Transporting Ecologies

Phase 3: 50% completion

Protocal Applications and Strategies

29 March 2004

Alachua Countywide
Bicycle Master Plan
Update

prepared for the

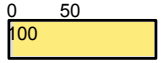
North Central Florida Regional Planning Council

Metropolitan Transportation Planning Organization

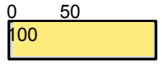
Project Status

Advancing the Bicycle Pedestrian Master Plan

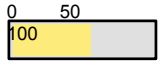
- Public health & community infrastructure



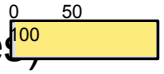
- Utilize initiatives from 2001 Master Plan



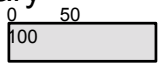
- Conceptualization of a complete regional system
  - Destination based analysis
  - Contextual analysis
  - New paths and networks potentials

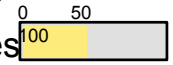


- Identify strategies for implementation (case studies)
  - Analysis of infrastructure in bicycle supportive communities
  - Interviews and literature research collection and summary

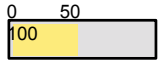


- Develop design vignettes for high priority projects
  - Integration of infrastructure and eco-sensitive strategies
  - Visualization of enhanced service



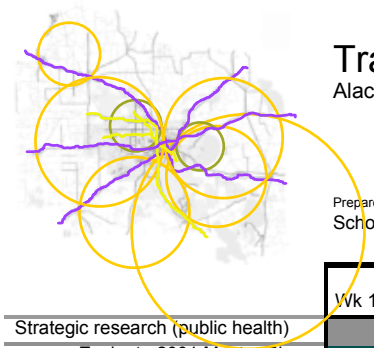


- Link with planning initiatives where appropriate



- Quality of Service visualizations
- Charrette feedback sessions with stakeholders

Project Schedule



Transporting Eclologies

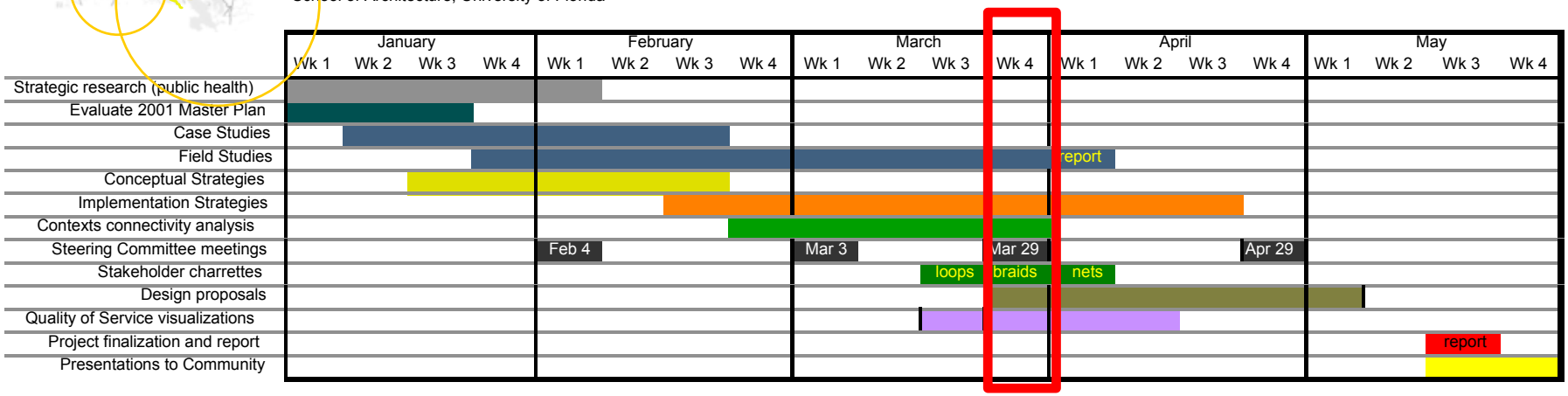
Alachua County-wide Bicycle Pedestrian Master Plan Update

Metropolitan Transportation Planning Organization

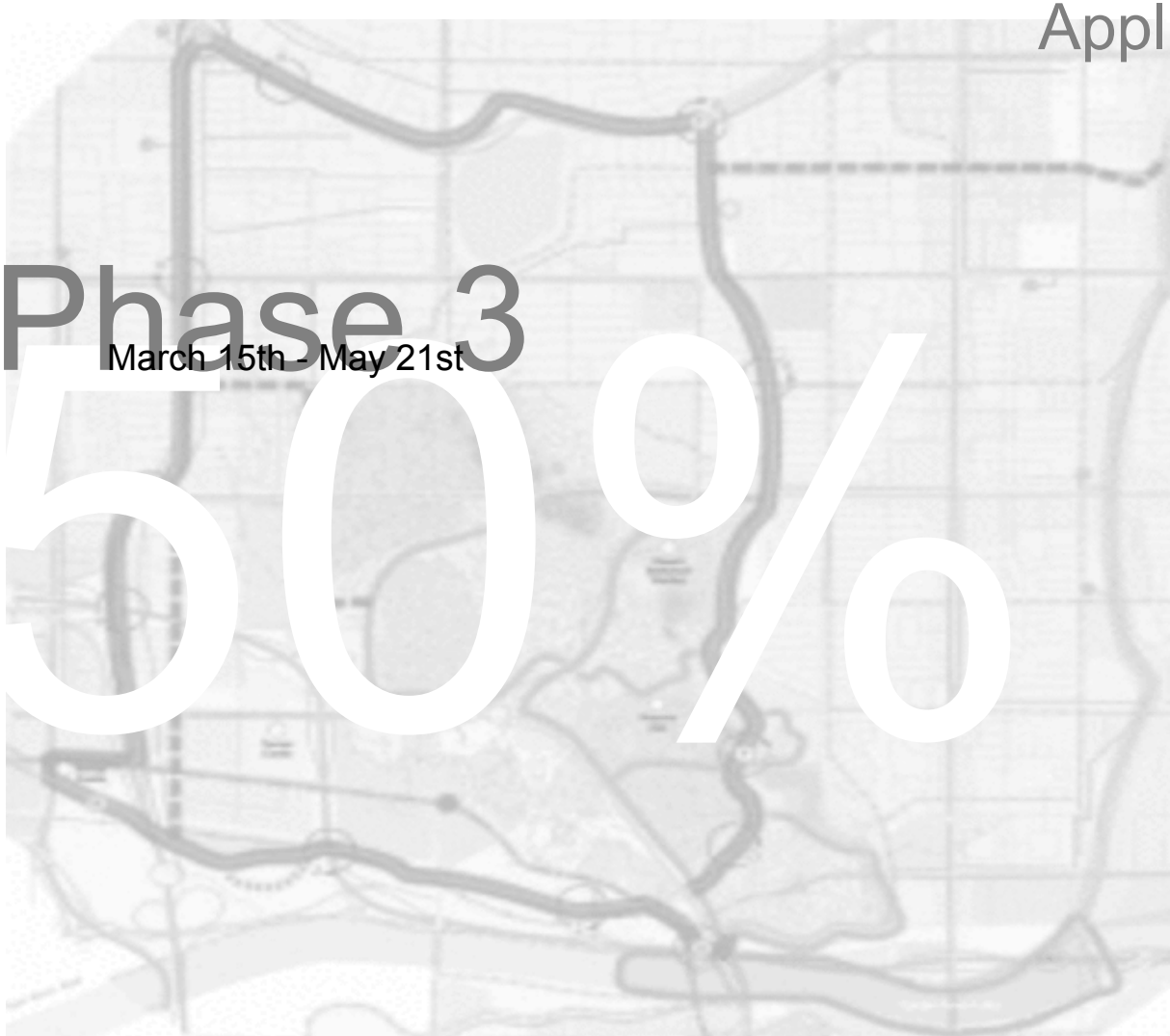
North Central Florida Regional Planning Council

Prepared by

School of Architecture, University of Florida



The project schedule outlines durations expected for the specific tasks listed and identifies expected completion dates. Meeting dates with the steering committee are set. Other critical dates will be announced including charrettes with stakeholder groups once coordinated.



Phase 3

March 15th - May 21st

50%

Applications & Strategies

Context Analysis Studies

Reassessment of Existing System

Rationalizing Priority Matrix (2001)

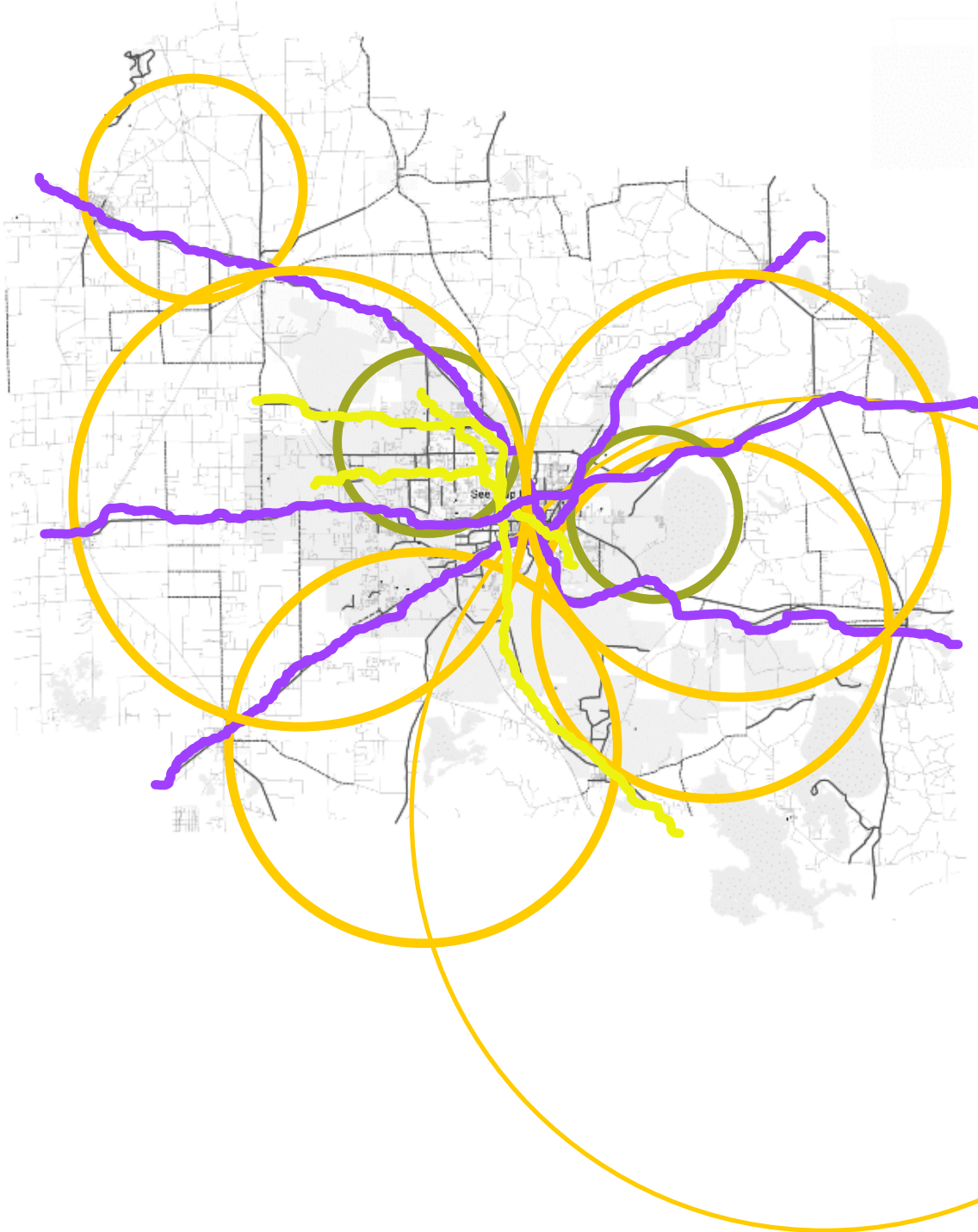
Conduct Public Workshop

Conduct Stakeholder Workshop

Continue New Path Studies

Develop Design Vigniettes

Nets, Braids, Loops



Nets:

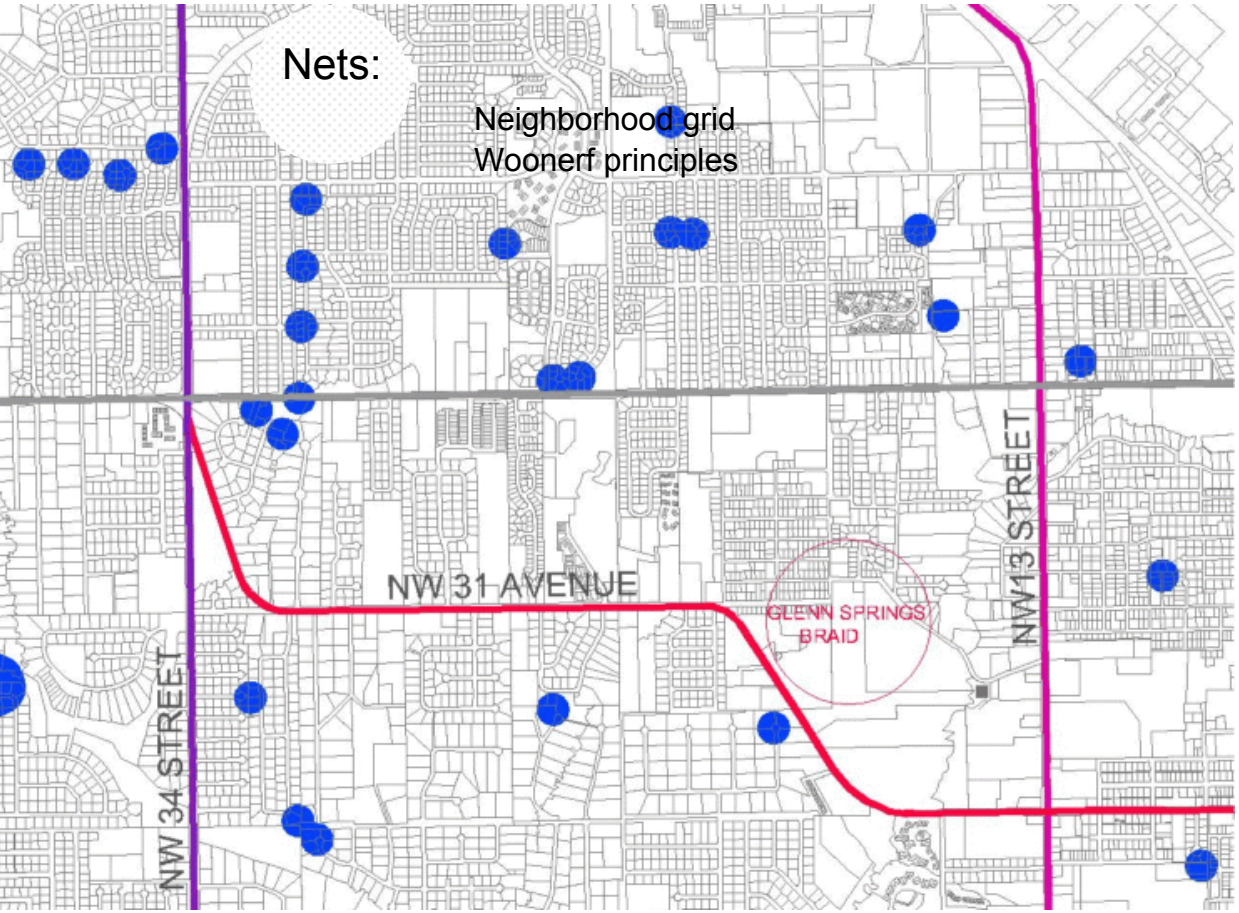
Transportaion grid
Woonerf principles

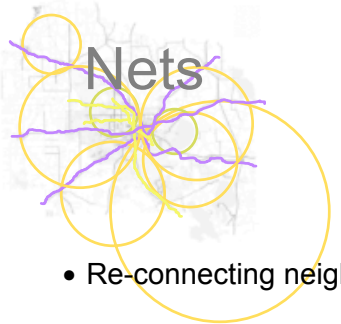
Braids:

Destination based
Commuter driven
Multimodal potential
Greenway connectivity

Loops:

Recreational
Nature access
Rural connectivity



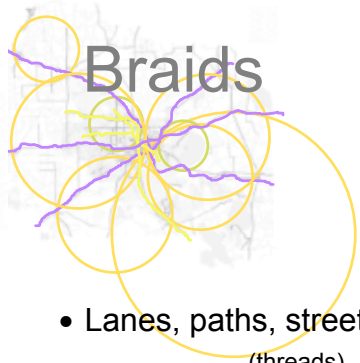


- Re-connecting neighborhoods
- Safer routes for childeren (incorportation of ○neighborhood shcools○ initiative)
- Reduce travel distances
- Promotes local bicycle travel (1 to 3 miles)
- Prime connectivity locations identified (Mapped and tabulated)
- Implementation priority based on neighborhood interest & school board

Stiching the voids — moving from "high proximity" to "high connectivity

Braids:

Analysis Factors



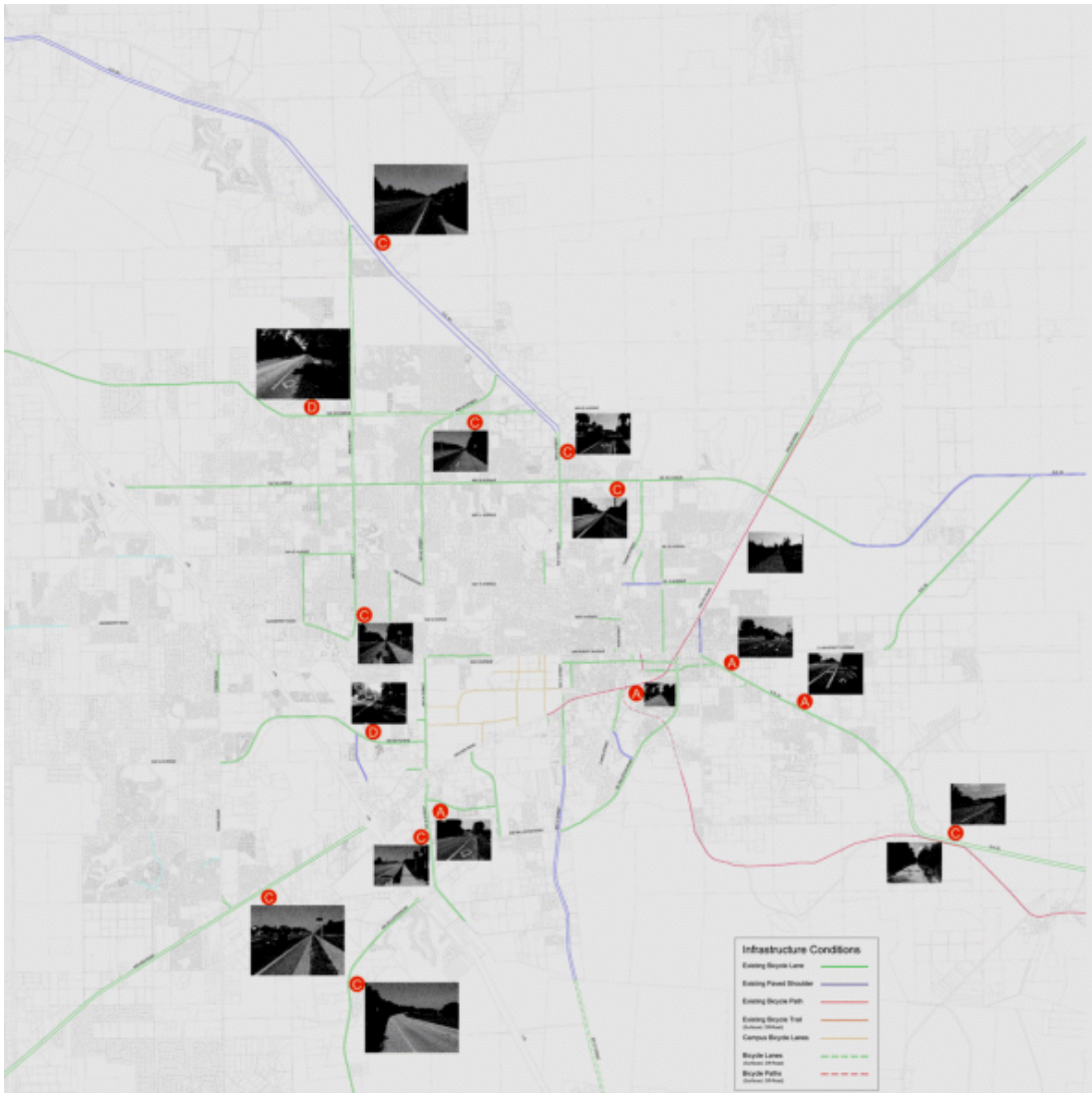
- Lanes, paths, streets & green ways
  (threads)
- Demand analysis & prioritization
  (centripetal linkages)

  Minimizes travel distance

  Optimizes connectivity
  (intersection preference)
- Cycling barriers analysis
  (Identifies difficult topography & obstacles)

  Maximizes accessability
- Quality of Service (QOS) analysis

  Optimizes safety and comfort
- Hydrology matrix
  (watersheds & riparian corridors)

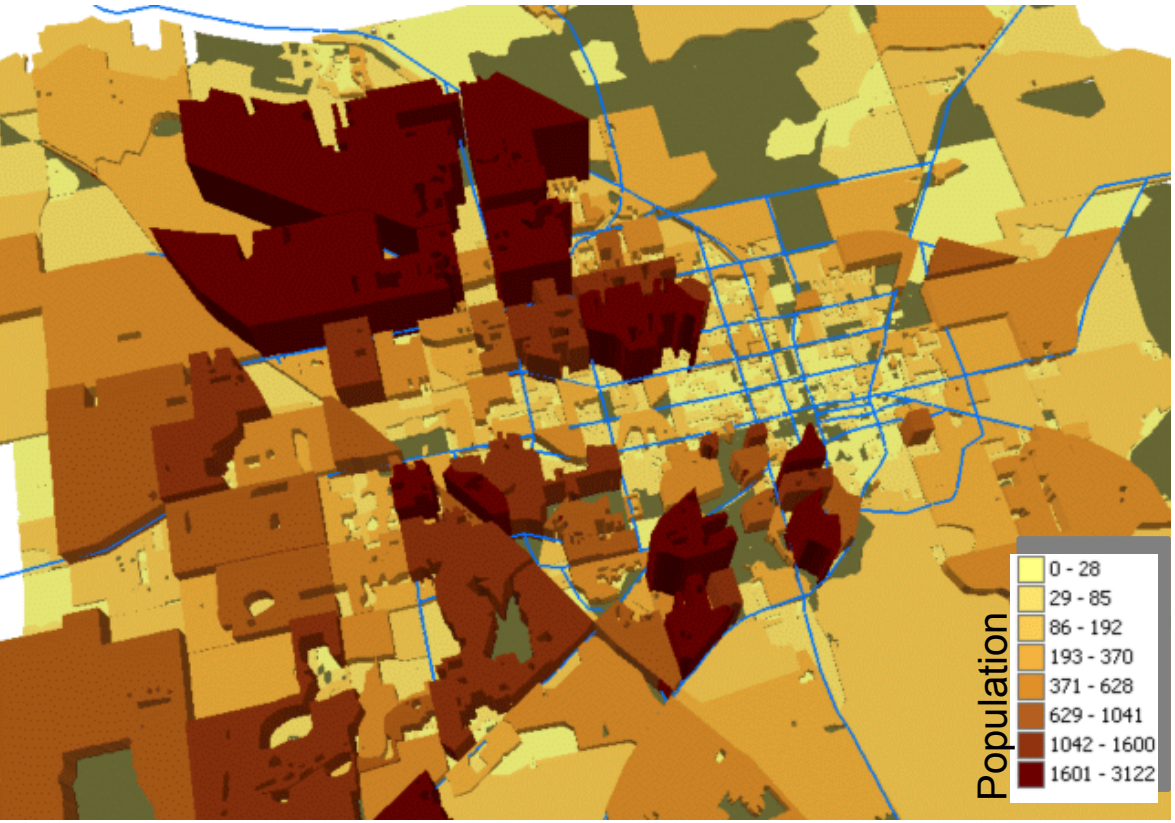


Braids

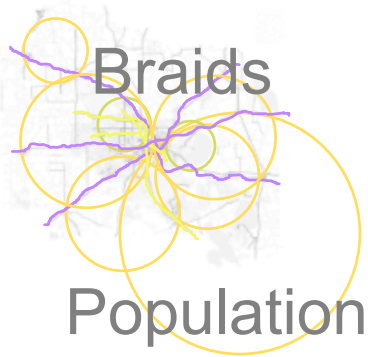
Existing Infrastructure

- Evaluation of existing Infrastructure
  (Network and Quality of Service)

- Visualization
  (Images of exemplary locations and service quality)



US Census data population contours provided by Do Kim



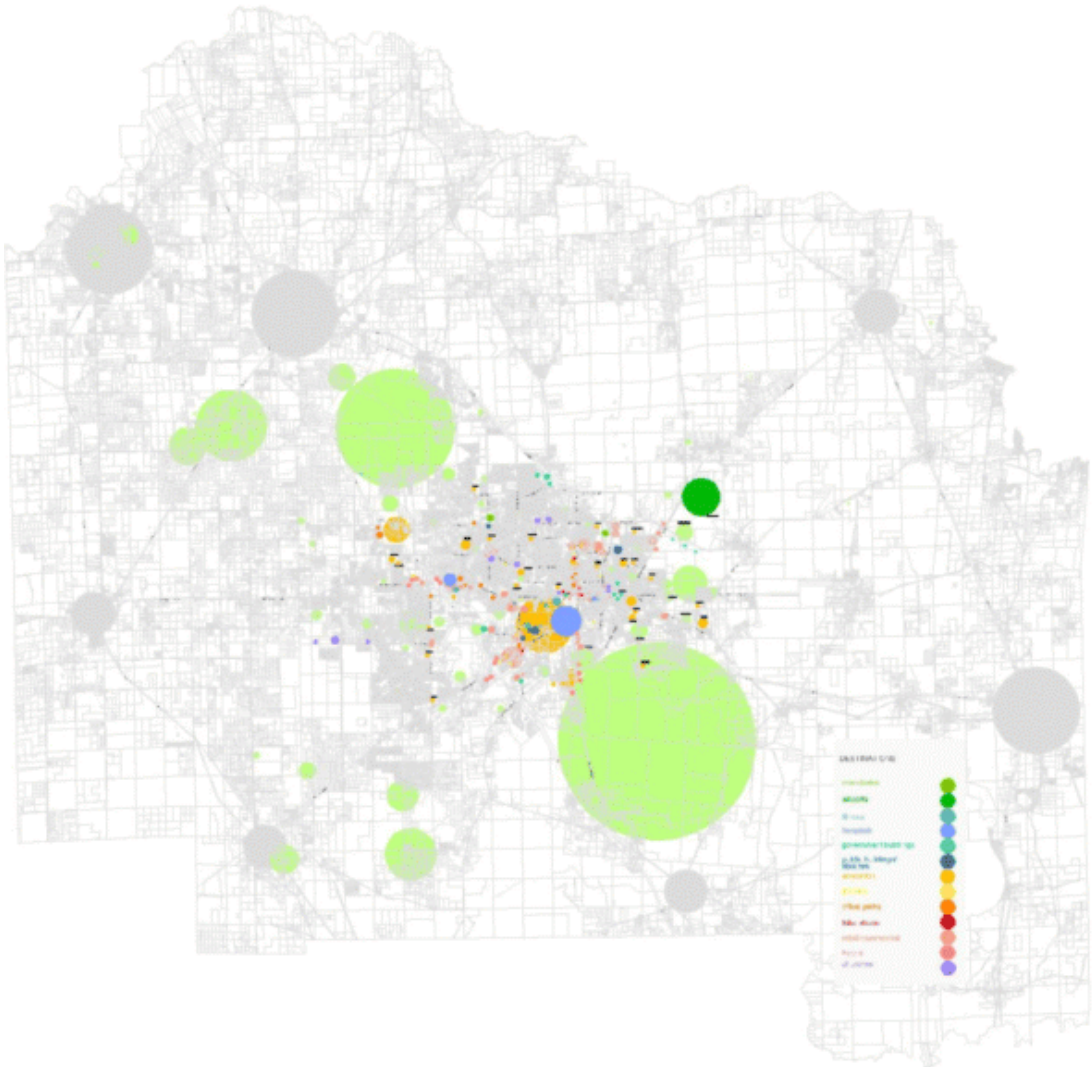
- Latent Demand Method - segment based

(2001 Master Plan gravitational models)

- Destination Matrix - multisegmented

(public, commercial, educational, religeous, parks, natural)

- Population Analysis
- Destination Analysis



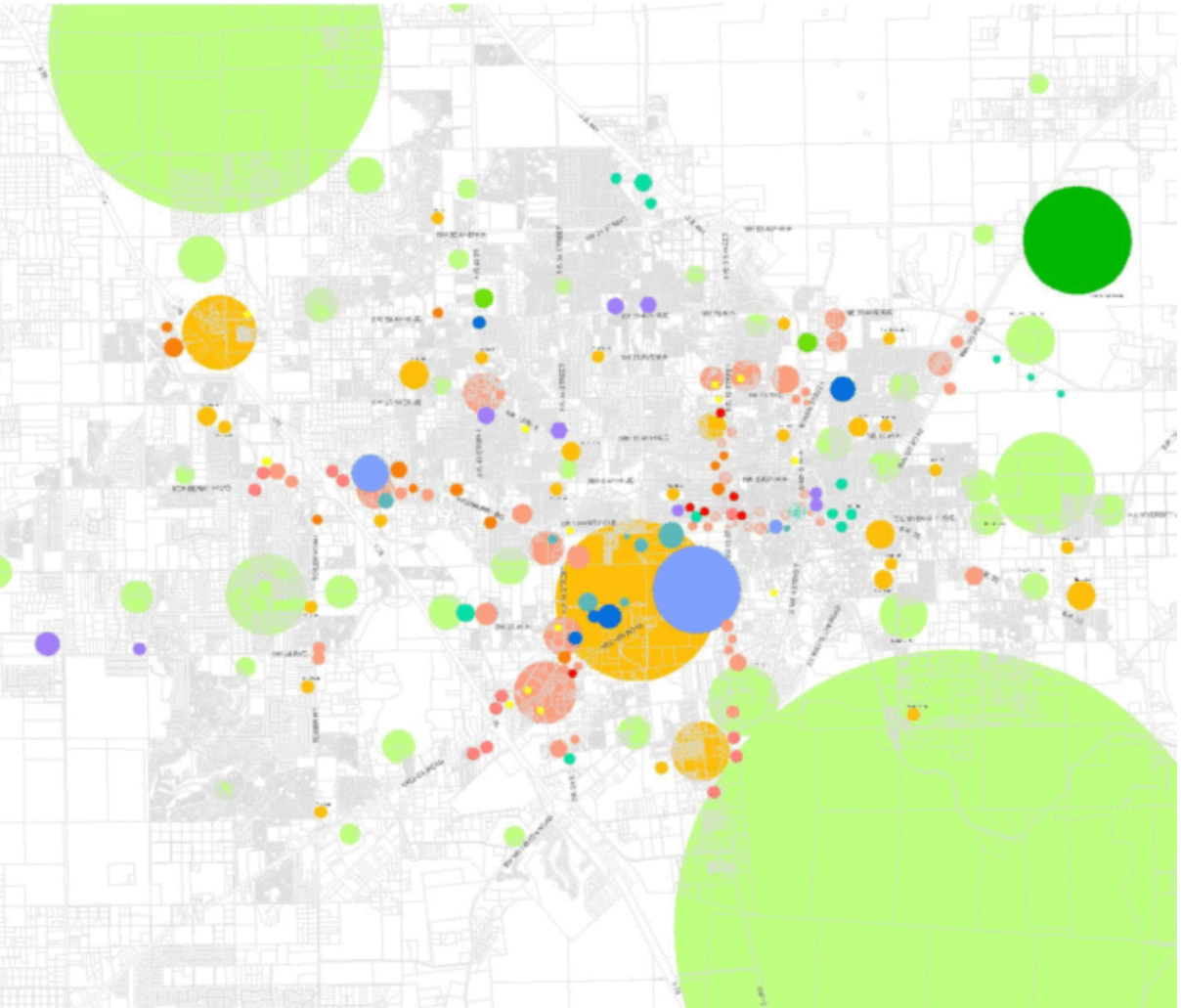
Braids

Destination Matrix

- Destination based analysis
  (Populations and destinations)

- Latent demand influences - 2001 data
(Incorporated as a weighted segmentation analysis)

Destination influences on ○Braid○ prioritization.



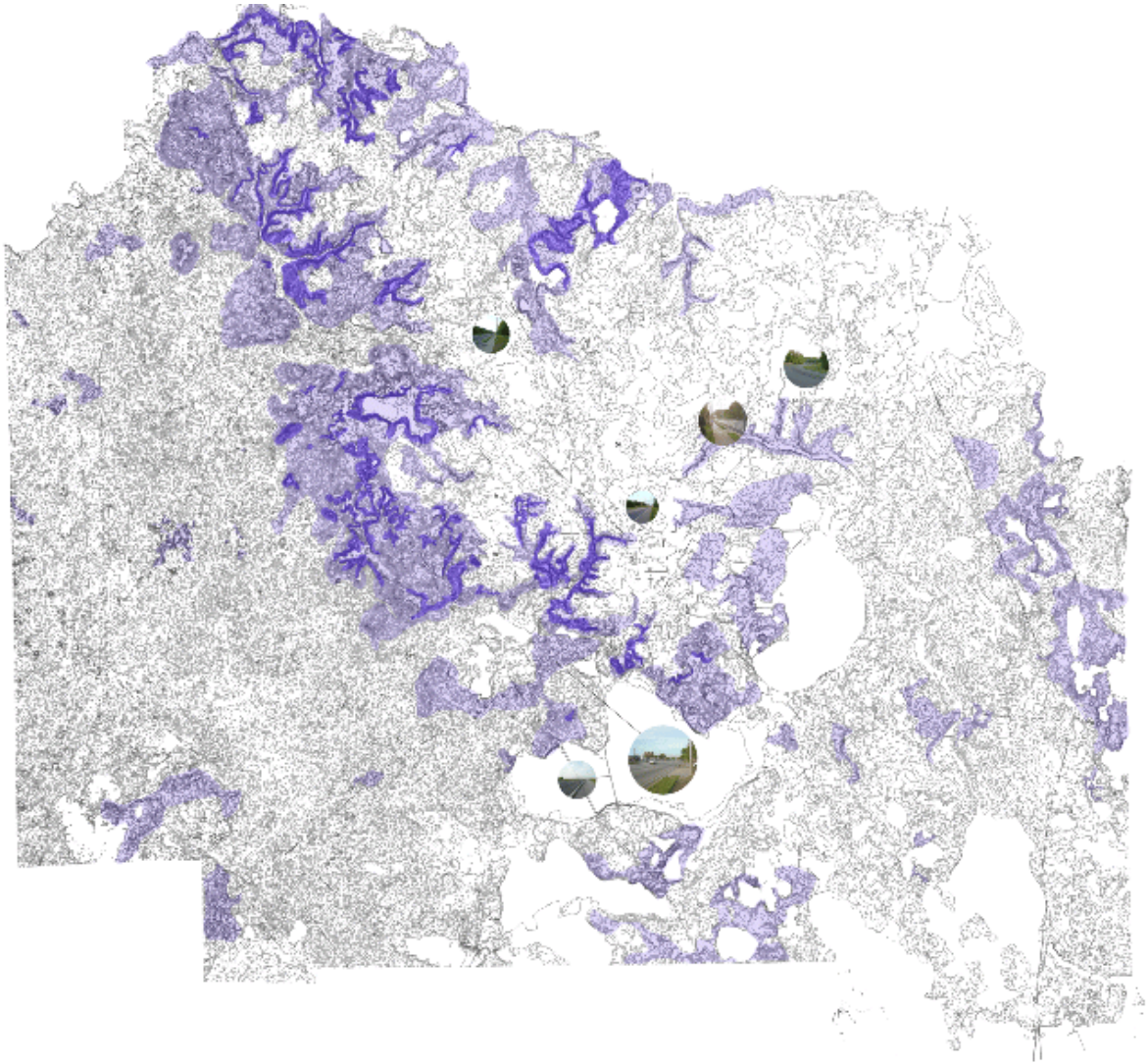
Braids

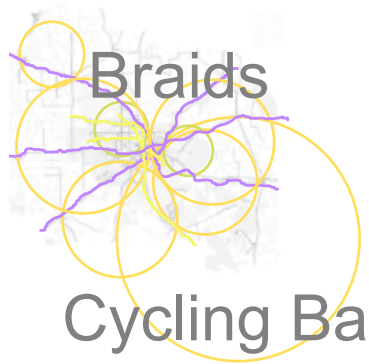
Destination Matrix

- Destination based analysis
  (Populations and destinations)

- Latent demand influences - 2001 data
(Incorporated as a weighted segmentation analysis)

Weights destination based analysis (large view) against Newtonian gravitational models (segmented snapshots).

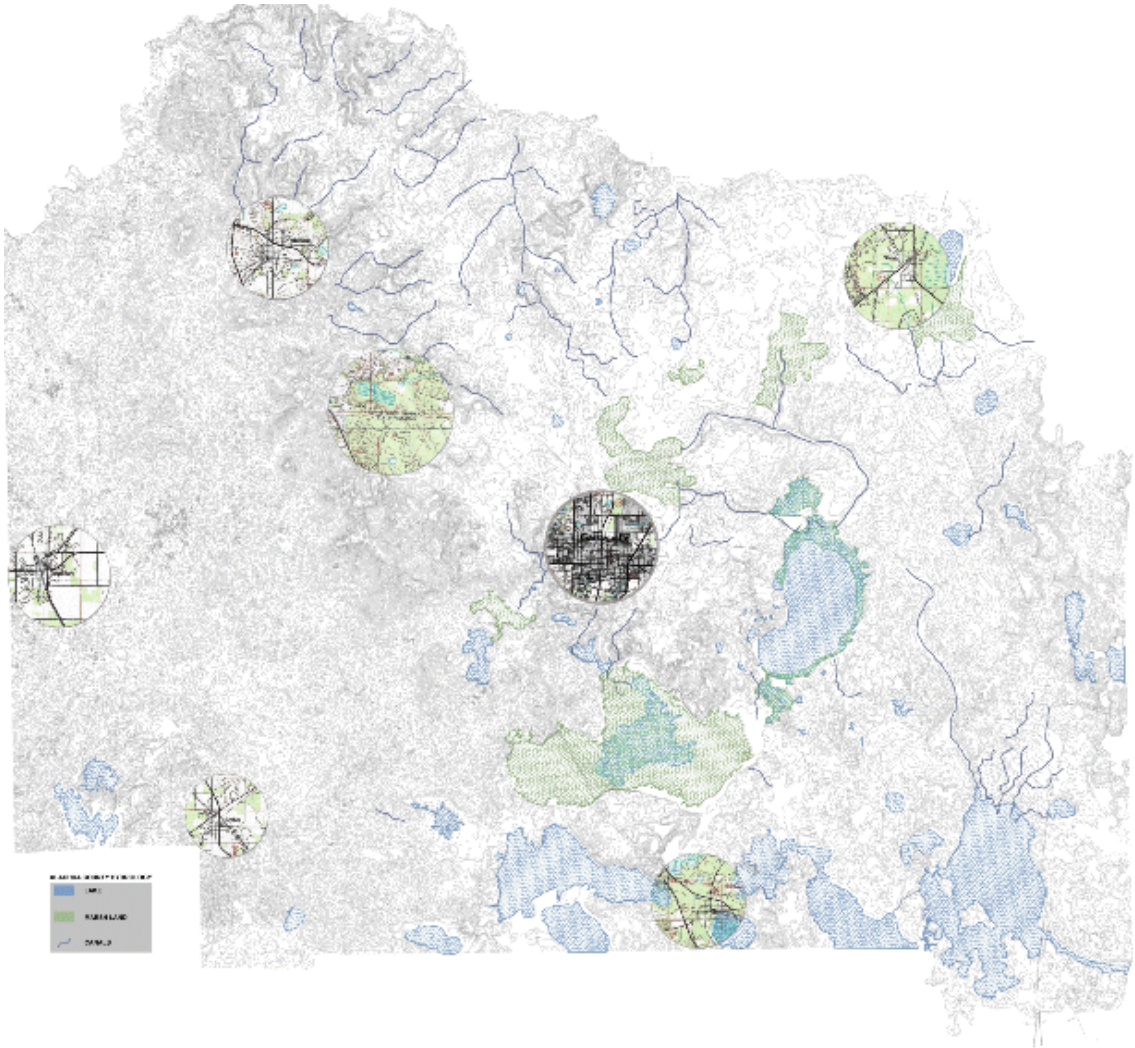


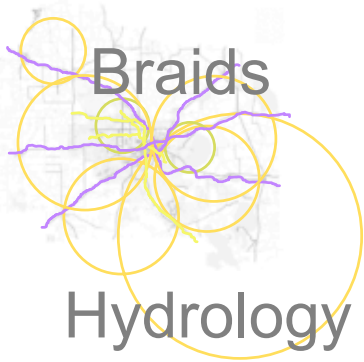


Braids

Cycling Barriers

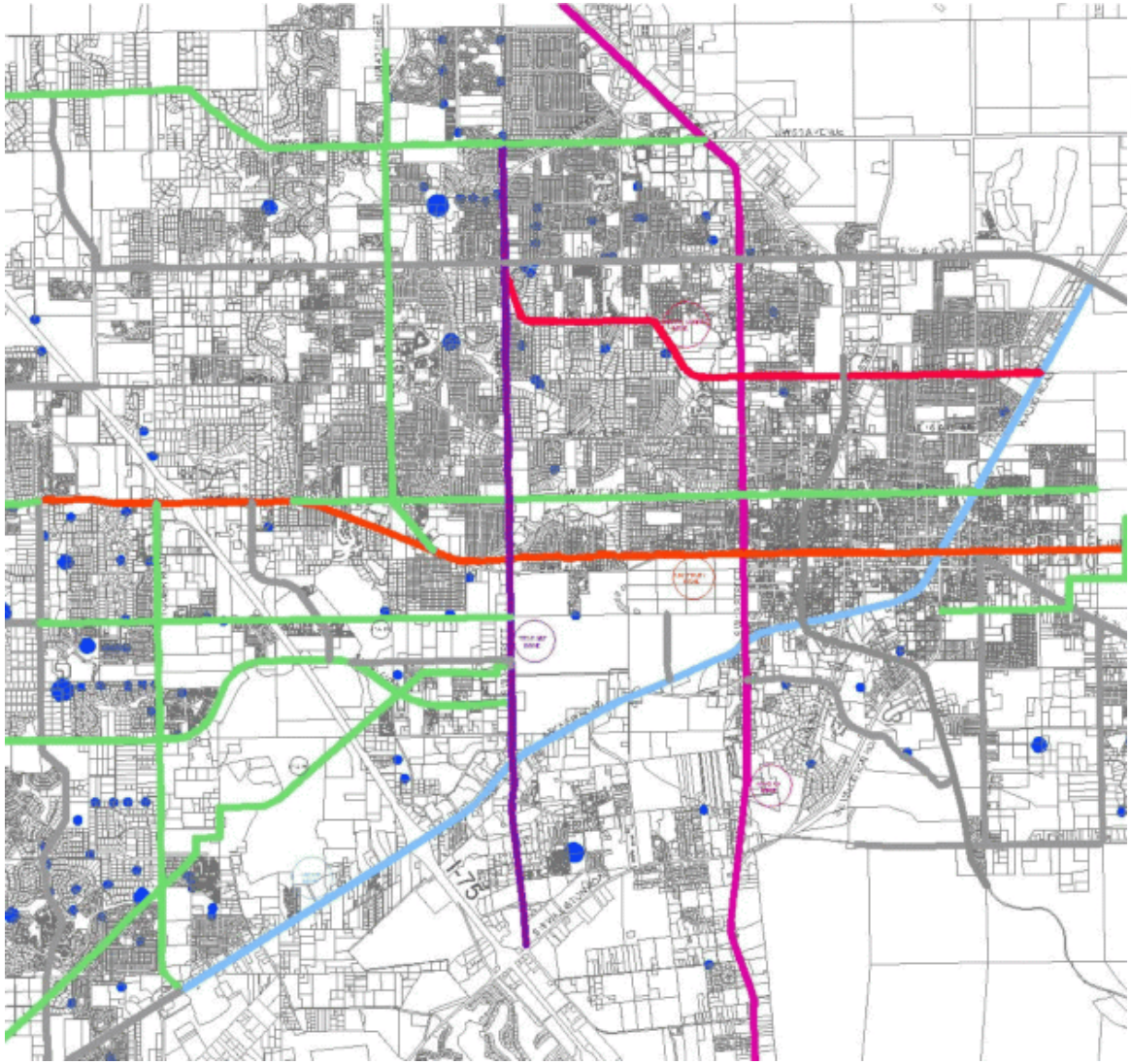
- Topographic Studies
  (Contour based)
- Riparian barriers
  (Hydrolocially based)
- Infrastructural barriers
  (Auto, rail transportation corridors)

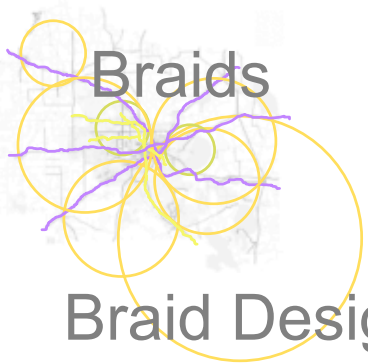




Hydrology

- Riparian analysis
  (Streams as corridors or greenways)
- Lakes and marshes as destinations
(Water park potentials)
- Watershed analysis
(Opportunities for integrated design)





Braids

Braid Designations

Immediate Priority

(Critical to a viable bicycle network)

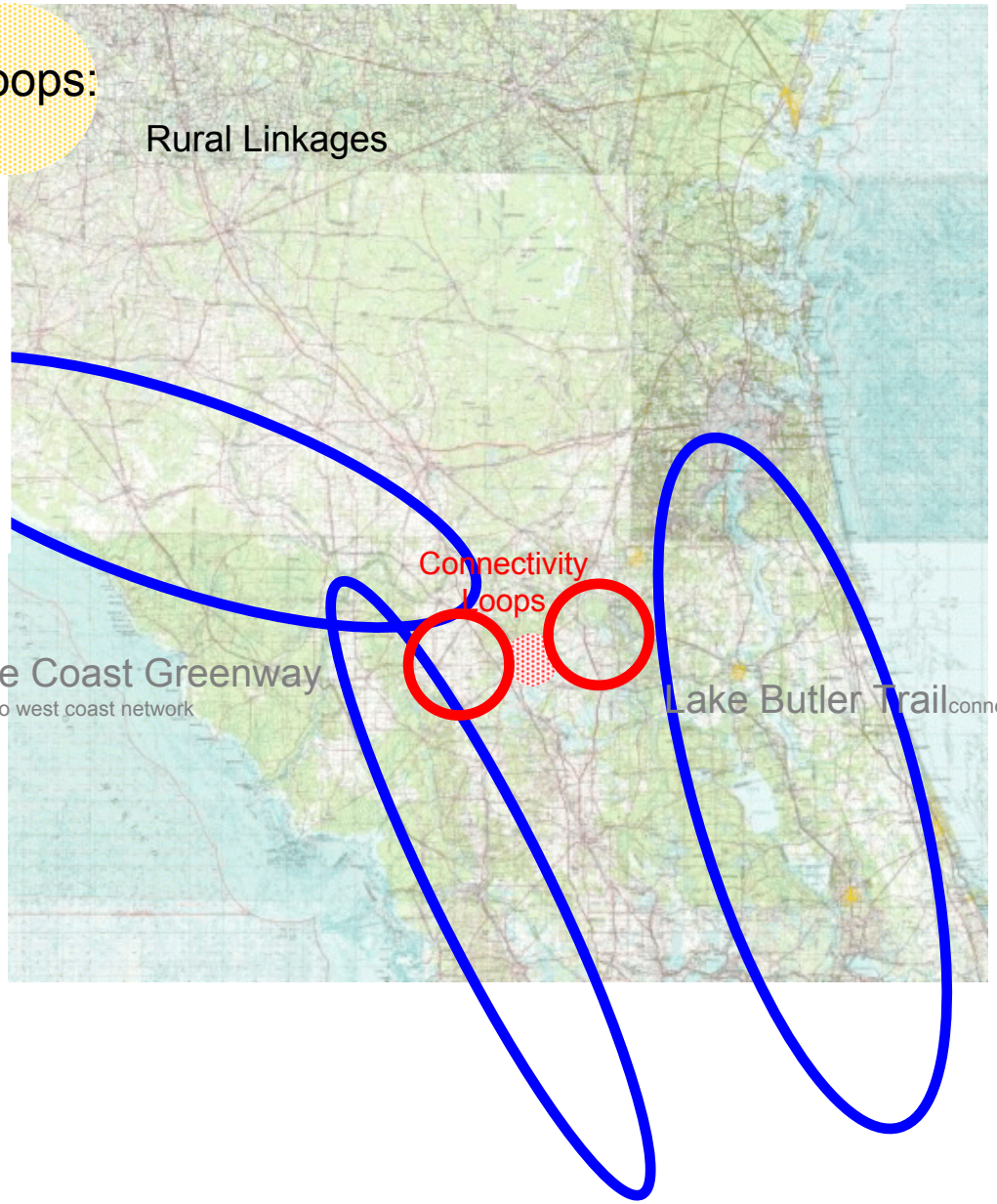
High Priority

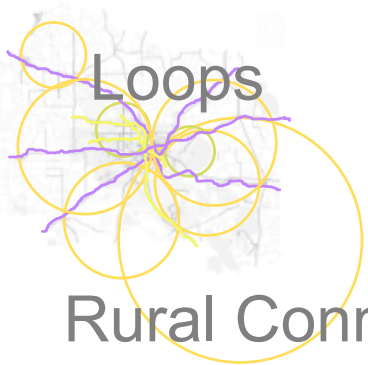
(Very important for high connectivity and alternative routes)

Priority

(Needed enhancements for reduncancy and user comfort)

1. Alachua Braid (441)
2. University Braid (University Ave.)
3. Westside Braid (NW 34th Street)
3. Archer Braid (Archer Rd.)
4. Millhopper Braid (NW 16th & 13rd Ave.)
5. Glenn Springs Braid (NW 23rd Ave & 31st Ave)
6. Hawthorne Braid (W 6th Street rail corridor).

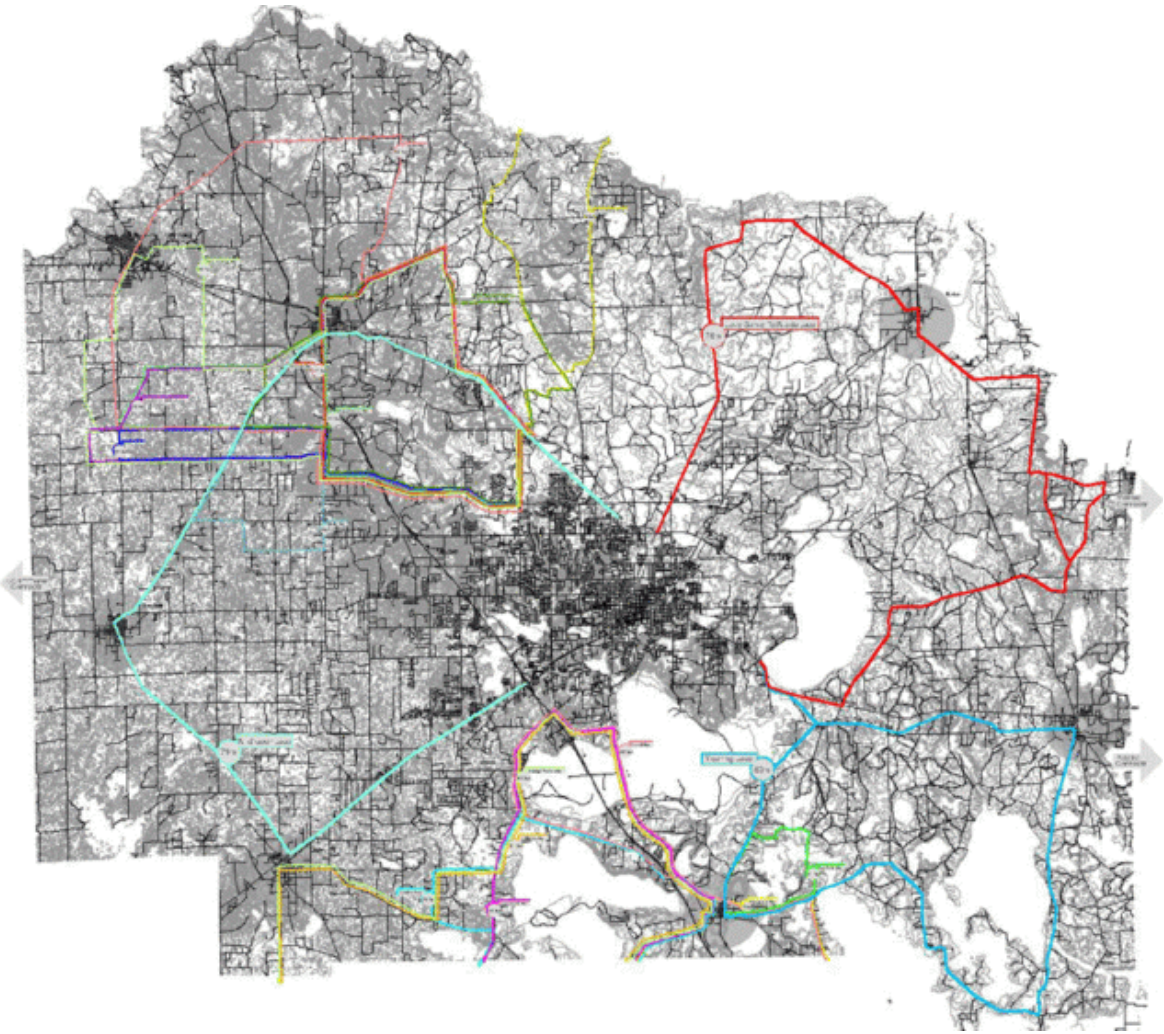


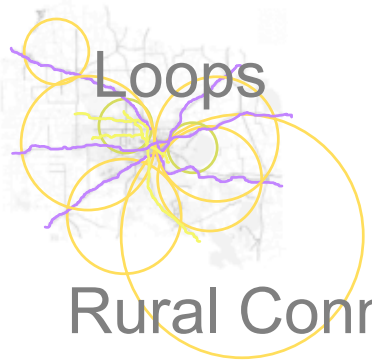


Rural Connectivity

- Loops - paths, greenways and lanes
- Regional connectivity
  Links coastal trail networks
- Urban - rural connectivity
- Ecotourism
  Recreational and competitive cycling

Statewide Linkages





Rural Connectivity

- Network Analysis

  Existing loop inventory & mapping

  Stake holder workshops

  Proposed new linkages

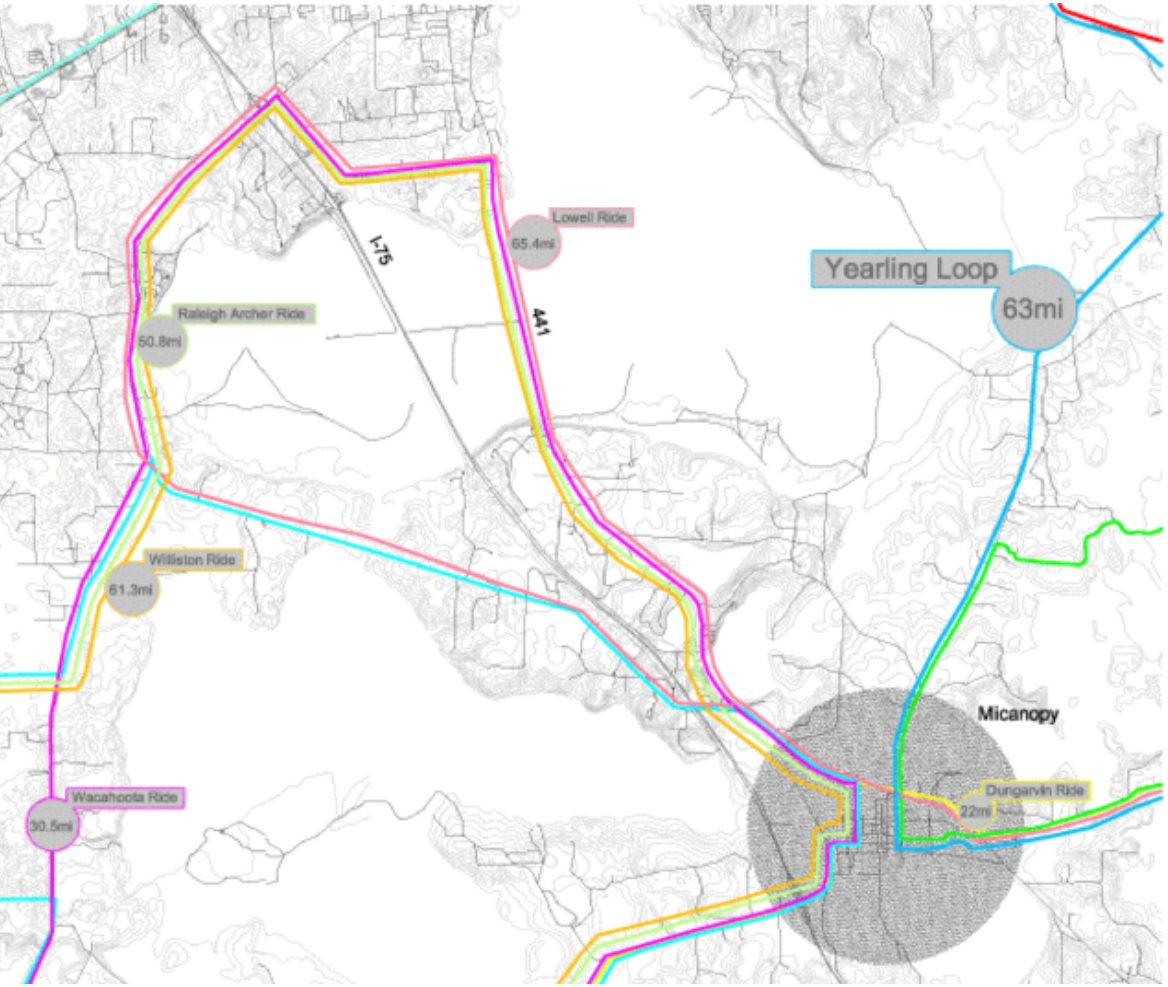
- Implementation Protocals

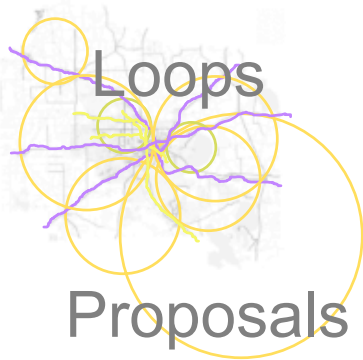
  Appropriat rural design guidelines

Wildflower Loop

Yearling Loop

Lake Sante Fe / Waldo Loop





Loops

Proposals

- Themed Loops

  (Conceptually focused & mapped)

  Promote regional history

  Enhance access to nature areas

  Advance ecotourism

- Multiplicity

  (Complexity and alternative options)

  Varied challenge levels

  Alternative vistas and scenery

Transporting Ecologies
nets, braids & loops
Alachua County Wide Master Plan Update
Metropolitan Transportation Planning Organization
North Central Florida Regional Planning Council

School of Architecture
University of Florida

Public Input Survey
Please take a moment to answer the following questions. The results will be used to promote bicycle transportation through improvements to the existing infrastructure and toward focusing resources on projects with highest potential for utilization, connectivity and public desireability.

General - please answer questions 1-4 regarding your bicycling habits.

1. Please indicate your age _____.
2. How often do you ride a bike? (Circle one)

1	2	3	4	5	7
never		occasionally			every day

3. Which of the following categories describes your riding habits? (Circle all that apply)

Commute to work/school	Ride for recreation/exercise
Ride competitively/distance	Ride for work (delivery)

Destination Matrix - on the map below, draw lines between the places you travel by bicycle or would like to travel

Public Workshop Protocals

- Introduction to Project
  (15 minute overview)
- Survey of Needs
  (Discussion based inquiry)
- Interactive Network Design
  (Complexity and alternative options)
- Questionnaire Survey
  (Distributed at meeting and available on line)

Design Scheming

Phase 3

March 15th - May 21st

Finalize Priority Matrix

Develop design vigniettes

Integration of ecological strategies

Translate information to website

Draft report

Develop Promotional Posters