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FISCAL RESEARCH CENTER  
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**SUBJECT:** Estimated 1% Sales Tax Revenue to the City of Atlanta

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This memorandum provides: 1) an estimate of sales tax revenue for 2005-2011 that is expected from the 1 percent sales tax being imposed in the City of Atlanta beginning in October 2004, and 2) an estimate of sales tax revenue for 1983-2003 that would have been collected within the City of Atlanta if the 1 percent sales tax had been in place during that period.

## **I. Procedures for Revenue Estimates for 2005-2011**

### **Step 1. Forecast for MARTA Sales Tax**

The basis for our estimate is the forecast of the 1 percent sales tax revenue for MARTA that is prepared by the Economic Forecasting Center at Georgia State University. The report describing the methodology for this forecast is attached. Column 2 of Table 1 contains the MARTA sales tax revenue forecast. The MARTA sales tax is imposed in Fulton and DeKalb Counties. A comparison of current actual collections and the forecast for the period January-June of 2004 indicates lower revenues than forecasted. Thus, we adjusted the Economic Forecasting Center's estimates downward by 3 percent (see Table 2).

### **Step 2. Adjustment for Motor Vehicle Exemption**

The difference between the MARTA sales tax base and that for the City of Atlanta sales tax is that motor vehicle sales are exempt from the City's base. We obtained from the Georgia Department of Revenue sales tax revenue from motor vehicle sales in Fulton and DeKalb Counties, based on a 1 percent sales tax. This amounts to \$22.6 million and includes sales of automobiles and parts for repairs. Because parts are not exempted this figure overstates the exemptions by an unknown amount. However, in the interest of maintaining a conservative estimate of revenues, we do not adjust this amount. Furthermore, comparing the Department of Revenue's 2003 number to the 1997 Economic Census of Retail Trade's number, there is an indication that the taxable sales of automobiles in Fulton County and DeKalb County is declining. If we were to project this trend, the outcome would be that the automobile exemption would decline in size over time. Again, in the interest of maintaining a conservative estimate, we maintain a constant figure for the automobile exemption. With this noted, we subtracted this amount each year to arrive at column 3 of Table 1.

**TABLE 1. ESTIMATES OF SALES TAX REVENUES FOR THE CITY OF ATLANTA (IN THOUSANDS)**

Year	Forecast of MARTA Sales Tax Revenue (adjusted for forecast accuracy)	MARTA Sales Tax Revenues Less Exemption for Automobile Sales	Unadjusted Estimate of Sales Tax Revenues for the City of Atlanta	Less Adjustment for Construction Materials and Non-Compliance	Less Adjustment for Cross-Border Shopping: FINAL REVENUE ESTIMATE
2005	\$298,089	\$275,488	\$90,911	\$89,093	\$84,638
2006	\$312,459	\$289,858	\$95,653	\$95,653	\$90,871
2007	\$330,122	\$307,521	\$101,482	\$101,482	\$96,408
2008	\$346,145	\$323,544	\$106,769	\$106,769	\$101,431
2009	\$346,981	\$324,380	\$107,045	\$107,045	\$101,693
2010	\$364,480	\$341,879	\$112,820	\$112,820	\$107,179
2011	\$379,301	\$356,700	\$117,711	\$117,711	\$111,825

**TABLE 2. MARTA SALES TAX REVENUE THROUGH JULY 2004 COMPARED TO PROJECTIONS**

	2004 Actual Revenues	2004 EFC Forecast	Forecast as a % of Actual
<b>Jan</b>	\$20,543,775	\$21,537,529	
<b>Feb</b>	\$23,837,450	\$25,971,342	
<b>Mar</b>	\$26,538,043	\$24,926,267	
<b>Apr</b>	\$22,054,539	\$24,986,812	
<b>May</b>	\$25,212,434	\$25,340,048	
<b>Jun</b>	\$25,217,882	\$24,372,341	
<b>Jul</b>	\$24,574,976	\$25,098,734	
<b>YTD</b>	\$167,979,098	\$172,233,073	97%

**Step 3. Allocate a Percentage to the City**

Sales tax revenue forecast is reported at the two-county level. To obtain estimates of the sales tax revenue from businesses located within the City of Atlanta, we developed an estimate of Atlanta's share of economic activity subject to the sales tax. We use the 1997 Economic Census to calculate the share of retail sales, hotel/motel, entertainment, and taxable leasing (e.g., automobiles rentals) located within the city limits of Atlanta as compared with Fulton and DeKalb. We allocate this fraction of total MARTA sales tax revenues to the City. To validate our estimate of the share of sales tax revenues attributable to economic activity within the City of Atlanta, we use current ES202 and Atlanta Regional Commission employment data to estimate shares of economic activity based on their shares of employment, both in total and within industries subject to the sales tax. The results were comparable but slightly higher. Furthermore, based on the ARC data the percentage of retail employment in the City of Atlanta increased over the period 1996 to 1999. In the interest of producing conservative estimates we use the lower estimates of Atlanta's share based on the 1997 Economic Census, namely 33 percent.

#### **Step 4. Adjust for Treatment of Construction and Compliance**

An adjustment is made in the 2005 estimate to account for an exemption from the sales tax of purchases of construction materials for construction projects already under contract, and for a higher than usual amount of non-compliance among businesses during the startup phase of a new tax due to errors and possible ignorance of their tax responsibility. This estimate was derived by comparing the startup of a new one-cent sales tax for education and to the on-going one-cent sales taxes in Fulton and DeKalb. We found in the first year of implementation of the new tax revenues were two percent less than the revenues from the on-going tax. This difference includes both non-compliance and purchase of construction materials for on-going construction activities. We therefore reduced the 2005 estimated sales tax collection by 2 percent (column 5 of Table 1).

#### **Step 5. Adjustment for Border Shopping**

It is recognized that geographic sales tax differentials will result in a reduction of the sales tax base in jurisdictions that have higher sales tax rates. This border shopping effect has been estimated by several authors for various geographic areas. Some of the studies compare a central city and its suburbs, while others compare state border counties. The studies are summarized by John Due and John Mikesell in their book *Sales Taxation: State and Local Structure and Administration* (1994). We could find no more recent study.

The studies find anywhere from no effect to a 7 percent effect from a 1 percentage point difference in sales tax rates. The estimates cluster around a 5 percent reduction for a 1 percentage point increase in the tax differential. Based on these studies, we reduced our forecast of sales tax revenue reported in column 5 by 5 percent, and report the difference in column 6.

#### **Final Forecast**

Column 6 presents our estimate of the revenue from the 1 percent sales tax in the City of Atlanta. We think this is a reasonable and conservative estimate. However, it is an estimate, and one should expect that actual revenues could be less. The estimate is based on a forecast of MARTA sales tax revenue. Underlying this forecast are assumptions regarding the state of the local economy, and in particular that the local (Fulton and DeKalb) economy will grow. The percentage of the MARTA sales that are made within the City of Atlanta are estimated from data other than actual sales taxes. While we think we have been conservative in our estimate, we could have overstated the actual percent. Thus, we urge caution in the use of these estimates.

## II. Procedures For Revenue Estimates for 1983-2003

We repeated the same exercise as reported above, except that we started with actual sales tax receipts as reported by MARTA for the period 1983-2003. Figure 1 shows the pattern of actual MARTA sales tax revenues over the period. We followed the same steps and used the same numbers to adjust the MARTA revenue, except no adjustment is made for first-year non-compliance and construction exemption. Column 5 of Table 3 shows the final estimate of sales tax revenue if a 1 percent sales tax had been in effect from 1983 to 2003.

**TABLE 3. ESTIMATES OF HISTORIC SALES TAX REVENUES FOR THE CITY OF ATLANTA  
(IN THOUSANDS)**

Year	Actual MARTA Revenue	MARTA Sales Tax Revenues Less Exemption for Automobile Sales	Unadjusted Estimate of Sales Tax Revenues for the City of Atlanta	Less Adjustment for Cross-Border Shopping: <b>Final Revenue Estimate</b>
1983	\$116,311	\$93,710	\$30,924	\$29,378
1984	\$130,815	\$108,214	\$35,711	\$33,925
1985	\$141,956	\$119,355	\$39,387	\$37,418
1986	\$144,645	\$122,044	\$40,275	\$38,261
1987	\$156,915	\$134,314	\$44,324	\$42,107
1988	\$160,671	\$138,070	\$45,563	\$43,285
1989	\$163,200	\$140,599	\$46,398	\$44,078
1990	\$166,838	\$144,237	\$47,598	\$45,218
1991	\$167,154	\$144,553	\$47,702	\$45,317
1992	\$171,337	\$148,736	\$49,083	\$46,629
1993	\$188,033	\$165,432	\$54,593	\$51,863
1994	\$207,284	\$184,683	\$60,945	\$57,898
1995	\$240,496	\$217,895	\$71,905	\$68,310
1996	\$262,424	\$239,823	\$79,142	\$75,185
1997	\$238,133	\$215,532	\$71,126	\$67,569
1998	\$263,828	\$241,227	\$79,605	\$75,625
1999	\$281,571	\$258,970	\$85,460	\$81,187
2000	\$303,264	\$280,663	\$92,619	\$87,988
2001	\$297,664	\$275,063	\$90,771	\$86,232
2002	\$281,669	\$259,068	\$85,492	\$81,218
2003	\$270,616	\$248,015	\$81,845	\$77,753

**Figure 1. MARTA Sales Tax History: 1983- 2003**

