



# Neighborhood Predictors of Urban Trail Use

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# Rationale for Focus on Urban Trails

- ◆ Benefits of trails
  - ◆ Availability of trails
  - ◆ Correlates identified
  - ◆ Further research needed on environmental determinants
  - ◆ Further research needed examining multiple levels of influence
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# Main Research Questions

- ◆ What environmental features of urban multi-use trails and adjacent areas significantly influence decisions of people living within 1 mile of trails to use trails for recreation or non-motorized travel?
  - ◆ Are levels of urban trail use related to levels of physical activity among residents in nearby communities?
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# Elements of the Research

- ◆ Trail selection
- ◆ Trail count
- ◆ Trail audit
- ◆ Characterize built & social environment
  - Divide trail into ½ mile segments
  - Create buffer 1 mile on each side of trail
- ◆ Survey of trailside residents



# Trail Selection

- ◆ Trail selection criteria
  - Trails from different regions
  - Continuous, multi-use, >15 miles
  - Urban or suburban setting
  - Traverse neighborhoods: Hispanic, African-American, European-American
- ◆ Identified through websites, key informant interviews, literature

# Chicago Lakefront Trail

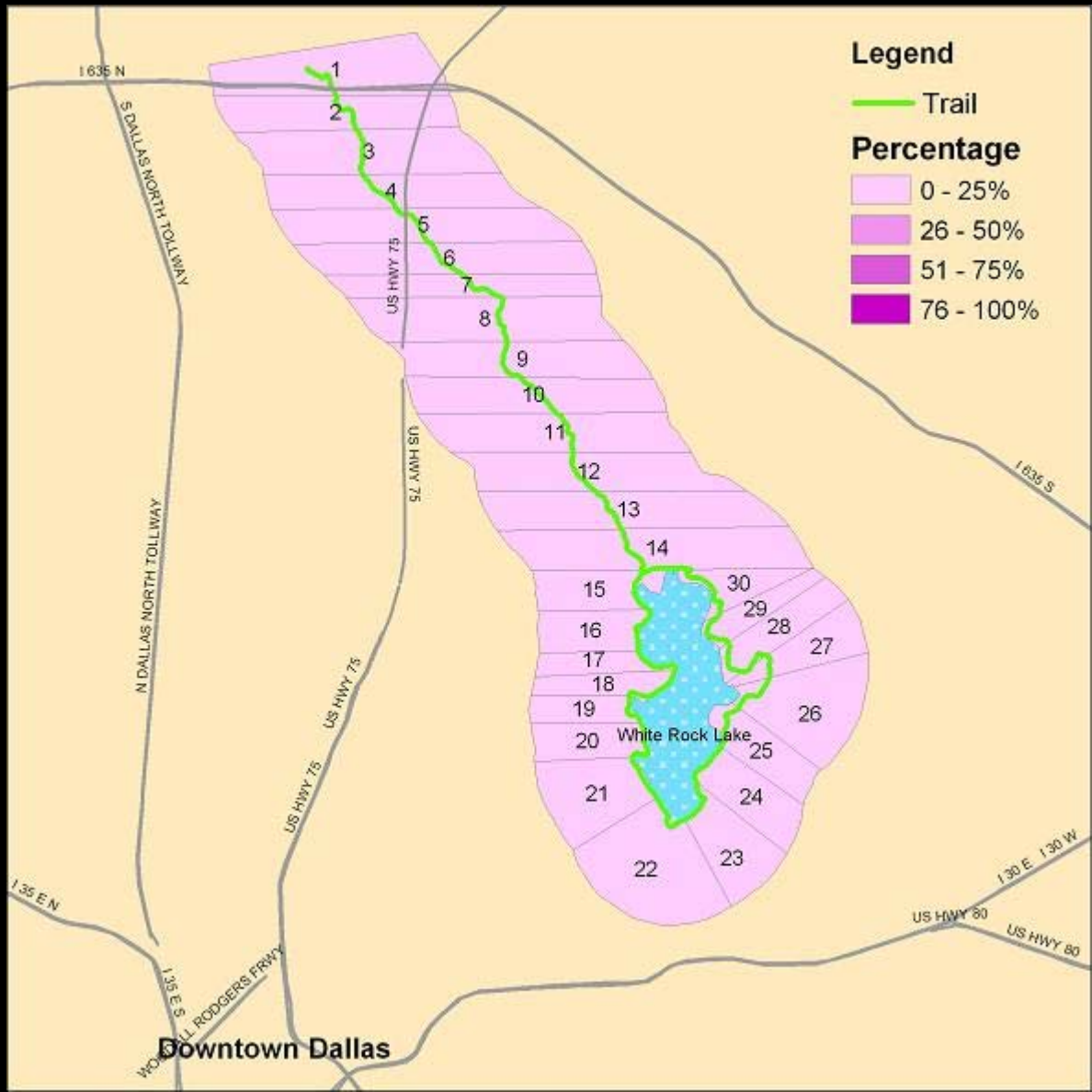






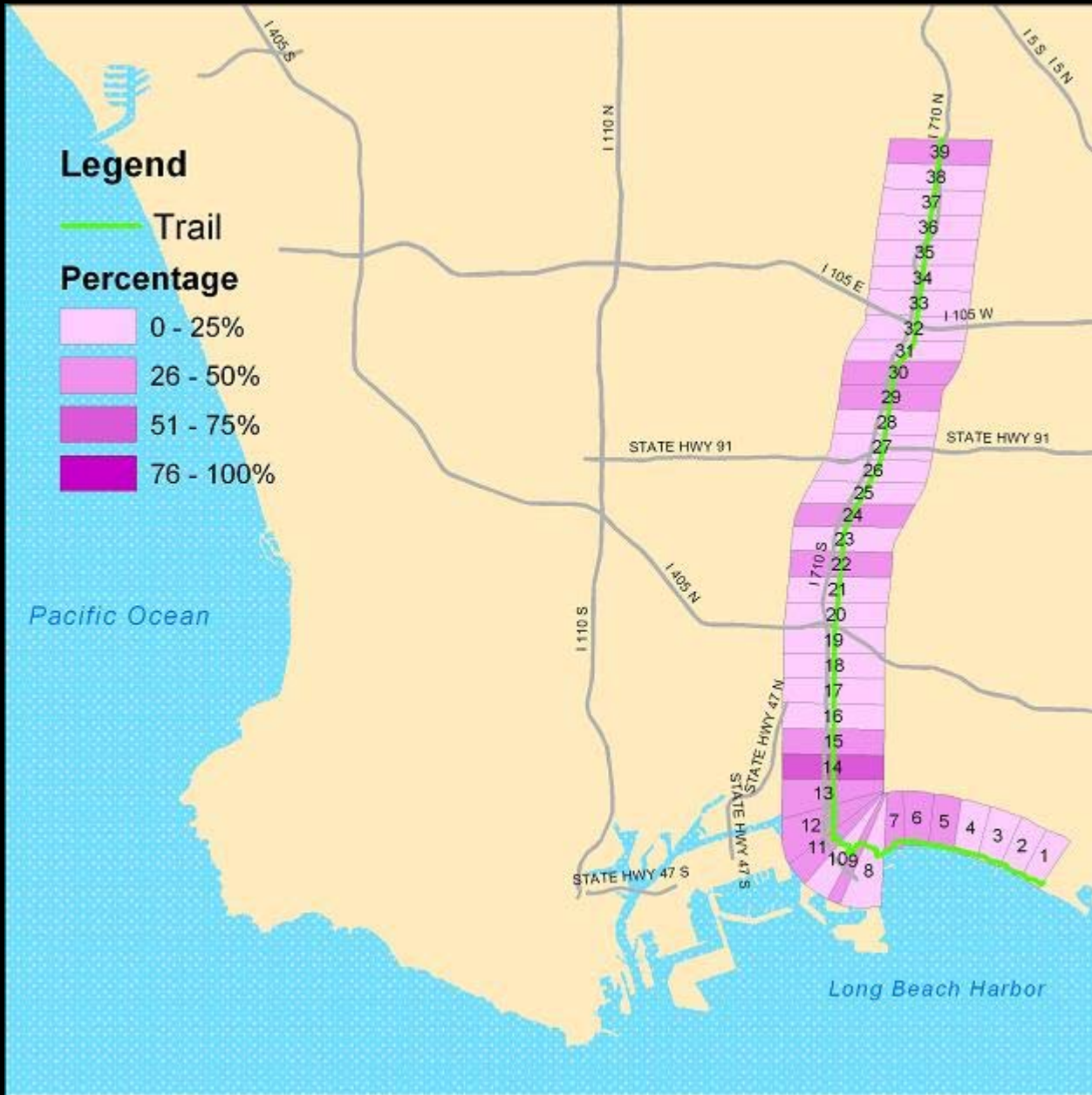
# Dallas White Rock Lake Trail





# Los Angeles River Trail



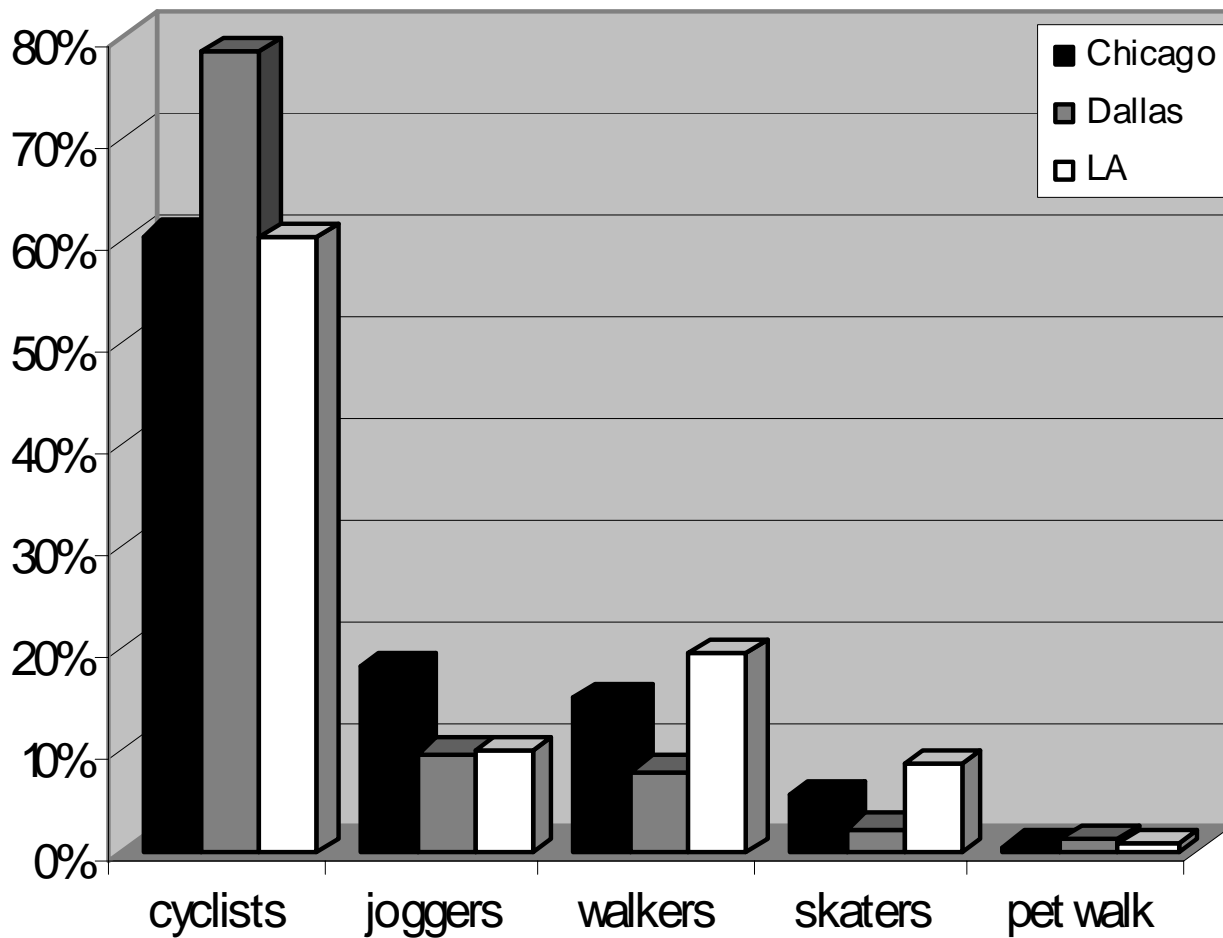


# Trail Count Procedures

- ◆ Observers working in pairs recorded:
  - Age (<18, 18-39, 40-64, 65>)
  - Gender
  - Type of activity (cycling, jogging)
- ◆ Two weekdays, two weekend days
- ◆ Segment boundaries (every ½ mile) verified by GPS and marked in advance
- ◆ Observations in 15 minute intervals
- ◆ Inter-rater agreement (A:.67; G:.90; T:.94)



## Percent user type - All users



# Trail Audit

- ◆ Systematic coding of trail characteristics
- ◆ Searched for existing audit instruments (Moudon AJHP 2003;18(1):21-37)
- ◆ Adapted Systematic Pedestrian And Cycling Environmental Scan (Pikora AJPM 2002;23(3):187-194)
- ◆ Completed in Chicago & Dallas
- ◆ Lessons learned



# Elements of the Trail Audit



# Trailside Neighborhoods

- ◆ Analysis using GIS
- ◆ Urban design and land use
  - Population & business density
  - Residential mix
  - Connectivity to destinations
  - Access to alternative transportation
  - Parks and schools
  - Land Use Mix
- ◆ Social characteristics (race, SES, crime)

# Percentage Black



# Percentage Hispanic



# Percentage White



# Survey of Trailside Residents

- ◆ Survey of 500 residents within 1 mile
- ◆ Minimum of N=5 per segment
- ◆ Random sample from census blocks
- ◆ Verify residence within 1-mile buffer
- ◆ Letter & telephone procedures
- ◆ Self-report measures & accelerometry
- ◆ Chicago (N=184) Dallas (N=173) LA (N=150)

# Acknowledgements

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Always Bring Your Umbrella!

