

BICYCLING AS PART OF A COMPREHENSIVE TRANSPORTATION PLAN

Phil Sarnoff
Executive Director
Bike Utah



BICYCLING TRENDS

- 2001 – 1.7 billion trips
2009 – 4 billion trips¹
- Overall drop in Vehicle Miles Travelled and Vehicle Miles Travelled per capita^{2,3,4}
- Nearly two-thirds (65%) of Americans who don't bicycle say they would like to ride more often⁵

1 – US Department of Transportation and Federal Highway Administration, 2009 National Household Travel Survey.

2 – U.S. Public Interest Research Group, <http://www.uspirg.org/reports/usp/new-direction>

3 – AAA Foundation for Traffic Safety

4 – Federal Highway Administration, National Household Travel Survey Data.

5 – National Highway Traffic Safety Administration, 2008. – National Survey of Bicyclist and Pedestrian Attitudes and Behavior.



WHY BICYCLES?



SAFETY OF ALL ROAD USERS

- Cities with high bicycling rates tend to have lower crash rates for all road users.¹
- Safety in Numbers
1998 to 2008 cycling fatalities fell by 21%²
- Studies of bike lanes in Chicago, Washington DC, Seattle and New York City found increases in bicycle ridership, reductions in motor vehicle speeding, reductions in crashes, and improved feelings of safety on those streets^{3,4,5}

1 – Marshall, W., E. & Garrick, N. W. (2011). Evidence on why bike-friendly cities are safer for all road users, *Environmental Practice*, 13 (1), 16-27.

2 - Pucher, J., et al., *Bicycling Renaissance in North America? An update and re-appraisal of cycling trends and policies*, Transportation Research A, 2011

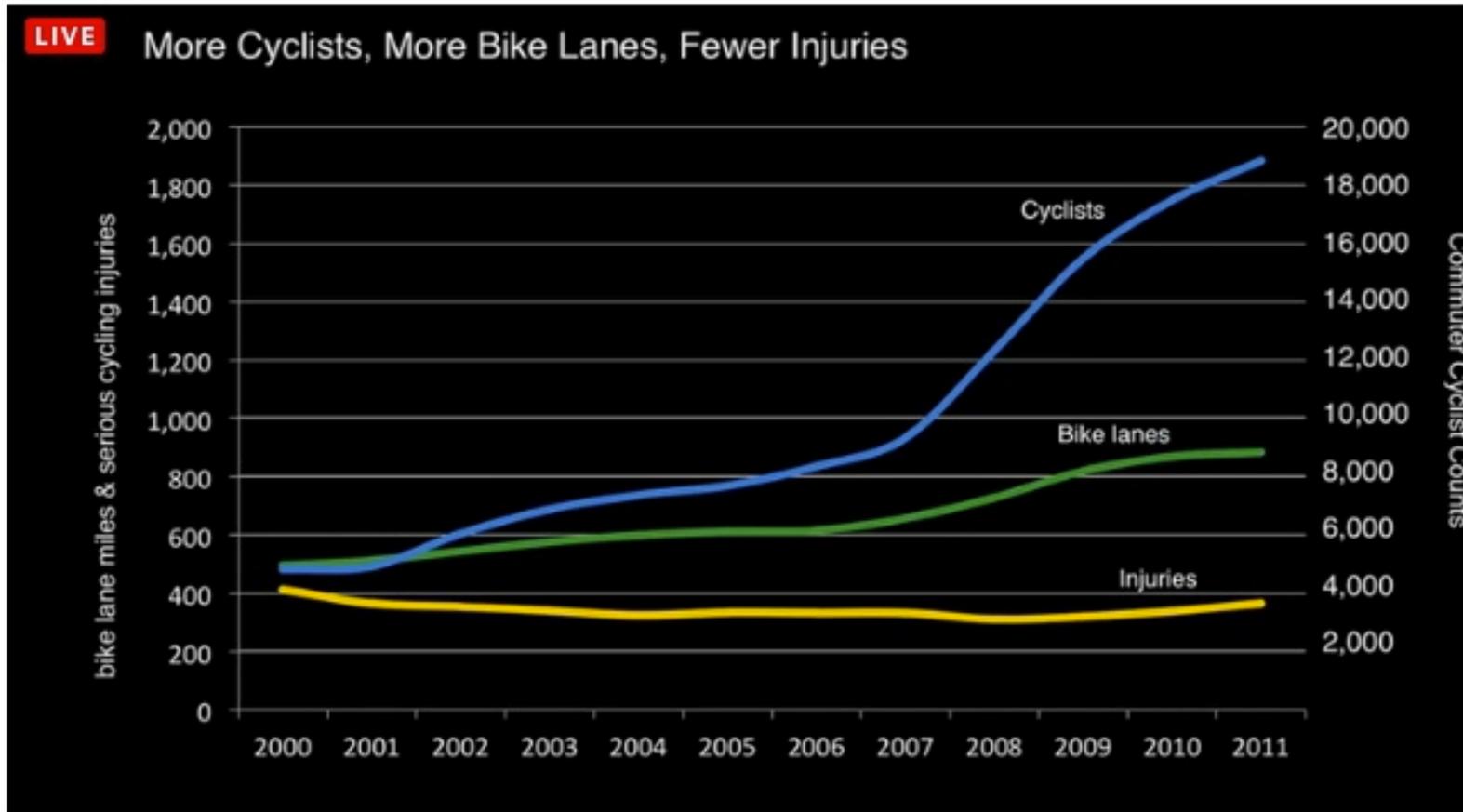
3 – Stone Way N Rechannelization: Before and After Study.
<http://www.seattle.gov/transportation/docs/StoneWaybeforeafterFINAL.pdf>

4 – Measuring the Street: New Metrics for 21st Century Streets, 2012.
<http://www.nyc.gov/html/dot/downloads/pdf/2012-10-measuring-the-street.pdf>

5 – Chicago Department of Transportation, July 2012 – Protected Bike Lanes Fact Sheet. <http://www.ecwrpc.org/wp-content/uploads/2013/06/Bike-Lane-Quick-Facts.pdf>

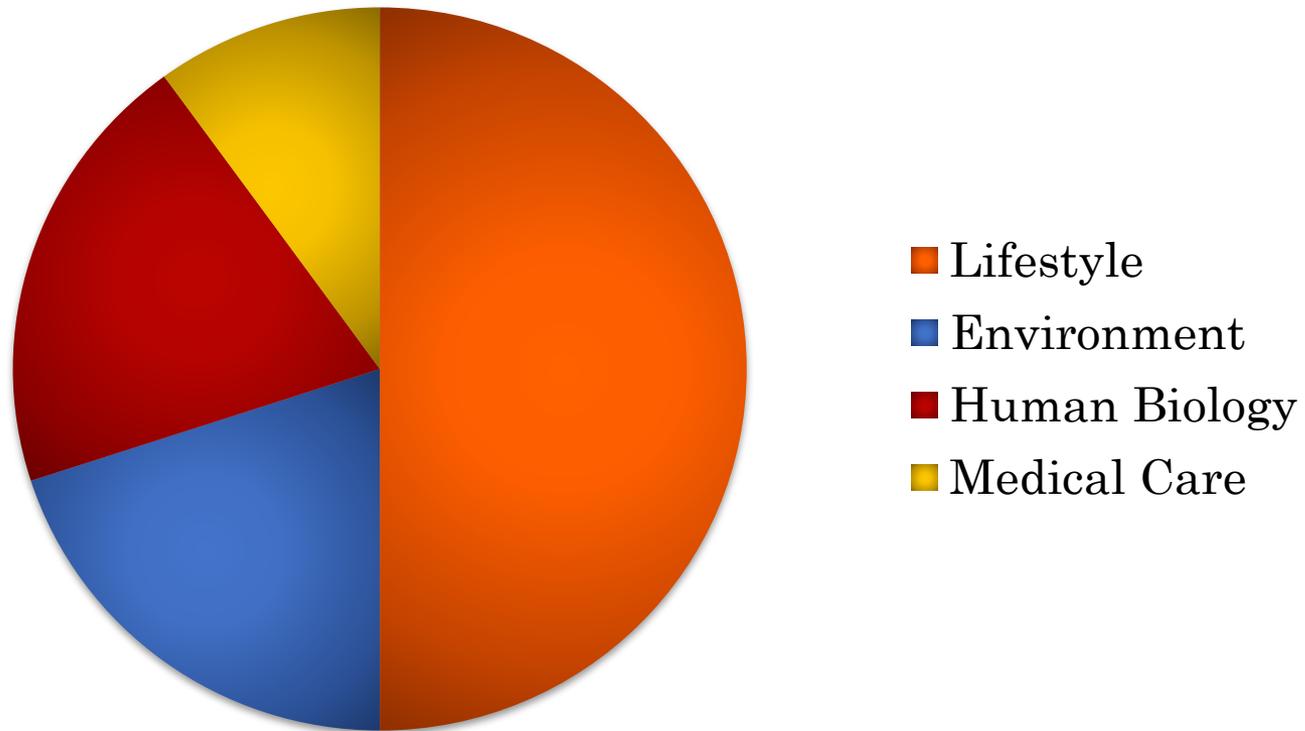


SAFETY

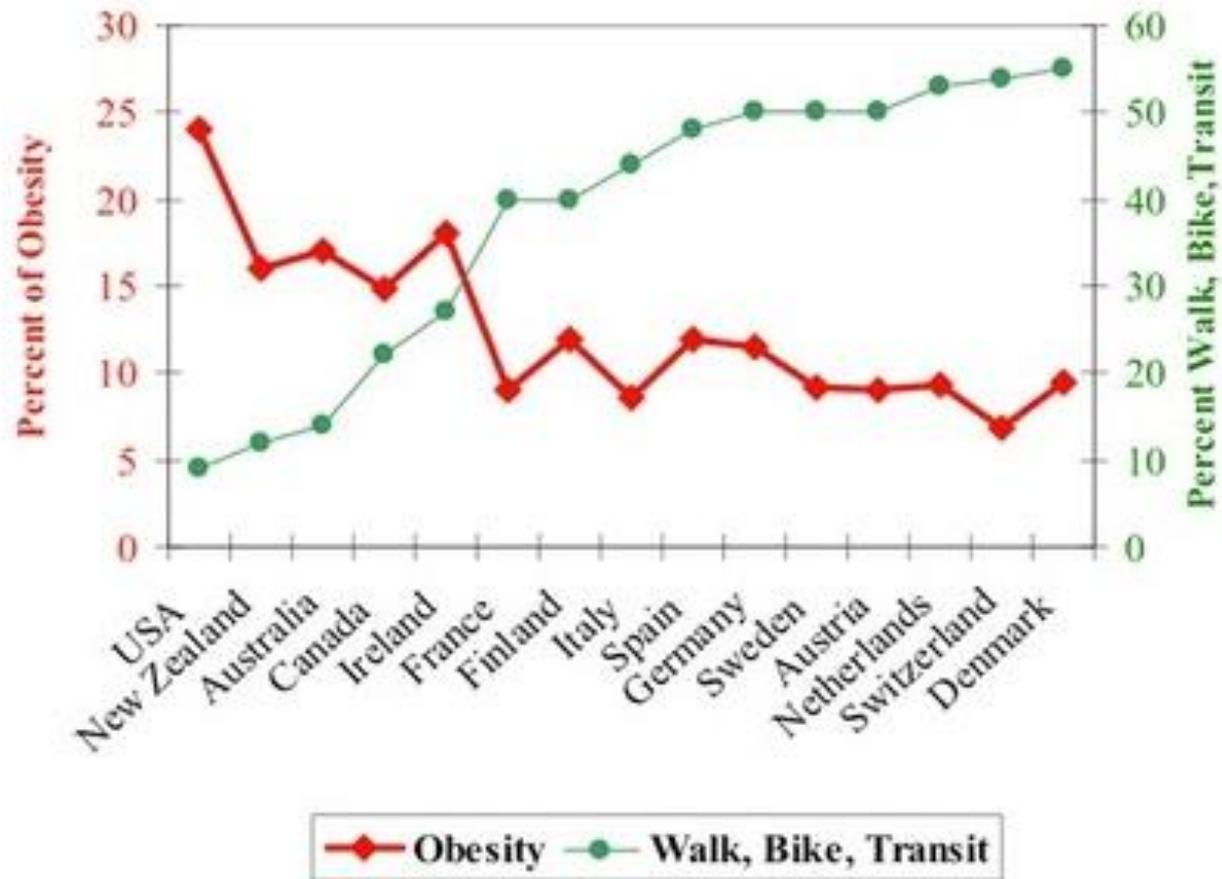


HEALTH

Relative Impact of Factors Determining Health Status in the United States



OBESITY FALLS WITH INCREASED WALKING, BICYCLE USE, AND TRANSIT USE



Pucher, J., Buehler, R., Bassett, D. R., and Dannenberg, A. L. (2010). Walking and cycling to health: A comparative analysis of city, state, and international data. *American Journal of Public Health*, 100 (10), 1986-1992



HEALTH IN UTAH

Utah Children (2 years – 5 years)	Utah Adolescents	Utah Adults
12% are overweight	10.5% are overweight	56.9% are overweight
8.7% are obese	6.4% are obese	22.5% are obese
	82.7% were not physically active for the recommended amount during the previous week	48.1% are not getting the recommended amount of exercise
	78.2% did not attend daily physical education class in an average week	17.7% reported not getting any exercise in the previous month

Center for Disease Control (2012). Utah: State nutrition, physical activity, and obesity profile.
Retrieved from <http://www.cdc.gov/obesity/stateprograms/fundedstates/pdf/utah-state-profile.pdf>



ECONOMIC DEVELOPMENT

- 1 Car = 9,600 Bicycles^{1,2,3,4}
- Per \$1 million dollars spent, more jobs are created on bicycle and pedestrian infrastructure projects (11-14 jobs) compared to road projects (7 jobs)⁵

1 – April Castro, USA Today. Overweight trucks damage infrastructure. USA Today. September 10, 2007.

2 – Equivalent single axle load. Pavement Interactive. August 15, 2007.

3 – Richard Johnsson. The cost of relying on the wrong power-road wear and the importance of the fourth-power rule. Transport Policy 11 p. 345-353. 2004.

4 – Samer Madanat and Shadi Anani, UC Berkeley. Repricing Highway Pavement Deterioration. UCTC Policy Brief. 2010.

5 – Garrett-Peltier, H. 2010 – Estimating the employment impacts of pedestrian, bicycles and road infrastructure, Political Economy Research Institute, University of Massachusetts – Amherst



ECONOMIC DEVELOPMENT

- Bicycle Tourism
 - Maine - \$66.8 million¹
 - Arizona - \$88 million²
- Bicycle-Related Businesses
 - Minnesota - \$315 million³
 - Wisconsin - \$556 million and 3,420 jobs to the state⁴
- Bicycling (Transportation, Recreation, Tourism, & Health)
 - Iowa - \$435 million⁵
- Bicycling (Manufacturing, Retail, Tourism, & Events)
 - Colorado (2000) - \$1 billion⁶

1 – Maine Department of Transportation, 2001. Bicycle Tourism in Maine: Economic impacts and marketing recommendations

2 – Arizona Department of Transportation. Retrieved from <http://www.azdot.gov/media/News/news-release/2013/08/20/adot-completes-study-on-economic-impact-of-bicycling-in-arizona>

3 – Mayer, F., 2010. Inside Minnesota's Booming Bike Economy, Minnesotat Business. Retrieved from <http://www.minnesotabusiness.com/inside-minnesotas-booming-bike-economy>

4 – Bicycle Federation of Wisconsin and Wisconsin Department of Transportation. The Economic Impact of Bicycling in Wisconsin.

5 – Lankford, J. et al., 2012. Economic & health benefits of bicycling in Iowa. Retrieved from http://www.peoplepoweredmovement.org/site/images/uploads/Economic_and_Health_Benefits_of_Bicycling_in_Iowa.pdf

6 – Colorado Department of Transportation Bicycle/Pedestrian Program, 2000 – Bicycling and Walking in Colorado: Economic impact and household survey results. Retrieved from <http://atfiles.org/files/pdf/CObikeEcon.pdf>



AIR QUALITY

- 55% of pollution from cars and trucks¹
- 50% of all trips are 3 miles or less²
- 72% of trips 3 miles or less are made by motor vehicle²
- Starting a car creates the most emissions (20-25%)³

1 – Utah Department of Environmental Quality. Retrieved from <http://www.deseretnews.com/article/865560535/Clearing-the-air-That-air-youre-breathing-may-be-slowly-killing-you.html?pg=all>

2 – 2009 National Household Travel Survey. Retrieved from <http://www.advocacyadvance.org/docs/nhts09.pdf>

3 – Federal Highway Administration. Retrieved from http://www.fhwa.dot.gov/environment/air_quality/publications/fact_book/page15.cfm



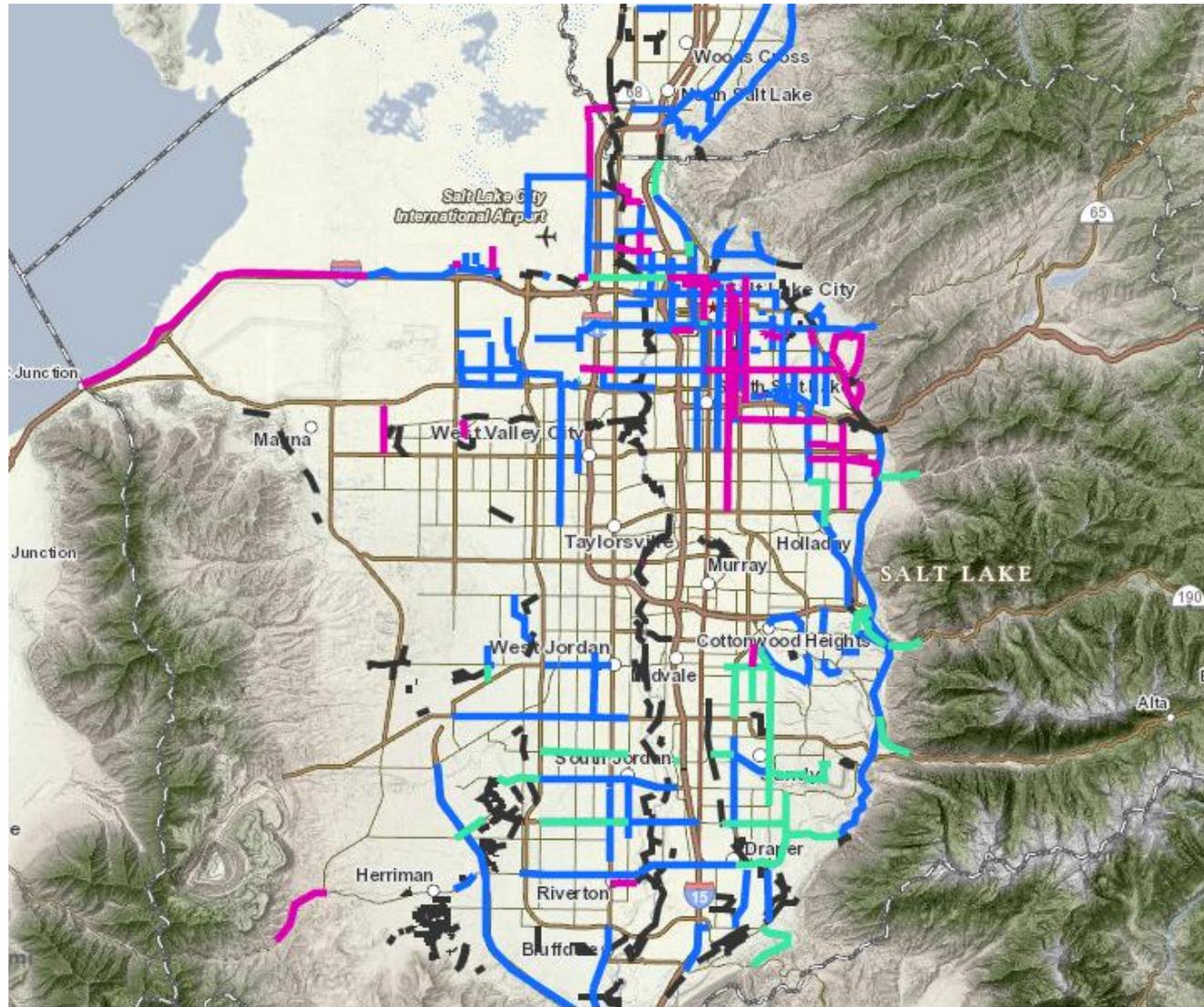
MUNICIPAL RESIDENT SURVEY RESPONSES ON ACTIVE TRANSPORTATION

Wasatch Front

- 87% of trips are by car
- 50% of all trips are 3 miles or less
- Only 17% believe that new roads are the solution
- 70% would like to walk more
- 53% would like to bike more
- 46% would like to take transit more



EXISTING INFRASTRUCTURE



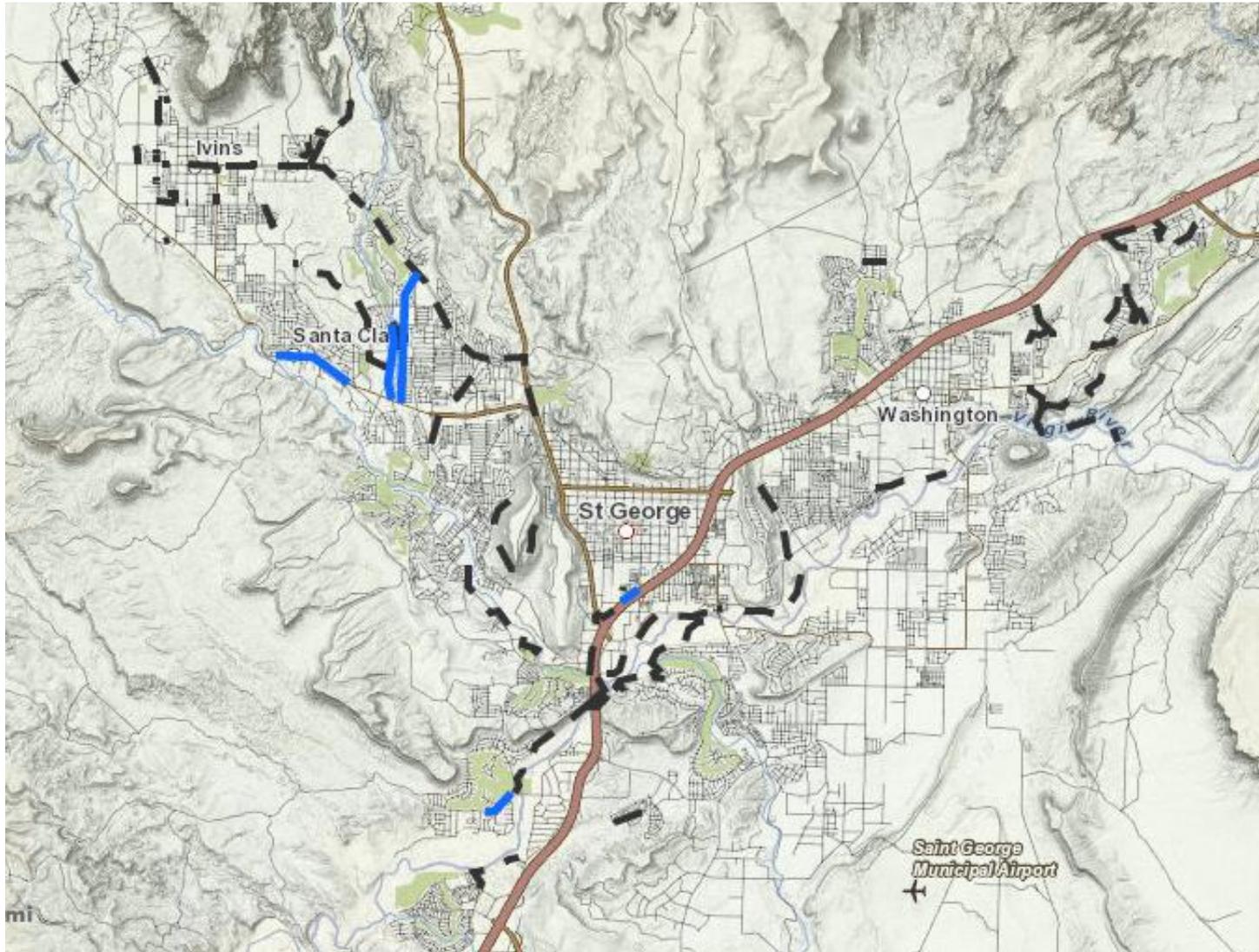
EXISTING INFRASTRUCTURE



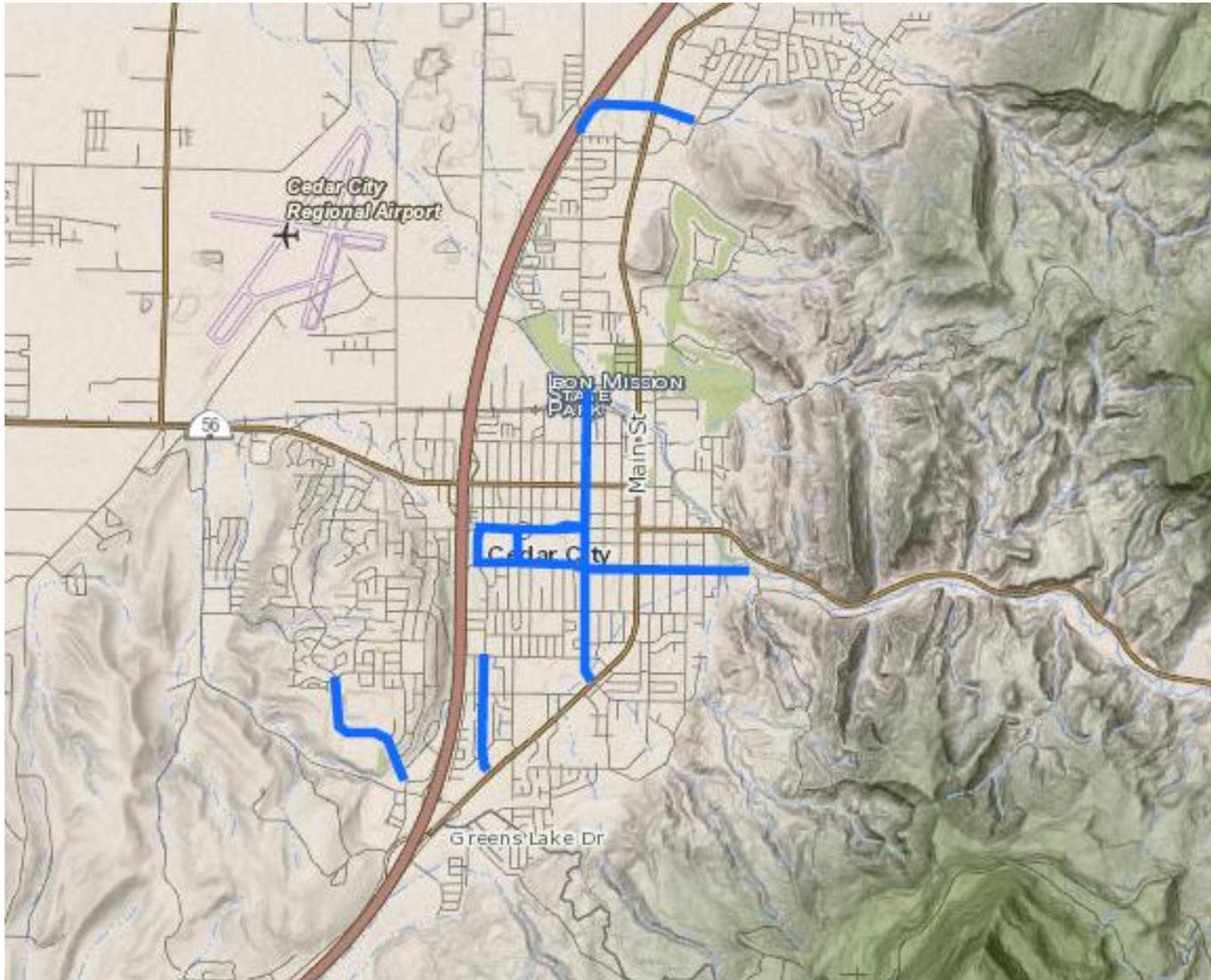
EXISTING INFRASTRUCTURE



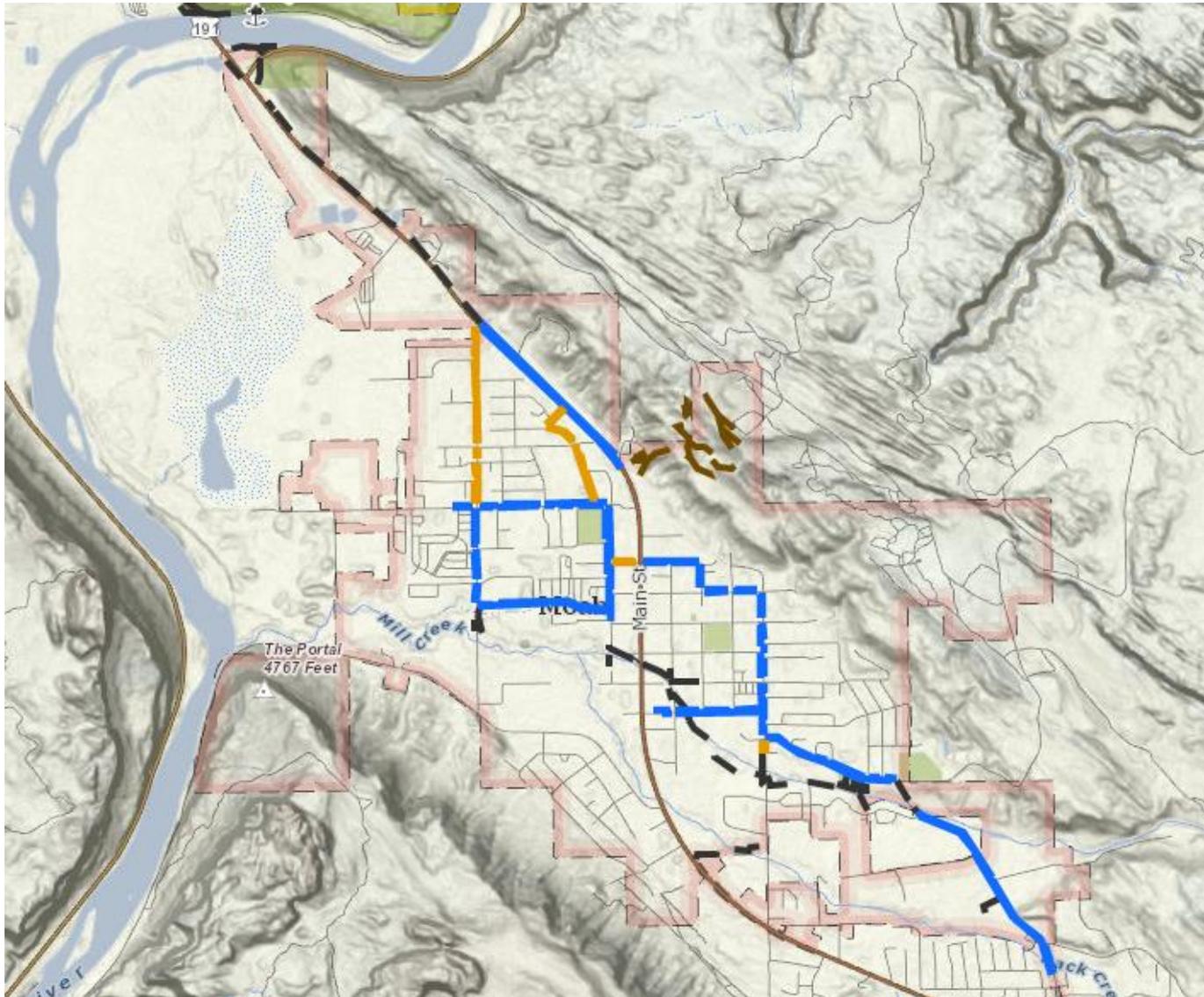
EXISTING INFRASTRUCTURE



EXISTING INFRASTRUCTURE



EXISTING INFRASTRUCTURE



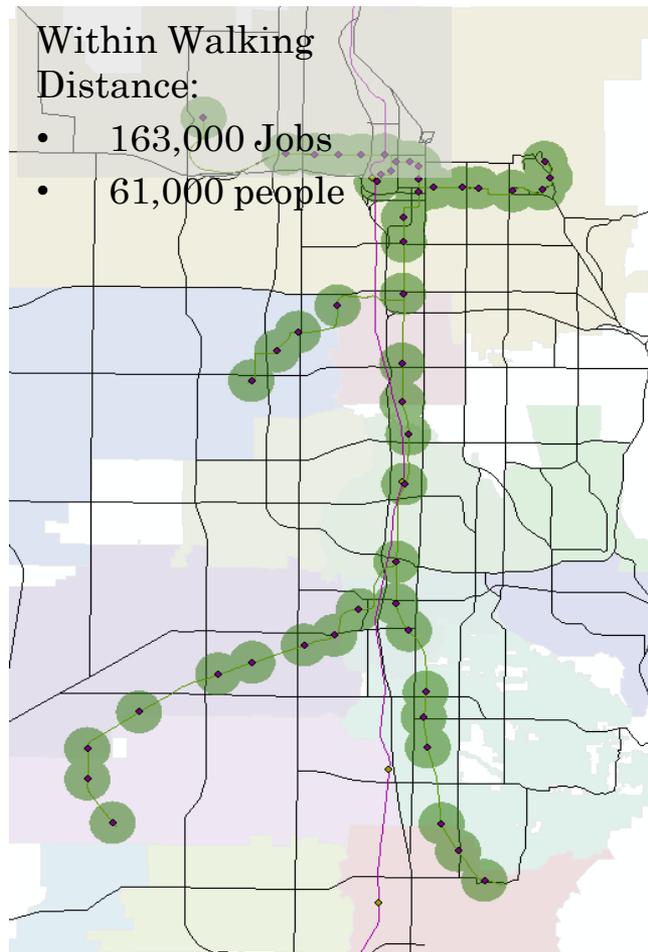
TRAIL USAGE IN UTAH

- Jordan River Parkway Trail (January – July)
 - Total Counters: 1
 - Miles of Trails: 4
 - Total Traffic for this Period: 54,585
 - Daily Average: 268
 - Busiest Day: 1,331
- Utah County (January – July)
 - Total Counters: 16
 - Miles of Trails: 65
 - Total Traffic for this Period: 1,094,799
 - Daily Average: 5,164
 - Busiest Month: June (252,817)
 - Least Busy Month: January (49,998)
 - 2013 to 2014: 5% increase in trail usage

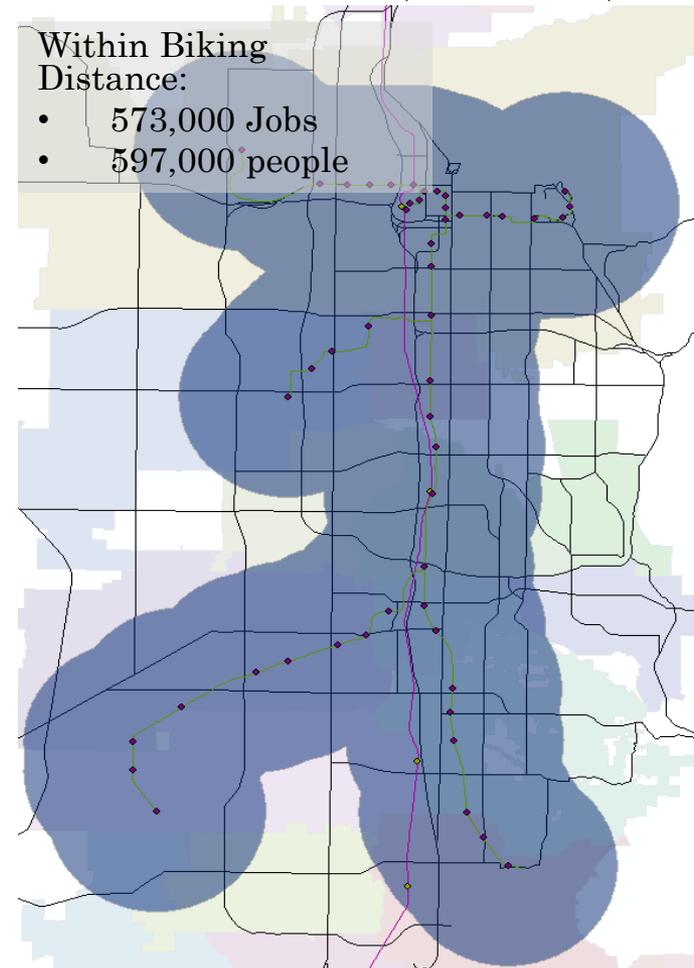


BICYCLES MAKE TRANSIT WORK BETTER

Light Rail 15 Minute
Walk Buffer (0.5 miles)



Light Rail 15 Minute
Bike Buffer (2.5 miles)



BICYCLE ADVISORY COMMITTEES, ADVOCACY GROUPS, AND TRAILS COMMITTEES

Cache County

Cache MPO Bicycle Pedestrian
Advisory Committee

Davis County

Farmington Trails Committee

Garfield County

Escalante Mountain Biking
Association

Grand County

Moab Mountain Bike Association
Trail Mix

Salt Lake County

Bike Ped Taylorsville
Cycle Midvale
Cycle Murray
Salt Lake City Bicycle Advisory
Committee
Salt Lake County Bicycle Advisory
Committee
Wasatch Front Regional Council
Active Transportation Committee

Summit County

Mountain Trails Foundation

Uintah County

Northeast Uintah Mountain
Biking

Utah County

Provo Bicycle Advisory
Committee

Wasatch County

Wasatch Trails Alliance

Washington County

Southern Utah Bicycle Alliance

Weber County

Ogden Cycling Education
Foundation
Weber Ogden Bicycle Advisory
Committee
Weber Active Transportation
Committee
Weber Pathways



BICYCLING

- Improves safety for all road users
- Improves the personal health of Utahns and Utah's air quality
- Provides an economic benefit to Utah and has the potential to be even larger
- Is part of a well-developed transportation system

