One person’s cell phone is another person’s planning tool

Presented by
Cynthia Albright, AICP CUD, GISP

NorCal ITE Wednesday
November 14, 2018
• 2 Major Airports
• 6 Entry Points
• Minimal Regional Bus Service
• Rail Service 1 stop per day
View north of the Lake Tahoe Basin from Mt. Tallac
Local Facts
Why People Visit

8-10M
Annual Visitors 2014

Legend

Land Ownership
- Public
- Private

Recreation Areas

Recreation Facilities
- Campground
- Beach
- Marina
- Day Use Area
- Ski Resort
- Trailhead

--- Tahoe Rim Trail
Key Issues

• Addressing uniqueness of congestion
• Recreation travel patterns
• Lack of inter-regional connections
• Coordinated parking management and policy
• Developing technology infrastructure
Project Goals

• Accelerate implementation with Basin agencies
• Better understand recreation travel demands
• Improve environment and quality of experience by reducing auto dependency
• Collect & analyze mobile signaling data
• We “see” over:
  – 1/3 of the U.S. population
  – 100 million devices / day
  – each device average 100 times / day
• Anonymous - Consumer privacy
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Cars entering Basin by travel group

Source: Dottin Consulting Services Inc. and Foresee Analytics
Most Popular Destinations

HOT SPOTS
Activity density date, February 2014
- Red: Hot spots
- Blue: Cold spots

HOT SPOTS
Activity density date, July 2014
- Red: Hot spots
- Blue: Cold spots
Visitor Trips, February

4.7 Million
Visitor Trips, July
11.8 Million
Transit Ridership vs. Vehicle Trips

Summer ridership

- 1,497 – 7,428
- 12,579 – 37,137
- 74,219

7,428 transit trips vs. 1.6 million vehicle trips
“Perhaps for the first time we could see what our true visitation was…” - Carl Hasty, District Manager, Tahoe Transportation District
## Transit Vision Summary

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<th>Time Frame</th>
<th>0-1 years</th>
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<th>5-10 years</th>
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Putting it all together

South Shore Corridor

- Route R1 - Stateline to Carson City then Reno Tahoe Airport
  - Add trips
  - Extend service to Reno
  - Add seasonal trips as required

- Route D - Stateline to Heavenly
  - Create route
  - Add additional summer service

- Route R2 - Stateline to Minden & Gardnerville then Reno Airport
  - Add trips
  - Extend service to Reno
  - Add seasonal trips as required

- Route R - Heavenly Community
  - Create round trip from Route D and Route H

- Route H - Heavenly California Lodge Transit Center
  - Create round trip from Route D and Route H along with non-seasonal parking

- Route J - Stateline to Ponderosa via LTCC
  - Create new route (Route 33)
  - Add summer frequency

- Route C - South Y to Zephyr Cove
  - Route extended
  - Add summer service
  - Increase frequency and length of seasonal service

South Shore Corridor

- PHASING OF TRANSIT PROJECTS
  - Immediate (0-1 year)
  - Short Term (1-5 years)
  - Medium Term (5-10 years)
  - Long Term (10+ years)

- US 50 South Shore Corridor
  - Transit Impact Summary
    - Annual Service Hours: 162,200
    - Annual Operating Cost ($millions): 17.4
    - Total Fleet Requirement: 86
    - Estimated Annual Transit Ridership (millions): 5.1
    - Annual Automobile Trip Reduction (millions): 2.4

US 50 South Shore Corridor

- Mobility Hub
  - Introduce
  - Increase frequency
  - Create

- Ferry
  - Introduce
  - Increase frequency
  - Create

- Route
  - Add trips
  - Extend service
  - Create

- Frequency
  - Local Transit
  - Community Transit
  - Regional Nevada

- Service
  - Summer Shuttle
  - Water Shuttle

See Figure 49 in the Transit Master Plan for a complete list of required infrastructure improvements.
Summary

- 41.4M Vehicles entering annually
- 1.4% transit ridership as a percent of all trips
- 18,725 existing parking spaces Basinwide
- 25.6M Annual Visitors 2014
  Original estimate 8-10M
- 20 miles of existing sidewalks
- 94 total miles of existing bikeways
- 80M person trips within the Basin annually
What Now?

- Funding
- Emergency Management / DOT / ICT Coordination
- Shared Parking Management System
- Basinwide iOT Infrastructure Strategy
Internet of Things (iOT)

The “thing” a unique IP address that connects to the internet.

Informed decision making about future strategy.

User’s ability to obtain near-real-time information.

Analytics gathered from sensors, meters, and applications.
Traffic Management Benefits

Integration of street lights and sensors in the traffic management system optimizes signals, increases fuel efficiency, reduces accidents and reduces vehicle time traveled.

Cars are tracked by sensors or cell phones allowing traffic management systems to identify speeds and densities and adjust lights in real time.

d: set distance

$t_0$: initial time

$t_1$: final time
Smart Streetlights

- Efficient energy tracking and control
- Revenue generation potential
- Integration with telecommunication and traffic management systems
- Public safety
“...the water was not merely transparent, but dazzlingly, brilliantly so.”
- a description of Lake Tahoe by Mark Twain, *Roughing It* (1871)