area analysis.

2. Type “87123” into the search box and click “Search.”
3. Once the search is complete and the list appears, click on “87123” under Zip Codes (ZCTA).

1 The figures cited are from the 5-year American Community Survey estimates for 2005-2009, based on Census 2000. Data for the 2007-2011 ACS 5-year estimates will be available in 2012.
4. To buffer the area to add a one-mile radius, click on “Change Selection Area” in the pop-up box. (The pop-up box should appear after you choose 87123, if it does not, click on the red kite symbol and the pop-up box will show.)

5. After “Change Selection Area” is chosen, the menu on the left-hand side navigation will be active on the Selection tab. Under Add Layer Selection, choose “Zip Codes (ZCTA).”

6. Under Add Buffer to Selection, click on “Simple/Ring,” and use 1 mile as the radius.

7. Click on “Confirm and Add Advanced Selection” at the top.

8. Once on the Advanced tab, under Add Layer Selection, choose “Zip Codes (ZCTA).”

9. On the map, scroll to where 87102 is visible.

10. Under Drawing Tools, click on “Draw point(s)” and click on the 87102 title. A pink dot should appear over 87102.

11. Click on “Confirm Advanced Selection.”

12. Over the green kite, another pop-up box will appear. Click on “Perform Paired Area Analysis.”

13. An analysis settings box will appear. The setting changed for this analysis was to swap the Home/Work area. The red kite was the first choice (87123) which should be the Home area and the green kite (87102) is the Work area. All other options were left unchanged.

14. Click Go!.

15. Once the analysis is complete, options will appear at the left-hand side navigation to view the Detailed Report providing demographic data (age, earnings, industry segment), to Export Geography for use with mapping software, or to Print Map/Chart. Below is an example of the map/chart with some minor adjustments.