

Scottsdale, Arizona, United States

Project #1 Hard Systems

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About Us

Aka Arizona Cowboys



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Arizona



About Scottsdale

About Scottsdale



Scottsdale

Scottsdale is a desert city in Arizona east of state capital Phoenix. It's known for its spa resorts and golf courses, including TPC Scottsdale. Farther north, trails wind through McDowell Sonoran Preserve, a desertscape of hills, rock formations and cacti.

03

Hard System: Transportation

Transportation



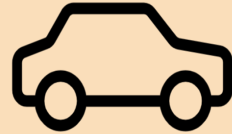
Scottsdale Transportation



Bus



Bike



Car

04

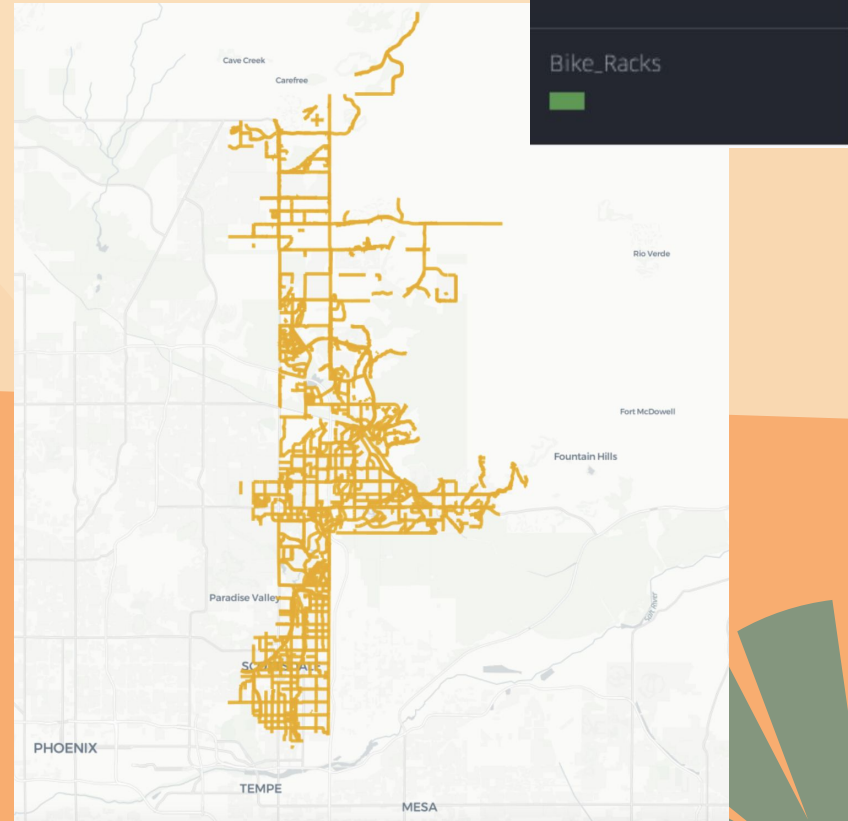


Analysis

Networks, Flows, Nodes and Agents

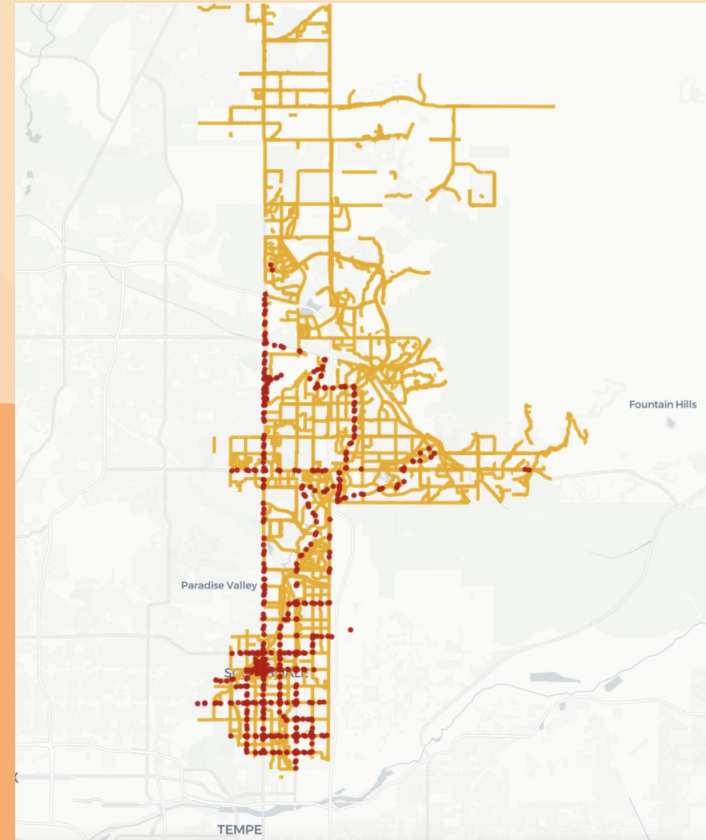
Scottsdale Networks

- The yellow lines indicate dedicated the general Scottsdale network
- Covering a significant portion of the city's grid and extending into surrounding areas
 - Cave Creek,
 - Carefree,
 - and some small parts of Paradise Valley and Phoenix



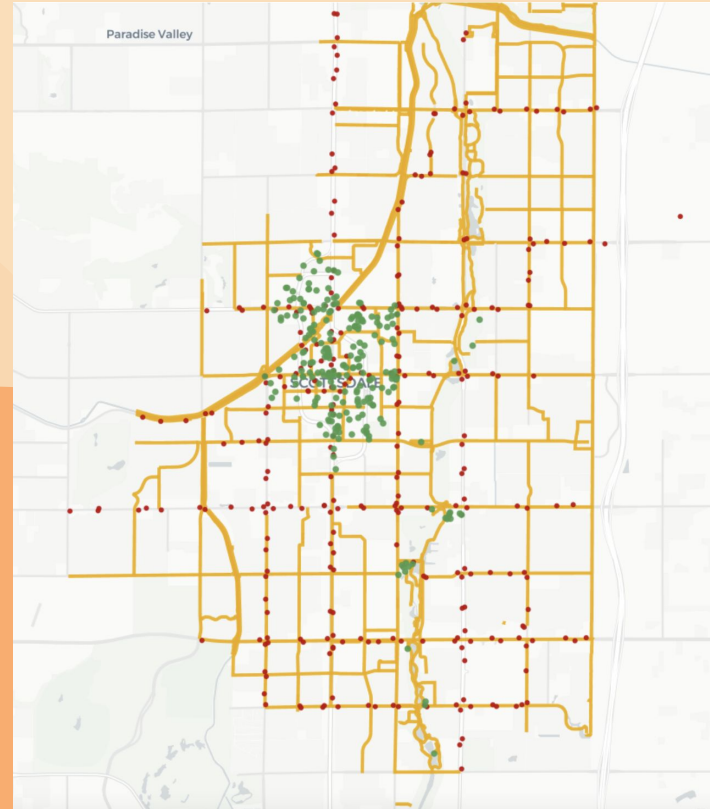
Scottsdale Networks

- Concentrated in central and southern Scottsdale, particularly around densely populated and commercial areas
- Forms a grid-like pattern that aligns with key commuting routes
- located where the biking and walking routes intersect



Scottsdale Networks

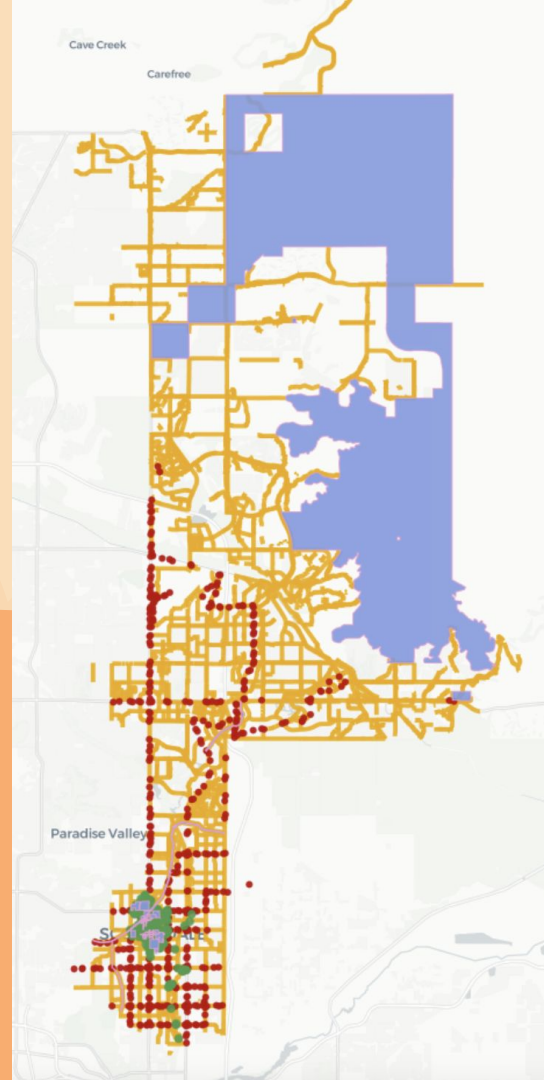
- Heavily concentrated in the downtown Scottsdale area
- Typical in urban planning to encourage the use of bicycles for short commutes
- Decreases as you move outward from downtown due to restricted areas and less commercial regions



For the record...

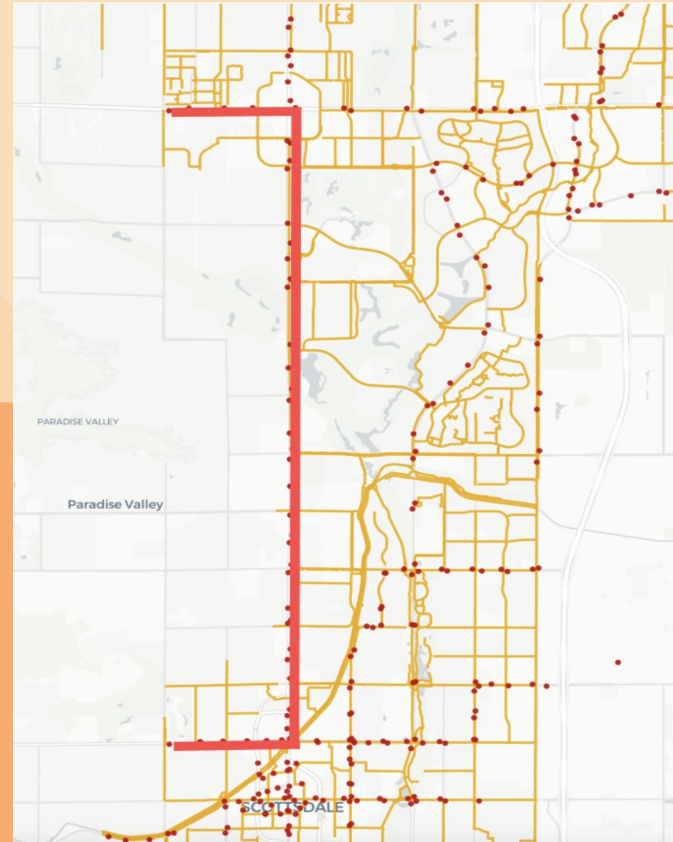
- The blue area indicates Scottsdale's restricted area, where no any transportation is allowed

Yea, you probably
end up dying there



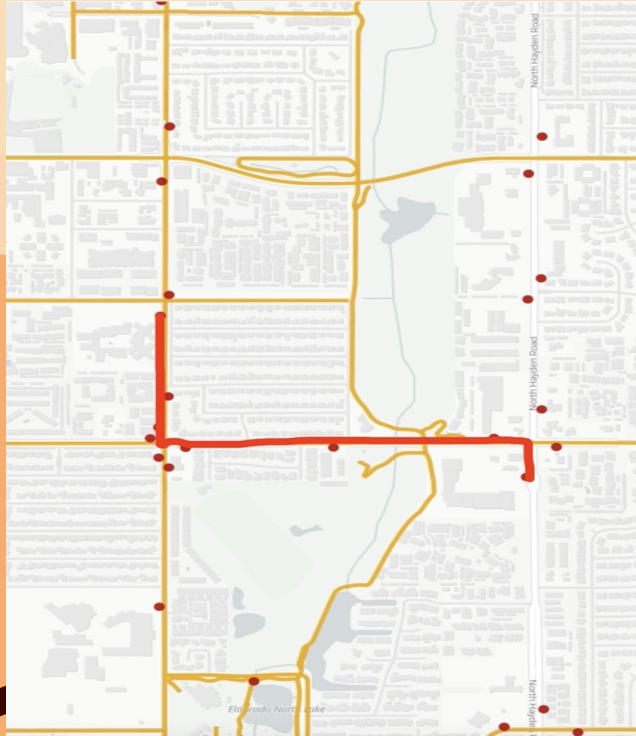
Scottsdale Flows 1

- One key route running north to south along the eastern edge of Scottsdale
- **68th St/Camelback RD**
- Connecting the northern areas to the central and southern parts of the city, while providing access to neighboring regions like Paradise Valley and Camelback East

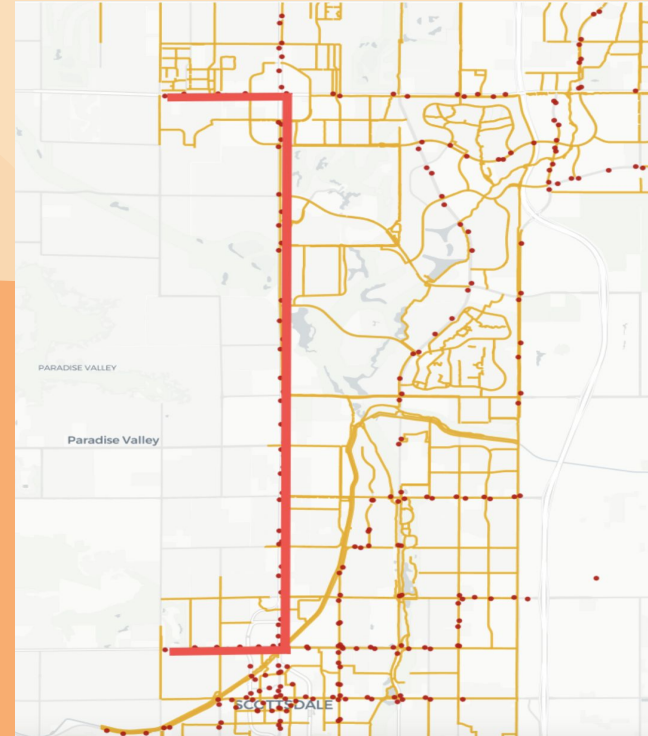


Scottsdale Flows 2 & 3

Downtown/Old Town Trolley

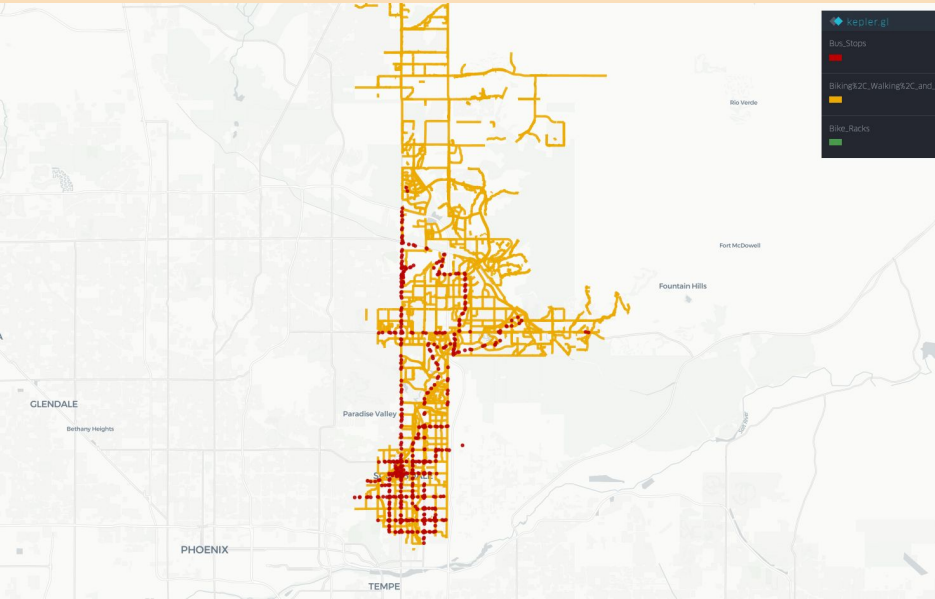


Miller/Haydeen Trolley

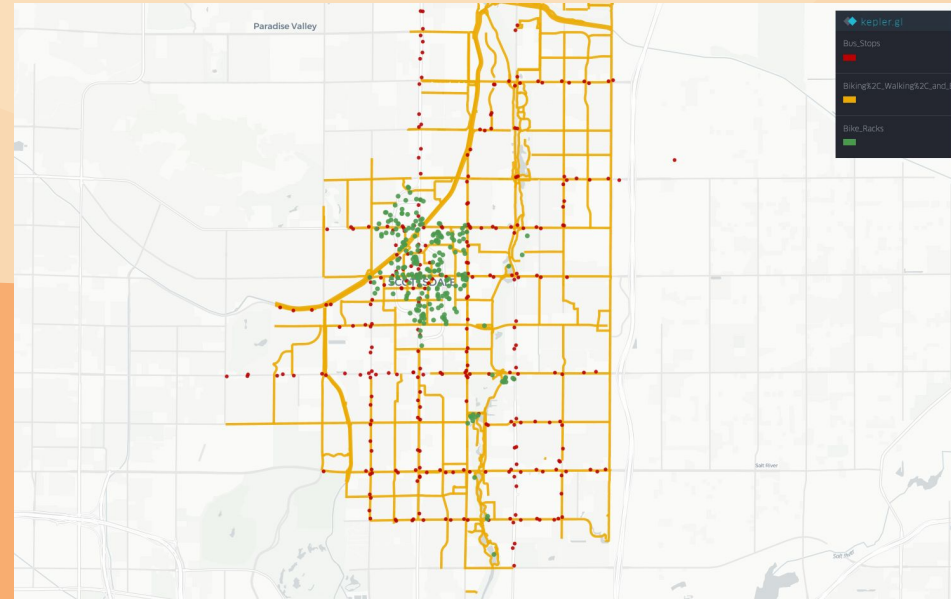


Scottsdale Nodes

Bus Stops



Bike Racks





Scottsdale
Agents



05

Key Insights

Challenges and Opportunities



Key Insights

Challenges: Traffic congestion during peak hours, limited public transit options, and gaps in bicycle infrastructure.

Opportunities: Expansion of public transit services, investment in smart traffic management systems, and promotion of alternative transportation modes like cycling and walking.



Thanks!!

Reference:

1. <https://data-cos-gis.hub.arcgis.com/search>
2. <https://kepler.gl/demo>
3. https://en.wikipedia.org/wiki/Scottsdale,_Arizona
4. <https://atlasofurbantech.org/cases/usa-scottsdale-open-data/>

