UNR BIKE TRAFFIC STUDY
Learn about bike traffic to improve bicycle infrastructure on and around campus and the city.

Campus Bicycle Traffic Study
Wolf Pack Bicycle Commuters — Help us learn about bike traffic to improve riding around campus!

Do you commute to campus by bicycle? We’re seeking volunteers for a study on bicycle travel to-and-from and around campus. Participants will track and share their ride activity data for two weeks, April 2-16, 2018 using the Strava GPS app.

The data will help us make better decisions about where to place infrastructure to help cyclists move through campus safely and more efficiently.

We want our participants to represent the campus community, so we need a diverse group of undergrad and grad students, faculty and staff. Participants must be at least 18 years of age and have a device with the Strava application.

If you are interested, visit unr.edu/bike-study

For more information, contact Project Lead Scott Kelley, Ph.D., at scott.kelley@unr.edu or (775) 784-6703.
Background

- April 2nd - 16th, 2018 (14 days)
- 500 registered bikes on the UNR campus
  - 54 volunteered
  - 44 participated
  - 10% represented

- UNR Master Plan
- City of Reno/Sparks Master Plan
- League of American Bicyclists:
  - Reno/Sparks - Silver
  - University of Nevada, Reno - Bronze
Daily outlook
Questions

1. What is the connectivity to - from and around campus?
   a. Are city designated bikes paths in close proximity of the university?
2. How much of the current Reno/Sparks bike infrastructure, campus bike infrastructure, and Google’s recommended shortest paths are used by UNR Bike Commuters?
3. What is the % of bikes route taken based on the elevation of slope?
4. Where are commuters coming from? (N, S, E, or W)
DATA Collection

- Commuters Record their rides
- Downloaded GXP files from STRAVA app to a NevadaBox folder - everyday
- Undergrad team converted:
  - GXP → point
  - Point → lines
DATA Collection

UNR Bike Map 2016

Reno/Sparks RTC 2017/2018 Bike Map
Raw UNR Bike Commuter Data
City & Campus Bike Infrastructure
Observed correspondence routes on the UNR campus with suggested bicycle routes and high pedestrian traffic routes.
Spatial distribution of off-campus portions of UNR bicycle commuting trips with origins by chosen route and city bicycle infrastructure
• Worked with Dr. Scott Kelley from the Geography Dept. & Dr. Amy Fitch Chair of the Bike Committee and Lecture in Social and Behavioral studies and a team of undergraduate students
• 78% of all observed UNR Bike Commuters utilized on-campus infrastructure
• 25% of all observed UNR Bike Commuters utilized city infrastructure
  ○ Very low
• We analysed distance, slope, shortest suggested paths, time, current bike infrastructure on and off campus, etc.
• Submitted as a conference paper to the Transportation Research Board conference in January in Washington, DC and the *Transportation Research Record*, which is their journal.
Questions?

A Special Thank you to:

Volunteer participants
Liam, Miguel, Tyler, Cameron, Alex
Dr. Kelley
Dr. Fitch
Washoe County, etc.