

Chatham County–Savannah MPC Stakeholder Committee Meeting #5

August 27, 2014



COASTAL REGION MPO

REGIONAL PARK + RIDE INITIATIVE

park. ride. relax.



Agenda

1. Introductions
2. Project Objectives
3. Stakeholder Outreach Efforts
4. Regional Demographics and Travel Patterns
4. Park-and-Ride Lot Location Recommendations
5. Park-and-Ride Development and Costs
6. Potential Transit Service Plans and Costs
7. Potential Funding Sources and Management Options
8. Implementation Strategy

Project Objectives

To accomplish:

- A **comprehensive evaluation** of
 - travel demand in commuter corridors
 - park & ride lot site evaluation
 - transit service needs
 - financial analysis and plan
- **Meaningful outreach** efforts that engaged stakeholders
- A “**road map**” for advancing promising corridors

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

Stakeholder Meetings

- November 12, 2013
- January 23, 2013
- March 27, 2014
- June 10, 2014
- **August 27, 2014**

Greater Savannah/Coastal Study Area

Georgia Counties

- Chatham
- Effingham
- Bryan
- Liberty
- Bulloch

South Carolina Counties

- Jasper
- Beaufort



Population Estimates and Forecasts

County	2010 Pop.	2012 Pop.	2040 Pop.	2040-2012 % Change
Chatham	265,998	276,434	321,107	16.2%
Effingham	52,420	53,292	71,202	33.6%
Bryan	30,412	32,214	44,028	36.7%
Liberty	62,773	65,471	77,655	18.6%
Bulloch	70,635	72,694	93,689	28.9%
Jasper, SC	24,777	25,833	32,175	24.6%
Beaufort, SC	162,233	168,049	210,718	25.4%
TOTAL	669,248	693,987	850,574	22.6%

Sources: 2010 & 2012: Georgia Office of Planning and Budget, South Carolina Budget & Control Board;
2040: GA Statewide Model and CORE MPO model demographic data

Regional Work Travel Patterns

County	2009-11 Employees	% Working In County	% Working Outside Cty.	% Working Outside State
Chatham	115,905	92.3%	5.3%	2.4%
Effingham	23,488	33.5%	61.9%	4.6%
Bryan	14,078	29.7%	66.1%	4.2%
Liberty	28,328	79.1%	18.9%	1.9%
Bulloch	28,822	74.8%	24.4%	0.8%
Jasper, SC	10,455	50.3%	39.9%	9.8%
Beaufort, SC	70,703	92.5%	3.1%	4.5%

Sources: 2009-2011 and 2007-2011 American Community Survey

Demographic and Travel Demand: 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

Demographic and Travel Demand: 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)

Park-and-Ride Location Recommendations

Candidate Park-and-Ride Lot Sites

Northwest Corridor Locations

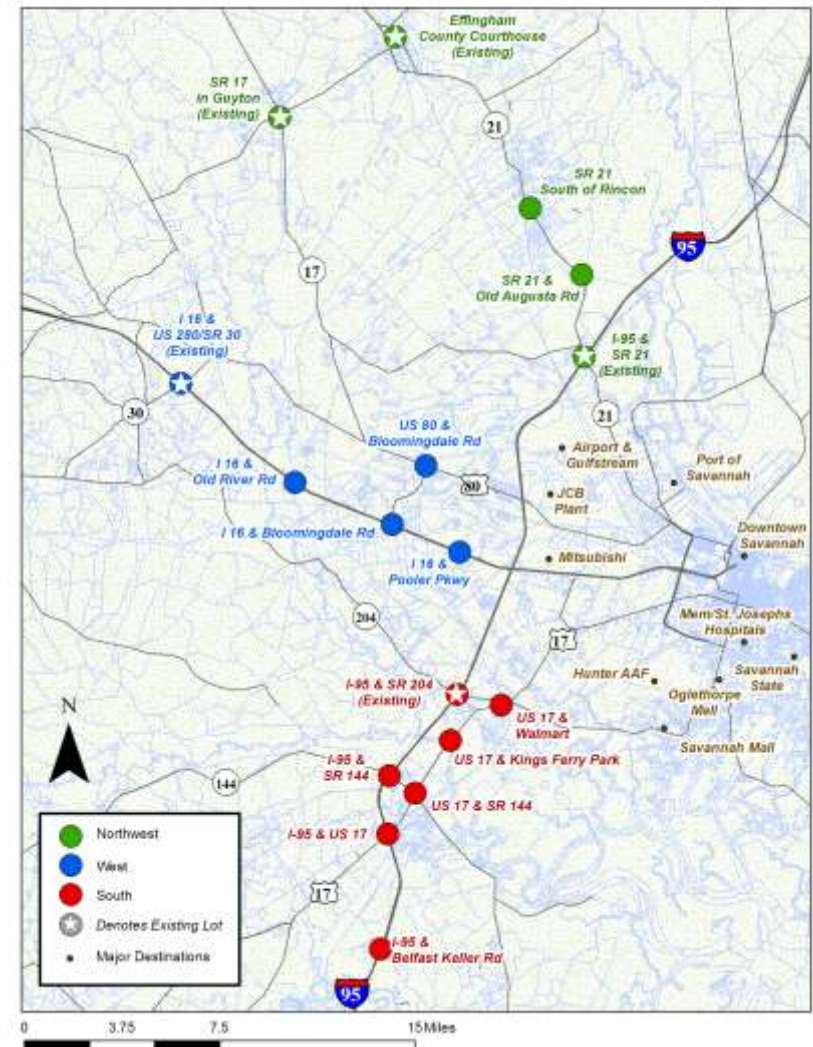
- I-95 & SR 21 (Existing Lot)
- SR 21 & Old Augusta Road
- SR 21 South of Rincon
- Effingham County Courthouse (Existing Lot)
- SR 17 in Guyton (Existing Lot)

West Corridor Locations

- I-16 & Pooler Parkway
- I-16 & Bloomingdale Road
- US 80 & Bloomingdale Road
- I-16 & Old River Road
- I-16 & US 280/SR 30 (Existing Lot)

South Corridor Locations

- US 17 & Vicinity of Wal-Mart
- I-95 & SR 204 (Existing lot)
- US 17 & Kings Ferry Park
- US 17 & SR 144
- I-95 & SR 144
- I-95 & US 17
- I-95 & Belfast Keller Road



Park-and-Ride Location Recommendations

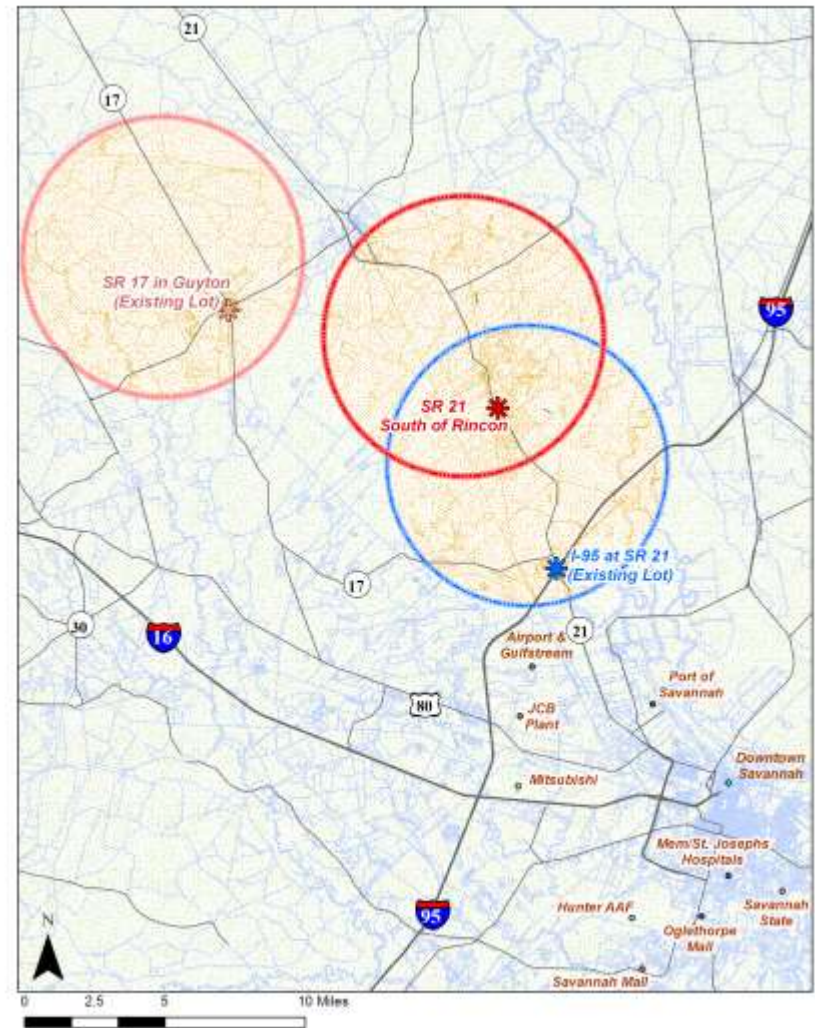
Process Used to Determine Preferred Sites:

- ✓ Site Suitability Evaluation
- ✓ Travel Demand Market Analysis
- ✓ Stakeholder Input

Park-and-Ride Location Recommendations

Northwest (SR 21) Corridor

- ✓ SR 21 & I-95 (existing)
- ✓ SR 21 South of Rincon
- ✓ SR 17 in Guyton (existing)

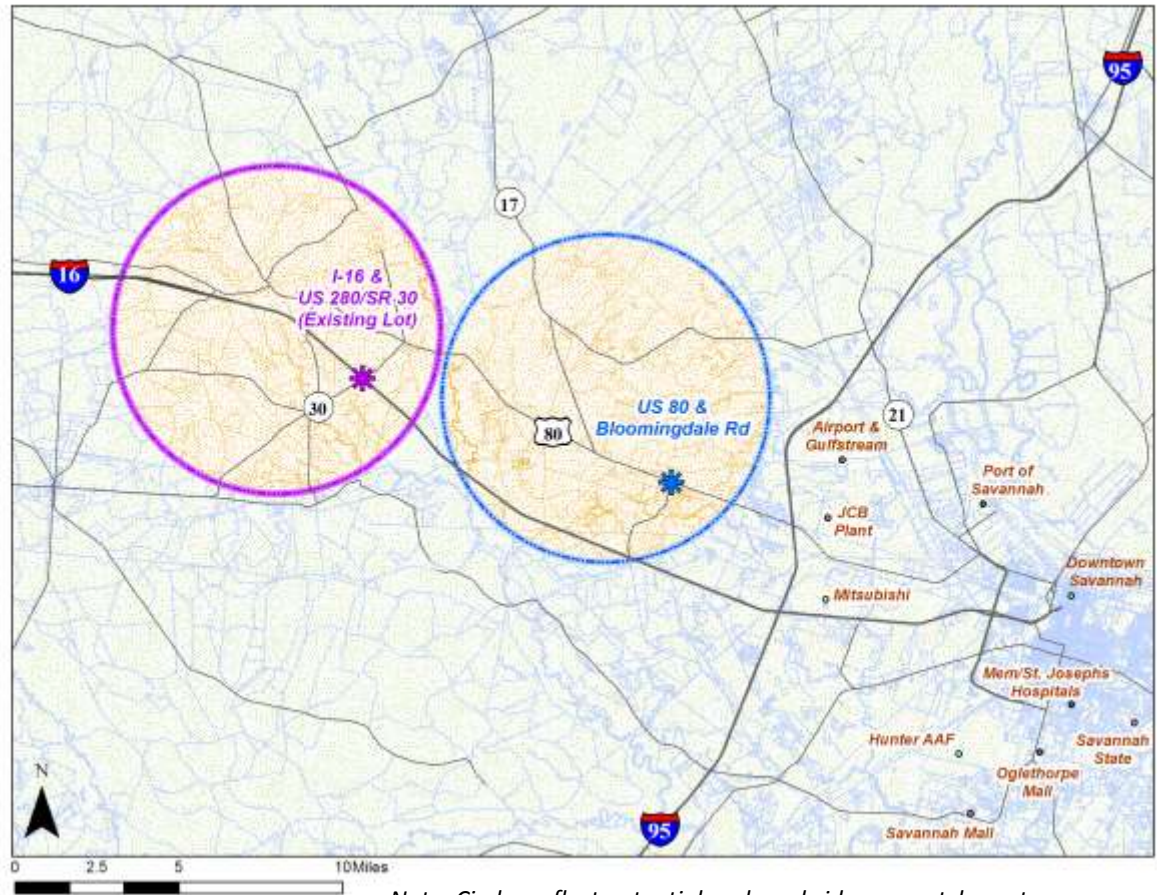


Note: Circles reflect potential park-and-ride user catchment areas.

Park-and-Ride Location Recommendations

West (I-16/US 80) Corridor

- ✓ I-16 & US 280/SR 30 (existing)
- ✓ US 80 & Bloomingdale Road

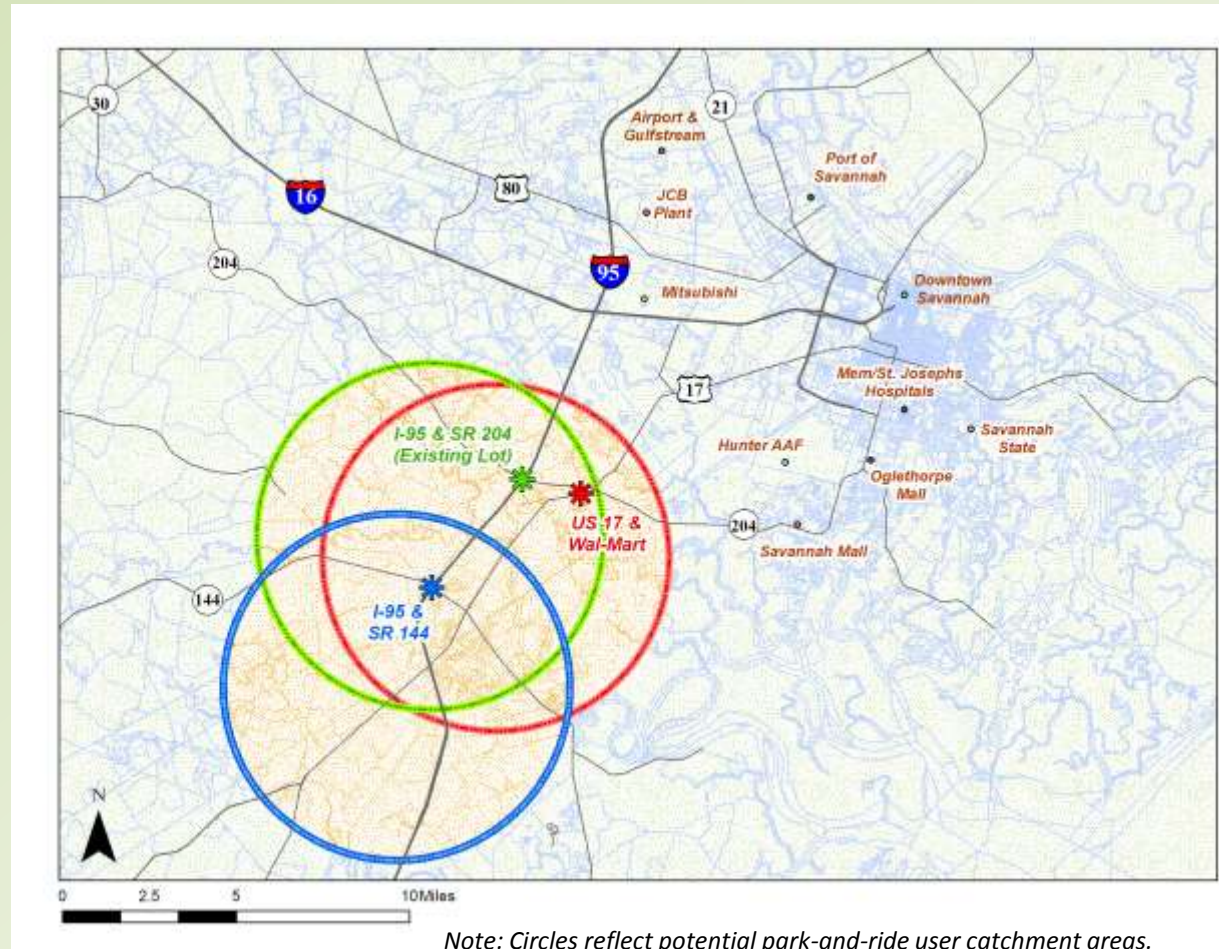


Note: Circles reflect potential park-and-ride user catchment areas.

Park-and-Ride Location Recommendations

South (I-95/US 17) Corridor

- ✓ US 17 in Vicinity of Wal-Mart
- ✓ I-95 & SR 144 OR US 17 & SR 144
- ✓ I-95 & SR 204 (eventually phased out)



Park-and-Ride Development

Development Options

- Existing GDOT Lot
 - Improve and Maintain
 - Expand to Accommodate Demand
- New Publicly Owned (State, Regional, or Local)
 - Significant Capital Costs and Lead Time
 - May Require Land Acquisition
- Lease Agreements with Private Owners
 - Utilize Existing Underutilized Parking
 - Economical and Efficient
- Development Agreement
 - Regulatory or Non-regulatory
- Incorporate into Highway Construction Projects
 - Potential Cost Savings by Combining into Larger Projects

Park-and-Ride Development

Potential Development Scenarios

Corridor	Location	Existing GDOT Lot	New Publicly Owned	Lease Agreements	Development Agreement	Incorporate into Highway Project
Northwest	I-95 & SR 21 (Existing)	✓				
	SR 21 South of Rincon		✓	✓	✓	
	SR 17 in Guyton (Existing)	✓				
West	I-16 & US 280/SR 30 (Existing)	✓				
	US 80 & Bloomingdale Rd.		✓	✓	✓	✓
South	US 17 & Vicinity of Walmart		✓	✓	✓	
	I-95 & SR 144 OR US 17 & SR 144		✓	✓	✓	✓

Park-and-Ride Costs

Assumptions for Costing Purposes

- New Lots Assumed to be Either 50 or 100 Spaces
 - Based on Projected Ridership and Land Availability
- Northwest Corridor:
 - I-95 & SR 21 - Expand Existing GDOT Lot
 - SR 21 South of Rincon – Lease Agreement
 - SR 17 in Guyton – Maintain Existing GDOT Lot
- West Corridor:
 - I-16 & US 280/SR 30 – Expand Existing GDOT Lot
 - US 80 & Bloomingdale Rd - New Publicly-Owned Lot
- South Corridor:
 - US 17 & Vicinity of Wal-Mart – Lease Agreement
 - I-95 & SR 144 – New Publicly-Owned Lot

Park-and-Ride Costs

Total Estimated Capital Costs

Corridor	Park-and-Ride Lot	Improvement Type	Existing Spaces	2020	2040	One-Time Costs		
				Proposed Spaces	Proposed Spaces	Land, Engineering, Construction 2020	2040	Total
Northwest Corridor	I-95 & SR 21	Expand Existing Lot	33	85	85	\$809,700	\$0	\$809,700
	SR 21 South of Rincon	New Leased Lot	0	50	100	\$96,000	\$96,000	\$192,000
	<u>SR 17 in Guyton</u>	<u>Existing Lot - No Change</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>\$38,400</u>	<u>\$0</u>	<u>\$38,400</u>
	Corridor Total		53	155	205	\$944,100	\$96,000	\$1,040,100
West Corridor	I-16 & US 280/SR 30	Expand Existing Lot	35	35	85	\$63,400	\$525,000	\$588,400
	<u>US 80 & Bloomingdale Rd.</u>	<u>New Public-Owned Lot</u>	<u>0</u>	<u>100</u>	<u>100</u>	<u>\$1,162,100</u>	<u>\$0</u>	<u>\$1,162,100</u>
	Corridor Total		35	135	185	\$1,225,500	\$525,000	\$1,750,500
South Corridor	I-95 & SR 204	Existing Lot	32	0	0	\$0	\$0	\$0
	US 17 & Vicinity of Wal-Mart	New Leased Lot	0	100	100	\$192,000	\$0	\$192,000
	<u>I-95 & SR 144</u>	<u>New Public-Owned Lot</u>	<u>0</u>	<u>50</u>	<u>100</u>	<u>\$654,500</u>	<u>\$654,500</u>	<u>\$1,309,000</u>
	Corridor Total		32	150	200	\$846,500	\$654,500	\$1,501,000
REGIONAL TOTALS			120	440	590	\$3,016,100	\$1,275,500	\$4,291,600

Note: Costs in 2014 dollars.

Land acquisition costs are based on assessed values per the applicable tax assessor's office

Park-and-Ride Costs

Total Estimated Maintenance/Lease Costs

Corridor	Park-and-Ride Lot	Improvement Type	Existing Spaces	2020	2040	Annual Maintenance and/or Lease Costs	
				Proposed Spaces	Proposed Spaces	2020	2040
Northwest Corridor	I-95 & SR 21	Expand Existing Lot	33	85	85	\$8,500	\$8,500
	SR 21 South of Rincon	New Leased Lot	0	50	100	\$19,500	\$30,500
	<u>SR 17 in Guyton</u>	<u>Existing Lot - No Change</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>\$2,000</u>	<u>\$2,000</u>
	Corridor Total		53	155	205	\$30,000	\$41,000
West Corridor	I-16 & US 280/SR 30	Expand Existing Lot	35	35	85	\$3,300	\$8,300
	<u>US 80 & Bloomingdale Rd.</u>	<u>New Public-Owned Lot</u>	<u>0</u>	<u>100</u>	<u>100</u>	<u>\$10,000</u>	<u>\$10,000</u>
	Corridor Total		35	135	185	\$13,300	\$18,300
South Corridor	I-95 & SR 204	Existing Lot	32	0	0	\$0	\$0
	US 17 & Vicinity of Wal-Mart	New Leased Lot	0	100	100	\$22,000	\$22,000
	<u>I-95 & SR 144</u>	<u>New Public-Owned Lot</u>	<u>0</u>	<u>50</u>	<u>100</u>	<u>\$5,000</u>	<u>\$10,000</u>
	Corridor Total		32	150	200	\$27,000	\$32,000
REGIONAL TOTALS			120	440	590	\$70,300	\$91,300

Note: Costs in 2014 dollars.

Potential Transit Service Plans and Costs

Northwest Corridor Routes to:

- Downtown
- Gulfstream & Crossroads



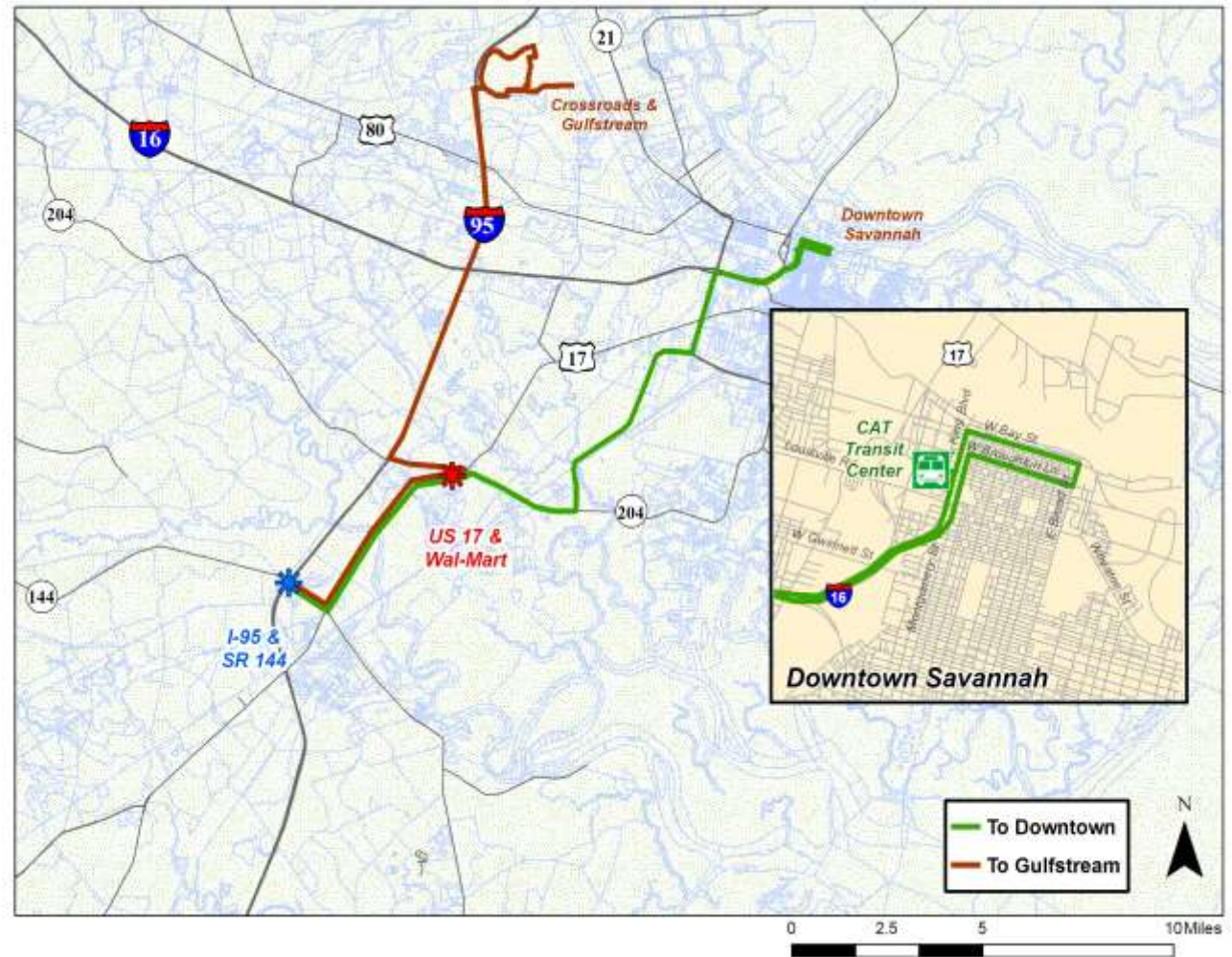
West Corridor Routes to:

-
- The map displays the proposed transit routes in the Savannah area. The main map shows a green line starting from the intersection of I-16 and US 280/SR 30 (marked with a purple star) and heading southeast towards Downtown Savannah. A brown line branches off from the green line near the intersection of US 80 and Bloomingdale Rd (marked with a blue star) and heads east towards Gulfstream. The inset map shows the Downtown Savannah area, highlighting the CAT Transit Center and surrounding streets like W Bay St, W Gaston St, and W Clinch St. A legend in the bottom right corner indicates that the green line is 'To Downtown' and the brown line is 'To Gulfstream'. A scale bar at the bottom shows distances from 0 to 10 miles.

Potential Transit Service Plans and Costs

South Corridor Routes to:

- Downtown
- Gulfstream & Crossroads



Potential Transit Service Plans and Costs

Transit Schedule Assumptions

- Three morning and three afternoon trips in each corridor
- Approximate 90-minute service span in each peak period
- Two buses required for each route (one bus makes two trips)
- One bus assumed to remain available for guaranteed ride home service in midday

Potential Transit Service Plans and Costs

Estimated Annual O&M Costs

Cost Item	Unit Cost	Unit Type	Units	Cost Estimate
Contract Operator O&M =	\$56.00	per Total Bus Hr.	15,304	\$857,000
Fuel & Agency G&A =	\$11.00	per Total Bus Hr.	15,304	\$168,300
Small Bus Costs =	\$18,000	per Bus	8	\$144,000
Large Bus Costs =	\$29,000	per Bus	8	\$232,000
Total Annual O&M Cost Estimate				\$1,401,300

Notes:

1. Costs in 2014 dollars.
2. O&M = operations & maintenance
3. G&A = general administrative
4. Small bus (cutaway) bus estimated to be \$90,000, with a 5-year useful life
5. Larger bus (29' or more) bus estimated to be \$350,000, with a 12-year useful life

Potential Transit Service Plans and Costs

Estimates of Funding Subsidy: Horizon Year (2040)

Service	Corridor	Daily Ridership	Annual Ridership	Total Bus-Hours	Fare Revenues	Annual O&M Costs	Farebox Recovery %	Subsidy Required	Subsidy/ 1-Way Trip
Downtown Routes	Northwest	120	30,480	2,625	\$68,580	\$223,900	31%	\$155,320	\$5.10
	West	250	63,500	2,887	\$142,875	\$241,400	59%	\$98,525	\$1.55
	<u>South</u>	<u>190</u>	<u>48,260</u>	<u>2,362</u>	<u>\$108,585</u>	<u>\$206,300</u>	<u>53%</u>	<u>\$97,715</u>	<u>\$2.02</u>
Downtown Totals		560	142,240	7,874	\$320,040	\$671,600	48%	\$351,560	\$2.47
Gulfstream/ Crossroads Routes	Northwest	90	22,860	1,926	\$51,435	\$206,400	25%	\$154,965	\$6.78
	West	100	25,400	2,752	\$57,150	\$261,700	22%	\$204,550	\$8.05
	<u>South</u>	<u>60</u>	<u>15,240</u>	<u>2,752</u>	<u>\$34,290</u>	<u>\$261,700</u>	<u>13%</u>	<u>\$227,410</u>	<u>\$14.92</u>
Gulfstream Totals		250	63,500	7,430	\$142,875	\$729,800	20%	\$586,925	\$9.24
FULL SYSTEM TOTALS		810	205,740	15,304	\$462,915	\$1,401,400	33%	\$938,485	\$4.56

Notes

1. Ridership Annualization Factor = 254
2. Fare per Passenger Trip = \$2.25
3. Hours distributed to routes based on each route's 1-way trip revenue time. Midday hours are shared proportionally.
4. Costs for spare buses shared proportionally in O&M cost calculations.
5. Costs presented in 2014 dollars.

Potential Funding Sources - Federal

- Federal Transit Administration (FTA) Funding
 - Section 5307: Urbanized Area Formula Program
 - Section 5311: Nonurbanized Area Formula Program
 - Section 5339: Bus and Bus Facilities
 - Transportation Investment Generating Economic Recovery (TIGER)
- Federal Highway Administration (FHWA) Funding
 - Surface Transportation Program (STP)

Potential Funding Sources - State

- State Funding to Match Federal Funds
 - State Share for Capital Expenses: 10%
- State Funded Projects through GDOT and CORE MPO
 - State Funds Possible for Park-and-Ride Lots
 - Work Through GDOT and CORE MPO to Get Funds Programmed

Potential Funding Sources - Local

- Necessary to Provide:
 - Local Share for Federal Capital Funding: 10%
 - Operating Costs not Covered by Farebox Revenue and/or Federal Operating Assistance
- More Agencies Relying on Local Funding
 - Dwindling Federal and State Funding
- Potential Local Sources:
 - Special District Transit Tax (Chatham County)
 - SPLOST Funds
 - General Fund Appropriations
 - Other Local Taxes (e.g., Vehicle Registration)

Potential Funding Sources - Other

- Sale of Advertising Rights (e.g., on Buses)
- Public-Private Partnerships
- Value Capture Mechanisms
 - Tax Increment Financing
 - Special Assessment Districts
 - Development Impact Fees
- Financing Mechanisms
 - Lease Payment
 - Georgia Transportation Infrastructure Bank (GTIB)

Potential Management Options: Park-and-Ride Lots

- Establish Responsibilities for:
 - Construction
 - Shared Use Agreements
 - Maintenance
- Establish through Regional Cooperative Process
 - Led by CORE MPO and Coastal Regional Commission (CRC)
 - Develop Multi-Agency Agreement
 - Primary Responsibility Likely GDOT or County Where Located

Potential Management Options: Transit Services

- Directly Operated Service
 - Chatham Area Transit (CAT)
 - Currently Limited to Geographic Area of Tax District
 - Transit Development Plan Envisions Regional Service to Multi-County Area
 - CAT Charter Includes Eligibility for Bryan and Effingham to Participate
 - Coastal Regional Commission (CRC)
 - Section 5311 Funds Require One End of Trip in Rural Area
 - Could Only be Used for Service from Park-and-Ride Lots in Rural Area
- Contract Service
 - Contract with a Service Provider
 - Service Provider Could be Public or Private
 - Potential for Lower Cost through Competitive Bidding
 - Provides More Flexibility
- Interagency Operating and/or Funding Agreement

Implementation Strategy

Concurrent Three-Pronged Effort:



**Park-and-Ride
Lot
Development
and Expansion**



**Carpool and
Vanpool
Program
Promotion**



**Regional
Commuter
Transit Service
Implementation**

Implementation Strategy

1. Park-and-Ride Development and Expansion

Coordination Needs:

- Site selection refinement
- New construction vs. lease arrangements
 - ROW acquisition, engineering and design for new lot construction
 - Negotiations for leasing arrangements
- Identification of funding sources
- Programming

Implementation Strategy

1. Park-and-Ride Development and Expansion

Programming and Coordination Needs

Northwest Corridor (SR 21)	West Corridor (I-16/US 80)	South Corridor (I-95/US 17)
I-95/SR 21 P&R Lot Expansion <ul style="list-style-type: none">CORE MPO TIP & GDOT STIP Programming	I-16-US 280/SR 30 P&R Lot Improvements <ul style="list-style-type: none">GDOT STIP Programming	US 17/SR 204 New P&R Lot <ul style="list-style-type: none">CORE MPO TIP & DOT STIP ProgrammingSavannah and Chatham County Coordination
Rincon New P&R Lot <ul style="list-style-type: none">GDOT STIPRincon and Effingham County Coordination	US 80 New P&R Lot <ul style="list-style-type: none">CORE MPO TIP & GDOT STIP ProgrammingBloomington and Chatham County Coordination	SR 144 New P&R Lot <ul style="list-style-type: none">CORE MPO TIP & GDOT STIP ProgrammingRichmond and Bryan County Coordination

Implementation Strategy

2. Carpool/Vanpool Promotion

- Peer review of successful ridematch programs in similar-sized communities
 - Employer outreach
 - Employee outreach
 - Use of social media tools
- Funding for a full-time Mobility Manager
- Consider park-and-ride incentives in Downtown Savannah

Implementation Strategy

2. Carpool/Vanpool Promotion

- Develop ridematch program expansion steps and implement in conjunction with P&R lot expansion
- Continued support for CRC vanpool program study and integration of vanpool recommendations into this study's recommendations

Implementation Strategy

3. Regional Commuter Transit Service

- Long-Term effort to determine appropriate governance, funding and service delivery methods
- Not required as part of P&R lot expansion program
- CAT and CRC – two potential service delivery providers, both with current funding and geographic service constraints
- Initiate **Regional** discussions through existing MPO committees

THANK YOU!

