

Chatham County–Savannah MPC Stakeholder Committee Meeting #2

January 23, 2013



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Agenda

1. Introductions
2. Task 2 Tech Memo
 - Conclusions
 - Comments/Discussion
3. Stakeholder Outreach Activities
4. Proposed Park and Ride Site Evaluation Process
5. Travel Demand Analysis Approach
6. Next Steps
7. Questions and Discussion



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TASK 2 TECH MEMO REVIEW



Tech Memo 2 Review

Analysis Completed

- Existing and 2040 Demographics
 - ✓ Population growth and densities
 - ✓ Employment growth and densities
- American Community Survey County-to-County Travel Patterns
- LEHD Analysis of 10 Employment Activity Centers
- Analysis of Employer-Supplied Data
 - ✓ Gulfstream
 - ✓ Crossroads Home Depot Distribution Center
 - ✓ Hunter Army Airfield and Fort Stewart
 - ✓ Georgia Southern
- Existing Park and Ride Lots

Tech Memo 2 Review

Findings and Conclusions

- Highest population growth rates are for Effingham and Bryan Counties
- Significant population and employment growth along and west of I-95 corridor
- Over 2/3's of work trips from Effingham and Bryan Counties are leaving those counties for work elsewhere
- Areas with significant employment and densities are:
 - ✓ Downtown Savannah
 - ✓ Gulfstream/Airport/Crossroads area
 - ✓ Hospitals area
 - ✓ Hunter Army Airfield
 - ✓ Oglethorpe Mall and Southside areas

Tech Memo 2 Review

Findings and Conclusions

- Analysis of demographics and work trip travel patterns suggest primary long-distance commuter corridors to focus efforts on are:
 - ✓ Northwest (Highway 21)
 - ✓ West (US 80 and I-16)
 - ✓ South (US 17 and I-95)



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STAKEHOLDER OUTREACH EFFORTS



Stakeholder Outreach Efforts

Stakeholder Interviews

- Gulfstream
- Chatham Area Transit
- Coastal Regional Commission
- Memorial Hospital
- SEDA and Crossroads Business Park
- Hunter Army Airfield and Fort Stewart
- Bryan County
- Effingham County



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PARK AND RIDE LOT SITE EVALUATION PROCESS



Site Selection Process

Area Considerations

- Informal park-and-ride activity
- Density of residential areas
- Intensity and concentration of employment
- Distance between major residential areas and employment centers; and,
- Current and future levels of service on pertinent roadways.

Suitability Assessment Criteria

- Geographic Factors
- Area Roadway Factors
- Site Location Factors
- Site Access Factors
- Transit Factors



Geographic Factors

- Relative Distance to Major Employment/Activity Centers
- Number of Employment Centers Served
- Others?



Area Roadway Factors

- Proximity to Major Commuter Corridors
- Proximity to Local Arterials
- Highway Corridor Level of Service
- Highway Corridor Average Annual Daily Traffic Volumes
- Others?



Site Location Factors

- Visibility
- Residential Dwellings
- Safety and Security
- Others?



Site Access Factors

- Trail and/or Bike Access
- Sidewalk Access
- Available Right-of-Way
- Others?



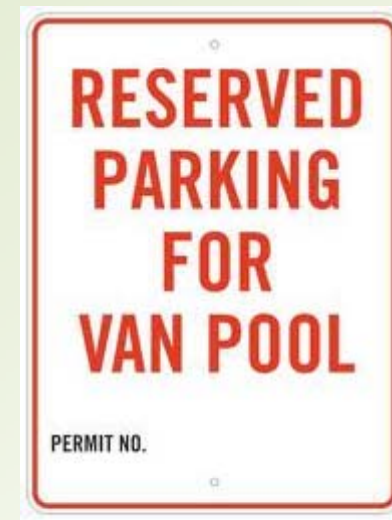
Transit Service Factors

- Express transit routes
- Fixed-route transit service
- Circulator service at the lot
- Circulator service at the destination
- Others?



Other Park-and-Ride Lot Considerations

- Lot Size
- Internal Lot Design
 - Handicapped Parking
 - Kiss-and-Ride Parking
 - Short-Term Parking
 - Standard Park-and-Ride Parking
- Access
- Traffic Control Devices



Other Park-and-Ride Lot Considerations

- Signage
- Amenities
- Landscaping
- Maintenance
- Boundary Identification
- Expansion Potential



Lot Naming and Addresses

- Address Signs
- Lot Naming





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TRAVEL DEMAND ANALYSIS APPROACH



2011 Base Year Work Person Trip Data

Data Sources and General Limitations

- American Commuter Survey data:
 - Represents all work travel
 - County-level geography (i.e., too few zones)
- LEHD data:
 - Represents most work travel (no federal employees or sole proprietors)
 - Census block geography (nearly 25,000 blocks)
- Local Employer data:
 - Most exact
 - Various geographies (zip codes and county)

Study Area

Georgia Counties

- Chatham
- Effingham
- Bryan
- Liberty
- Bulloch

South Carolina Counties

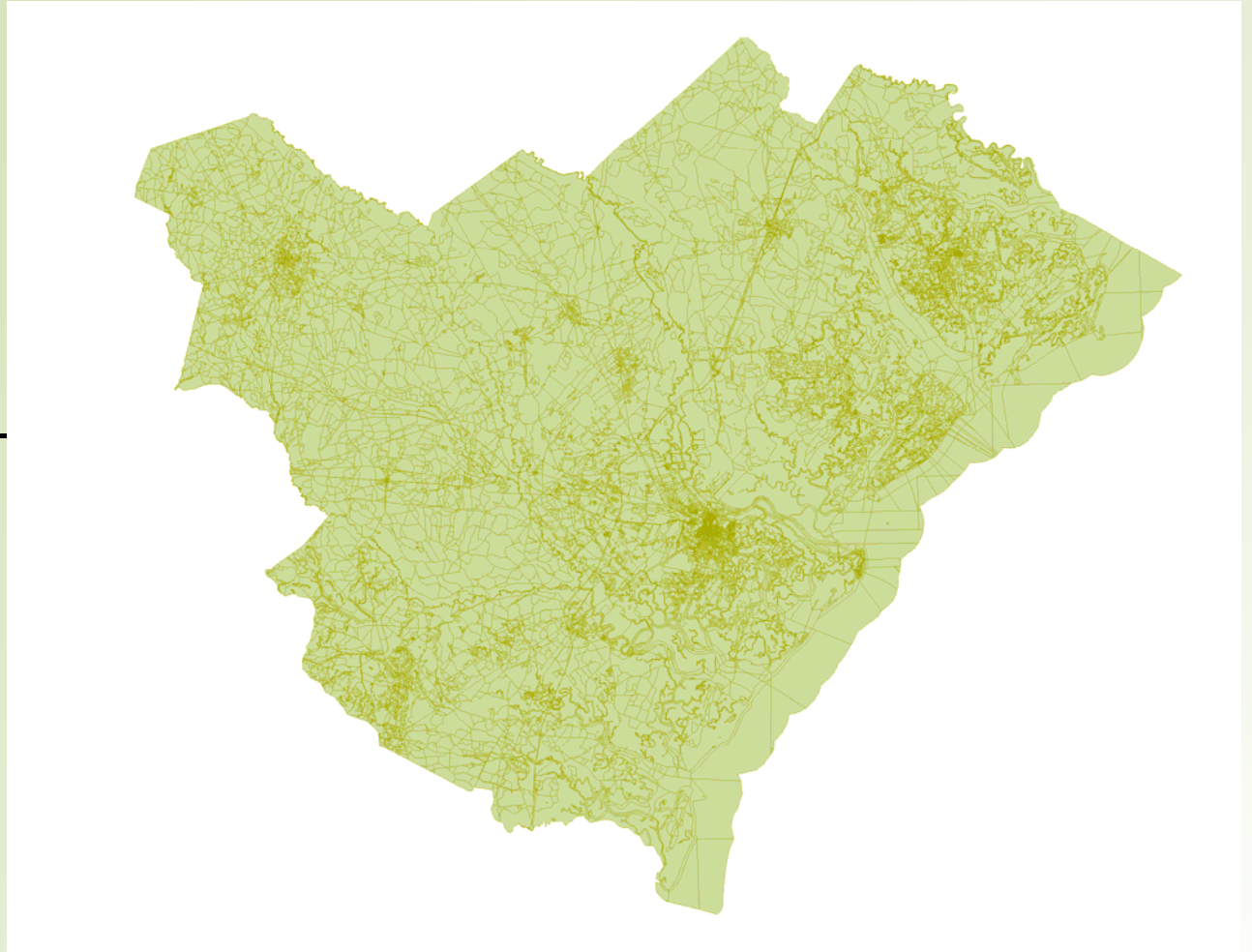
- Jasper
- Beaufort



Geography of LEHD Data

Block-Level Geography

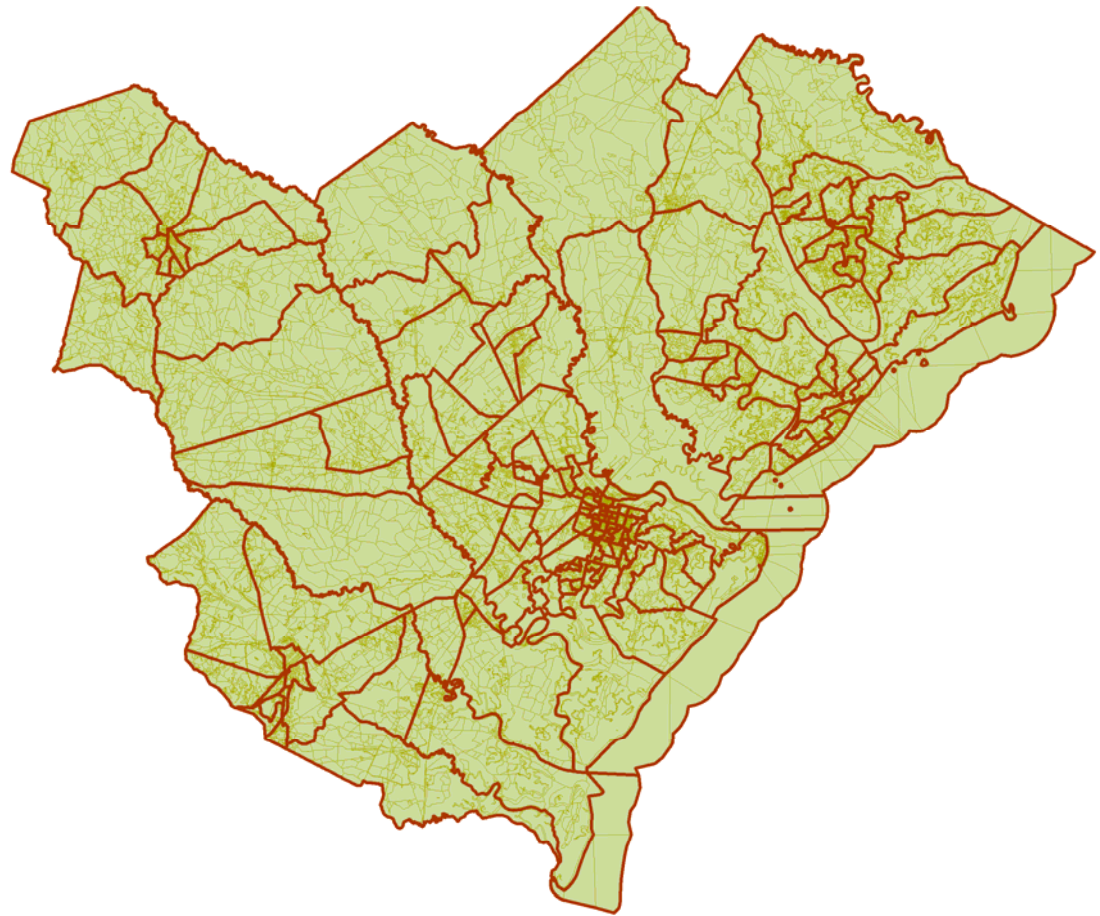
- Nearly 25,000 Census Blocks
- Some 200,000 Home-to-Work records
- Needs practical consolidation



Analytical Geography

Merged Geography

- 166 Total zones or districts
- 10 by Employment Area
- 156 by Census Tract or portions of Census Tracts



Simplified LEHD Expansion Strategy

- ACS county-level data assumed to be best representation of all work flows
- LEHD data provides needed detail **BUT** is missing federal/military employment and sole proprietors
- Assume most of “*missing*” LEHD trips is related to military bases
- Rest of missing trips distributed based on LEHD trip distribution

So: $ACS = (LEHD \times Factor) + Military$

166 x 166 matrix

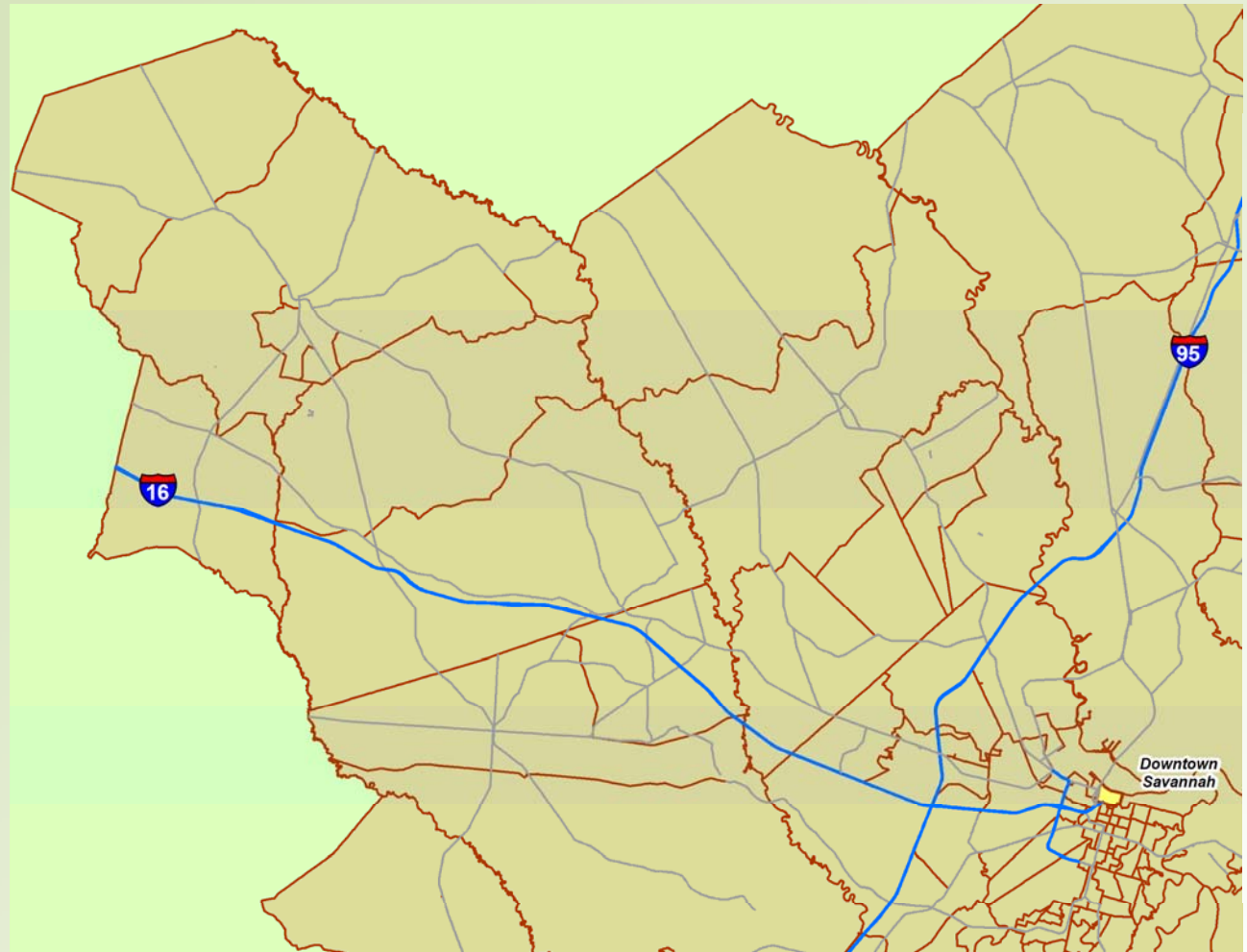
2040 Horizon Year Work Trip Expansion

- Expansion based on TAZ population and employment
- 2011 Base Year Work Trips = 291,974
- 2040 Future Year Work Trips = 376,457
- +29% Increase

Example Application

Downtown Destination

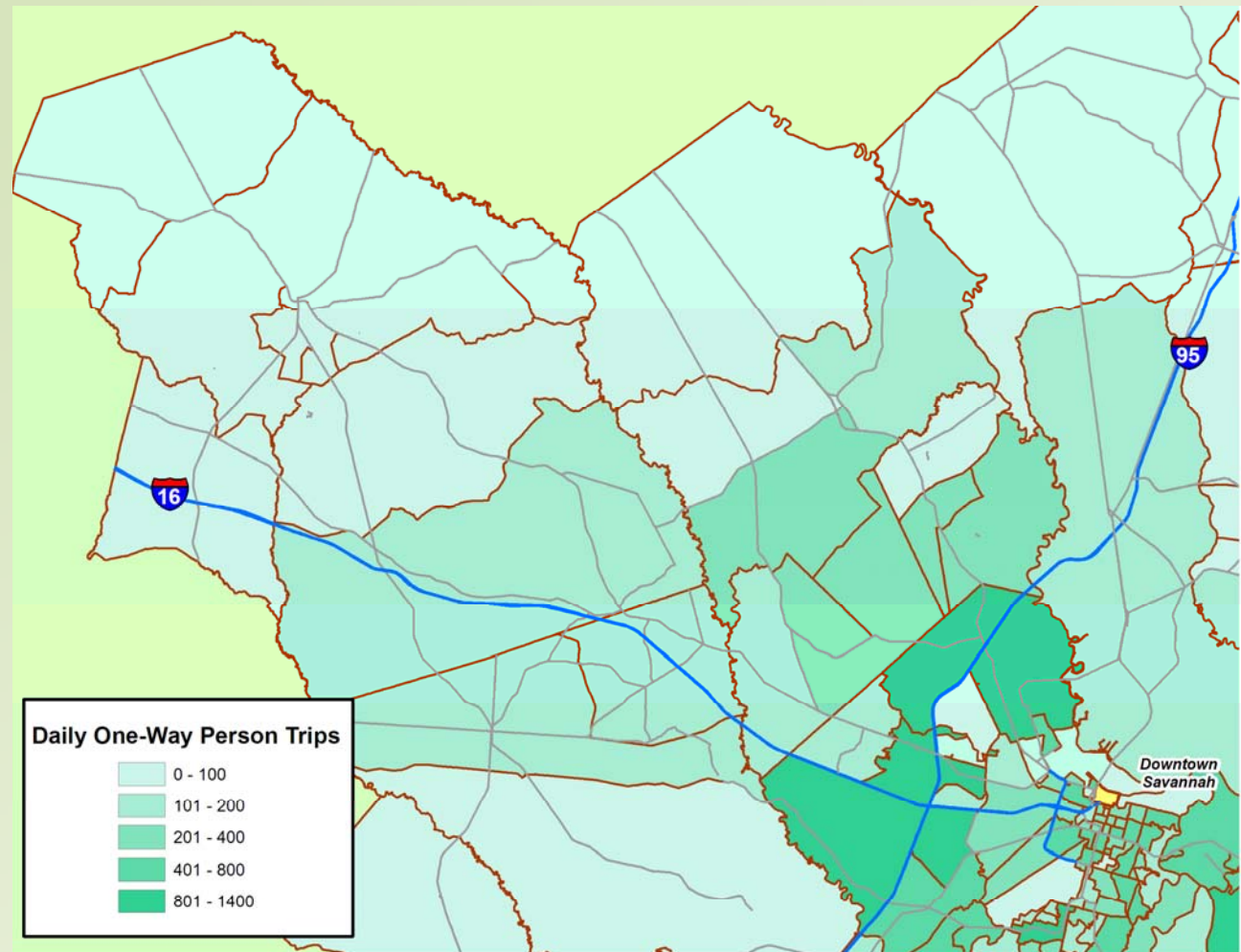
Red Boundaries are Analytical Areas (i.e., Census Tracts)



Example Application

Downtown Destination

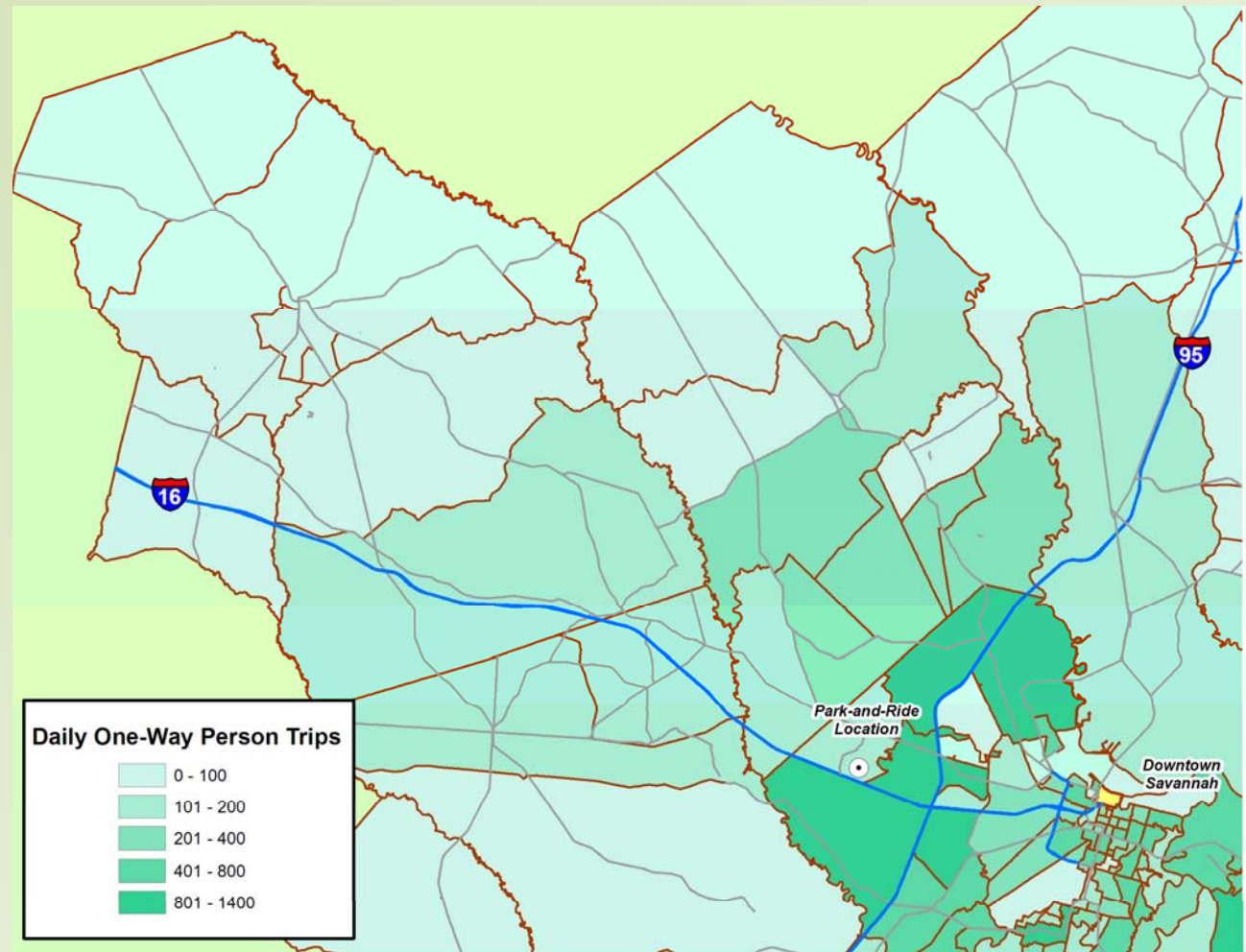
Daily One-Way Person Trips by Analytical Area



Example Application

Downtown Destination

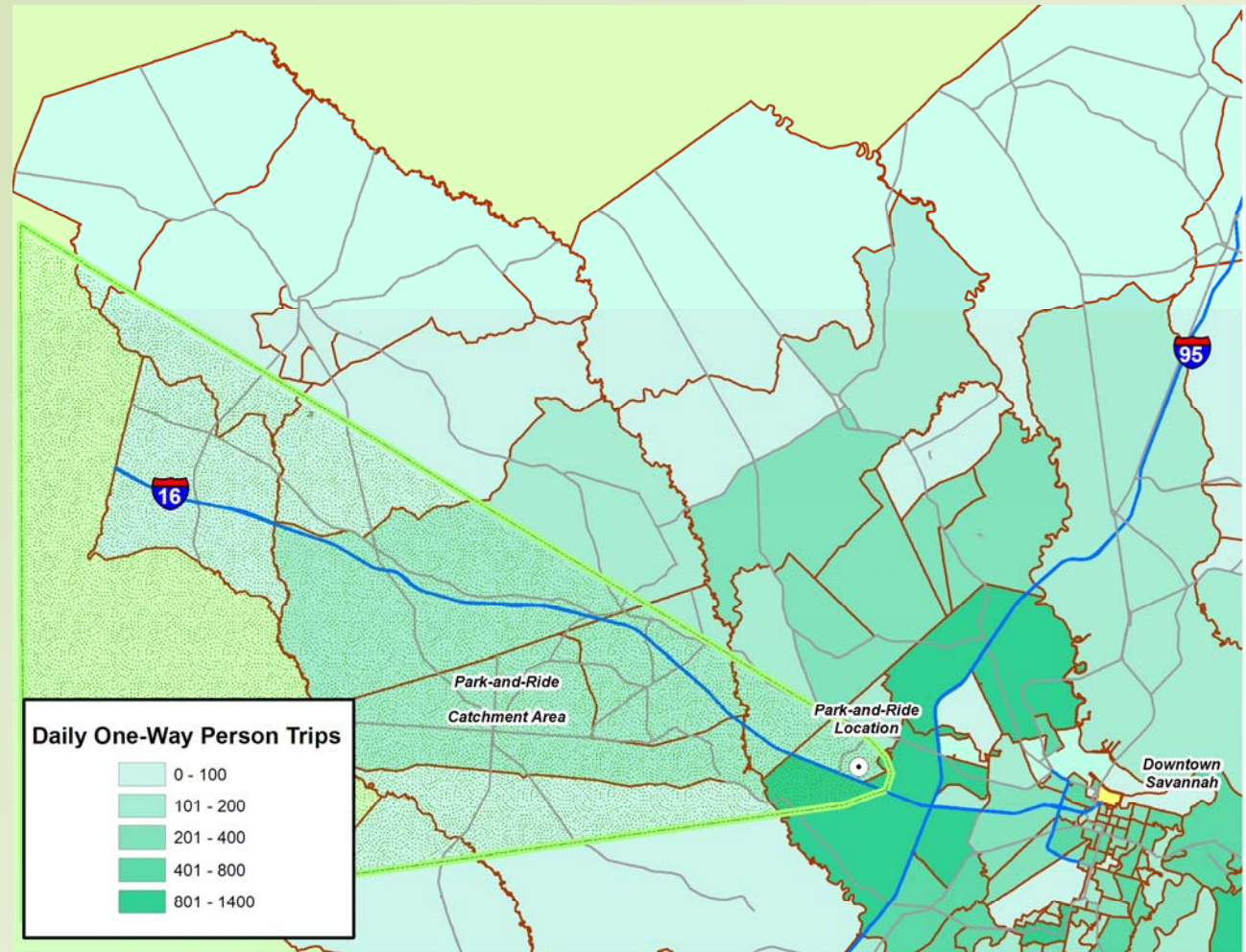
Add a New Park-and-Ride



Example Application

Downtown Destination

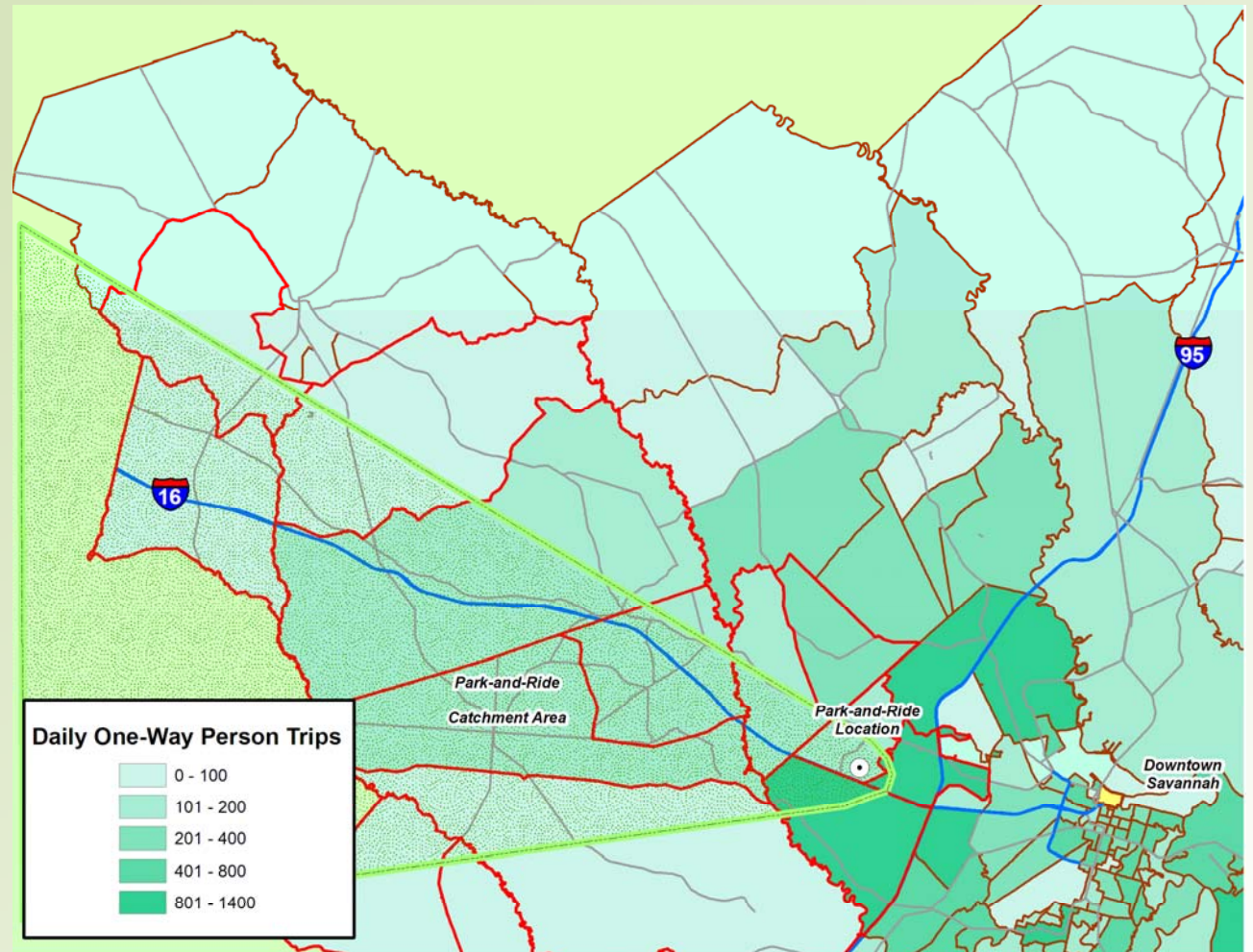
Draw a Catchment Area for the New Park-and-Ride



Example Application

Downtown Destination

Isolate Tracts in the Park-and-Ride's Catchment Area



Example Application

- Approach results in:
 - ✓ 946 Base Year (2011) trips
 - ✓ 1,475 Future Year (2040) trips
- This represents potential park-and-ride lot market from this corridor to downtown Savannah

Catchment Tracts	One-Way Work Person Trips to Downtown Savannah		Growth			Adjustments	Catchment Area Person Trips to Downtown Savannah	
	Base Year	Year 2040	Person Trips	Overall Percent	Annual Percent	% of Tract in Catchment Area	Base Year	Year 2040
13029920101	103	147	44	43%	1.4%	10%	10	15
13029920102	91	134	43	47%	1.6%	20%	18	27
13029980000	1	1	0	0%	0.0%	50%	1	1
13031110300	12	15	3	25%	0.8%	90%	11	14
13031110700	42	57	15	36%	1.2%	80%	34	46
13031110800	4	9	5	126%	4.2%	30%	1	3
13031110900	114	174	60	53%	1.8%	50%	57	87
13051010801	162	168	6	4%	0.1%	25%	41	42
13051010802	467	845	378	81%	2.7%	30%	140	253
13051010803	710	1,128	418	59%	2.0%	75%	533	846
13103030401	113	184	71	63%	2.1%	20%	23	37
13103030402	156	208	52	33%	1.1%	50%	78	104
13179010102	2	3	1	56%	1.9%	50%	1	2
Totals	1,977	3,073	1,096	55%	1.8%		946	1,475



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NEXT STEPS

