ECONOMIC REVITALIZATION OF ATLANTA'S EAST LAKE COMMUNITY

# A Chance to Succeed

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#### **ACKNOWLEDGMENTS**

The authors thank the following individuals for their assistance in completing this study.

Brian P. Williams, Chief Operating Officer, East Lake Foundation

J. Don Edwards, member of the Board of Directors of the East Lake Foundation and emeritus J. M. Tull Professor of Accounting, Terry College of Business, University of Georgia.

Charles B. Knapp, Chairman of the Board of the East Lake Foundation and President Emeritus, University of Georgia

Carol R. Naughton, Executive Director, East Lake Foundation

Kathleen Brownlee, Director of Real Estate Development, Cousins Family Foundation

Todd Rhinehart, Executive Director for the TOUR Championship, PGA Tour, Inc.

Michael Proctor, Chief Operating Officer, Asset Management and Policy Development, Atlanta Housing Authority

Thomas G. Cousins, member of the Board of Directors of the East Lake Foundation, Founder/Chairman Emeritus of the Board, Cousins Properties, Inc.

Rita Houser-Jones, User Liaison Coordinator, DeKalb County Board of Tax Assessors

Mark Vignati, Georgia Department of Education

Nicholas Stapleton, Principal, Drew Charter School

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## **Executive Summary**

The redevelopment of the East Lake Campus by the East Lake Foundation generates substantial, sustainable economic benefits. These include: (1) the economic impacts of expenditures flowing from the institutions that comprise the East Lake Campus, new commercial developments, and the PGA Tour Championship; (2) higher household incomes for the residents of The Villages of East Lake; (3) above-average appreciation of home values in the surrounding neighborhood; (4) lifetime benefits of improved educational outcomes; and (5) the avoided costs of reducing crime and saving high-risk youth.

#### **Economic Impact of the East Lake Campus**

Seven institutions make up the East Lake Campus: The Villages of East Lake, Drew Charter School, Sheltering Arms Early Education Center, East Lake Golf Club, Charlie Yates Golf Course, East Lake Family YMCA, and the East Lake Foundation.

The 2007 economic impact of spending by East Lake Campus institutions for personnel services and operations was \$30 million in output (sales revenue or gross receipts) and 639 full- and part-time jobs. The economic impacts of the individual institutions are equally impressive:

- Villages of East Lake \$3.6 million and 37 jobs;
- Drew Charter School \$11 million and 135 jobs;
- Sheltering Arms Early Education Center \$1.6 million and 42 jobs;
  - East Lake Golf Club \$5.7 million and 179 jobs;
  - Charlie Yates Golf Course \$1 million and 21 jobs;
  - East Lake Family YMCA \$4.1 million and 189 jobs;
  - East Lake Foundation \$3.4 million and 34 jobs.

From 1995 through 2007, \$159 million (nominal dollars) was spent on capital projects on the East Lake Campus, which is the equivalent of \$188 million in 2007 dollars. The total economic impact of capital expenditures was \$266 million in output and 1,827 jobs.

#### **Economic Impact of Commercial Developments**

The redevelopment of the East Lake Campus prompted several commercial developments in the neighborhood, including the East Lake Publix, Sun Trust at East Lake Publix, Wachovia's Villages of East Lake Financial Center, and the BP station on Glenwood Avenue. Collectively, these new businesses generated \$29.9 million in business revenues, which produced a combined economic impact of \$19.2 million in output and supported 178 jobs in 2007. Specifically, the new businesses generate:

- Publix \$19.9 million in revenues, \$8.2 million in output, and 107 jobs;
- SunTrust \$1.7 million in revenues, \$2.5 million in output, and 15 jobs;
- Wachovia \$4.7 million in revenues, \$6.9 million in output, and 41 jobs;
- BP station \$4.9 million in revenues, \$1.6 million in output, and 15 jobs.

#### **Economic Impact of the PGA Tour Championship**

The total economic impact of the 2007 PGA Tour Championship was \$31.5 million. Out of that, \$27.5 million (87 percent) results from spending by visitors from outside the Atlanta region and \$4 million (13 percent) results from spending by the PGA. The employment impact of the 2007 Championship is 361 jobs.

#### The Villages of East Lake: Net Gain in Residents' Income

The total household income for all residents of The Villages of East Lake was \$16,522,085 in 2006, which exceeds the 1995 value estimated for East Lake Meadows by \$14,145,517. After factoring out the organic growth that took place in the control group of Atlanta Housing Authority properties, the net gain due to redevelopment in 2006 was \$11,797,746, which equals \$12,131,313 when expressed in constant 2007 dollars.

A major factor behind these income gains is that The Villages of East Lake is a mixed income community whereas East Lake Meadows was a public housing community. The Villages of East Lake allocates half of the units to those who pay market rate rents (and have much higher incomes) and half to public housing assisted households.

Even among those receiving the public housing subsidy,

## Summary of the Economic Impacts and Benefits of Redevelopment of Atlanta's East Lake Community

| Impact/Benefit Category                      | Spending/Business<br>Revenues<br>(in \$ 2007) | Output Impact<br>(in \$ 2007) | Employment<br>Impact<br>(jobs) |
|--|---|-------------------------------|--------------------------------|
| ECONOMIC IMPACTS                             | 267,942,387                                   | 347,571,743                   | 3,003                          |
| East Lake Campus, Operations, 2007           | 30,521,542                                    | 30,365,687                    | 637                            |
| The Villages of East Lake                    | 5,393,264                                     | 3,597,946                     | 37                             |
| Drew Charter School                          | 8,340,876                                     | 11,037,112                    | 135                            |
| Sheltering Arms                              | 1,128,283                                     | 1,613,992                     | 42                             |
| East Lake Golf Club                          | 8,092,533                                     | 5,673,139                     | 179                            |
| Charlie Yates Golf Course                    | 929,595                                       | 1,003,431                     | 21                             |
| East Lake Family YMCA                        | 3,467,437                                     | 4,051,772                     | 189                            |
| East Lake Foundation                         | 3,169,554                                     | 3,388,296                     | 34                             |
| East Lake Campus Capital Spending, 1995-2007 | 187,849,352                                   | 266,494,461                   | 1,827                          |
| Commercial Developments, Operations, 2007    | 29,368,898                                    | 19,247,817                    | 178                            |
| East Lake Publix                             | 17,941,142                                    | 8,194,773                     | 107                            |
| SunTrust at Publix                           | 1,735,463                                     | 2,539,146                     | 15                             |
| Wachovia                                     | 4,748,800                                     | 6,947,942                     | 41                             |
| BP Station                                   | 4,943,493                                     | 1,565,956                     | 15                             |
| The PGA Tour Championship, 2007              | 20,202,595                                    | 31,463,778                    | 361                            |
| ECONOMIC BENEFITS (\$ 2007)                  |   |                               |                                |
| Gain in Residents' Income in 2007            | 12,131,313                                    |                               |                                |
| Home Price Appreciation                      |   |                               |                                |
| 1995 to 2007, percent change                 |   |                               |                                |
| East Lake Neighborhood                       | 334%  |                               |                                |
| Atlanta MSA                                  | 86%   |                               |                                |
| U.S.   | 113%  |                               |                                |
| Lifetime Benefits of Improved Education      |   |                               |                                |
| at Drew Charter School (\$ 2007)             | 14,003,594                                    |                               |                                |
| Benefits of Reducing Crime (\$ 2007)         | 134,963,183                                   |                               |                                |
| Avoided costs to victims in 2007             | 5,714,415                                     |                               |                                |
| Avoided costs of incarceration               | 21,818,483                                    |                               |                                |
| Fewer career criminals among high-risk youth | 107,430,285                                   |                               |                                |

Notes: Capital spending (investment) expressed in nominal dollars and in accordance with standard accounting practices equals \$154,220,254 rather than \$187,849,352 (\$ 2007). The lifetime benefits of improved education at Drew Charter School that will accrue to a single graduating class of 85 students. Estimates of both the avoided costs of incarceration and the savings resulting from fewer career criminals among high-risk youth are based on Drew Charter School's 1,042 current students and alumni and therefore should not be allocated to a single year.

average incomes grew substantially faster at The Villages of East Lake than at comparable properties operated by the Atlanta Housing Authority (AHA). For example, the 1995-2006 percentage gain for households that receive housing assistance at The Villages of East Lake was 204 percent, which is far higher than the 89 percent gain calculated for the control group of AHA properties (Bankhead Courts and Bowen Homes).

#### **Above-Average Appreciation of Existing Homes**

Redevelopment of the East Lake Campus has made the East Lake community a very desirable place to live. By any measure, existing home prices rose substantially faster in the East Lake community than in either the Atlanta metro area or the nation as a whole. For example, existing home prices in 2007 were 334 percent higher than in 1995. The comparable percentage gains for Atlanta and the nation were 86 percent and 113 percent, respectively.

#### Lifetime Benefits of Improved Educational Outcomes

The longer students stay at Drew Charter School—the new elementary and middle school that replaced Drew Elementary—the closer they come to the statewide average performance levels on standardized tests. In doing so, they also exceed the Atlanta Public School System's performance levels. In contrast, the longer students were enrolled at the old Drew Elementary, the farther behind they fell compared to the rest of students in Georgia.

Because of improved educational opportunities and better performance, the Selig Center predicts that at least 35.3 percent of Drew Charter's graduates and current student body will attend college. Under a scenario based on the old Drew Elementary School, only 24 percent of students would be expected to attend college. Moreover, 9.2 percent of Drew Charter's students will attend a technical school whereas only 7.7 percent of Drew Elementary pupils would have done so. If the higher levels of educational attainment that the Selig Center predicts are realized, then the lifetime earnings of each year's graduating class of 85 students will be \$14 million (in 2007 dollars) higher than would have been true had the students attended Drew Elementary.

#### Costs Avoided by Reducing Crime

The decreases in the number of reported index crimes, before and after East Lake redevelopment, are dramatic. From

1993 to 2007, the number of violent crimes dropped by 96 percent. Similarly, the number of property crimes dropped by 41 percent. Also, the composition of crimes shifted for the better. In 1992 and 1993, 65 percent of the crimes were violent crimes, or crimes directed against persons; by 2007, the number had plummeted to just over 12 percent.

The cost of crime borne by the victims reflects the immediate burden of crime in a neighborhood. In the East Lake neighborhood, this cost fell by 45.5 percent between 1997 and 2006, compared with a 30.4 percent decrease in Atlanta, and a 2.4 percent increase in Georgia. In 2007, the cost of crime in the neighborhood was \$5.7 million lower than it was in 1997.

In Georgia, the statistical likelihood of going to prison at least once is 42.2 percent for black males and 7 percent for black females; and recidivism rates for the state indicate that 24 percent of Georgia's inmate population is incarcerated three or more times. Based on these statistics, 256 of Drew Charter's 1,042 current students and alumni might be expected to go to prison at least once, and 59 to 61 of them might become career criminals. Those estimates are based on the conservative assumption that the residents of inner city Atlanta have the same likelihood of going to prison as the average resident of Georgia, which almost certainly understates the actual risk for students who once attended the old Drew Elementary School and who lived in East Lake Meadows prior to redevelopment.

In the East Lake community, education is a vital part of a comprehensive community-wide strategy to offer meaningful opportunities to participate and be successful in the general economy. If we assume that these efforts are 90 percent successful, the avoided costs of incarceration will be \$21.8 million. This estimate assumes that each person who goes to prison does so only once. The cumulative costs of a lifetime career in crime are much higher, ranging from \$1.7 million to \$1.9 million per career criminal, or \$89.1 million to \$107.4 million for the 59 to 61 students at a high risk of becoming career criminals. That is the potential savings to society resulting from fewer career criminals among high-risk youths at Drew Charter School. Note that the estimates of the avoided costs of incarceration and the savings resulting from fewer career criminals are based on Drew Charter's 1,042 current students and alumni and therefore should not be allocated to a single year.

## A Chance To Succeed

The East Lake story almost didn't happen. Decades of civic neglect had diminished a park-like Atlanta neighborhood to an urban slum ready for the wrecking ball. One long-time resident of the old East Lake Meadows housing project described it as a crime-ridden no man's land on acres of red clay. It seemed that nobody cared; but then things changed.

Much has been written about East Lake's major benefactor, Atlanta developer Tom Cousins, whose avid interest and philanthropic investment underpinned the blighted neighborhood's transformation. Today, there's scant evidence of that no man's land on acres of red clay. The East Lake Campus now boasts several hundred apartments built around a 100-acre recreation area that also includes a public golf course. The transformed neighborhood has a charter school, a YMCA, and the attention-getting East Lake Golf Club, which is home to the annual PGA Tour Championship.

These assets, among others, are the basis for this economic portrait of the East Lake community, researched and produced by the University of Georgia's Selig Center for Economic Growth. Although scores of journal articles and case studies released over the past decade describe in detail various theories of urban socioeconomics [studies by HUD, the Fannie Mae Foundation, and the Urban Institute, for example], very few deal with the actual economic impact of a revitalized neighborhood.

A Chance to Succeed is the East Lake story in numbers. First, it shows the net economic impact of expenditures related to the operation of The Villages of East Lake, Drew Charter School, Sheltering Arms Early Education Center, East Lake Golf Club, Charlie Yates Golf Course, East Lake Family YMCA, and the East Lake Foundation. The economic impact of the PGA Tour Championship is covered in Part 2.

Part 3 details the impact of new businesses in the area, including Publix supermarket, Wachovia and SunTrust banks, and the BP station.

The fourth section covers net changes in residents' earnings. The earnings of those who live in the Villages of East Lake are estimated and compared to estimates of the earnings of residents of the old East Lake Meadows housing project.

Next, A Chance to Succeed examines how appreciation of residential property values adds to the wealth of residents who are landowners, increases their spending power, and lowers their borrowing costs. This section of the report compares the rate of property value appreciation in the East Lake community to rates realized in comparable communities in DeKalb County.

The last two sections of *A Chance to Succeed* underscore the title, because these pages analyze the economic benefits of the improved quality of education provided by the Drew Charter School; and the economic benefits of reduction in crime rates. In the education section, the Selig Center compares standardized test scores of Drew Charter to those of other similarly situated public schools. The standardized test scores also are used to predict educational attainment, which in turn, becomes the base for our estimates of graduates' earnings over a working lifetime.

The final section estimates the economic benefits to the East Lake community associated with reductions in crime rates. Benefits are assessed both in terms of costs avoided by victims as well as costs avoided by government (costs incurred by incarceration, law enforcement, and the criminal justice system).

#### PART 1

## Economic Impact of the East Lake Campus

Seven institutions make up the East Lake Campus: The Villages of East Lake, Drew Charter School, Sheltering Arms Early Education Center, East Lake Golf Club, Charlie Yates Golf Course, East Lake Family YMCA, and the East Lake Foundation. These institutions are the hub of the East Lake community, providing housing, education, family and home services, recreation, social activities, and places for neighbors to congregate. The East Lake Campus brings the community together, building the neighborhood. The redevelopment of this Campus not only is the primary force behind the revitalization of Atlanta's East Lake community, but also generates sustainable economic impacts on DeKalb County through spending for personnel services and ongoing operations. In addition, capital outlays related to the neighborhood's construction and renovation generate economic impacts. This section of the report quantifies the economic impacts generated by the operations the seven institutions that comprise the East Lake Campus in 2007. The cumulative economic impacts generated by capital outlays also are estimated for 1997-2007.

#### **Economic Impact Highlights**

In the broadest terms, the total economic impact of spending by East Lake Campus institutions for personnel services and operations was \$30 million in 2007. Measured in other terms, the economic impact equals \$19 million in value added, \$15 million in labor income, and 639 full- and parttime jobs.

For the period 1995-2007, the total economic impact of capital expenditures on DeKalb County was \$266 million in output, \$111 million in value added, \$79 million in labor income, and 1,827 full- and part-time jobs. The total output impact of capital expenditures exceeds initial spending by 42

percent, reflecting a regional economic multiplier for capital outlays of 1.42.

#### Methodology

The Chief Operating Officer of the East Lake Foundation provided expenditures for personnel services, operating expenses, and capital outlays, shown in Table 1. Similarly, the East Lake Foundation provided employment estimates for each institution, which are reported in Table 2. Employment refers to paid employees (not volunteers), including both full-time and part-time jobs.

For each East Lake Campus institution, the East Lake Foundation provided data on capital spending in nominal dollars for the period 1995 through September 30, 2007. Capital investment in the East Lake Campus totaled \$154,220,254. In accordance with standard accounting practices, revenues generated from the Gresham Road/Wal-Mart assemblage (\$2,604,959 in nominal dollars) are included as revenues rather than expenditures, but to the regional economy this transaction represents activity for the real estate industry. Accordingly, the Selig Center treated the revenues from the sale of the Gresham Road/Wal-Mart assemblage as a positive rather than a negative entry under "Other Items." Thus, capital spending in nominal dollars totaled \$159,430,172 rather than \$154,220,254.

For analytical purposes, the Selig Center converted capital expenditures into constant (inflation-adjusted) 2007 dollars based on price indices obtained from the U.S. Bureau of Labor Statistics. Moreover, unless otherwise noted, all dollar amounts in this report are expressed in constant 2007 dollars. Table 3 reports capital spending for the six East Lake Campus institutions, which equals \$187,849,352 when expressed

Table 1

East Lake Campus: Economic Impact of Spending for Personnel Services and Operations on Output, Value Added, and Labor Income in 2007 (2007 dollars)

|  | Initial<br><u>Spending</u> | Output<br>Impact | Value Added<br>Impact | Labor Income<br>Impact |
|--|----------------------------|------------------|-----------------------|------------------------|
| Grand Total East Lake Campus           | 30,521,542                 | 30,365,687       | 18,899,793            | 14,707,940             |
| Personnel Services                     | 9,840,074                  | 19,301,025       | 14,151,293            | 12,049,430             |
| Operating Expenses                     | 20,681,468                 | 11,064,662       | 4,748,500             | 2,658,510              |
| The Villages of East Lake              | 5,393,264                  | 3,597,946        | 2,149,014             | 1,561,926              |
| Personnel Services                     | 904,492                    | 1,774,221        | 1,302,957             | 1,107,512              |
| Operating Expenses                     | 4,488,772                  | 1,823,725        | 846,057               | 454,414                |
| Drew Charter School                    | 8,340,876                  | 11,037,112       | 7,604,079             | 6,208,844              |
| Personnel Services                     | 4,808,863                  | 9,432,906        | 6,927,364             | 5,888,250              |
| Operating Expenses                     | 3,532,013                  | 1,604,206        | 676,715               | 320,594                |
| Sheltering Arms Early Education Center | 1,128,283                  | 1,613,992        | 1,123,987             | 931,164                |
| Personnel Services                     | 730,896                    | 1,433,503        | 1,047,850             | 895,094                |
| Operating Expenses                     | 397,387                    | 180,489          | 76,137                | 36,070                 |
| East Lake Golf Club                    | 8,092,533                  | 5,673,139        | 2,828,583             | 1,952,961              |
| Personnel Services                     | 791,765                    | 1,552,885        | 1,135,115             | 969,638                |
| Operating Expenses                     | 7,300,768                  | 4,120,254        | 1,693,468             | 983,323                |
| Charlie Yates Golf Course              | 929,595                    | 1,003,431        | 627,511               | 498,795                |
| Personnel Services                     | 342,754                    | 672,242          | 491,389               | 419,755                |
| Operating Expenses                     | 586,841                    | 331,189          | 136,122               | 79,040                 |
| East Lake Family YMCA                  | 3,467,437                  | 4,051,772        | 2,671,177             | 2,161,491              |
| Personnel Services                     | 1,579,494                  | 3,097,853        | 2,264,443             | 1,934,332              |
| Operating Expenses                     | 1,887,943                  | 953,919          | 406,734               | 227,159                |
| East Lake Foundation                   | 3,169,554                  | 3,388,296        | 1,895,442             | 1,392,758              |
| Personnel Services                     | 681,810                    | 1,337,416        | 982,175               | 834,848                |
| Operating Expenses                     | 2,487,744                  | 2,050,880        | 913,267               | 557,910                |

#### Notes:

The East Lake Foundation provided estimates of initial spending for personnel services and operating expenses from administrative records. Initial spending for personnel services excludes both fringe benefits and the employer-paid portion of Social Security. Initial spending for operating expenses excludes spending for personnel services and capital projects.

The impacts of initial spending on output, value added, and labor income were estimated using the IMPLAN Professional System, version 2.0. Type SAM multipliers and production functions provided by MIG, Inc. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs of workers who are paid by employers and payments received by self-employed individuals. The region is defined as DeKalb County, Georgia.

Table 2

East Lake Campus: The Economic Impact of Spending for Personnel Services and Operations on Employment in 2007 (number of jobs)

|  | Total<br>Employment | On-Campus | Off-Campus |
|--|---------------------|-----------|------------|
|  | Impact              | Employees | Employees  |
| Grand Total East Lake Campus           | 639                 | 509       | 130        |
| Personnel Services                     | 570                 | 509       | 61         |
| Operating Expenses                     | 69                  | 0         | 69         |
| The Villages of East Lake              | 37                  | 19        | 18         |
| Personnel Services                     | 25                  | 19        | 6          |
| Operating Expenses                     | 12                  | 0         | 12         |
| Drew Charter School                    | 135                 | 98        | 37         |
| Personnel Services                     | 127                 | 98        | 29         |
| Operating Expenses                     | 8                   | 0         | 8          |
| Sheltering Arms Early Education Center | 42                  | 37        | 5          |
| Personnel Services                     | 41                  | 37        | 4          |
| Operating Expenses                     | 1                   | 0         | 1          |
| East Lake Golf Club                    | 179                 | 150       | 29         |
| Personnel Services                     | 155                 | 150       | 5          |
| Operating Expenses                     | 24                  | 0         | 24         |
| Charlie Yates Golf Course              | 21                  | 17        | 4          |
| Personnel Services                     | 19                  | 17        | 2          |
| Operating Expenses                     | 2                   | 0         | 2          |
| East Lake Family YMCA                  | 189                 | 174       | 15         |
| Personnel Services                     | 183                 | 174       | 9          |
| Operating Expenses                     | 6                   | 0         | 6          |
| East Lake Foundation                   | 34                  | 14        | 20         |
| Personnel Services                     | 18                  | 14        | 4          |
| Operating Expenses                     | 16                  | 0         | 16         |

#### Notes:

Employment refers to paid employees (not volunteers), including both full-time and part-time jobs. On-campus employment refers to paid employees of the specified East Lake Community institutions. The East Lake Foundation provided estimates of on-campus employment from administrative records. The Selig Center estimated off-campus employment using the IMPLAN Professional System, version 2.0. Type SAM multipliers and production functions provided by MIG, Inc. The region is defined as DeKalb County, Georgia.

Table 3

East Lake Campus: Cumulative Capital Spending, 1995-2007
(nominal and 2007 dollars)

|  | Capital<br>Spending<br>( <u>\$ Nominal)</u>   | Capital<br>Spending<br>( <u>\$ 2007)</u>  |
|--|---|---|
| East Lake Campus Total   | 159,430,172   | 187,849,352   |
| The Villages of East Lake Drew Charter School Sheltering Arms Early Education Center East Lake Golf Club Charlie Yates Golf Course East Lake Family YMCA Other Items | 53,705,904<br>18,598,839<br>2,446,457<br>37,059,024<br>13,760,333<br>11,946,000<br>21,913,615 | 63,329,773<br>21,931,672<br>2,884,852<br>43,549,816<br>16,226,126<br>14,086,672<br>25,840,441 |

#### Notes

The East Lake Foundation provided capital spending estimates in nominal dollars for the period 1995-2007, which were converted into constant (inflation-adjusted) 2007 dollars by the Selig Center based on price indices obtained from the U.S. Bureau of Labor Statistics. Other Items includes capital expenditures associated with miscellaneous real estate transactions, the shopping center, and general East Lake Foundation minor capital expenses. Although revenues generated from the Gresham Road/Wal-Mart Assemblage are not expenditures in an accounting sense, they do represent local economic activity and therefore were included as a positive rather than a negative entry under Other Items.

in constant 2007 dollars. It should be emphasized that actual capital spending expressed in constant 2007 dollars was \$181,710,742, but, as explained in the preceding paragraph, the proceeds from the Gresham Road/Wal-Mart assemblage were treated as an expenditure item rather than as revenue in order to more fully account for actual changes in economic activity. "Other Items" includes capital expenditures that were not associated with a specific East Lake Campus institution, including miscellaneous real estate transactions, the shopping center, and minor capital expenses that were allocated to an affiliated entity rather than to one of the East Lake Campus institutions. Also be aware that \$1,834,304 in capital outlays for the East Lake Golf Club's front gate was reassigned from "Other Items" to East Lake Golf Club.

The IMPLAN Professional Version 2.0 modeling system was used to estimate the economic impact of each category of spending on output, value added, labor income, and employment. The total economic impact can be expressed in terms of output (sales revenue or gross receipts), value added (gross regional product), labor income (employee compensation and proprietor's income), and employment (full- and part-time jobs).

Total output impacts are the most inclusive, largest measures of economic impact. Output is the value of production by industry for a given time period, and may be thought of as the value of sales (or gross receipts) plus or minus inventory. Value added consists of employee compensation, proprietor's income, other property income (e.g., payments from interest, rents, royalties, dividends, and profits), and indirect business taxes. Labor income represents all forms of employment income, and is the sum of employee compensation and proprietor's income. Employment includes total wage and salary employees as well as self-employed jobs in a region. It includes both full- and part-time workers and is measured in annual average jobs.

Because of their size, output impacts typically are emphasized in economic impact studies. Output impacts are relevant to the estimation of sales and use tax collections by state and local governments. One problem with output as a measure of economic impact, however, is that it includes the value of inputs produced by other industries, which means that some double counting of economic activity is inevitable. The other measures of economic activity are free from double counting.

Note that value added and labor income already are in-

cluded in the output impacts (although not separately stated) and should not be added in again. Similarly, employment impacts are simply another measure of economic impact and should not be added to either the output, value added, or labor income impacts. DeKalb County is the regional economy we used in the model. Because the size of the study area is relatively small, there will be a high level of leakage. Leakages are any payments made to imports or value-added sectors that do not in turn re-spend the dollars within the region. Expenditures for personnel services, operations, and capital outlays were allocated to the industrial classification system that is recognized by the IMPLAN model.

Using the IMPLAN model and Type SAM multipliers, impacts associated with all categories of initial spending were estimated in terms of output, value added, labor income, and employment. Type SAM multipliers capture the original expenditures resulting from the impact, the indirect effects of industries buying from industries, and the induced effects of household expenditures based on information in the social accounts matrix; and also account for Social Security and income tax leakage, institutional savings, commuting, and interinstitutional transfers. The regional purchase coefficients generated by the model for DeKalb County were used to estimate the proportion of local demand purchased from local producers. A regional purchase coefficient represents the portion of the total local demand that is met by local production and attempts to account for cross-hauling. Whenever appropriate, the IMPLAN software applied margins to convert purchaser prices to producer prices. In addition, the analysis employs the full range of industrial sectors in order to avoid aggregation bias.

#### **FINDINGS**

The institutions that comprise the East Lake Campus are dependable sources of economic impact for Atlanta's East Lake community and DeKalb County. Expenditures by East Lake Campus institutions for personnel and operations generate annual economic impacts for people who live, work, and do business in the neighborhood and region. In addition, capital expenditures related to the redevelopment of the East Lake Campus have generated large economic impacts.

The 2007 economic impact of spending by East Lake Campus institutions for personnel services and operations

Table 4

East Lake Campus: The Economic Impact of Capital Spending on Output, Value Added, and Labor Income, 1995-2007 (2007 dollars)

|                                       | Capital<br><u>Spending</u> | Output<br>Impact | Value Added<br>Impact | Labor Income<br><u>Impact</u> |
|---------------------------------------|----------------------------|------------------|-----------------------|-------------------------------|
| East Lake Campus Total                | 187,849,352                | 266,494,461      | 117,175,837           | 79,139,382                    |
| The Villages of East Lake             | 63,329,773                 | 99,673,051       | 50,042,424            | 36,141,478                    |
| Drew Charter School                   | 21,931,672                 | 29,776,972       | 10,956,592            | 8,337,582                     |
| Sheltering Arms Early Learning Center | 2,884,852                  | 3,916,809        | 1,441,210             | 1,096,710                     |
| East Lake Golf Club                   | 43,549,816                 | 59,254,762       | 22,688,052            | 16,403,913                    |
| Charlie Yates Golf Course             | 16,226,126                 | 18,538,860       | 3,821,442             | 3,332,495                     |
| East Lake Family YMCA                 | 14,086,672                 | 19,125,694       | 7,037,399             | 5,355,214                     |
| Other Items                           | 25,840,441                 | 36,208,313       | 21,188,718            | 8,471,990                     |

#### Notes:

The impacts of capital spending (expressed in 2007 dollars) on output, value added, and labor income were estimated using the IMPLAN Professional System, version 2.0. Type SAM multipliers and production functions provided by MIG, Inc. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs of workers who are paid by employers and payments received by self-employed individuals. The region is defined as DeKalb County, Georgia.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, June 2008.

on DeKalb County includes \$30 million in output, \$19 million in value added, \$15 million in labor income, and 639 full-and part-time jobs. Administrative records indicate that 509 jobs (80 percent) are on the East Lake Campus. The IMPLAN model estimates that 130 jobs (20 percent) are off campus, primarily in private sector businesses. Due to a high level of leakage, the output impact is slightly lower than initial spending, which is not surprising given that the study area is a single county. Still, the estimates for 2007 should be useful as proxies for the annual economic impacts that will be generated in future years—as well as those generated more recently.

The 2007 economic impacts on DeKalb County generated by the institutions on the East Lake Campus are equally impressive.

- The Villages of East Lake generates \$3.6 million in output and \$1.6 million in labor income. The institution supports 37 jobs, including 19 on-campus jobs and 18 off-campus jobs.
- Drew Charter School generates \$11 million in output and \$6.2 million in labor income. It supports 135 jobs, including 98 on-campus jobs and 37 off-campus jobs.
- The Sheltering Arms Early Education Center generates \$1.6 million in output and nearly \$1 million in labor income.

Table 5

East Lake Campus: The Economic Impact of Capital Spending on Employment, 1995-2007

|  | Capital<br>Spending<br>(\$2007) | Employment<br>Impact<br>(Jobs) |
|--|---------------------------------|--------------------------------|
| East Lake Campus Total                 | 187,849,352                     | 1,827                          |
| The Villages of East Lake              | 63,329,773                      | 815                            |
| Drew Charter School                    | 21,931,672                      | 185                            |
| Sheltering Arms Early Education Center | 2,884,852                       | 24                             |
| East Lake Golf Club                    | 43,549,816                      | 369                            |
| Charlie Yates Golf Course              | 16,226,126                      | 73                             |
| East Lake Family YMCA                  | 14,086,672                      | 119                            |
| Other Items                            | 25,840,441                      | 242                            |

#### Notes:

Employment includes both full-time and part-time jobs. The Selig Center estimated employment impacts using the IMPLAN Professional System, version 2.0. Type SAM multipliers and production functions provided by MIG, Inc. The region is defined as DeKalb County, Georgia.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, June 2008.

The center supports 42 jobs, including 37 on-campus jobs and 5 off-campus jobs.

- The East Lake Golf Club generates \$5.7 million in output and \$2 million in labor income. It supports 179 jobs, including 150 on-campus jobs and 29 off-campus jobs.
- The Charlie Yates Golf Course generates \$1 million in output and nearly one-half million dollars in labor income. The institution supports 21 jobs, including 17 on-campus jobs and 4 off campus jobs.
- The East Lake Family YMCA generates \$4.1 million in output, \$2.2 million in labor income, and supports 189 jobs, including 174 on-campus and 15 off-campus jobs.
  - The East Lake Foundation generates \$3.4 million in

output, \$1.4 million in labor income, and supports 34 jobs, including 14 on-campus and 20 off-campus jobs.

From 1995 through September 30, 2007, \$159 million (nominal dollars) was spent on capital projects on the East Lake Campus, which is the equivalent of approximately \$188 million in constant (inflation-adjusted) 2007 dollars. For 1997-2007, the total economic impact of capital expenditures on DeKalb County was \$266 million in output, \$111 million in value added, \$79 million in labor income, and 1,827 full-and part-time jobs. It's worth noting that the output impact of capital expenditures on DeKalb County exceeds the initial spending on capital projects by 42 percent, reflecting a regional economic multiplier for capital outlays of 1.42.

#### PART 2

# Economic Impact of the 2007 PGA Tour Championship

ow much does Atlanta benefit economically from the PGA Tour Championship golf tournaments that are held at the East Lake Golf Club? This section of the report quantifies the economic impacts that the 2007 PGA Tour Championship conveyed to the Atlanta metropolitan statistical area. The benefits are estimated for five major categories of event-related expenditures: (1) spending by participants; (2) spending by attendees; (3) spending by those who accompanied attendees but who did not go to the tournament; (4) spending by volunteers; and (5) spending by the PGA. The economic impacts are based on regional input-output models of the Atlanta's economy, certain necessary assumptions, and data obtained from the PGA, the U.S. Department of Commerce, the U.S. Bureau of Labor Statistics, the Georgia Department of Revenue, the International Association of Convention and Visitor Bureaus (IACVB), the Travel Industry Association of America, and economic impact studies conducted at other PGA Tour events.

#### The PGA Tour Championship

The East Lake Golf Club hosted the Tour Championship in 1998, 2000, and 2002. In 2004, in the wake of three successful tournaments, the PGA Tour designated the East Lake Golf Club as the permanent home of the season-ending Tour Championship. This decision solidified the contribution that the PGA Tour and the East Lake Golf Club make to the Atlanta region's economy.

#### **Economic Impact Highlights**

In the broadest terms, the total economic impact of the PGA Tour Championship was \$31.5 million in 2007. This

amount represents the combined impact of spending by visitors and the PGA. Out of the \$31.5 million, \$27.5 million (87 percent) results from spending by visitors from outside the Atlanta region, and \$4 million (13 percent) results from spending by the PGA.

Of the 2007 total, \$20.2 million is the initial spending by visitors and the PGA; \$11.3 million is the induced or re-spending (multiplier) impact. Dividing the 2007 total output impact (\$31.464 million) by initial spending (\$20.202 million) yields an average multiplier value of 1.56. On average, therefore, every dollar of initial spending generates an additional 56 cents for Atlanta's economy. The PGA Tour Championship added \$18.5 million in regional product (value added) to Atlanta's economy; \$11.5 million in labor income (earnings); and 361 jobs (see Table 6).

#### Methodology

Estimating the economic impact of the PGA Tour Championship on Atlanta's economy in 2007 involved several steps. First, the number of visitors in each of the previously mentioned categories was estimated based on data obtained from the PGA as well as on certain necessary assumptions. Next, the average length of stay, average daily expenditures, and total spending were estimated for each type of visitor. The PGA Tour also provided estimates of its spending in the Atlanta MSA. Then, expenditures by both visitors and the PGA Tour were allocated to industrial sectors. (The IMPLAN Professional Version 2.0 modeling system was used to estimate the economic impact of visitor-related spending on output, value added, labor income, and employment. All dollar amounts are expressed in 2007 dollars.)

Table 6

Economic Impact of The PGA Tour Championship Golf Tournament on Georgia's Economy in 2007

|                    |                | Output     | Value Added | Labor Income | Employment |
|--------------------|----------------|------------|-------------|--------------|------------|
|                    | Total Spending | Impact     | Impact      | Impact       | Impact     |
| <u>Category</u>    | (\$ 2007)      | (\$ 2007)  | (\$ 2007)   | (\$ 2007)    | (Jobs)     |
| Total              | 20,202,595     | 31,463,778 | 18,450,408  | 11,538,633   | 361        |
| Participants       | 2,591,719      | 3,998,167  | 2,346,878   | 1,466,115    | 46         |
| Attendees          | 14,550,000     | 22,445,848 | 13,175,456  | 8,230,821    | 258        |
| Companions         | 547,189        | 756,223    | 421,356     | 275,584      | 10         |
| Volunteers         | 163,688        | 252,517    | 148,224     | 92,597       | 3          |
| The PGA Tour, Inc. | 2,350,000      | 4,011,023  | 2,358,494   | 1,473,516    | 44         |

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, 2008.

#### Visitors' Spending

Visitors' spending constitutes the largest component of initial spending. Spending was estimated for four types of visitors: (1) participants—players, caddies, officials, directors, media, and their families and friends; (2) attendees—those who attended the event for one or more days; (3) companions—non-local persons who did not attend the Championship, but who accompanied those who did; and (4) volunteers—those who volunteered at the event.

The first step was to determine the number of non-local visitors in each of the four visitor categories.

The PGA estimates that 1,250 caddies, officials, directors, and media participated in the 2007 PGA Championship Golf Tournament at East Lake. The proportion of participants from outside the Atlanta area was not available from the PGA, so the Selig Center assumed that 95 percent (1,188 participants) were from outside the Atlanta region.

The PGA estimates that 25,000 persons attended the event per day for four days, which amounts to 100,000 attendee-days. Although the PGA was not able to provide an estimate of the number of days that the average spectator actually went to the event, it did estimate that the average length of a

non-local attendee's stay in the Atlanta region was 2.25 days. Based on that information, the Selig Center assumed that the average spectator went to the event for 1.5 days. (Although this figure is lower than has been reported at other PGA Tour events, it is consistent with the PGA's estimate that the average spectator stayed in Atlanta for only 2.25 days. In contrast, data from the American Express Championship Golf Tournament in San Francisco show the average non-local attendee spent 2 days at the event, but stayed in the region for 4.2 nights.) Dividing 100,000 attendee-days by 1.5 days per attendee yields 66,667 people who attended the PGA Tour Championship at the East Lake Golf Club. The PGA estimates that 20 percent of attendees were from outside the Atlanta area; thus, 13,333 out-of-towners visited the Atlanta to watch the Championship.

Data regarding the number of accompanying visitors to the region was not available from the PGA, but the Selig Center assumed that there was one accompanying visitor for every ten non-local attendees. Based on this assumption, there were 1,333 companion visitors to the Atlanta region.

The PGA Tour estimates that there were 1,200 volunteers and that 12.5 percent of them, or 150, were from outside the Atlanta metro area.

For each visitor category, Table 7 reports the total number of visitors, the percentage of visitors from outside the Atlanta area, and the total number of visitors from outside the Atlanta region.

The next step involved in estimating visitors' spending was to determine the number of visitor days associated with each visitor category. The PGA estimates that the average lengths of stays were 4.5 days for participants, 4.5 days for volunteers, and 2.25 days for attendees. The average length of stay for an accompanying visitor was assumed to be 2.25 days. For each category, multiplying the number of visitors from outside the region by the average length of stay yielded the total visitor days, which are reported in Table 8. For all types of visits combined, the PGA Tour generated nearly 39,000 visitor days.

The third step involved estimating average daily expenditures per visitor day, which are reported in Tables 9 and 10. The Selig Center-produced estimates were based on information obtained from many sources, including studies of three previous PGA Tour events, the IACVB's *ExPact2004 Convention Expenditure and Impact Study* (revised in February 2005), the updated year-end 2005 spending figures for ExPact2005, and the Travel Industry Association of America's Travel Price Index through June 2007. The \$485 average daily expenditure es-

timated for participants, attendees, and volunteers is based on the assumption that \$85 is spent on-site (at the event for food, beverages, retail, etc.) and \$400 is spent off-site (for lodging, restaurants, local transportation, retail, etc.). Expenditures for tickets to the PGA Tour Championship are not included in these amounts.

After taking into consideration inflation, differences in location, and varying lengths of stay, these estimates appear reasonable when compared to estimates reported at other PGA Tour events. For example, at The Players Championship Golf Tournament at Ponte Vedra Beach in 2005, \$356 (measured in 2005 dollars) per day was spent off-site and \$77 was spent onsite. Similarly, at the American Express Championship Golf Tournament in San Francisco in 2005, \$444 per day was spent off-site and \$84 was spent on-site. Also, aggregate estimates issued by the South Carolina Department of Parks, Recreation, and Tourism imply that the average golf visitor to South Carolina spent about \$975 (in 2004 dollars) per golf trip. After adjusting for inflation, that amounts to about \$1,070 per trip, which is very close to the \$1,080 (2.25 days multiplied by \$480 per day) per trip estimated by the Selig Center for the PGA Tour Championship in Atlanta in 2007.

Table 7

The PGA Tour Championship Golf Tournament,
Visitors in 2007

|              |                | Percentage of   |                 |
|--------------|----------------|-----------------|-----------------|
|              | Total          | Out-of-MSA      | Out-of-MSA      |
| Category     | <u>Persons</u> | <u>Visitors</u> | <u>Visitors</u> |
| Total        | 69,117         | 23              | 16,004          |
| Participants | 1,250          | 90              | 1,188           |
| Attendees    | 66,667         | 20              | 13,333          |
| Companions   | 1,333          | 100             | 1,333           |
| Volunteers   | 1,200          | 12.5            | 150             |

Source: The PGA Tour, Inc. and the Selig Center for Economic Growth, Terry College of Business, University of Georgia, 2008.

Table 8

The PGA Tour Championship Golf Tournament,
Visitor Days in 2007

|              |                 | Average Length | Total Number        |
|--------------|-----------------|----------------|---------------------|
|              | Out-of-MSA      | of Stay        | of Out-of-MSA       |
| Category     | <u>Visitors</u> | (Days)         | <u>Visitor Days</u> |
| Total        | 16,004          | 2.4            | 38,681              |
| Participants | 1,188           | 4.5            | 5,344               |
| Attendees    | 13,333          | 2.25           | 30,000              |
| Companions   | 1,333           | 2.25           | 3,000               |
| Volunteers   | 150             | 2.25           | 338                 |

Source: The PGA Tour, Inc. and the Selig Center for Economic Growth, Terry College of Business, University of Georgia, 2008.

Table 9

Participants, Attendees, Volunteers: Average Daily Expenditures per Visitor, 2007
(\$ 2007)

| Expenditure Class        | Daily Amount per Visitor (\$) |
|--------------------------|-------------------------------|
| Lodging and Incidentals  | 189                           |
| Food and Beverage        | 150                           |
| Entertainment/Recreation | 38                            |
| Retail                   | 68                            |
| Local Transportation     | 13                            |
| Car Rental               | 11                            |
| Gas/Parking/Other        | 16                            |
| Total                    | 485                           |

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, 2008. The daily amount per visitor includes \$400 in off-site expenditures and \$85 in on-site expenditures.

#### Table 10

### Companions: Average Daily Expenditures per Visitor, 2007 (\$ 2007)

| Expenditure Class   | Daily Amount per Visitor (\$)     |
|---|-----------------------------------|
| Lodging and Incidentals   | 0                                 |
| Food and Beverage   | 87                                |
| Entertainment/Recreation  | 13                                |
| Retail  | 43                                |
| Local Transportation  | 13                                |
| Car Rental  | 11                                |
| Gas/Tolls/Parking/Other   | 16                                |
| Total   | 182                               |
| Source: Selig Center for Economic Growth, Terry College of Busine | ess, University of Georgia, 2008. |

The final step in estimating visitors' spending was to multiply average daily expenditures by the appropriate number of visitor days for each category of visitor. Total visitor spending for each category of visitor is reported in the first column of Table 6. These amounts were allocated to various economic sectors recognized by the IMPLAN economic impact modeling system. Finally, the IMPLAN system was used to estimate the total economic impact of spending by visitors on output, labor income, and employment. These impacts are reported in columns 2, 3, 4, and 5 of Table 6.

#### **PGA Tour Spending**

After a review of 2007 expenses, the PGA Tour estimated that it spent \$2.35 million in the Atlanta market for advertising, hotels, transportation, printing, office supplies, entertainment, food and beverages, security, rentals, and other items. This estimate only includes expenditures received by local vendors and does not include expenditures received by national vendors for items such as tents, scaffolding, bleachers, signage, and on-site catering. Table 6 summarized the dollars spent and their impacts on the Atlanta region's economy. It should be noted that the spending and impacts attributed to the PGA Tour in Table 6 do not include approximately \$1 mil-

lion in PGA Tour Championship proceeds that are paid by the PGA to the East Lake Foundation. Also, to the extent that the PGA derives a small proportion of its global revenues from onsite spending for food and other items from those attending the 2007 PGA Tour Championship at East Lake, a slight degree of double counting may be inherent in calculating the event's economic impact.

#### **FINDINGS**

Strategic decisions to invest in the East Lake Golf Club and surrounding community helped Atlanta to become the home of the PGA Tour Championship. The fundamental finding is that the Championship generates a significant, sustainable, annual economic impact on Atlanta.

The 2007 PGA Tour Championship's economic impact on the Atlanta region included:

- \$31.5 million in sales (output);
- ■\$18.5 million in production (value added);
- \$11.5 million in labor income (earnings); and
- 361 jobs.

Out of the \$31.5 million output impact, \$27.5 million (87

percent) resulted from spending by visitors and \$4 million (13 percent) resulted from spending by the PGA. The multiplier effect enhanced the impact of initial spending. For example, of the 2007 total output impact, \$20.2 million was the initial spending by visitors and the PGA. The induced or re-spending (multiplier) impact added another \$11.3 million in economic impact. Dividing the 2007 total output impact (\$31.464 mil-

lion) by initial spending (\$20.202 million) yields an average multiplier value of 1.56. On average, therefore, every dollar of initial spending generated an additional 56 cents for Atlanta's economy.

The revitalization of Atlanta's East Lake community ensures that the PGA Tour Championship will continue to provide annual economic impacts to the Atlanta region.

#### PART 3

## Economic Impact of Commercial Development

The redevelopment of the East Lake Campus has already led to a number of commercial developments, including the Publix at East Lake, SunTrust at East Lake Publix, Wachovia's Villages of East Lake Financial Center, and the BP station at 2371 Glenwood Avenue. The Selig Center believes that these developments would not have occurred without the redevelopment of the East Lake Campus. Each year, these commercial entities generate economic impacts for the East Lake community.

#### **Economic Impact Highlights**

In 2007, the combined economic impact of the East Lake Publix, SunTrust at East Lake Publix, the Wachovia branch, and the BP station on output was \$20.1 million. Measured in terms of labor income, commercial developments contributed \$6.6 million in 2007. In terms of its effects on employment, these businesses support 183 jobs.

#### Methodology

The individual businesses were contacted and asked to provide their actual business revenues (sales) and employment for 2007. None of the business establishments was willing (or able) to divulge these proprietary financial statistics to the Selig Center, however, presumably due to competitive factors and/or corporate policies. Accordingly, we used indirect methods to estimate or predict business revenues in 2007.

#### East Lake Publix

Since it is known that the floor space of the Publix at East Lake is 44,270 square feet, the Selig Center developed two analytical methods to estimate Publix's business revenues based on its floor space. The 2002 Economic Census that was con-

ducted by the U.S. Census Bureau indicates that U.S. supermarkets and other grocery stores (except convenience stores) generated a total of \$395,233,897,000 (in 2002 dollars). The Census also reports that the total floor space nationwide for this category was 1,038,155,000 square feet. Dividing total sales by total square footage of floor space yields an estimate of \$380.71 (\$2002) in sales per square foot, which is the equivalent of \$422.52 in constant 2007 dollars. Multiplying 44,270 square feet by \$422.52 yields an estimate of \$18,704,823 in business revenue for the East Lake Publix.

The second method developed to estimate business revenues for the East Lake Publix is also based on 44,270 square feet of floor space, but uses 2007 data obtained from the Food Marketing Institute, a trade association for the grocery industry. One potential advantage of this method is that the data are contemporaneous instead of five years old. The institute reports that, in 2007, the average U.S. supermarket generated weekly sales of \$382,226, or \$19,875,752 per year. It also reports that the average size of a supermarket was 47,500 square feet of floor space, therefore sales per square foot of floor space is \$19,875,752 divided by 47,500, or \$418.44. Multiplying \$418.44 by the East Lake Publix's floor space (44,270 square feet) yields an estimate of business revenues of \$18,524,201.

Since each method yields similar results, the Selig Center used the average of both estimates as an approximation of business revenues for the East Lake Publix in 2007. The average value was \$18,614,512, as shown in Table 11. The Selig Center also was aware that a small convenience/grocery store known as Pop's had closed, so business revenues were reduced accordingly. But in order to estimate Publix's business revenues net of Pop's, the Selig Center had to calculate Pop's business revenue. The Census Bureau's 1997 Economic Census for Georgia

Table 11

## East Lake Community: The Economic Impact of Commercial Development on Output, Value Added, and Labor Income in 2007 (2007 dollars)

|                               | Business   | Output        | Value Added   | Labor Income  |
|-------------------------------|------------|---------------|---------------|---------------|
| Business Establishment        | Revenues   | <u>Impact</u> | <u>Impact</u> | <u>Impact</u> |
| Total, All Developments       | 29,368,898 | 19,247,817    | 12,552,956    | 6,405,038     |
| East Lake Publix (net "Pops") | 17,941,142 | 8,194,773     | 5,135,515     | 3,293,974     |
| Publix Store #00783           | 18,614,512 | 8,502,343     | 5,328,263     | 3,417,605     |
| "Pops" Grocery (demolished)   | 673,370    | 307,570       | 192,748       | 123,631       |
| SunTrust at East Lake Publix  | 1,735,463  | 2,539,146     | 1,707,399     | 697,524       |
|                               |            |               | , ,           | ,             |
| Wachovia Bank - 2283 Glenwood | 4,748,800  | 6,947,942     | 4,672,007     | 1,908,657     |
| BP Station - 2371 Glenwood    | 4,943,493  | 1,565,956     | 1,038,035     | 504,883       |

#### Notes

The economic impact of the East Lake Publix was reduced to reflect the closing of a small convenience/grocery store (known as "Pop's").

The impacts of business revenues on output, value added, and labor income were estimated using the IMPLAN Professional System, version 2.0. Type SAM multipliers and production functions provided by MIG, Inc. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs of workers who are paid by employers and payments received by self-employed individuals. The region is defined as DeKalb County, Georgia.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, June 2008.

reports that 513 convenience stores generated \$274,436,000 in sales in 1997. The average convenience store generated sales of \$534,963, which equals \$673,370 when expressed in constant 2007 dollars; therefore, East Lake Publix's business revenues net of Pop's total \$17,941,142.

#### SunTrust at East Lake Publix

The SunTrust branch that operates inside the East Lake Publix is a small retail banking center and not a full-service bank branch. It does not include a mortgage office, an investment center, or a commercial center. Accordingly, the Selig Center based its estimate of business revenues on the average retail revenue generated by the typical branch bank operated by SunTrust in 2007.

SunTrust Banks, Inc. 2007 Annual Report indicates that total revenue was \$8,259,900,000. In a presentation on May 13, 2008, James M. Well, III, Chairman and Chief Financial Officer of SunTrust reported that retail and commercial business combined generated 57 percent of total revenue in 2007. The annual report shows retail revenue comprises 62 percent of retail and commercial revenue, so the percentage of SunTrust's total revenue in 2007 that is from retail business is approximately 35 percent (57 percent multiplied by 62 percent). Multiplying 0.35 by \$8,259,900,000 results in \$2,919,048,660 in retail revenue in 2007. Given that SunTrust operated 1,682 branches, the average business revenue per branch from retail banking therefore equals \$1,735,463. The Selig Center estimates that the SunTrust at East Lake Publix was average in

Table 12

East Lake Community: The Economic Impact of Commercial Development on Employment in 2007

|   | Business                            | Employment               |
|---|-------------------------------------|--------------------------|
| Business Establishment  | Revenues<br>( <u>\$2007)</u>        | Impact<br>( <u>Jobs)</u> |
| Total, All Developments   | 29,920,098                          | 178                      |
| East Lake Publix (net "Pops") Publix Store #00783 "Pops" Grocery (demolished) | 17,941,142<br>18,614,512<br>673,370 | 107<br>111<br>4          |
| SunTrust at East Lake Publix  | 1,735,463                           | 15                       |
| Wachovia Bank - 2283 Glenwood   | 4,748,800                           | 41                       |
| BP Station - 2371 Glenwood  | 4,943,493                           | 15                       |

#### Notes:

The employment impact of the East Lake Publix was reduced to reflect the closing of a small convenience/grocery store (known as "Pop's"). Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, June 2008.

terms of revenue generation in 2007, implying that \$1,735,463 in business revenue was produced.

#### Wachovia's Villages of East Lake Financial Center

Wachovia Corporation's 2007 Annual Report indicates that the average amount of business revenue generated per financial center was \$5.3 million in 2007. The Villages of East Lake Financial Center is a full-service financial center, and it appears to be quite active. But business revenues were reduced by 10.4 percent to reflect the fact that this branch did not open until February 8, 2007. Based on this data, the Selig Center estimates that the Wachovia branch at 2283 Glenwood Avenue generated \$4.7 million in business revenue in 2007.

#### **BP Station**

The BP station at 2371 Glenwood Avenue is situated on a popular commuting corridor between downtown Atlanta and its suburbs. The station appears to be flourishing and is reput-

ed to be a top performer (this status could not be verified). The station has 16 pumps, a convenience store, and food service.

According to the National Association for Convenience and Petroleum Retailing—an international trade association representing over 2,200 stores and 1,800 supplier companies—the U.S. convenience store industry consists of approximately 146,000 stores, which generated \$577.4 billion in sales in 2007. Based on these statistics, the average revenue generated per store was \$3,954,792. For the reasons cited previously, the Selig Center expects that the BP station at 2371 Glenwood Avenue substantially outperforms the average convenience store. Thus, the Selig Center's estimate of business revenues for this station is \$4,943,493, which is 25 percent higher than the average amount of revenue generated by the average U.S. gas station/convenience store in 2007.

The IMPLAN Professional Version 2.0 modeling system was used to estimate the economic impact of each commercial development on output, value added, labor income, and

employment. The regional economy is defined as DeKalb County. Business revenues generated by the Publix at East Lake, SunTrust at East Lake Publix, Wachovia's Villages of East Lake Financial Center, and the BP station were allocated to the industrial classification system that is recognized by the IMPLAN model.

#### **FINDINGS**

Commercial developments stemming from the redevelopment of the East Lake Campus generated \$29.9 million in business revenues in 2007. The combined economic impact of the East Lake Publix, SunTrust at East Lake Publix, the Wachovia branch, and the BP station on output is \$20.1 million. Due to a high level of leakage, the economic impact is lower than business revenues, which is typical for grocery and convenience stores, especially when the study area is a single county. For example, the portion of gasoline sales at the BP station that represents payments to producers, refiners, wholesalers, and distributors located outside DeKalb County is not a local economic impact. The combined economic impact of commercial development on value added is \$13.1 million. Measured in terms of labor income, the commercial developments contributed \$6.6 million in 2007. In terms of its effects on employment, commercial developments support 183 jobs. The economic impacts generated by commercial developments on output, value added, and labor income are reported in Table 11. Employment impacts are reported in Table 12.

The output and employment impacts of the East Lake Publix are \$8.2 million and 107 jobs. The value added impact is \$5.1 million and the labor income impact is \$3.3 million. Although the East Lake Publix accounts for 60 percent of business revenues attributed to commercial developments, it accounts for only 41 percent of the output impact. Again, that's due to a high level of leakage. Nonetheless, the presence of the East Lake Publix allows residents of the East Lake community to shop in the neighborhood, which would not be possible otherwise. It is convenient, and it truly invigorates the neighborhood's economy. The East Lake Publix also attracts those who commute to jobs in downtown Atlanta from the suburbs, which represents new economic activity for the East Lake community.

In addition, the East Lake Publix provides a base of operations for the SunTrust bank branch, which generated an output impact of \$2.5 million in 2007. Measured in other terms, the economic impact of the SunTrust branch includes \$1.7 million in value added, \$698,000 in labor income, and 15 jobs.

The Wachovia bank branch on Glenwood Avenue generated an output impact of \$6.9 million in 2007. Value added and labor income impacts were \$4.7 million and \$1.9 million, respectively. The employment impact is 41 jobs.

The BP station generated an output impact of \$1.6 million, which—due to a high level of leakage—is considerably less than its business revenues of \$4.9 million. The discrepancy is typical of gas stations, and reflects the relatively small proportion of spending that takes place locally. The value added and labor income impacts are \$1 million and \$504,000, respectively. The BP station's employment impact is 15 jobs.

#### PART 4

## Residents' Household Incomes: Villages of East Lake vs. East Lake Meadows

Compared to similar properties operated by the Atlanta Housing Authority that were not redeveloped (Bankhead Courts and Bowen Homes), The Villages of East Lake reports average household incomes that are substantially higher and much faster growing. The relatively robust spending power of the residents of The Villages of East Lake is an important benefit of redevelopment.

A major factor behind these income gains is that The Villages of East Lake is a mixed income community that allocates half of the units to those who pay market rate rents and half to public housing-assisted households. Households that can afford to pay market rate rents have substantially higher average incomes than those on public housing assistance. Nonetheless, even among those receiving the housing subsidy, average incomes grew substantially faster at The Villages of East Lake than at either Bankhead Courts or Bowen Homes. One likely explanation is that the majority of the Villages' residents who receive public housing assistance are employed. It also is worth noting that the revitalization of the East Lake neighborhood makes the Villages a desirable place to live because of all the amenities and resources available. So it is possible that families stay rather than move away when their economic situation improves. The Selig Center did not investigate this possibility, however.

#### Methodology

The Selig Center compared average household incomes at The Villages of East Lake in 2006 to average household incomes at East Lake Meadows in 1995. The number of households and household composition (market rate versus assisted)

also were taken into consideration. To better gauge the gains, similar comparisons were made for Bankhead Courts and Bowen Homes, which are operated by the Atlanta Housing Authority. Bankhead Courts and Bowen Homes were judged to be similar to East Lake Meadows prior to redevelopment, and are good proxies for what might have occurred at East Lake Meadows if it had not been redeveloped.

In addition to comparing average household incomes across properties and time, the Selig Center calculated the total household income of all the residents of each property and compared the change in those aggregates over time. Finally, the net gain due to the redevelopment of East Lake Meadows was estimated. This was accomplished by reducing the overall gain in the aggregate household income of the residents of The Villages of East Lake by the organic growth in income experienced at Bankhead Courts and Bowen Homes.

The Atlanta Housing Authority's Office of Policy Research provided the number of households and average household income for Bankhead Courts, Bowen Homes, and East Lake Meadows. The East Lake Foundation provided data on the number of households and average household income for The Villages of East Lake. Please note that unless otherwise indicated, nominal rather than inflation-adjusted dollars are used in this section of the report.

#### **FINDINGS**

The average household income of all the residents of The Villages of East Lake was \$32,717 in 2006, which is 477 percent

Table 13

Residents' Household Incomes, 1995 and 2006 (nominal dollars)

| Property                            | Number of<br>Households (1995) | Average Income (1995) | Total Income (199  |  |
|-------------------------------------|--------------------------------|-----------------------|--------------------|--|
| <u>- Toporty</u>                    | <u>110000110100 (1000)</u>     | rwerage moome (1000)  | Total moonie (100) |  |
| Control Group                       | 941                            | 5,482                 | 5,158,112          |  |
| Bankhead Courts                     | 299                            | 6,232                 | 1,863,368          |  |
| Bowen Homes                         | 642                            | 5,132                 | 3,294,744          |  |
| East Lake Meadows                   | 419                            | 5,672                 | 2,376,568          |  |
|                                     | Number of                      |                       |                    |  |
|                                     | Households (2006)              | Average Income (2006) | Total Income (200  |  |
| Control Group                       | 991                            | 10,347                | 10,253,723         |  |
| Bankhead Courts                     | 358                            | 10,778                | 3,858,524          |  |
| Bowen Homes                         | 633                            | 10,103                | 6,395,199          |  |
| The Villages of East Lake           | 505                            | 32,717                | 16,522,085         |  |
| Assisted Households                 | 264                            | 17,241                | 4,551,624          |  |
|                                     | Net Change, 1995 to 2006       |                       |                    |  |
|                                     | <u>Households</u>              | Average Income        | Total Income       |  |
| Control Group                       | 50                             | 4,865                 | 5,095,611          |  |
| Bankhead Courts                     | 59                             | 4,546                 | 1,995,156          |  |
| Bowen Homes                         | -9                             | 4,971                 | 3,100,455          |  |
| The Villages of East Lake           | 86                             | 27,045                | 14,145,517         |  |
| Assisted Households                 | -155                           | 11,569                | 2,175,056          |  |
|                                     | Percent Change, 1995 to 2006   |                       |                    |  |
|                                     | <u>Households</u>              | Average Income        | Total Income       |  |
| Control Group                       | 5.3                            | 88.8                  | 98.8               |  |
| Bankhead Courts                     | 19.7                           | 72.9                  | 107.1              |  |
| Bowen Homes                         | -1.4                           | 96.9                  | 94.1               |  |
| The Villages of East Lake           | 20.5                           | 476.8                 | 595.2              |  |
| Assisted Households                 | -37.0                          | 204.0                 | 91.5               |  |
|                                     |                                | Income                | Gain               |  |
|                                     |                                | Due to Redev          | <u>relopment</u>   |  |
| The Villages of East Lake           |                                | 11,797,               |                    |  |
| Assisted Households                 |                                | -172,                 | 715                |  |
| The Villages of East Lake (\$ 2007) |                                | 12,131,               | 313                |  |

Sources: The Atlanta Housing Authority's Office of Policy Research provided data for Bankhead Courts, Bowen Homes, and East Lake Meadows. The East Lake Foundation provided data for the Villages of East Lake All other data estimated by the Selig Center for Economic Growth, June 2008.

higher than the \$5,672 average reported for East Lake Meadows in 1995. The 1995-2006 percent gain for households that receive housing assistance at The Villages of East Lake was 204 percent, which is substantially higher than the 89 percent gain calculated for the control group of properties (Bankhead Courts and Bowen Homes).

The total household income for all The Villages of East Lake residents was \$16,522,085 in 2006, which exceeds the 1995 value estimated for East Lake Meadows by \$14,145,517. After factoring out the organic growth that took place at the control group of Atlanta Housing Authority properties, the net gain due to redevelopment in 2006 was \$11,797,746, which equals \$12,131,313 in constant 2007 dollars. ■

#### PART 5

## Appreciation of Residential Property Values

Because the redevelopment of the East Lake Campus has made the East Lake community a very desirable place to live, homeowners reap the benefits as prices of existing homes rise. Appreciation of residential real estate values not only adds to the wealth of East Lake residents who own their own homes, but it also increases their potential spending power and lowers their borrowing costs. Substantially above-average rates of home price appreciation also should prompt new residential and commercial development.

In order to gauge the extent to which home price appreciation in the East Lake community exceeds the norm, the Selig Center compared home price appreciation in the East Lake neighborhood to home price appreciation in the Atlanta MSA and the nation as a whole. To gain additional insights into the combined effects of home price appreciation and new residential development, the Selig Center analyzed the growth of the total appraised value of residential properties (zoning code R3) by zip code. Of course, the broader geographic coverage provided by the zip code 30317 as compared to the much more tightly defined East Lake neighborhood means that factors other than the revitalization of the East Lake Campus contributed proportionally more to growth in the appraised value of residential properties.

## Geographic Boundaries of the East Lake Neighborhood

This section of the report defines the East Lake neighborhood as a roughly rectangular area with the following boundaries: The northern border consists of Wade Avenue to the northwest, Delano Drive to the north, and Pharr Road to the northeast. The eastern border is Candler Road, and the southern border is Glenwood Avenue. The western border reaches

from Maynard Terrace in the southwest to Wyman Street in the northwest. Memorial Drive bisects this rectangle through the middle from east to west, and Second Avenue divides it from north to south. The East Lake Golf Club, Drew Charter School, and the Charlie Yates Golf Course lie between Memorial Drive and Glenwood Avenue.

#### Methodology

The Selig Center compared home price appreciation in the East Lake neighborhood to home price appreciation experienced in both the Atlanta MSA and the nation as a whole. It should be noted that none of the home prices are adjusted for inflation. The source of home price data for the East Lake neighborhood is the DeKalb County Property Tax Appraisal Department. For the East Lake neighborhood, price appreciation for each included home was calculated as the percentage change in the sales price of the same single-family home in the reference year (1995, 1996, 1997, 1998, or 1999) to its appraised value in 2007. The average of those values is reported in Table 14. We also calculated the compound annual rates of growth between the individual property's sales price in the reference years to its appraised value in 2007, and present the average of those values in Table 15.

The DeKalb County Parcel file CD was sifted through to obtain the records for all residential properties with zoning code R3 that were in the East Lake neighborhood with a deed date (sales date) in the reference year. After a preliminary list of properties was developed, the Selig Center downloaded and printed the individual property tax records from the DeKalb County Property Tax Appraisal website. To ensure data integrity, each property record was examined to assure that there

Table 14

Home Price Appreciation, Existing Homes: Percentage Change for Selected Periods

| Deviced       | East Lake           | Adlanta MCA | 11.0        |
|---------------|---------------------|-------------|-------------|
| <u>Period</u> | <u>Neighborhood</u> | Atlanta MSA | <u>U.S.</u> |
| 1995 to 2007  | 334                 | 86          | 113         |
| 1996 to 2007  | 315                 | 75          | 102         |
| 1997 to 2007  | 232                 | 69          | 97          |
| 1998 to 2007  | 163                 | 58          | 88          |
| 1999 to 2007  | 87                  | 49          | 80          |

#### Notes

For the East Lake neighborhood, home price appreciation equals the average of the percentage change in the sales price of the same home (in 1995, 1996, 1997, 1998, or 1999) to its appraised value (in 2007). Sales prices and appraised values for individual properties were obtained from the DeKalb County Tax Assessors Office's website. For the U.S. and the Atlanta MSA, home price appreciation equals the percentage change in the value of the Office of Federal Housing Enterprise Oversight's house price index for the first quarter of the referenced years.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, June 2008.

Table 15

Home Price Appreciation of Existing Homes:
Compound Average Annual Rate of Growth for Selected Periods
(percent)

|              | East Lake    |             |             |
|--------------|--------------|-------------|-------------|
| Period       | Neighborhood | Atlanta MSA | <u>U.S.</u> |
| 1995 to 2007 | 13.0         | 5.3         | 6.5         |
| 1996 to 2007 | 12.0         | 5.2         | 6.6         |
| 1997 to 2007 | 12.0         | 6.4         | 7.0         |
| 1998 to 2007 | 10.4         | 5.2         | 7.2         |
| 1999 to 2007 | 7.3          | 5.1         | 7.6         |

Table 16

Total Appraised Value of Residential Properties (R3), in Selected Zip Codes, 2002 and 2007

| Zip Code                | Total Appraised<br>Value in 2002<br>(millions of \$2002) | Total Appraised<br>Value in 2007<br>(millions of \$2007) | Percent Chang<br>Appraised Valu<br>2002 to 2007<br>(percent) |
|-------------------------|--|--|--|
| East Lake (30317)       | 498  | 910  | 83   |
| 30002                   | 341  | 466  | 37   |
| 30030                   | 1,573  | 2,360  | 50   |
| 30032                   | 1,015  | 1,726  | 70   |
| 30034                   | 1,373  | 1,936  | 41   |
| 30316                   | 657  | 1,266  | 93   |
| Total, Nearby Zip Codes | 4,959  | 7,754  | 56   |

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, based on data obtained from the DeKalb County Tax Assessors Parcel File CD, June 2008.

was a valid sale and that the appraised value was current. Because the focus is on existing homes, vacant lots and new homes were eliminated. We also eliminated properties that had a house in the reference year, but did not have one in 2007. In addition, properties purchased by entities affiliated with the East Lake Campus were excluded. Unless a valid sale price for an individual parcel could be determined, properties that were part of a multi-parcel sale were eliminated. When there were multiple sales (deed dates) within the same year, the earliest sale price for the property was selected.

For the U.S. and Atlanta, home price appreciation equals the percentage change in the value of the OFHEO's house price index for the first quarter of the referenced years (see Table 14). Also, the compound annual rates of growth of the OFHEO index between the reference years were calculated and reported in Table 15. The Selig Center also used data from the OFHEO's all-transactions House Price Index (HPI), which provides a broad measure of the movement in single-family house prices. Designed to capture changes in the value of single-family homes, the HPI is an accurate indicator of house price trends

at various geographic levels. The HPI itself is based on data provided by Fannie Mae and Freddie Mac, and is a weighted, repeat-sales index that measures average price changes. It is not adjusted for inflation.

The Selig Center also analyzed the growth of the total appraised value of residential properties by zip code (see Table 16). The DeKalb County Property Tax Appraisal Department provided data for 2002 through 2007. The 2002 to 2007 percentage change in total appraised value of all residential properties with zoning code R3 was calculated for the 30317 (East Lake community) zip code as well as a group of nearby zip codes, including 30002, 30030, 30032, 30034, and 30316.

#### **FINDINGS**

By any measure, existing home prices rose substantially faster in the East Lake community than in either the Atlanta MSA or the nation as a whole. In the East Lake neighborhood, existing home prices in 2007 were 334 percent higher than in

1995. The comparable percentage gains for the Atlanta MSA and the nation as a whole were 86 percent and 113 percent, respectively. In other words, the percentage gain in existing home prices enjoyed by homeowners who live in the East Lake neighborhood was four times larger than the percentage gain realized by the typical Atlanta homeowner, and three times larger than the percentage gain realized by the average U.S. homeowner.

In the East Lake neighborhood, the compound average annual rate of growth of existing home prices for 1995 through 2007 was a truly remarkable 13 percent. Compare that to the 5.3 percent growth rate for the Atlanta metro area or the 6.5 percent growth rate for the nation as a whole. The compound average annual rate of growth is the rate at which existing home prices grew over a period of years, with the effect of compounding factored in. It is calculated by taking the *n*th root of the total percentage change, where *n* is the number of years in the period being considered. It's worth noting that the compound annual rate of growth in the East Lake neighborhood declines steadily as the initial reference year moves from 1995 towards 1999, but even in the most recent period—1999-2007—the compound annual rate of growth in home prices

was higher in the East Lake neighborhood than in the Atlanta MSA. One implication is that the major beneficiaries of home price appreciation are the people who lived in the neighborhood the longest.

In the East Lake zip code (30317), the total appraised value of residential properties rose from \$498 million in 2002 to \$910 million in 2007. That 83 percent gain was much larger than the 56 percent gain reported for the group of nearby zip codes, but it was lower than the 93 percent gain reported for zip code 30316. The 27 percentage point difference between the 83 percent gain realized in the East Lake zip code and the 56 percent gain reported for the group of nearby zip codes represents the above-average component of growth that took place in East Lake, and it amounts to an additional \$131 million in appraised value, or, on average, an extra \$26 million per year.

The increase in total appraised properties reflects home price appreciation, new residential development, and the conversion of other property classes to R3 residential property. In that regard, it is interesting to note that the number of residential properties in the East Lake zip code rose from 3,446 in 2002 to 5,042 in 2007, a 46 percent gain.

#### PART 6

## Economic Benefits of Improved Education

The two-part discussion of the economic impact of improved education in Drew Charter School analyzes the changes in educational opportunities, and estimates how these changes are lilkely to impact the lives of Drew Charter School's students.

The discussion of 1995-2007 trends in educational performance is based on the analysis of results of standardized testing. Before 2001, the Iowa Test of Basic Skills (ITBS) was administered to grades 3, 5 and 8, with the results of testing presented as an average percentile score for each school and grade. The 1995-2000 test results used in this analysis were obtained from the Georgia Department of Education. Beginning in 2001, Georgia public schools were required to administer the Criterion-Referenced Competency Test (CRCT), with outcomes classified in one of three broad categories: "Does not meet," "Meets," or "Exceeds" standard requirements. After 2001, the CRCT became the basis for comparisons of schools in Georgia, with results reported by the Governor's Office of Student Achievement.

Given the changes in testing and reporting, we decided to base our analysis of student academic performance between 1995 and 2007 on the differences in test results between Drew Elementary (later replaced by Drew Charter School), the Atlanta Public Schools (APS) average, and the Georgia average in a given year. The changes in how Drew Elementary and Drew Charter schools compared to the Atlanta and Georgia averages serve as the basis for the cross-year analysis. Doing so allowed us to compare the schools, regardless of what tests were administered and regardless of the changes in the tests themselves.

The replacement of a percentile score (a single number) with three performance designations (each covering a broad

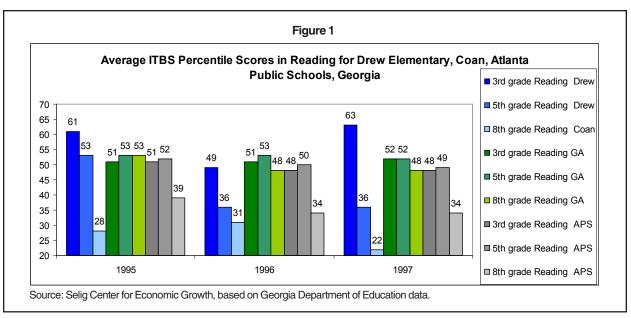
range of scores) also makes it difficult to perform a time-series analysis. So, in order to make the necessary comparisons, we converted the three-tier scores to average performance levels, with each represented by one value on a scale from 2 to 6: 2 (Does not meet), 4 (Meets), 6 (Exceeds) standards. To determine the average performance level, we multiplied the number of students within each category by the assigned value (2, 4, or 6), and divided the outcome by the number of tested students. Average performance levels for the grade were obtained by averaging performance levels for individual subjects. This approach makes it possible to compare Drew Charter School to the APS and Georgia averages, and to measure performance of individual schools as well as account for the number of under- and overachievers.

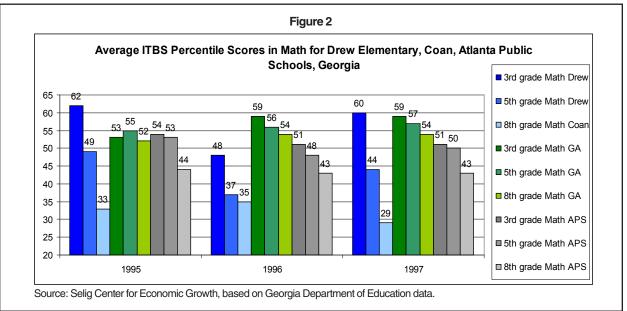
#### **ANALYSIS OF TRENDS**

The differences in academic performance of Drew Elementary and Drew Charter School students were traced during two three-year periods: 1995 to 1997 (the three years before Drew Elementary School closed in 1998), and 2005 to 2007, the most recent years for which data are available. Comparisons were made for grades 3, 5 and 8. Since Drew Elementary did not go through the eighth grade, 1995-1997 test results for the eighth grade were presented for Coan Middle School, which is comparable to Drew Elementary School in student demographics. Also, Drew Elementary students were zoned to attend Coan for middle school.

#### 1995-1997

While the performance of Drew Elementary's third graders exceeded, or stayed close to the Atlanta and Georgia averages between 1995 and 1997, fifth graders fell behind in both





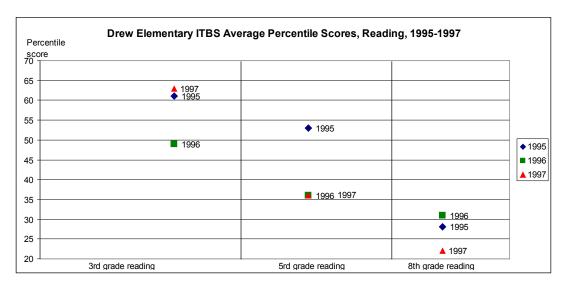
reading and math in 1996 and 1997. Compared to the fifth grade performance of Drew Elementary students, the eighth graders in Coan fell even farther behind the APS and Georgia averages.

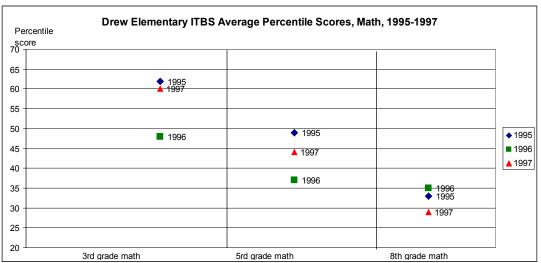
Although Georgia's average ITBS scores in reading and math tended to be lower in the eighth grade than in the fifth grade, the decline was much more pronounced in the case of Drew Elementary/Coan and Atlanta Public Schools. For example, the average Georgia percentile score in fifth grade

reading stood at 53 (1995), 53 (1996), and 52 (1997); Georgia's eighth graders scored at the 53, 48, and 48 percentile. Fifth graders at Drew scored at the 53, 36, and 36 percentile level in 1995, 1996, and 1997, while eighth graders in Coan averaged 28, 31, and 22 percentile in reading. A similar trend can be observed in math performance. Although the APS average showed steep declines (especially in reading), it was still higher than Coan's.

The precipitous decline in Drew Elementary's and Coan

Figure 3





Source: Selig Center for Economic Growth, based on Georgia Department of Education data.

Middle School's student performances suggests steadily declining educational opportunities between 1995 and 1997. It seems that the longer these students stayed in school, the more they lagged behind the APS and Georgia averages.

Table 17

Eighth Grade Testing, 1997

| <u>Math</u> |
|-------------|
| 29          |
| 43          |
| 54          |
|             |

#### 2005-2007

Due to the change in testing and reporting systems in 2001, it is difficult to compare test scores before and after that date. The new reporting system eliminated much of the detail, so students with different scores often fell into the same performance level category. Comparisons between schools, and district and state totals are still valid and informative, however.

In a radical reversal of the 1995-1997 trends, performance levels improved at Drew Charter School for all grades between 2005 and 2007. Although third and fifth graders lagged behind both the APS and Georgia average performance levels in 2005 and 2006, by 2007 they had drawn even with the APS, and lagged behind Georgia by 0.1 to 0.2 points. The test results of Drew Charter's eighth graders constitutes the most promising reversal of the 1995-1997 trends: they outperformed the APS, and were below the Georgia average by a mere 0.2 to 0.3 points in 2005, 2006, and 2007 (see Figure 4 on page 30).

A look at average performance levels in grades 3, 5 and 8 shows that the longer students stay at Drew, the closer they come to the state average, and the more they pull ahead of the APS performance level (see Figure 4 on page 30).

The statistics presented are based on average performance on tests in English, language arts, math, social studies, and science (5 subjects). Since English, language arts, and math were given a special emphasis in Drew Charter School in the first years after it opened, it is worth looking at the performance levels in just these three areas. Also, the average performance in English, language arts, and math is a better comparison to the 1995-1997 base, for which only the test scores in math and reading were analyzed.

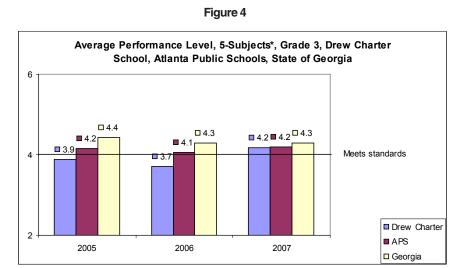
An examination of average performance levels in eighth grade, based on English, language arts, and math scores (3 subjects) is even stronger evidence of continuing progress in Drew Charter's academic performance. Drew Charter School students met or exceeded testing standards in 2004, 2005, 2006, and 2007, with each year being better than the last. Also, since 2005, Drew Charter's eighth graders began to close in on the Georgia average, and pulled ahead of the Atlanta Public Schools and Coan Middle School averages. In 2007, Drew Charter School students scored just 0.1 point below the Georgia average, and 0.3 points above the Atlanta Public School average. Coan's average performance level was the same as the APS (see Figure 5 on page 31).

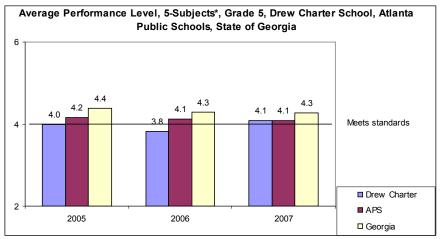
## ESTIMATES OF EXPECTED EDUCATIONAL AND EARNINGS OUTCOMES

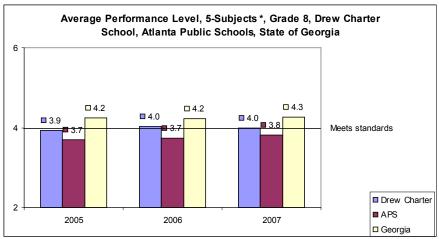
The analysis of the expected educational outcomes of Drew Charter School students illustrates the academic performance of a hypothetical, average student at Drew Charter and at Coan Middle School, and the expected differences in their post-secondary educational opportunities and earning potential.

In predicting the number of Drew and Coan alumni likely to attend college, we assumed that eighth grade academic performance is closely related to high school performance. This assumption is based on the average eighth grade test scores for Coan, Atlanta Public Schools, and Georgia, and the post-graduate careers of students at Grady and Southside high schools, which Coan students are likely to attend.

We also assumed that college enrollment rates will not change between 2007 and 2010 for Georgia and for the APS, and that Drew Charter School and Coan Middle School students will maintain their performance levels in high school.







\*CRCT scores in English, language arts, math, science, and social studies.

Source: Selig Center for Economic Growth, based on Governor's Office of Student Achievement data.

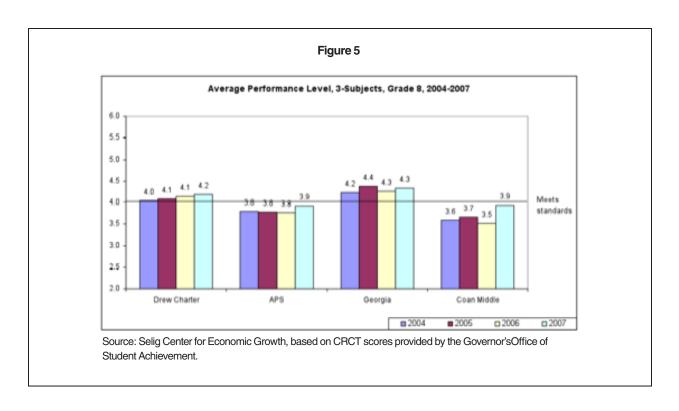


Table 18

Enrollment in
Post-Secondary Education\*, 2001

|                        | Percent |
|------------------------|---------|
| Southside High School  | 21.3    |
| Grady High School      | 32.0    |
| Atlanta Public Schools | 21.9    |
| Georgia                | 45.8    |

\*Georgia public colleges, universities, technical schools. Source: Georgia Department of Education, 2008.

To assess the impact of the improved education at Drew Charter School, we compared 85 eighth graders enrolled in Drew Charter in 2007 to a hypothetical group of 85 students "placed" in Coan Middle School's eighth grade in 2007. Average performance levels were calculated for Drew Charter and Coan based on three-subject test scores in English, language arts, and math, and on five-subject test scores in English, language arts, math, social studies, and science. Graduation rates at Grady and Southside high schools were used to estimate the number of students likely to finish high school. Eighth grade average performance levels were used to estimate the number of students likely to enroll in post-secondary schools, graduate from high school, or drop out.

#### Coan Middle School

Since Coan's eighth grade average performance levels fall in line with Atlanta Public School averages for both three- and five-subject tests, we applied post-secondary education rates for Atlanta Public Schools to calculate the number of students attending post-secondary schools, had they graduated from Coan Middle School. Then we calculated the number of students likely to graduate from high school (after attending

#### Table 19

### Expected Educational Outcome, Hypothetical Class at Coan Middle School

| Enrollment in 2007 (grade 8)                         | 85   |
|--|------|
| Graduation rate (Grady, black, 2006-7)               | 84   |
| Number expected to graduate from high school         | 71   |
| Number not expected to graduate from high school     | 14   |
| Expected to enter post-secondary education (percent) |      |
| Georgia public colleges                              | 24.0 |
| Georgia technical schools                            | 7.7  |
| Out-of-state 4-year colleges                         | 7.2  |
| No post-secondary education                          | 61.1 |
| Number of graduates expected to enter:               |      |
| Georgia public colleges                              | 17   |
| Georgia technical schools                            | 5    |
| Out-of-state 4-year colleges                         | 5    |
| No post-secondary education                          | 44   |
|  |      |

and the National Center for Education Statistics (Digest of Education Statistics), 2007.

Coan) based on graduation rates reported for black students in Grady High School.

As a result, we estimated that 71 of the group of 85 students will graduate from high school in 2010, and 28 of them will continue their education past high school. Seventeen of them will attend public colleges in Georgia, five will enroll in Georgia's technical schools, and five will continue their education in other states. Forty-four students are likely to graduate from high school and not go on to college immediately.

#### **Drew Charter School**

In 2007, Drew Charter School's eighth graders' average performance level, based on five-subject CRCT tests, fell about mid-way between the Atlanta Public Schools and Georgia averages (4.0 Drew, 3.8 APS, 4.3 Georgia). Drew Charter's eighth grade average performance based on English, language arts, and math (3 subjects) fell at 4.2, compared to the 4.3 and 3.9 point averages for Georgia and the Atlanta Public Schools. Using the 2007 average performance levels for Drew Charter

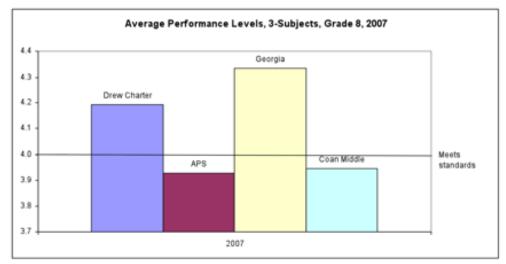
School's eighth graders and high school graduation rates for Southside High School, we estimated that out of the group of 85 students, 73 will finish high school and between 37 to 40 will continue their education past high school. Between 33 and 36 students are likely to graduate from high school, but not go on to college immediately.

#### **Drew Charter School Difference**

Based on five-subject test performance levels in eighth grade, six more students from Drew Charter School can expect to attend Georgia's public colleges and universities, one more is expected to attend Georgia technical schools, and two more students are expected to attend college out of state, compared to Coan Middle School (APS average).

The same estimates based on the performance levels in the three-subject CRCT put nine more Drew Charter students in Georgia colleges and universities, one more in Georgia technical schools, and three more students in out-of-state colleges. Based on both three- and five-subject tests, two more students





Source: Selig Center for Economic Growth, based on CRCT scores provided by the Governor's Office for Student Achievement, 2008.

Table 20

#### Expected Educational Outcome for Drew Charter School Students Based on Average Performance Level in 5-Subject CRCT\*

| Enrollment in 2007 (grade 8)                         | 85   |
|--|------|
| Graduation rate (Southside, black, 2006-7)           | 86.1 |
| Number expected to graduate from high school         | 73   |
| Number expected not to graduate from high school     | 12   |
| Expected to enter post-secondary education (percent) |      |
| Georgia public colleges                              | 32.1 |
| Georgia technical schools                            | 8.8  |
| Out-of-state 4-year colleges                         | 9.6  |
| No post-secondary education                          | 49.5 |
| Number of graduates expected to enter:               |      |
| Georgia public colleges                              | 23   |
| Georgia technical schools                            | 6    |
| Out-of-state 4-year colleges                         | 7    |
| No post-secondary education                          | 36   |
|  |      |

<sup>\*</sup> Calculated by the Selig Center based on 2007 eighth grade CRCT scores.

Source: Selig Center for Economic Growth, based on Governor's Office for Student Achievement data, 2008; and the National Center for Education Statistics (Digest of Education Statistics), 2007.

Table 21

Expected Educational Outcomes for Drew Charter School Students,
Based on Average Performance Level in 3-Subject CRCT\*

| Enrollment in 2007 (grade 8)                         | 85   |
|--|------|
| Graduation rate (Southside, black, 2006-7)           | 86.1 |
| Number expected to graduate from high school         | 73   |
| Number expected not to graduate from high school     | 12   |
| Expected to enter post-secondary education (percent) |      |
| Georgia public colleges                              | 35.3 |
| Georgia technical schools                            | 9.2  |
| Out-of-state 4-year colleges                         | 10.6 |
| No post-secondary education                          | 44.9 |
| Number of graduates expected to enter:               |      |
| Georgia public colleges                              | 26   |
| Georgia technical schools                            | 7    |
| Out-of-state 4-year colleges                         | 8    |
| No post-secondary education                          | 33   |

<sup>\*</sup> Calculated by the Selig Center based on 2007 eighth grade CRCT scores.

Source: Selig Center for Economic Growth, based on Governor's Office for Student Achievement data, 2008; and the National Center for Education Statistics (Digest of Education Statistics), 2007.

are likely to finish high school.

According to our estimates, the group of 85 Drew Charter School students can expect between \$163.1 million and \$166.7 million in lifetime earnings, compared to \$152.7 million for Coan students (see Table 23 on page 36).

#### **FINDINGS**

Based on the comparison of expected educational outcomes for the class of 2010, we estimate that 37 to 40 students from Drew Charter School will continue on to college, and that 9 to 13 of them will do so as a result of the improved education that they received at Drew Charter School. The estimated total net lifetime earnings benefit ranges from \$10,363,138 to \$14,033,594 for the class of 2010 alone.

The estimated lifetime benefit from the improved education at Drew Charter School does not include data on those with graduate and professional degrees. According to the U.S. Bureau of the Census, 5.6 percent of Georgia's black residents over age 25 hold graduate or professional degrees. If that percentage were applied to the 85 students of Drew Charter's class of 2007, four of them are likely to obtain graduate degrees. If only one of these could be attributed to the improved education at Drew Charter, the estimated average lifetime earnings for the Drew Charter School class of 2010 would increase by \$400,988 (master's degree) to \$2,825,972 (professional degree).

The Class of 2008 Drew Alumni Report, released in June, details the post-secondary careers of the first class of the Drew Charter School alumni. Out of 87 graduates, 50 completed high school, 19 are currently completing requirements, and 2 students dropped out. One student is deceased, and 15 could not be tracked (see Table 25 on page 37). The Drew alumni collectively earned over \$700,000 in scholarships.

According to the Drew Alumni Report, 41.4 percent, or 36 Drew alumni, plan to attend college in 2008. This number includes 27 students who will go to college in Georgia, and 9

Table 22

Post-Secondary Education, Drew Charter School Difference, Class of 2010

|  | Based on       | Based on       |
|--|----------------|----------------|
|  | 3-subject      | 5-subject      |
|  | <u>average</u> | <u>average</u> |
|  | Percentage     | Percentage     |
|  | difference     | difference     |
| Students likely to                           |                |                |
| attend Georgia public colleges, universities | 11.3           | 8.1            |
| attend Georgia technical schools             | 1.5            | 1.1            |
| attend out-of-state 4-year colleges          | 3.4            | 2.4            |
| finish high school                           | 2.1            | 2.1            |
|  | Number         | Number         |
|  | Increase       | increase       |
| Students likely to                           |                |                |
| attend Georgia public colleges, universities | 9              | 6              |
| attend Georgia technical schools             | 1              | 1              |
| attend out-of-state 4-year colleges          | 3              | 2              |
| finish high school                           | 2              | 2              |

Source: Selig Center for Economic Growth, based on Governor's Office for Student Achievement data, 2008; and the National Center for Education Statistics (Digest of Education Statistics), 2007.

who will attend colleges and universities in other states. According to the Selig Center's estimates, 37 to 40 students (or 43.5 percent to 47.5 percent) of Drew's 2007 graduating class will go on to college.

Since the first class of Drew alumni to graduate from high school includes those who entered Drew Charter School in the fifth grade, when the school first reopened after reorganization, the statistics for those who were younger when they started at Drew are likely to be better. Also, our statistics, and those from the Drew Alumni Report, do not account for seniors who will enter college at a later time. So, in all likelihood, our estimates are conservative.

These estimates present a possible outcome of improved education. As College Board statistics show, SAT scores and college attendance depend in great measure on parents' levels of education. Thus, any gains in educational achievement experienced by Drew Charter School students should be viewed not only in terms of current students, but in terms of what this achievement will mean to their children and their families.

In the discussion of possible outcomes of improved education at Drew Charter School, we assumed that all students who enter public colleges and universities will graduate with bachelor's degrees. This optimistic assumption counterweighs the undercounting of students who graduate from private institutions and of those who earn advanced degrees.

Table 23

Lifetime Earnings Estimates, Drew Charter Students, Class of 2010

#### Based on 3-subject average\*

|                     | Drew Chart    | er School             | Coan Middle Sc | hool Scenario         |
|---------------------|---------------|-----------------------|----------------|-----------------------|
|                     | Earnings      | Number of<br>Students | Earnings       | Number of<br>Students |
| Bachelor's degree   | \$89,482,573  | 34                    | \$59,372,383   | 22                    |
| Associate degree    | \$13,159,325  | 7                     | \$10,699,296   | 5                     |
| High school diploma | \$50,129,475  | 33                    | \$66,585,438   | 44                    |
| No high school      | \$13,970,565  | 12                    | \$16,081,225   | 14                    |
| Total               | \$166,741,937 | 85                    | \$152,738,343  | 85                    |

#### Based on 5-subject average\*\*

|                     | Drew Chart    | er School             | Coan Middle Sc | hool Scenario         |
|---------------------|---------------|-----------------------|----------------|-----------------------|
|                     | Earnings      | Number of<br>Students | Earnings       | Number of<br>Students |
| Bachelor's degree   | \$81,275,558  | 31                    | \$59,372,383   | 22                    |
| Associate degree    | \$12,530,724  | 6                     | \$10,699,296   | 5                     |
| High school diploma | \$55,324,634  | 36                    | \$66,585,438   | 44                    |
| No high school      | \$13,970,565  | 12                    | \$16,081,225   | 14                    |
| Total               | \$163,101,481 | 85                    | \$152,738,343  | 85                    |

<sup>\*</sup> Based on average performance level in math, English, language arts.

Source: Selig Center for Economic Growth, based on Governor's Office for Student Achievement data, 2008; and the National Center for Education Statistics (Digest of Education Statistics), 2007; The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings, Jennifer Cheeseman Day and Eric C. Newburger, Bureau of the Census, Current Population Reports, P23-210, July 2002.

<sup>\*\*</sup> Based on average performance level in math, English, language arts, science, social studies. Note: Estimates based on reported statewide and system averages.

#### Table 24

## Lifetime Net Earnings Benefit from Improved Education at Drew Charter School, Class of 2010

|  | Based on 3-sub | iect average* | Based on 5-sub | iect average** |
|--|----------------|---------------|----------------|----------------|
|--|----------------|---------------|----------------|----------------|

| Bachelor's degree   | \$30,110,190  | \$21,903,175  |
|---------------------|---------------|---------------|
| Associate degree    | \$2,460,028   | \$1,831,427   |
| High school diploma | -\$16,455,964 | -\$11,260,804 |
| No high school      | -\$2,110,661  | -\$2,110,661  |

Total \$14,003,594 \$10,363,138

- \* Based on average performance level in math, English, language arts.
- \*\* Based on average performance level in math, English, language arts, science, social studies.

Source: Selig Center for Economic Growth, based on Governor's Office for Student Achievement data, 2008; and the National Center for Education Statistics (Digest of Education Statistics), 2007; The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings, Jennifer Cheeseman Day and Eric C. Newburger, Bureau of the Census, Current Population Reports, P23-210, July 2002.

Table 25

Drew Charter's Class of 2008 Post-Secondary Summary

|   | Number | Percen |
|---|--------|--------|
| Promoted to high school                       | 87     | 100.0  |
| Completed high school                         | 50     | 57.5   |
| Accepted to colleges, universities            | 36     | 41.4   |
| Military active duty                          | 1      | 1.1    |
| Workforce                                     | 5      | 5.7    |
| Undecided                                     | 8      | 9.2    |
| Currently completing high school requirements | 19     | 21.8   |
| Dropped out                                   | 2      | 2.3    |
| Unable to track*                              | 16     | 18.4   |

\*Includes one deceased student.

Source: Drew Charter School, Class of 2008 Alumni Report.

Table 26
Post-Secondary Education Summary Details

|  | Coan Middle School |         |                                | Drew Chart | er School                      |         |
|--|--------------------|---------|--------------------------------|------------|--------------------------------|---------|
|  |                    |         | Based<br>3-sub<br><u>avera</u> | ject       | Based<br>5-sub<br><u>avera</u> | ject    |
|  | Number             | Percent | Number                         | Percent    | Number                         | Percent |
| Enrollment (grade 8)                         | 85                 | 100.0   | 85                             | 100.0      | 85                             | 100.0   |
| Expected to graduate from high school        | 71                 | 84.0    | 73                             | 86.1       | 73                             | 86.1    |
| Not expected to graduate<br>from high school | 14                 | 16.0    | 12                             | 13.9       | 12                             | 13.9    |
| Expected to enter                            |                    |         |                                |            |                                |         |
| Georgia public colleges                      | 17                 | 20.2    | 26                             | 30.4       | 23                             | 27.6    |
| Georgia technical schools                    | 5                  | 6.5     | 7                              | 8.0        | 6                              | 7.6     |
| Out-of-state 4-year colleges                 | 5                  | 6.1     | 8                              | 9.1        | 7                              | 8.3     |
| Total in college                             | 28                 | 32.7    | 40                             | 47.5       | 37                             | 43.5    |
| No college                                   | 44                 | 51.3    | 33                             | 38.6       | 36                             | 42.6    |

Note: Numbers may not add up to totals due to rounding.

Source: Selig Center for Economic Growth, based on Governor's Office for Student Achievement data, 2008; and the National Center for Education Statistics (Digest of Education Statistics), 2007.

<sup>\*</sup> Based on average performance level in math, English, language arts.

<sup>\*\*</sup> Based on average performance level in math, English, language arts, science, social studies.

#### Table 27

#### Selected Labor Force Characteristics, by Educational Attainment, 2007

No high school diploma

Unemployment rate 9.1 Earnings (average for population 25 and over, 2006) \$18,157

Occupations

Services Construction Production

Transportation

High school diploma

Unemployment rate 4.6

Earnings (average for population 25 and over, 2006) \$25,751

Occupations Services

Office and administrative

Sales

Associate degree

Unemployment rate 3.0

Earnings (average for population 25 and over, 2006) \$31,452

Occupations

Professional

Office and administrative

Services

Management, business, and financial

Bachelor's degree

Unemployment rate 2.0

Earnings (average for population 25 and over, 2006) \$45,460

Occupations

Professional

Management, business, and financial

Sales

Master's, professional, doctorate

Unemployment rate 0.6 to 1.7

Earnings \$57,044

Occupations

Management, business, and financial

Professional

Source: Selig Center for Economic Growth, based on Current Population Survey, 2007.

#### PART 7

## Economic Benefits of Reduction in Crime Rates

Mirroring a nationwide phenomenon, the number of serious crimes (referred to as Index Crimes that include murder, rape, aggravated assault, robbery, burglary, larceny-theft and motor vehicle theft) dropped dramatically in Georgia between 1995 and 2006.

Of the many theories that attempt to explain this unprecedented drop, one credits increased community policing for the decreased crime. The "Broken Windows" theory advocates increased policing and the elimination of the appearance of disorder (graffiti, loitering, etc.) as a crime reducing measure. The appearance of disorder, it seems, creates circumstances that encourages more serious crime.

Not surprisingly, critics argue that community policing increased already swollen jail populations, and that demographic and other unrelated reasons contributed to crime reduction in the 1990s. They say that any lasting crime reduction can be accomplished only by a more concentrated action, which, in addition to the focus on disorder, also addresses issues such as economic opportunities and better education.

The "Broken Windows" theory provides a useful framework for the discussion of community revitalization, which, in the case of East Lake, went far beyond community policing. East Lake's revitalization removed the substandard homes, barred career criminals from moving back, and created new opportunities for those who go to school, work, look for work, or train for work, and do not engage in criminal activity. The opportunities included improved education—including pre-K and after-school programs—as well as enrichment opportunities offered by the YMCA and golf instruction. The Villages of East Lake also strives to empower residents to cope in the rapidly changing labor market.

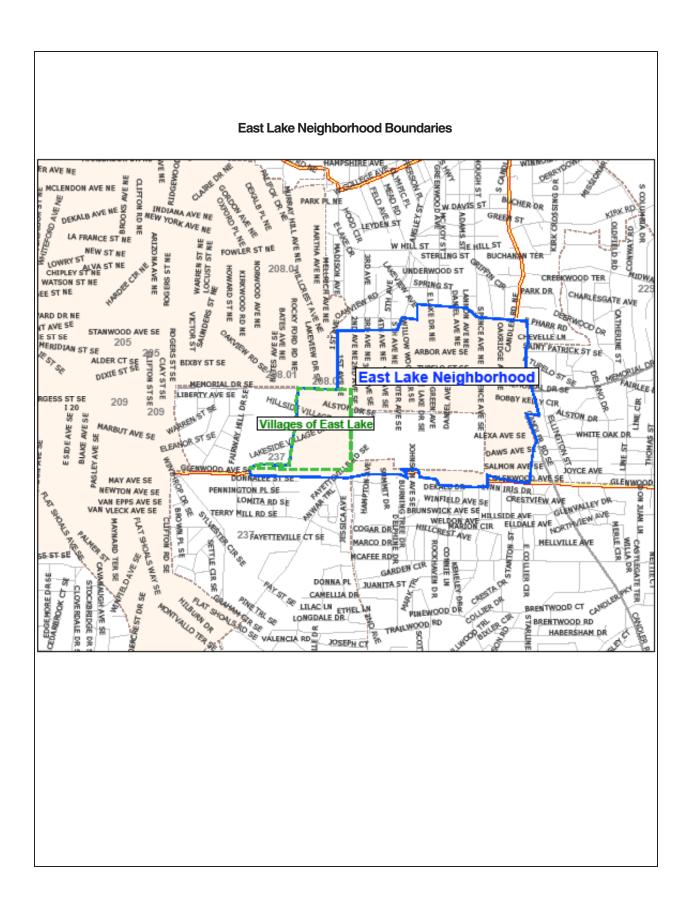
The analysis of crime in the East Lake community is based on data from the Uniform Crime Reports, and the Atlanta Police Department (APD). Data are presented for Georgia, Atlanta, APD Zone 6, and the East Lake neighborhood, which refers to the area defined as APD Beat 605 before the 2005 rezoning.

Between 1995 and 2004, the number of index crimes reported to the police declined in Georgia, Atlanta, and in APD Zone 6. The decline was most pronounced in APD Zone 6, which includes the East Lake neighborhood (see Figure 7). As Figure 8 shows, however, by 2005 the number of index crimes in all of these areas began to rise again.

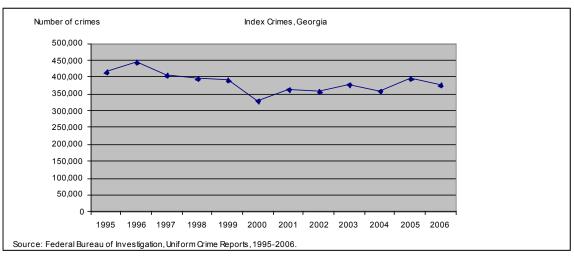
But, following redevelopment, the number of crimes reported in the East Lake neighborhood fell from 567 in 1997 to 364 in 2004, and 329 in 2007 (see Figure 9). Between 1997 and 2006 the number of crimes reported in the East Lake neighborhood decreased by a wider percentage than in Georgia and the city of Atlanta.

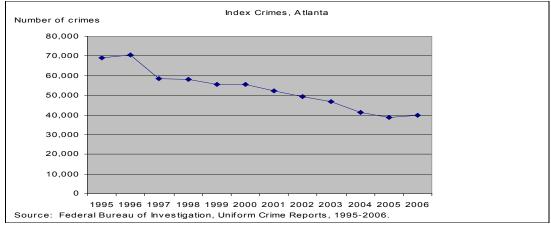
Over the time period, the number of crimes reported in The Villages of East Lake fell from an average of 350 in 1993 (when it was known as East Lake Meadows) to an average of 71 between 2004 and 2007, a 76.6 percent decrease (see Table 28 and Figure 10).

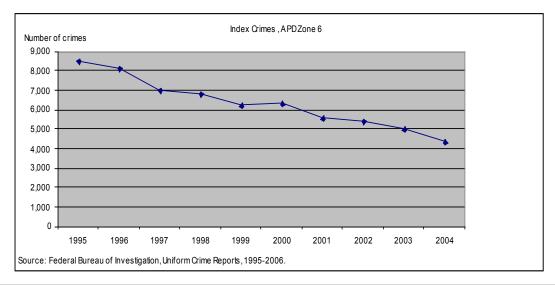
The decrease in the number of reported crimes is only a part of the story, however. Our analysis also reveals changes in the prevalence of violent crimes. The number of violent crimes (murder, rape, aggravated assault, robbery) versus property crimes is remarkably stable for the areas discussed here. In Georgia, violent crimes comprised between 10 and 11 percent of total index crimes between 1997 and 2006. The numbers are

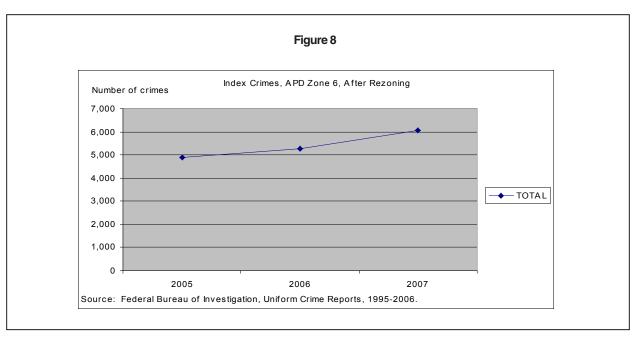












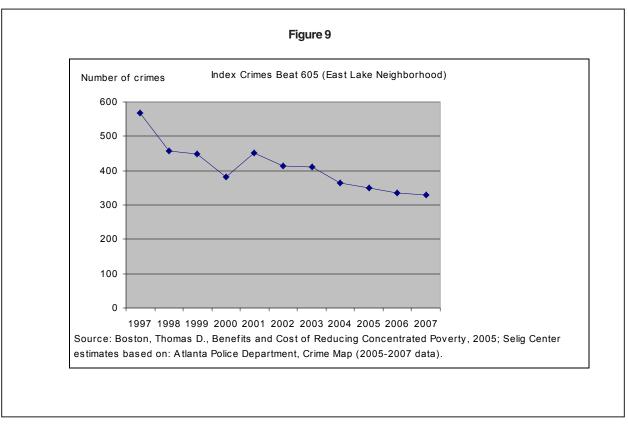
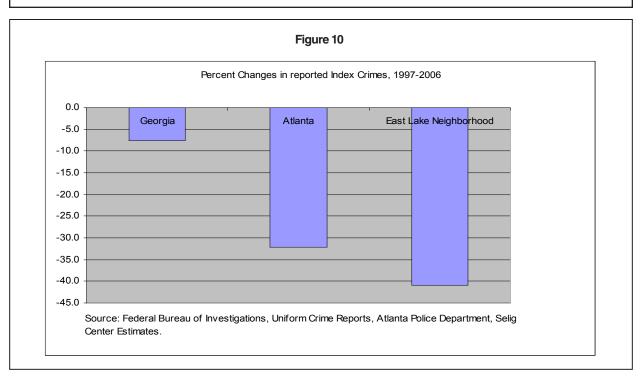


Table 28

Changes in Reported Index Crimes,
Before and after East Lake Redevelopment

|                   | East Lake   | Meadows     | V           | illages of I | East Lake   |      |                             |
|-------------------|-------------|-------------|-------------|--------------|-------------|------|-----------------------------|
|                   | <u>1992</u> | <u>1993</u> | <u>2004</u> | <u>2005</u>  | <u>2006</u> | 2007 | 1993-2007<br>Percent Change |
| Homicide          | 2           | 1           | 0           | 0            | 0           | 0    | -100.0                      |
| Rape              | 4           | 5           | 1           | 1            | 1           | 1    | -78.3                       |
| Robbery           | 24          | 21          | 5           | 6            | 6           | 4    | -83.3                       |
| Agg. Assault      | 191         | 221         | 2           | 4            | 5           | 5    | -97.4                       |
| Burglary          | 43          | 55          | 17          | 23           | 23          | 16   | -62.8                       |
| Larceny           | 38          | 42          | 23          | 22           | 18          | 26   | -31.6                       |
| Auto Theft        | 35          | 18          | 13          | 14           | 22          | 27   | -22.9                       |
| Total             | 337         | 363         | 61          | 70           | 75          | 79   | -76.6                       |
| Crime composition |             |             |             |              |             |      |                             |
| Number            |             |             |             |              |             |      |                             |
| Violent           | 221         | 248         | 8           | 11           | 12          | 10   | -95.5                       |
| Property          | 116         | 115         | 53          | 59           | 63          | 69   | -40.5                       |
| Percent           |             |             |             |              |             |      |                             |
| Violent           | 65.6        | 68.3        | 12.6        | 15.4         | 15.8        | 12.5 |                             |
| Property          | 34.4        | 31.7        | 87.4        | 84.6         | 84.2        | 87.5 |                             |

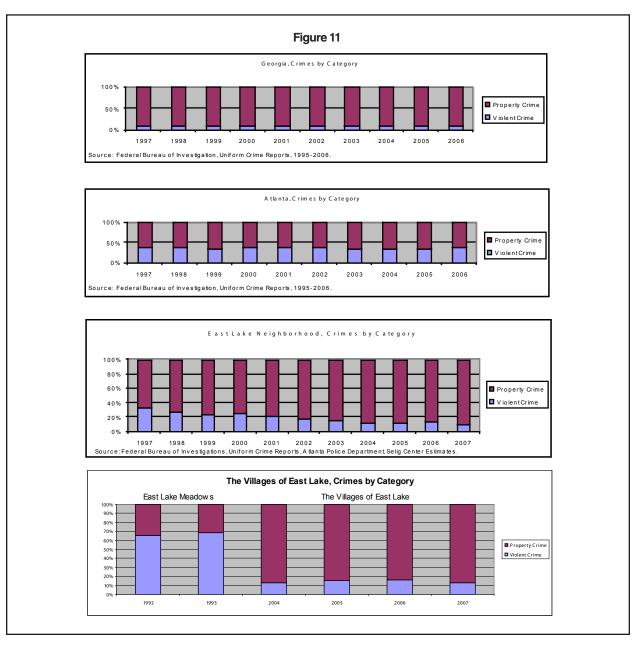
Source: Boston, Thomas D., Benefits and Cost of Reducing Concentrated Poverty, 2005; Atlanta Police Department, Crime Map (January 17, 2004 - December 31, 2007).



starkly different for the city of Atlanta, however, where violent crimes constituted about 18.2 to 21.9 percent of all crimes between 1997 and 2006.

It's a different picture in the East Lake neighborhood, where the proportion of violent crimes decreased steadily from 33.3 percent in 1997 to 11.1 percent in 2007. This decrease in number of violent crimes exceeds the drop in APD Zone 6 (from 24.5 percent in 1997 to 16.7 percent in 2006), although data for 2005 and 2006 are not directly comparable to earlier years due to rezoning.

The composition of crime has changed even more dramatically in The Villages of East Lake. In 1992 and 1993, 65 percent of reported crimes were violent crimes, or crimes directed against persons. This average far exceeds any reported for Georgia or Atlanta. In 2007, just over 12 percent of crimes were directed against persons (Figure 11). Based on limited data available for East Lake Meadows and APD Beat 605 before the East Lake redevelopment, we estimate that a minimum of 68 percent of total crimes reported in Beat 605 (defined in this study as the East Lake neighborhood) were commit-



ted in East Lake Meadows, compared with 23 percent of the East Lake neighborhood's crimes committed in The Villages of East Lake in 2007. This percentage is based on the number of crimes in East Lake Meadows in 1992 and 1993, and the number of crimes in the East Lake neighborhood in 1997. Therefore, we conclude that the unprecedented reduction in crime, and violent crime in particular, in the neighborhood was brought about by East Lake's redevelopment.

#### **FINDINGS**

The monetary costs of crime is typically expressed in terms of the cost to victims and their families, and the cost to society, who support police, judiciary and other agencies with their tax dollars. Individuals other than the victims of crime also bear the cost of crime by paying for individual protection, such as alarm systems, and also by paying more for homes in areas where crime is less prevalent.

#### **Cost to Victims**

For this study, we selected a method of monetizing the tangible and intangible costs of crime borne by the victims, because this shows the immediate burden of crime in a defined geographic area. According to our calculations, the costs accrued by the victims of crimes in the East Lake neighborhood fell by 45.5 percent between 1997 and 2006, compared with the 30.4 percent decrease in Atlanta, and a 2.4 percent increase in Georgia. The steep decrease in violent crime in the neighborhood is the main reason for the drop, since violent crime inflicts higher costs on victims than property crime.

In the 1997 and 2007 comparison, the neighborhood saved \$5,714,415 as a result of a decrease in the number of crimes. Most of the savings occurred in terms of medical care, social services, and productivity, which are the costs usually associated with violent crime. Tangible costs decreased by 42.4 percent, while the intangible costs (quality of life) decreased by 47 percent (Tables 29 and 30).

#### **Cost of Imprisonment**

One remarkably stark statistic presented by recent research (2003) shows that black youths born in 2001 have an 18.6 percent probability of being imprisoned at some point in their lives. The rate is higher for black males (32.2 percent)

than females (5.6 percent). The same data would put 17.7 percent of black youths born in 1997 (the first group of children to enter Sheltering Arms Early Education Center) in prison during their lifetimes. A study that applied the same method to Georgia's rates revealed that the likelihood of going to prison is 10 percent higher for black males in Georgia than it is for the average American black male.

The Villages of East Lake supports its residents with the explicit purpose of improving employment and income opportunities and, as a result, reducing crime. Education—beginning with the Sheltering Arms preschool and continued at Drew Charter School—is a vital part of that strategy. If we assume that these efforts are fully successful, and none of the students in Drew Charter School goes to prison, we can present the following estimates of savings resulting from decreased chances of imprisonment.

Assuming that that all children (born in 1997) who went through Drew Charter School since 2001 stood the chance of going to prison, 187 of Drew's 1,042 current students and alumni could expect to be imprisoned during their lifetimes, at the total cost of \$17,689,330.38. That cost would climb to \$18,625,535 if the rate for those born in 2001 were applied. If Georgia rates were applied, the resulting cost would be as high as \$24,242,759 (no equivalent rate for black females is available for Georgia, so the average female rates applied).

Optimistically assuming that none of the students at Drew Charter School will go to prison, the full avoided cost of imprisonment can be counted as a net gain to society. Of course, this does not necessarily represent a gain to the East Lake community specifically. It is worth noting that the estimated imprisonment costs presented here are based on the conservative assumption that the residents of inner city Atlanta will have the same likelihood of going to prison as either the average resident of the U.S. or the average resident of Georgia. Data limitations prevented the Selig Center from basing the estimate on the residents of inner city Atlanta.

Moreover, the estimated imprisonment costs are very conservative because the methodology implicitly assumes that each person who goes to prison does so only once during their lifetime. Again, data limitations forced the Selig Center to make that assumption. Nonetheless, the analysis sheds some light on the cumulative costs of a lifetime career in crime (Table 31).

(continued on page 50)

Table 29

Cost of Crime in the East Lake Neighborhood, by Type of Crime, 1997-2007 (dollars)

|                  | Aggravated       |         |            |                 |
|------------------|------------------|---------|------------|-----------------|
|                  | <u>Homicides</u> | Rape    | Robbery    | <u>Assaults</u> |
| 1997             | 8,470,650        | 620,591 | 723,186    | 1,596,533       |
| 1998             | 12,705,975       | 868,828 | 447,687    | 1,033,051       |
| 1999             | 0                | 124,118 | 642,832    | 711,061         |
| 2000             | 0                | 744,709 | 413,249    | 791,559         |
| 2001             | 4,235,325        | 372,355 | 493,603    | 657,396         |
| 2002             | 0                | 744,709 | 264,020    | 657,396         |
| 2003             | 4,235,325        | 744,709 | 321,416    | 415,904         |
| 2004             | 4,235,325        | 0       | 160,708    | 429,320         |
| 2005             | 0                | 477,258 | 195,145    | 293,241         |
| 2006             | 5,142,895        | 457,163 | 181,206    | 325,823         |
| 2007             | 5,142,895        | 448,790 | 195,145    | 195,494         |
| 1997-2007 change | 3,327,755        | 171,801 | 528,041    | 1,401,040       |
|                  | Burglary         | Larceny | Auto Theft | <u>Total</u>    |
| 1997             | 202,894          | 95,564  | 528,901    | 12,238,320      |
| 1998             | 218,965          | 86,538  | 321,703    | 15,682,746      |
| 1999             | 233,027          | 82,291  | 365,324    | 2,158,653       |
| 2000             | 202,894          | 65,833  | 310,798    | 2,529,04        |
| 2001             | 261,150          | 98,218  | 218,104    | 6,336,152       |
| 2002             | 208,920          | 94,502  | 294,440    | 2,263,988       |
| 2003             | 220,973          | 95,033  | 305,345    | 6,338,706       |
| 2004             | 214,947          | 81,760  | 305,345    | 5,427,405       |
| 2005             | 251,250          | 76,072  | 211,872    | 1,504,838       |
| 2006             | 212,221          | 70,270  | 284,703    | 6,674,281       |
| 2007             | 200,024          | 76,717  | 264,840    | 6,523,905       |

Source: Selig Center for Economic Growth, based on Mark A. Cohen, Measuring the Costs and Benefits of Crime and Justice.

Table 30

The Cost of Crime to Victims, by Cost Category, 1997 and 2006 (dollars)

|                        |               |               | Perce |
|------------------------|---------------|---------------|-------|
|                        | <u>1997</u>   | <u>2006</u>   | Chang |
| East Lake Neighborhood |               |               |       |
| Productivity           | 3,023,200     | 1,742,151     | -42.4 |
| Medical Care/Ambulance | 159,539       | 56,151        | -64.8 |
| Mental Health Care     | 51,472        | 26,406        | -48.7 |
| Police/Fire Services   | 85,020        | 52,908        | -37.8 |
| Social/Victim Services | 6,169         | 2,214         | -64.1 |
| Property Loss/Damage   | 772,633       | 482,230       | -37.6 |
| Tangible Losses        | 4,101,952     | 2,363,060     | -42.4 |
| Quality of Life        | 8,136,368     | 4,311,221     | -47.0 |
| Total                  | 12,238,320    | 6,674,281     | -45.5 |
| Georgia                |               |               |       |
| Productivity           | 842,490,852   | 891,435,387   | 5.8   |
| Medical Care/Ambulance | 38,960,430    | 38,802,678    | -0.4  |
| Mental Health Care     | 17,938,148    | 16,988,504    | -5.3  |
| Police/Fire Services   | 57,044,522    | 53,624,698    | -6.0  |
| Social/Victim Services | 2,098,835     | 2,026,334     | -3.5  |
| Property Loss/Damage   | 428,170,693   | 412,479,496   | -3.7  |
| Tangible Losses        | 1,387,949,639 | 1,416,355,259 | 2.0   |
| Quality of Life        | 2,294,393,720 | 2,355,335,863 | 2.7   |
| Total                  | 3,682,343,359 | 3,771,691,121 | 2.4   |
| Atlanta_               |               |               |       |
| Productivity           | 225,131,044   | 162,379,332   | -27.9 |
| Medical Care/Ambulance | 11,142,150    | 7,067,177     | -36.6 |
| Mental Health Care     | 3,832,696     | 2,305,886     | -39.8 |
| Police/Fire Services   | 8,428,735     | 5,876,106     | -30.3 |
| Social/Victim Services | 465,320       | 291,968       | -37.3 |
| Property Loss/Damage   | 68,866,426    | 50,499,378    | -26.7 |
| Tangible Losses        | 318,232,921   | 228,647,584   | -28.2 |
| Quality of Life        | 595,093,207   | 407,206,009   | -31.6 |
| Total                  | 913,326,128   | 635,853,593   | -30.4 |

Source: Selig Center for Economic Growth, based on Mark A. Cohen, Measuring the Costs and Benefits of Crime and Justice.

Table 31
Estimates of the Cost of Imprisonment

| Median sentence of prisoners in Georgia (2006)  Daily cost per prisoner  Average cost per sentence | 55 months (1,698 days)<br>\$55.7<br>\$94,605.9 |  |  |
|--|--|--|--|
| Drew enrollment (average 2003-2006)  | 773  |  |  |
| Drew alumni  | 269  |  |  |
| Total  | 1,042  |  |  |

Statistical Likelihood of Going to Prison for Drew Charter School Students and Alumni

|                               |               | Percent of          |
|-------------------------------|---------------|---------------------|
|                               | <u>Number</u> | Resident Population |
| U.S. rates-based estimates    |               |                     |
| Born in 1997                  |               |                     |
| Male                          | 161           | 31.0                |
| Female                        | 26            | 4.9                 |
| Total                         | 187           | 17.7                |
| Estimated imprisonment cost   | \$17,689,330  |                     |
| Born in 2001                  |               |                     |
| Male                          | 168           | 32.2                |
| Female                        | 29            | 5.6                 |
| Total                         | 197           | 18.6                |
| Estimated imprisonment cost   | \$18,625,535  |                     |
|                               |               |                     |
| Georgia rates-based estimates |               |                     |
| Born in 2001                  |               |                     |
| Male                          | 220           | 42.2                |
| Female                        | 36            | 7.0                 |
| Total                         | 256           | 24.6                |
| Estimated imprisonment cost   | \$24,         | 242,759             |

Note: Daily cost per prisoner derived from the total 2007 Georgia Department of Corrections expenditures divided by the number of prisoners.

Source: Selig Center for Economic Growth, based on data from the United States Sentencing Commission;
Bureau of Justice Statistics, Prisoners in the United States; Georgia Department of Corrections,
Annual Report, 2007; National Center for Education Statistics, Common Core Data; Thomas P.
Bonczar, Bureau of Justice Statistics, Prevalence of Imprisonment in the U.S. Population, 1974-2001.
Georgia State Board Of Pardons And Paroles Office Of Criminal Justice Research, What is the
Likelihood of Going to a Georgia Prison in Your Lifetime?

Table 32

#### Dollar Benefit of Reduced Crime 90 Percent Success Rate

| V | um | ber | ot | Arr | es | ts |
|---|----|-----|----|-----|----|----|
|---|----|-----|----|-----|----|----|

|                   | U.S. Rates   |              | Georgia Rate |  |
|-------------------|--------------|--------------|--------------|--|
|                   | Born in 2001 | Born in 1997 | Born in 2001 |  |
| Male              | 151          | 145          | 198          |  |
| Female            | 26           | 23           | 33           |  |
| Total             | 177          | 168          | 231          |  |
| Imprisonment cost | \$16,762,981 | \$15,920,397 | \$21,818,483 |  |

Source: Selig Center for Economic Growth, based on data from the United States Sentencing Commission;
Bureau of Justice Statistics, Prisoners in the United States; Georgia Department of Corrections,
Annual Report, 2007; National Center for Education Statistics, Common Core Data; Thomas P. Bonczar,
Bureau of Justice Statistics, Prevalence of Imprisonment in the U.S. Population, 1974-2001. Georgia State
Board Of Pardons And Paroles Office Of Criminal Justice Research, What is the Likelihood of Going to a
Georgia Prison in Your Lifetime?

The foregoing estimate is based on the assumption that none of Drew Charter School students and alumni will go to prison. A more conservative estimate, based on the assumption that only 90 percent of potential imprisonment could be avoided, puts the savings at \$15,920,397 to \$21,818,483.

Another estimate shows the value of preventing crime in terms of victims' costs, criminal justice-related costs, and the offender's lost productivity. According to these figures, the value of steering at-risk-youth away from crime can be estimated at between \$1,679,406 to \$1,937,776 (in 2007 dollars) per youth. (These figures include tangible costs only.)

Based on data from the Georgia Department of Corrections, 24 percent of the current inmate population had been incarcerated twice before. We estimated the number of students or alumni of Drew Charter School who, statistically, might have been incarcerated at some point in their lifetimes at 187

to 197. Based on these numbers, 45 to 47 of them might become career criminals, i.e., be incarcerated at least three times during their lifetimes; and the cost of their criminal activity could amount to between \$75.3 million and \$91.6 million. As Table 33 shows, if Georgia rates were applied, the number of potential recidivists would rise to between 59 and 61, and the cumulative cost of their activities would range from \$99.2 million to \$119.1 million, which is the estimated value of reducing crime among high-risk youths at Drew Charter School.

In a more conservative scenario, when only 90 percent of possible imprisonment could be prevented, U.S. rates-based estimates indicate that between 40 and 42 would go to prison. Using Georgia-based rates, the numbers are between 53 to 55. The benefit of preventing crime would then be estimated at \$67.7 million to \$82.3 million if U.S. rates were applied, or \$89.1 million to \$107.4 million if Georgia rates were used.

#### Table 33

## Lifetime Costs of a Career Criminal (2007 dollars\*, tangible costs)

Juvenile career

 Victim costs
 77,511 - 315,212

 Criminal justice related
 25,837 - 105,932

 Juvenile career
 103,348 - 421,144

Adult career

Victim costs1,098,073Criminal justice-related365,594Offender productivity69,760Adult career1,550,221

Lifetime Cost 1,679,406 - 1,937,776

## Statistical Likelihood of Recidivism and Related Costs <u>Among Drew Students and Alumni</u>

Georgia recidivism rate (2007) 24%

U.S. rates-based estimates

Number of re-offenders\*\* 45 to 47 Lifetime cost (dollars) 75,371,724 - 91,618,035

Georgia rates-based estimates

 Number of re-offenders\*\*\*
 59 to 61

 Lifetime cost (dollars)
 99,152,107 - 119,056,939

- \* Adjusted to 2007 dollars by the Selig Center.
- \*\* Based on rates in Bonczar.

Source: Selig Center for Economic Growth, based on Mark A. Cohen, Monetary Value of Saving a High-Risk Youth; Georgia Department of Coorections, Annual Report 2007; Office of Criminal Justice Research (Atlanta), What is the Likelihood of Going to a Georgia Prison in Your Lifetime?

<sup>\*\*\*</sup> Based on Office Of Criminal Justice Research (Atlanta).

## Table 34 Lifetime Costs of a Career Criminal 90 Percent Success Rate (2007 dollars\*, tangible costs)

Georgia recidivism rate (2007)

24%

U.S. rates-based estimates Number of re-offenders\*\* Lifetime cost (dollars)

40 to 42

67,713,634 - 82,316,712

Georgia based estimates

Number of re-offenders\*\*\*

Lifetime cost (dollars)

53 to 55

89,075,673 - 107,430,285

- \* Adjusted to 2007 dollars by the Selig Center.
- \*\* Based on rates in Bonczar.
- \*\*\* Based on Office Of Criminal Justice Research (Atlanta).

Source: Selig Center, based on Mark Cohen, Monetary Value of Saving a High-Risk Youth; Georgia Department of Corrections, Annual Report 2007; Office of Criminal Justice Research (Atlanta) What is the Likelihood of Going to a Georgia Prison in Your Lifetime?

# Simple Ratios of the Economic Impacts/Benefits to Capital Costs

Capital investment in the East Lake Campus totaled \$154,220,254 in nominal dollars, or \$181,710,742 in 2007 dollars. The economic impact estimates show that the East Lake Campus, PGA Tour, and nearby commercial developments generate a combined output impact of \$81,077,282 in 2007. Thus, the ratio of output impact to capital investment is 0.45, indicating that it takes only 2.2 years for the economic impact on output to exceed initial capital outlays.

Expressed in constant 2007 dollars, the net gain in household incomes of the residents of The Villages of East Lake was \$12,131,313 in 2006. Adding that amount to the output impacts increases the benefit of redevelopment to \$93,208,595 and yields a benefit to capital investment ratio of 0.51. So it takes 1.9 years before the benefits exceed initial capital outlays.

For each class of Drew Charter graduates, the lifetime earnings benefit of the improved education provided by the school is \$11,033,160. Adding that amount to the benefit total of \$93,208,595 yields a benefit of \$107,212,189, which raises the

ratio of benefits to capital investment to 0.59. Hence, it takes only 1.7 years of operation before the benefits exceed initial capital outlays. If the benefits of reducing the neighborhood crime rate (\$5,714,415) in 2007 are added to the above amount, the annual benefit rises to \$112,926,604. The ratio of benefits to capital investment therefore rises to 0.61, indicating that it takes only 19 months of operation before the benefits exceed initial capital outlays.

It is crucial to note that these ratios and breakeven periods do not factor in the substantial benefits stemming from either the avoided costs of incarceration (\$22 million) or the reduction in the numbers of career criminals (\$89 million to \$107 million). Those important benefit estimates are not included because they are based on Drew Charter's 1,042 current students and alumni rather than on the number of students in a single graduating class. Accordingly, the benefit estimates should not be allocated to a single 12-month period (2007). Also, the economic impact of the capital outlays themselves (\$266 million) is not considered.

## **Closing Comment**

To the extent that currently available information allows, this report estimates many of the economic impacts and benefits of the redevelopment of Atlanta's East Lake community. For a capital investment of \$154 million (nominal dollars), the rewards generated in a single year (2007) are impressive. East Lake Campus institutions, the PGA Tour, and new commercial developments generated an output impact of \$81 million. In 2006, the household income of the residents of The Villages of East Lake is \$12 million (\$2007) more than it would have been without redevelopment. The improved education provided by the Drew Charter School boosts the expected lifetime earnings of the 2007 graduating class by \$14 million. The neighborhood's sharply lower crime rate saved residents nearly \$6 million. Based on those benefits alone, it took only 19 months before the pay-off from redevelopment

of the East Lake Campus exceeded the initial capital costs of redevelopment.

In addition to the benefits that can be easily allocated to a single year, the benefit to society from Drew Charter School's current students and alumni will lead to avoided costs of incarceration of \$22 million. Moreover, the savings to society resulting from fewer career criminals among high-risk youths range from \$89 million to \$107 million.

Because the East Lake community is very desirable, the neighborhood's long-term homeowners have benefited from home price appreciation that is substantially higher than in either the Atlanta MSA or the nation as a whole. Finally, it is noteworthy that the economic impact of the initial capital outlays themselves generated over \$226 million in economic activity, primarily in the construction and real estate industries.