

**MEMORANDUM**

Date: December 13, 2010

To: Tom Thomson, Executive Director

From: Jane Love, Transportation Planner

RE: **Summary of Bicycle and Pedestrian Counts in Chatham County, GA, September/October 2010**

For the second year in a row, MPO staff, MPC staff and volunteers collected counts of bicycle trips and pedestrian trips for nine locations in early autumn. This year's counts allow comparison with last year's baseline. Also, the MPO is again submitting the data to the National Bicycle and Pedestrian Documentation Project, a national database, for potential use by researchers. The count methodology was consistent with that required for submission to the national database.

For a quick look at 2010 counts, compared to 2009 counts, by location and time period, please see attached graphs.

As in 2009, the 2010 counts included a weekday evening period and a Saturday mid-day period. Unlike 2009, a third, optional, time period (weekday mid-day) was omitted for 2010. Therefore, any year-to-year comparisons in this document do not include the extra time period for 2009.

Overall numbers, Year-to-Year			
	2009	2010	% Change
Total Bicycle Trips counted across the two time periods in nine locations	396	596	+51%
Total Pedestrian Trips counted across the two time periods in nine locations	3320	3969	+20%

**Summary by Time Period**

The National Documentation Project requests counts from either a Tuesday, a Wednesday, or a Thursday between 5:00 p.m. and 7:00 p.m. and from a Saturday between 12:00 p.m. and 2:00 p.m. For our counts, the two time periods specifically were:

- Thursday, September 30, 5:00 p.m. – 7:00 p.m.
- Saturday, October 2, 12:00 p.m. – 2:00 p.m.

For bicycle trips, the weekday evening hours saw slightly higher overall numbers than did the weekend mid-day hours. For pedestrian trips, the highest overall count was in the Saturday mid-day time period, but this is greatly skewed by the Broughton St. counts. Most locations showed more pedestrian trips on the weekday evening than on the Saturday mid-day.

Overall Trip Numbers by Time Period				
	Weekday 5:00 p.m. – 7:00 p.m.		Saturday 12:00 p.m – 2:00 p.m.	
	2009	2010	2009	2010
Bicycle	216	336	180	260
Pedestrian	1384	1362	1936	2507

## Summary by Location

Count locations are shown on the attached map. These locations were the same as last year, and include places where one or more of the following are true:

- Bicyclists and/or pedestrians are expected to be present currently;
- Bicyclists and/or pedestrians may be present in the future after a likely improvement is completed;
- Crash history seems indicate problem area for bicyclists/and or pedestrians;
- A gap exists in the pedestrian or bicycle network.

By location, the Broughton St. screen line had the highest overall counts of both bicyclist trips and pedestrian trips (see table below). Bicycle trips were up for most locations relative to 2009. Even though the gain in pedestrian trips at some locations made the overall 2010 number higher than in 2009, pedestrian trips were down for a majority of locations.

2010 Overall Trip Numbers by Location (sum of two 2-hour time periods) with Percent Change from 2009									
	Broughton	Lincoln	Habersham	Victory	W. Bay	J. Mercer	U.S. 80	Berwick	SR 21 G.C.
Bicyclist	174 (+85%)	95 (+32%)	130 (+49%)	28 (-7%)	46 (+171%)	49 (+44%)	3 (-40%)	44 (+52%)	27 (-4%)
Pedestrian	2989 (+17%)	133 (+8%)	128 (-37%)	70 (-38%)	274 (+265%)	57 (-42%)	2 (-60%)	56 (-18%)	160(+78%)

### Special analysis of directional bicycle travel on Lincoln St. and Habersham St.

As in 2009, the Habersham segment had more bicycle trips than Lincoln St. segment, even though Lincoln St. has a bike lane. This may be because Lincoln St. is one-way northbound. However, wrong-way bike riding is thought to be frequent on Lincoln St. Both of those count locations were in the block north of Gwinnett St.

To look more closely at the occurrence of wrong-way bicycle riding on Lincoln St., staff and volunteers again collected additional information regarding direction of bicycle travel on Lincoln St and on the parallel, signed, two-way route on Habersham St.

Looking at all Lincoln St. bicycle trips, 34% of the bicyclists that were observed using Lincoln St. were travelling in the illegal direction for that street (southbound), as opposed to 40% in 2009.

Looking at all the southbound bicyclists on both Lincoln St. and Habersham St. for both time periods, 29% of the overall southbound trips were on Lincoln St. (illegal). However, in the weekday evening count, the Lincoln St. share of southbound trips was as high as 42%. In the Saturday mid-day count, Lincoln St. had only 23% of the southbound trips.

Still, any amount of wrong-way cycling is unsafe, particularly at driveways and intersections.

### **Distribution of bicycle trips and pedestrian trips by sex**

The distributions by sex were very nearly the same as in 2009:

- Bicycle Trips: 31% female / 69% male
- Pedestrian Trips: 51% female / 49% male

### **Use of the Data**

Since there is not a lot of existing information on bicycle and pedestrian demand in our area, the data collected each year can help indicate general trends over time. Some of the observations also are useful right now for the development of the Non-motorized Transportation Plan. Eventually, the data could be valuable for measuring the effectiveness of future improvements for bicyclists and pedestrians.

Researchers are using data from the national database to develop methods of estimating daily, weekly, monthly, and annual averages from a count sample. The National Bicycle and Pedestrian Documentation Project (NBPDP), using data that has been submitted since the project started in 2002, has provided some adjustment factors to apply to counts from certain types of facilities or areas, such as high-density pedestrian and entertainment areas.

As the Broughton St. count location fits that description, staff used the NBPDP adjustment method to estimate average daily, monthly, and annual numbers of bicyclists and pedestrians on the block of Broughton St. between Bull St. and Drayton St.

Pedestrian estimates produced with 2010 data are similar to the pedestrian estimates produced with last year's data (1% higher in 2010). Bicycle estimates for Broughton St. are higher in 2010 than in 2009 (by 7%).

The estimates shown below may be of interest to other agencies and organizations, such as Savannah Development and Renewal Authority, Savannah Downtown Business Association, the Savannah Convention and Visitors Bureau, City of Savannah, the Chamber of Commerce, and the Savannah Bicycle Campaign.

#### Broughton St. Estimates

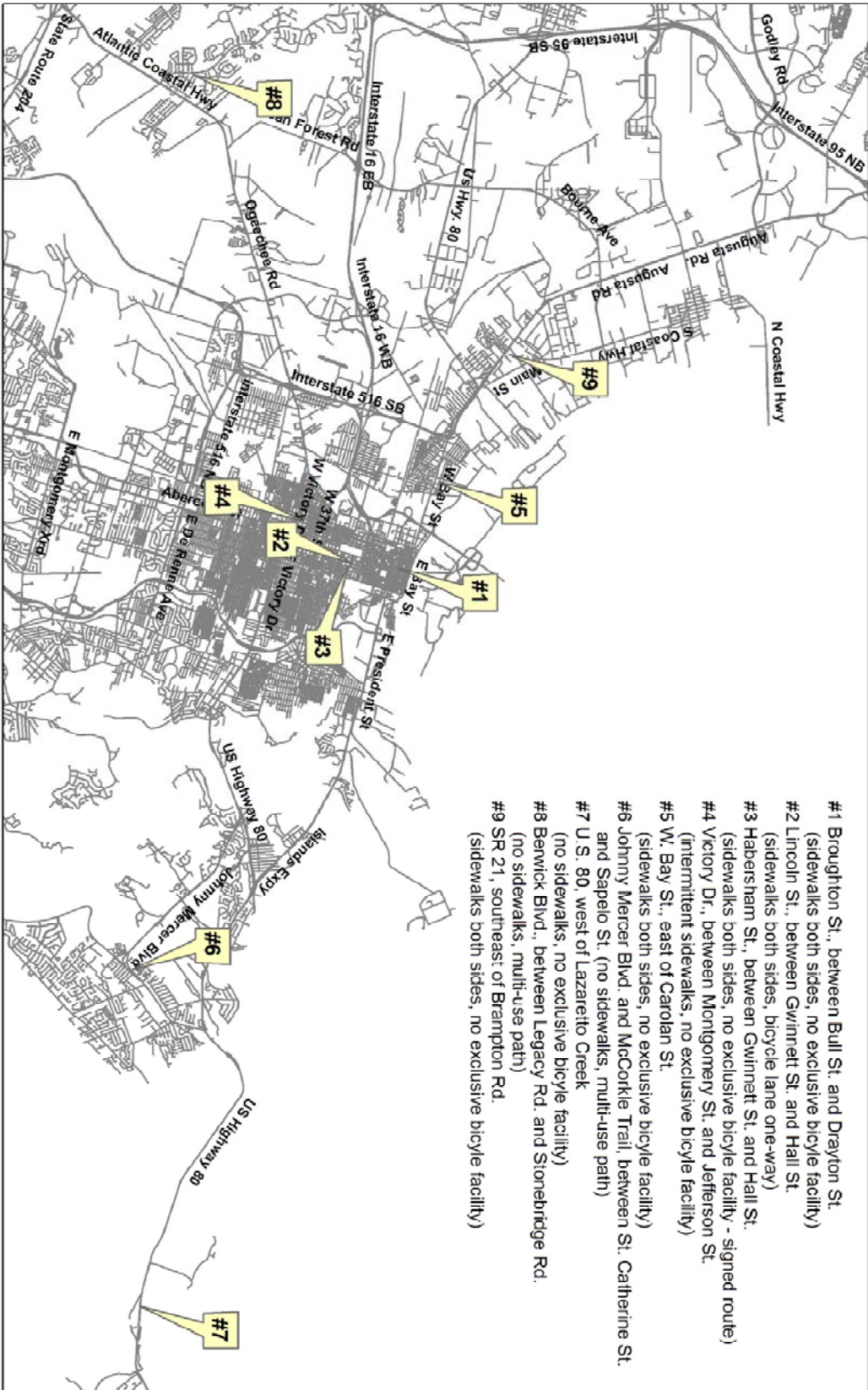
- Estimated average daily volume of bicyclists = 468
- Estimated average daily volume of pedestrians = 8896
  
- Estimated average monthly volume of bicyclists = 14,242
- Estimated average monthly volume of pedestrians = 270,591
  
- Estimated average annual volume of bicyclists = 170,900
- Estimated average annual volume of pedestrians = 3,247,094

As more localities submit data to the national database, it may be possible for researchers to develop adjustment factors for more area types.

JL

Attachments

cc: Mark Wilkes  
CORE MPO Board and Advisory Committees  
MPC Staff



### Bicycle and Pedestrian Count Data Comparisons, for locations throughout Chatham County

