JACKSONVILLE TRANSPORTATION AUTHORITY

September 12, 2013

The Honorable Lori Boyer,
Council District 5
Chairman, Task Force on Consolidated Government
City of Jacksonville
117 West Duval Street
Jacksonville, FL 32202

Dear Councilwoman Boyer:

Thank you for the opportunity to come before the Task Force on Consolidated Government. The City of Jacksonville and the Jacksonville Transportation Authority, formerly the Jacksonville Expressway Authority, has had over 50 years of successful partnership in planning, designing, engineering, building, developing and operating a robust multimodal transportation network for the citizens of Duval County

Enclosed you will find a Task Force on Consolidated Government report that addresses the questions we received by Executive Administrator Damian Cook, as well as additional information that will be helpful to you and the Task Force.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

Nathaniel P. Ford, Sr.
Chief Executive Officer

Enclosure

cc: Task Force on Consolidated Government Members

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Jacksonville Transportation Authority

REPORT TO THE TASK FORCE ON CONSOLIDATED GOVERNMENT

Integrated Business Services

The Jacksonville Transportation Authority (JTA) is committed to providing reliable and sustainable public transportation facilities and services. To achieve this goal, it is imperative that the JTA house internally essential functions that give us the capability of having personnel on hand with the expertise to address the immediate needs of the Authority.

The following chart illustrates the core services that are utilized by the JTA:

Centralized Activity	# Full Time of Employees	# Part Time of Employees	FY 2012 Actual	FY 2013 Annualized
Legal	0	-	$976,545	$1,220,527
HR	7	-	$571,056	$697,346
IT	11	-	$1,294,140	$1,289,212
Procurement	5	-	$332,322	$376,817
Bus Fleet Maintenance	75	-	$18,559,256	$16,909,806
Print Shop	1	1	$38,815	$60,183
Facilities	13	-	$2,121,928	$2,053,772
Marketing / Communications	6	1	$566,385	$623,623
TOTAL	*118*	*2*	*$24,460,447*	*23,231,286*

Note: The estimated total actual spending for all of these essential functions in FY13 is at least $1.2M less than FY12.

Legal Services

The JTA uses the General Counsel of the City of Jacksonville for some personal injury and property damage claims that primarily involve bus accidents. The JTA also retains outside General Counsel for other legal matters that require a specific area of expertise. Some of these matters are in the fields of labor, employment, condemnation, real estate, transit oriented development (TOD), catastrophic accidents, procurement support, risk mitigation, federal transportation law, grants support, contract drafting, litigation, federal and state regulations, transportation regulations and a host of other specialized legal areas. The JTA does not have its own internal legal division.

Information and Technology

The JTA houses an Information Technology Department that has approximately 270 networked workstations, a mix of Windows XP and Windows 7 Pro. The vast majority of these are located at the Myrtle Ave. campus. JTA's Local Area Network (LAN) is inter-connected via a routed Virtual Local Area Network (VLAN) configuration, which egresses' across multiple redundant Wide-Area Network (WAN) connections. JTA also has a Wi-Fi environment deployed at each of its branch locations and at its Myrtle Avenue campus. The Wi-Fi is configured to allow JTA guests to have Internet access at all of our locations and provides Wi-Fi connectivity for our employees who use Tablets and Smartphone's.

JTA is working with AT&T to bring up an additional 33Mb Internet circuit using My Florida Network (MFN), a state of Florida geographically inter-connected private network with multiple WAN redundancies as well as redundant Internet. This will allow JTA to connect any Internet connected device back to JTA's private network using Virtual Private Networks (VPNs). Utilizing VPN connections will allow real-time video streaming in the event of an incident aboard one or more of our transit vehicles.

The JTA IT Department supports a host of transportation specific software models such as Hastus for our fixed-route buses, Trapeze for our Connexion vehicles, a variety of cameras on buses, and buildings. Transit Signal Priority and is in the process of deploying a real-time passenger information system.

In early August, the JTA in collaboration with the City of Jacksonville, the JSO, JEA and JAA announced Florida LambdaRail which provides shared, high-speed internet access across city government. This initiative will result in considerable taxpayer savings.

Procurement

JTA's procurement actions are governed by Federal Transit Administration (FTA) Circular 4220.1F, U.S. DOT Federal Highway Administration, the State of Florida Procurement laws and JTA Procurement Rule No. 002. In all procurements utilizing any amount of federal funds, federal requirements supersede state and local law. Where no federal funds are involved, procurement actions are governed by JTA Procurement Rule. Where state law is more restrictive, JTA complies with state law. All procurements are routed through DBE, Risk and Compliance and Grants for input. Approvals are required by the Project Manager, Department Vice President, Procurement Review Committee (over $25,000), Chief Executive Officer, and the JTA Board (over $100,000).

Over the past 5 years JTA has purchased goods and services from over 810 suppliers. This does not include utility and direct voucher suppliers exempt from purchasing Rule No. 002. The bid process is completed on average in 60 days. The RFP process normally takes 90 days. Over the past five years we have processed 89 RFP's, 176 Bids and 22,484 Purchase Orders. We procure a variety of goods and services including fuel hedging, buses, paratransit vehicles, vehicle parts, engines, transmissions and brake assemblies.

Many of our commodities are specific to the transit industry such as buses, paratransit vehicles, bus parts, Skyway proprietary products and related services. The JTA's procurement personnel have the training and expertise to comply with federal guidelines that include approximately 35 FTA required clauses. This expertise makes us successful in the purchasing and bidding process and holds the JTA accountable to federal and state guidelines, while at the same time maintains credibility with our stakeholders.

As a recipient of federal financial assistance the JTA is required to implement and maintain a Disadvantaged Business Enterprise (DBE) program in accordance with federal regulations. The U.S. Department of Transportation (DOT) regulations stipulate that any agency receiving DOT funding in access of $250,000 for transit related projects must have a DBE program in place.

The DBE program is a comprehensive program developed and legislatively mandated by DOT that establishes guidelines for the participation of firms owned by socially and economically disadvantaged persons in DOT-assisted contracting. The DBE program provides opportunities for certified DBE companies, creating a "level playing field" on which these firms can fairly compete for purchasing and contracting dollars. This program differs substantially from the City's Small and Emerging Business program.

The DBE program objectives are:

- To ensure nondiscrimination in the award and administration of DOT-assisted contracts
- Help remove barriers to the participation of DBEs in DOT-assisted contracts
- Ensure the DBE program is narrowly tailored in accordance with applicable law
- Ensure that only firms that meet the strict eligibility requirements standards of 49 CFR Part 26 are permitted to participate in the DBE program
- Ensure that DBEs can compete fairly for federally funded transportation-related projects
- Assist the development of firms that can compete successfully in the marketplace outside of the DBE program

In order to overcome the effects of discrimination and its past influence on DBEs, in compliance with DOT mandates, JTA establishes an annual overall goal for DBE participation. Based upon our current goal setting methodology, which is reviewed triennially by the FTA, the JTA has currently established a goal to attempt to spend at least 12% of its qualifying expenditures with DBE firms. Beginning October 1, 2013, (start of FY 14) the goal will go up to 16.08%.

Attainment of this goal may be achieved through Race Neutral or Race Conscious means. Race Neutral means are aimed at achieving the participation of small businesses in JTA contracts without respect to the gender or race of the owner. A Race Neutral program is one that, while benefiting DBEs, is not solely focused on DBE firms. When the use of Race Neutral means do not substantially contribute towards the overall agency goal for DBE participation, JTA also utilizes Race Conscious means as a method of achieving a "level playing field" for DBEs seeking to participate in federal-aid transportation contracting. Race Conscious means are aimed at achieving the desired level of participation among certified DBE firms.

If a DBE participation goal has not been established for a project, JTA encourages the prime contractor to make every attempt to secure a level of DBE participation that contributes toward the achievement of JTA's overall DBE goal of 12%.

The following chart depicts JTA success over the past three fiscal years exceeding the DBE goal of 12%.

DBE Participation FYs 11 and 12 / First three Quarters FY 13

	FY 11	FY 12	FY 13 1st Qtr	FY 13 2nd Qtr	FY 13 3rd Qtr
Total $ Spent	$8,743,464	$6,924,381	$1,984,356	$1,662,283	1,625,207
YTD DBE %	14.3%	16.3%	17.2%	23.5%	20.9%

In order for small disadvantaged firms, particularly those owned by minorities and women, to participate in the DOT-assisted contracts of state and local transportation agencies, they must apply for and receive certification as a DBE. To be certified as a DBE, a firm must be a small business owned and controlled by economically disadvantaged individuals. JTA receives information about firms through on-site visits, personal interviews, reviews of licenses, stock ownership, equipment, bonding capacity, work completed, resume of principal owners, financial capacity, and type of work preferred.

JTA serves as one of eleven certifying agencies in the State of Florida responsible for certification of new firms. JTA certifies approximately 50-60 new applicant firms each year for the DBE program. Currently, JTA maintains a database of 350 DBE firms that are maintained in the Florida Unified Certification Program (FUCP) database that houses over 3,200 DBE firms throughout the State of Florida. JTA is responsible for providing DBE certification for new applicants and annual renewal certification for existing firms. The Florida Department of Transportation (FDOT) serves as the FUCP program administrator. JTA is required by DOT guidelines to be a member and participate in the FUCP. JTA holds a leadership position within the FUCP and serves on the three-member Executive Committee that is responsible for providing leadership and guidance in support of the rules and regulations that govern the DBE Program. JTA is responsible for providing DBE certification to an 18-county area as defined by the FUCP administrator of FDOT.

JTA has a very comprehensive certification process to determine the ownership and control of firms, which apply for DBE certification. There are many specific eligibility criteria for certification. In assessing ownership, investments by the minority owner are important. Control includes both managerial and operational control with technical knowledge of the firms' major areas of work being an important component for assessing operational control. Applications are carefully reviewed and personal interviews are conducted by trained DBE staff. The entire certification process assures that only bona fide DBEs participate in the program.

It is important to mention that JTA's DBE program is required to make a FTA semi-annual report, an ARRA quarterly report, FAC/PAC BJP Quarterly Report and the JTA's Board of Directors Quarterly Report which are sent to the FTA, the JTA's Board of Directors and the City of Jacksonville.

Other functions the division undertakes are:

- Large contract cost analysis/cost reduction
- Vendor and customer relations
- Frequent user training

- Proper receipt, issuance tracking, monitoring and stocking of adequate spare inventory parts to support daily operations of our transit modes (JTA operates 3 store rooms; bus, Skyway, and Connexion)
- Centralized contract management and problem resolution to adequately monitor and mitigate risk
- Serves as point of contact for federal and state audits related to purchasing and contracts

Human Resources and Organizational Development

The JTA's Human Resources and Organizational Development Division handles all the necessities for staffing and recruitment of our industry personnel, while also administering employee development for both union and non-union employees.

Specific tasks that our Human Resources and Organizational Development division undertake are:

- Staffing & Recruitment
- Employee Relations
- Leave Administration (Disability, FMLA)
- Benefits Administration (Administer 3 separate plan groups, over 45 different products to administer -Health, Dental, Vision, Disability, FSA, EAP, Vision, and voluntary elections)
- Policy Development (processes, handbooks, SOPs)
- Retirement/Pension Plan Administration (State of Florida Retirement, Salaried Jax Transit Management Plan, Amalgamated Transportation Union Plan, International Association of Mechanist and Aerospace Workers)
- Salary Administration as it relates to Transit and Transportation Industry
- Performance Management
- Background checks, employment verifications and staff IDs
- Employee File Management to include compliance with F.S. 1490 rules and Florida Department of Transportation (FDOT) files
- Administer federally regulated Drug and Alcohol Program for safety sensitive and all other employees
- Manage attendance records in accordance with 2 bargaining unit contracts (ATU and IAM)
- Union employee training – new hire orientation, refresher and post accident/incident, new equipment training, safety briefings, apprentice program
- Talent Management and Employee Development
- Tuition Assistance Program
- Succession Planning

There are more than 180 employees in the Florida Retirement System (FRS); more than 60 of them are not vested. The challenge of transitioning personnel from a state backed pension plan to a locally offered pension plan would be difficult and complex and needs to be accounted for when considering how this would affect the city, especially given the significant pension deficit the city itself is facing currently.

Bus Fleet Maintenance

The majority of the bus fleet is in revenue service during our operating hours, with the first bus departing in the morning at 3:47 a.m. and the last bus pulling in at the end of the day at 1:20 a.m. The JTA funding sources for transit vehicles place specific maintenance requirements on our vehicles, the plan must meet Florida Administration Code 14-90 as well as the FTA. The requirements range from inspections and service intervals to technician qualification requirements. To this end, the JTA Maintenance Division has a preventive maintenance section assigned to meet the inspection and service needs of the entire fleet. The maintenance plan is audited by the FDOT and FTA to ensure compliance.

Daily service requirements call for a 24/7 maintenance presence. Maintenance staff is responsible for responding to mechanical failures and operator assistance requests. The timely response is critical to our customers' safety, service, and comfort. Maintenance staff is needed on site for operator assistance during the morning and afternoon pullout or anytime a bus is taken off property and needs attention. The overnight maintenance staff is responsible for repairing all reported defects, including those reported by operators during their daily operation of the vehicle. This is extremely important in order to meet the daily vehicle service requirements. FTA requirements allow the JTA a 20% spare ratio that cannot be exceeded. Therefore, needed repairs must be made in the evening whenever possible to meet daily service requirements. In that respect, JTA stockroom personnel must be available during the same time to provide the necessary parts and supplies to the maintenance staff.

The fixed route fleet is made up of 146 heavy duty buses and 29 medium duty buses, and a contingency fleet of 13 heavy duty buses. All associated maintenance for these vehicles is done in-house. There are 96 support vehicles, which include service trucks, vans, and pool cars. The engine and transmission overhaul for these vehicles are outsourced. Within the last couple of months, JTA began completing all other vehicle maintenance in-house for these vehicles, which has saved JTA money over previous contracted services such as oil changes that were performed outside.

Facilities

The Facilities Division is responsible for the inspection and repair of over 500,000 square feet of facilities. There are 5 maintenance mechanics for this effort. In addition, there are buildings, emergency generators, bus lifts, air compressors, bus wash, and a fuel station which includes a 300,000 gallon fuel farm. Documentation of inspections required by FDOT are kept to comply with the System Safety Program Plan [SSPP] and Security Program Plan [SPP]. These are kept for federal triennial audits.

Twenty-four (24) hour coverage is required to respond to issues involving bus maintenance equipment that could affect bus pullout and service, as well as electrical and plumbing emergencies.

Regarding janitorial services, these functions are outsourced for the majority of our facilities with the exception of the shop floors. Rosa Parks Station is handled by in-house staff and requires janitorial service throughout the service day including the cleaning of the public restrooms every 45 minutes.

The Facilities Division is also responsible for system-wide lighting for over 5,000 light fixtures. Shelter and bus stop maintenance is also part of facility maintenance. It is performed daily and requires bus operations system knowledge. Four JTA employees are responsible for over 5,000 bus stops and weekly trash removal at over 300 bus stops, some of which require trash removal twice a say. JTA does,

however, outsource the majority of the bus shelter maintenance including trash removal and lawn maintenance. Other facility maintenance functions that are outsourced include all lawn maintenance for all JTA facilities and some parcels of land owned by the JTA, elevator and escalator maintenance and Motorola radio repairs.

Print Shop

The Print Shop falls under the management of the business unit of External Affairs. The shop is responsible for printing all JTA public service information signage and collateral, transit operations schedules and marketing materials. By having an internal resource we are able to fill print orders received from all JTA departments in the most cost effective manner and with minimal turnaround time for project completion.

The Print Shop produced more than 2,311,500 bus schedules and 587 collateral projects for the agency in FY 2013 to date.

Marketing / Communications

The primary role of the Marketing/Communications unit of the External Affairs Department is to shape the Agency's strategic direction and internal and external communications and brand identity. The department under the direction of the Vice President, with a staff of 6 people, 2 of which are part time manage the following functions:

- Graphic Design and the development of all JTA collateral inclusive of signage, brochures, route schedules, public service announcements and all other marketing materials
- Media and Public Relations
- Marketing strategy, messaging and campaign development
- Social media and website
- Customer Contact Center which averages 35, 000 inbound calls monthly
- STAR CARD Contact Center and processes refunds
- Editing/writing
- Multi-Media production, i.e. Making Moves television program, video production and photography
- Community relations and outreach

Financial Impact

The JTA works to ensure that all financial resources are appropriately allocated to the mission critical areas, and that the Authority operates in the most effective and efficient manner. As good stewards of taxpayer funds, the JTA does a rigorous review of all potential new initiatives and financial requests to ensure fiscal responsibility and compliance. Financial decisions often not only need Manager and/or Executive Leadership approval, but also JTA Board approval. The JTA utilizes all taxpayer funds to deliver an effective transportation system that is essential for stimulating the economic development in Jacksonville.

The JTA submits its annual budget to the City Council for their review on June 1st of every year. The City Council Finance Committee reviews and makes recommendations to the full Council for approval. This year, as part of the restructuring and strengthening ties with public officials, the CEO and CFO held one-on-one meetings with each member of the Finance Committee, discussing each aspect of JTA's operating and capital budgets.

The Fiscal Year 2014[1] operating and capital budgets are a balanced and fiscally responsible financial and business plan, which ensures that appropriate resources are allocated to the mission critical areas and JTA will operate in the most effective and efficient manner. The Fiscal Year 2014 budget development process was a rigorous and highly collaborative teamwork process, which resulted in a relatively flat operating budget (excluding contingency) in FY14 compared to the Fiscal Year 2013 projected actual expenditures.

Several critical factors which determined the Fiscal Year 2014 budget projections were:

- Realized increase of health insurances (5% or more)
- Wage increases for administrative staff who has not received an increase in the last three years (3%)
- Fuel costs remain flat by implementing a fuel hedging program
- Seek efficiency improvement to right-size staff based on service needs
- Sales tax proceeds increases (3%)
- Farebox revenue increases 1.5%
- FTA/FDOT grants 2%

The Fiscal Year 2014 operating budget includes a total of 833 full and part-time employees. Approximately 67% of the budgeted employees are union personnel including bus operators, mechanics, and utility workers. Approximately 33% of the budgeted employees are non-union personnel including dispatch/scheduling employees, safety and security personnel, engineering personnel, administrative staff, etc. The Fiscal Year 2014 Capital Budget totals $53.8 million and includes funding for specific assets, infrastructure, equipment and long-term projects. The majority of funding will be provided by the Federal Transit Administration and Florida Department of Transportation, which includes approximately $40 million for two Bus Rapid Transit (BRT) projects – BRT North Corridor and BRT Southeast Corridor.

[1] Please see Attachment #1 and #2

The JTA funding revenue sources include[2]:

- Passenger Fares
- Federal Grants
- State Grants
- Local Grants
- Gas Tax
- Sales Tax
- All Other – Includes non-transportation revenue such as advertising, parking, rent, and interest income

Economic Impact

An August 2012 University of North Florida study entitled "The Economic Effects of JTA Public Transit and Road Infrastructure" examined the economic impact of JTA over a ten-year period. Key findings of the report are summarized below. The full report is attached.

- Job Creation: JTA investments and operations supported more than 3000 jobs per year, adding more than one billion in wages and labor income and more than two billion in sales and gross revenues for businesses in Duval County between 2002 and 2011.
- Fuel and Time Savings: Public transit provides benefits to Jacksonville that includes fuel and time savings of at least $10,500,000 annually.
- Reduced Road Maintenance: By removing private single occupancy vehicles from the roads, JTA transit results in road maintenance cost savings equal to $679,700 annually in Duval County.
- Commuter Savings: Commuters save an estimated $6,483,000 annually by using public transportation versus driving.
- Delivering people to Work: Public transportation serves an important function in connecting workers, particularly low income workers, with jobs and aiding employers in filling job positions. Assuming these workers who use public transit could not find work for a year afterward, there would be lost wages and an economic disruption equal to at least $41,693,000.

[2] Please see Attachment #3

Unity of Purpose

JTA's VISION… "Residents and businesses have access to safe and reliable transportation choices to move people and goods efficiently and comfortably throughout our community."

JTA's MISSION… "To improve Northeast Florida's economy, environment and quality of life by providing safe, reliable, and efficient multimodal transportation services and facilities."

The JTA vision and mission support the City's vision to make Jacksonville "the best place to live, work and raise a family."

The JTA has been and continues to be a partner in advancing the goals of the City of Jacksonville. The JTA was originally created in 1955 by a special act of the Florida Legislature as the Jacksonville Expressway Authority (JEA) to complete, construct extensions of, operate and maintain the Jacksonville Expressway System. At the time it was the first limited access highway development agency in Florida outside of the State Road Department (now FDOT). In 1971, the JEA merged with the Jacksonville Coach Company, a privately owned entity operating local bus service, and its role was expanded to include acquisition and provision of public transit service for the Jacksonville area. This is when the "original JEA" officially became the "JTA."

Throughout its history, JTA's broader multimodal focus has allowed it to adjust to the changing demands of the community. As previously noted, the Authority took over failing private bus companies in 1971. Despite the elimination of the City contribution for mass transit services in the 1990's, JTA has continued to provide vital mass transit services to Jacksonville citizens.

In 1989, passage of a one-half cent Local Option Transportation Sales Surtax allowed for the removal of tolls on JTA facilities. For the past 23 years, JTA has utilized the ½ cent sales tax to run mass transit system and invest in critical roadway improvements in our community.

The Authority works closely with the FDOT and the City to develop and maintain plans to improve traffic flow and transportation throughout the City. In 2000, an additional half-cent sales tax was approved to fund projects identified by the Better Jacksonville Plan (BJP) a $2.2 billion infrastructure and quality-of-life improvement initiative. JTA has played a significant role in the implementation of this massive plan which includes 32 roadway ($800 million) projects.

JTA not only took on major road and bridge projects as part of BJP, but committed its primary funding source to advance the program. The JTA committed part of the Charter County Transportation Sales Surtax to cover debt service and pay-go projects identified in BJP. The road projects covered by BJP included local roads mostly constructed by the City and improvements on state roads typically constructed by JTA. In exchange, JTA received the six-cent Local Option Gas Tax to cover transit operations in spite of the fact that this funding source is expiring in 2016. Despite the funding uncertainty created by this arrangement, JTA agreed to support BJP because of our commitment to partnering with the City to advance this important initiative.

Throughout its history, JTA has constructed some of the most vital and even iconic transportation projects in Jacksonville. Much of the Interstate system in Jacksonville was built by JTA (JEA at the time) including I-95, I-10 and the Fuller Warren Bridge. J. Turner Butler Boulevard is a keystone JTA project that created a limited access roadway to the beaches. Not only is it vital for emergency evacuations, it has seen some of the most noteworthy developments in Northeast Florida over the past 30 years including the University of North Florida and Mayo Clinic. And it's hard to imagine the Players Championship without the access provided by JTB.

The Dames Point Bridge was controversial at its outset but today it is a critical link in Jacksonville's beltway. This bridge has provided an essential connection to North Jacksonville and the port and marine facilities that are now emerging as economic engines for the Northeast Florida Region. Similarly, the Wonderwood Connector and Mayport Flyover have enhanced the access to Mayport Naval Station and the Beaches with obvious evacuation and economic development value as the Navy considers locating a nuclear carrier at the base.

The Automated Skyway Express downtown people mover concept originated from a joint feasibility study conducted by the FDOT and the City Planning Department in 1973. The first phase of the 2.5 mile Skyway was completed in 1989 and the last phase of the current system was finished in 1994. It has won awards for its design and is regarded as a state-of-the-art intermodal transit station.

At the same time, as the City welcomed an expansion NFL team, the Jacksonville Jaguars, the JTA was welcoming the Jaguar Stadium Shuttle, the method of transportation for thousands of fans every year.

While JTA's independence allows us to tackle tough but critical projects, we remain committed as a partner with the City focused on facilitating mobility, economic growth and quality of life. As we have throughout our history, JTA is positioned to support the development and implementation of a strategic vision for Jacksonville.

Jurisdiction

Throughout its history, JTA has advanced and constructed some of the most significant roads and bridges in Jacksonville. These improvements often take decades to plan and build. Many are often controversial and require a level of unwavering commitment, expertise and continuity in personnel and leadership that is found at an agency like JTA. These projects also tend to be on state roads and the National Highway System. Construction of such facilities requires expertise in state and federal regulations and processes. The design standards, environmental planning and right-of-way requirements vary significantly from those of city and county roads. Few, if any, local governments, have the capacity to construct these types of roads and bridges which is why entities like JTA and other expressway authorities have been created.

JTA continues to advance projects that are critical to economic development in Jacksonville. For example, JTA recently advanced the JTB/I-95 interchange project into design so when funding became available in the FDOT work programs it could complete the project.

Much of JTA's road work supports transit development. The BRT program involves improvements on roadways such as dedicated lanes, station area improvements, pull-offs and Transit Signal Priority. These types of improvements require JTA to have design and engineering capacity. Future projects like Commuter Rail also require design and engineering support.

The overwhelming majority of JTA projects are on state roads and upon completion they are delivered to FDOT for long-term maintenance. However, the JTA has at times improved local roads. For example, Alta Drive and Soutel Drive are two recent local road improvements. JTA managed these improvements due to our expertise with federally-funded transportation projects.

For any city road project constructed by the JTA, we coordinate with the city and establish a clear understanding of any additional maintenance requirements prior to beginning the project. JTA will not make an improvement on a city road without the approval of the city.

Governance Structure and the Relationship with the City of Jacksonville

The Board of Directors of the JTA consists of seven members. Three members are appointed by the Governor and confirmed by the Senate and three members are appointed by the Mayor of the City of Jacksonville and confirmed by the City Council. The seventh member is the District Secretary of the FDOT serving in the district that contains the City of Jacksonville (District Two). The term of appointed members shall be for four (4) years deemed to have commenced on June 1st of the year in which they are appointed. Each member shall hold office until a successor has been appointed and qualified. A vacancy during a term shall be filled by the respective appointing authority only for the balance of the unexpired term. Any member appointed to the Board for two full consecutive terms shall not be eligible for appointment to the next succeeding term.

List of Board Members' Terms and Appointments

GOVERNOR'S APPOINTMENTS

MEMBER	APPOINTMENT DATE	EXPIRATION DATE
Edward E. Burr	July 20, 2011	May 31, 2015
Scott L. McCaleb	February 10, 2011	May 31, 2015
Donna L. Harper	December 29, 2010	May 31, 2014

MAYORAL APPOINTMENTS

Isaiah Rumlin	August 28, 2012	May 31, 2016
Steve Diebenow	October 2010	May 31, 2013
Ava L. Parker	February 2011	May 31, 2015

FDOT BOARD MEMBER – DISTRICT II

Greg Evans	February 6, 2012	Ex-Officio District Two Secretary

The officers of the Board include the Chair, Vice Chair, Secretary and Treasurer. Each officer shall perform the duties and functions as provided in the bylaws and perform such other functions as the Board or the Chair may designate, and such other functions as are provided in the bylaws. In the event of the absence at any meeting of the Chair or the Vice Chair, any member of the Board, whether or not an officer, may sign resolutions or other documents requiring the signature of a Board member, consistent with the adoption or approval by the Board of such resolution or document.

As provided by Florida Statute Chapter 349, one of the members of the Board is to be designated annually by the Board as Chair of the Authority. A member may serve as Chair for no more than two successive years. The Chair sets the agenda and presides at all meetings of the Board unless the Chair delegates otherwise. The Chair designates from time to time such committees as the Chair may deem appropriate in addition to the standing committees provided in the bylaws. The Chair also designates the subject matter assigned to each such committee for consideration. The Chair appoints the chairperson and members of each committee.

The JTA has a commitment to strengthening ties with public officials in the City of Jacksonville. So far this year, the CEO and his Executive Leadership Team held workshops for both City Council and staff, as well as the Mayor and his Cabinet. As mentioned in the financial section of this document, as part of the budget process, the CEO and CFO held one-on-one meetings with each member of the City Council's Finance Committee, as well as various meetings with Council Auditors.

The City Council appoints a liaison who represents the Council at all Board of Director meetings. The liaison has full access to the CEO and Executive staff, not only at his request, but at JTA's request to keep him informed of business and matters of compliance at the Authority. The JTA is committed to partnering with the City of Jacksonville and is eager to collaborate about the challenges that confront a growing city and region to keep the area at the forefront of transportation in the 21st century.

The JTA is also committed to move our community forward, to help citizens achieve a better way of life through better access to public transportation and a road system that promotes innovative development.

Attachment # 1

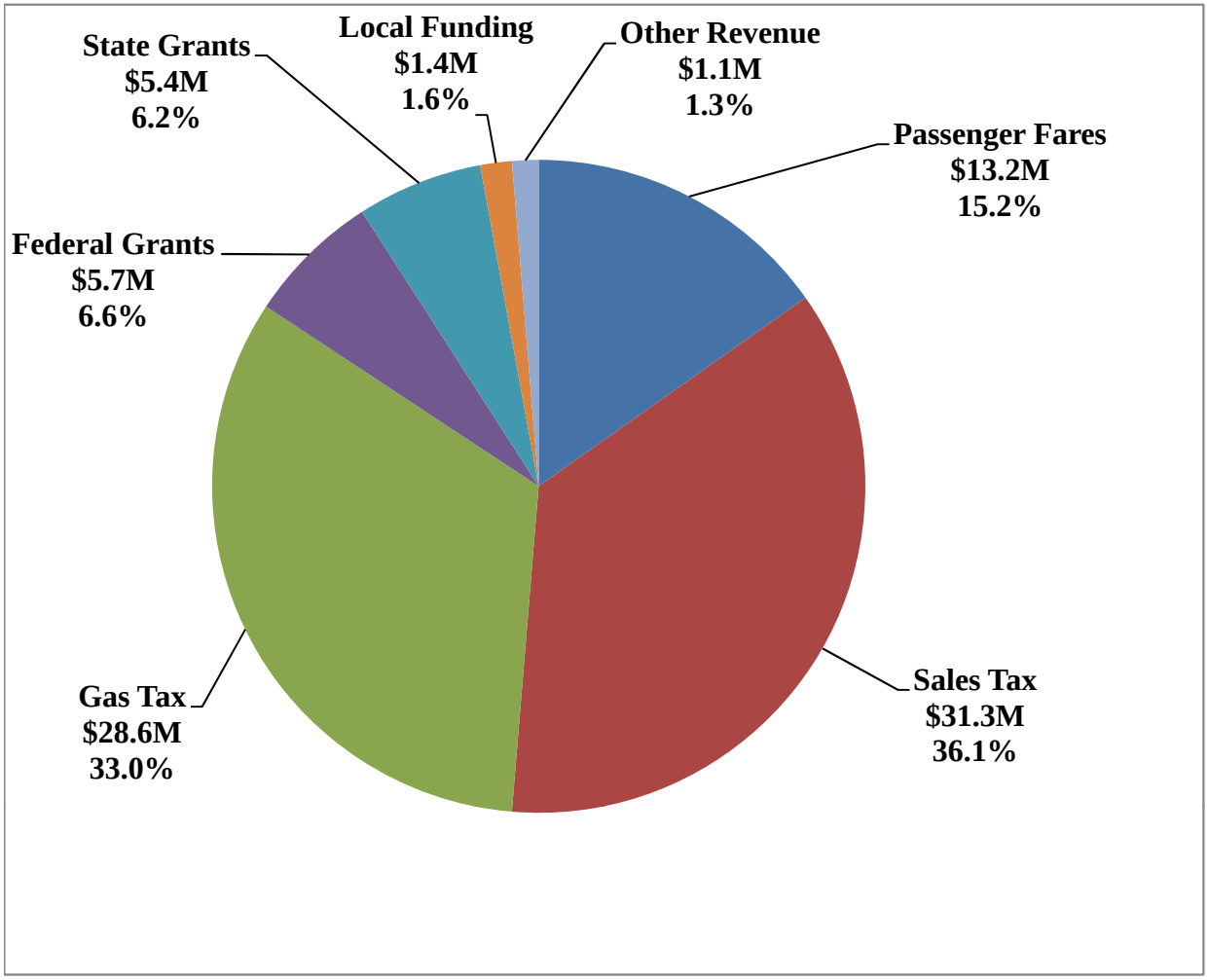
FY 2014 JTA Budget: 725 Full-Time Positions, 108 Part-Time Positions

	Full time				Part Time		
Cost Center	**FY 2014 Budget Non-Union**	**FY 2014 Budget Union**	**Budgeted Filled**	**Budgeted Unfilled**	**FY 2014 Budget Non-Union**	**FY 2014 Budget Union**	**Budgeted Filled**
Long Range Planning & System Development							
Engineering (201 0101)	10		10				
Long Range Planning (201 0214)	3		3				
System Development (100 0127)	6		6				
Total:	**19**		**19**				
CEO/COS/ELT							
Senior Staff (201 0202)	12		12				
I.T. (201 0204)	11		7	4			
Total:	**23**		**19**	**4**			
Finance & Administration							
Finance (201 0203)	11		11		1		1
Grants (201 0205)	3		3				
H.R. (201 00206)	7		6	1			
Procurement (201 0208)	5		5				
Training (201 0209)	3		2	1			
Inventory & Materials Management (100 0104)	2	4	5	1	1		1
Revenue Management (100 116)	9		9		8		8
General Accounting (100 0126)	10		10				
Total:	**50**	**4**	**51**	**3**	**10**		**10**
External Affairs							
Brand & Communications (201 0212)	6		5	1	1		1
Customer Service (201 0213)	10		9	1	6		5
Business Development & Corp Sales (201 0215)	2		2		1		1
Government Relations Office (201 0216)	1		1				
External Affairs (201 0218)	1			1	1		1
Print Shop (100 123)	1		1		1		1
Total:	**21**		**18**	**3**	**10**		**9**
Transit Operations							
Bus Ops Admin. (100 0115)	12		11	1	9		8
Maintenance (100 0101)	11	64	73	2			
Service Station (100 0102)	1	32	32	1			
Facilities (100 0103)	4	9	12	1			
Community Shuttle Service (100 0106)	9		9				
Bus Ops Supervisors (100 0113)	11		11		8		8
Dispatch (100 0114)	7		7		1		1
Scheduling (100 0122)	3		1	2			
Skyway (102 0101)	14	22	35	1			
Paratransit (104 0101)	7	15	20	2			
Dispatch/Scheduling (104 0101)	9		9				
Reservations (104 0101)	8		8		5		5
Eligibility (104 0101)	3		3		1		1
Bus Operators (100 0111)		355	347	8		53	27
Maintenance (104 0101)	1		1		1		1
Total:	**100**	**497**	**579**	**18**	**25**	**53**	**51**
Compliance & Risk Management							
Safety/Security (100 0121)	5		5		10		9
Compliance & Risk Mgmt (100 0125)	4		4				
Diversity & Equity (201 0207)	2		2				
Total:	**11**		**11**		**10**		**9**
Total JTA/ JTM Employees	**224**	**501**	**697**	**28**	**55**	**53**	**79**

Two unbudgeted full time positions have been approved within Transit Operations to clean Connexion Vehicles previously done by Maruti.

Attachment # 2

JTA FY 2014 BUDGETED FUNDING SOURCES - $86.8 MILLION



JTA initially projected $27.0 million in FY 2014 Local Option Gas Tax income. This projection was revised to $28.6 million based on the City Council's recommendation.

Center for Economic and GIS Research

The Economic Effects of JTA Public Transit and Road Infrastructure

Prepared by

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August 2012

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EXECUTIVE SUMMARY

The Jacksonville Transportation Authority (JTA) provides important regional transit services and roadway infrastructure for Duval County to improve the efficiency of the local transportation system, which results in significant economic benefits for Duval County residents. This report evaluates the impact of JTA on the Duval County, FL economy by estimating the economic impacts of its operations and spending over a 10-year period (2002-2011). Additionally, the report analyzes the mobility, travel improvement, and economic benefits of JTA public transportation in Jacksonville, beyond the economic impact of its operating and capital expenditures. Further, the report estimates the future economic impacts associated with the planned roadway expansion project at the I-95/JTB/US 1 interchange.

In order to show the impact of JTA operating and capital expenditures, we use Impact Analysis for Planning (IMPLAN), an input-output model that estimates the interrelationships among industries in the local area. This model helps to quantify the direct, indirect, and induced economic impacts of JTA operations over the study period. Direct impacts refer to the permanent jobs, wages and output of the JTA, while indirect impacts refer to the jobs, wages, and output created by firms and businesses that provide goods and services that are essential to the operations of JTA. Finally, the induced impacts refer to the spending of the wages and salaries of the direct and indirect employees on consumption items such as food and housing

The key findings of the study are outlined below:

- Between 2002-2011, JTA spending and operations supported more than 3000 jobs per year, adding more than one billion in wages and labor income and more than two billion in sales and gross revenues for businesses in Duval County over the course of these 10 years.

- Public transit provides benefits to Jacksonville that includes fuel and time savings of at least $10,500,000 annually and road maintenance cost savings equal to $679,700 annually in Duval County.

- Having public transportation saves individual Jacksonville commuters from the costs associated with other means of travel such as private automobiles, taxis, and car pooling. Commuters save an estimated $6,483,000 annually by using public transportation versus driving.

- Public transportation serves an important function in connecting workers, particularly low income workers, with jobs and aiding employers in filling job positions. Assuming these workers who use public transit could not find work for a year afterward, there would be lost wages and an economic disruption equal to at least $41,693,000.

- Continuous improvement to public transit and road infrastructure is critical and provides important economic benefits to Jacksonville. We examine the proposed road construction project at JTB, I-95, and Phillips Highway and find that investments in this project over a four-year period (2015-2018) will produce over 1300 jobs and result in over $93 million in total value added as well as over $179 million in business sales and gross revenues.

PART 1: 10-YEAR IMPACT OF JTA CAPITAL AND OPERATION SPENDING

Part 1 of this report measures JTA's net economic contribution to Duval County over the 10-year period between 2001-2011. JTA undertakes a wide array of activities and functions which add to the economic activity, jobs and incomes of Duval County residents. JTA spending on operations, capital investments, road construction and other activities generates new economic output (measured as gross revenues or sales), labor earnings, employment and value added in Duval County[1]. JTA may reduce economic activity because residents are assessed higher sales and gas taxes that are used to pay for a portion of JTA activities. Considering all of these elements, we calculate the net economic impact of JTA activities each year and then provide an overall net economic impact for the 10-year period.

There are four major categories of activities provided by JTA: 1) public transportation, including Bus, ASE and CTC; 2) capital investment in land, equipment and other; 3) road projects; and 4) ongoing operations. Each of these activities will have three distinct effects on the Jacksonville economy.

1) ***Direct effects*** are those that can be measured as a direct result of JTA spending in each of the four areas mentioned above. For example, public transportation activities increase spending and sales in Jacksonville when JTA purchases goods and services from local businesses and when they hire bus drivers and other personnel. The increase in new jobs, business revenues, worker income and value added at this stage is called the direct effect and also the *primary* impact.
2) ***Indirect effects*** occur when businesses, which are the beneficiaries of the direct spending, buy goods and services from other local establishments. For instance, when contractors and construction firms hired by JTA purchase materials and supplies from local firms, this action generates economic activity in the region. These subsequent rounds of business purchases are classified as secondary or indirect effects.
3) Finally, ***induced effects*** occur when firms, who are hired by JTA to perform services, hire additional employees raising workers' incomes. Workers' incomes in the community increase as does their new spending. This new spending is counted as the induced effect. For example, when construction workers and other new employees spend their increased earnings on auto maintenance, banking services, home repair and other goods and services in the community, these expenditures are counted as induced effects.

[1] Economic output is the total value of production by industry for a given time period. Labor income includes wages, salary and benefits of employees as well as income for self-employed individuals. Employment includes full-time and part-time employees, and self-employed. Value-added consists of four components: employee compensation, proprietor income, other property income and indirect business tax.

Total economic impact of JTA spending includes all three effects. The largest portion of the impact comes from the direct effects, however, both the indirect and induced effects add to the economic 'multiplier' of an initial spending investment as it ripples through the economy adding to new business revenues and labor income in Duval County.

This analysis recognizes that a portion of JTA funding comes from Duval County's gas and sales tax which takes money out of the local economy, reducing household spending on goods and services.[2] The 'net' economic impact weighs both the positive economic effects of JTA investments as well as the negative effects due to higher sales and gas taxes.

Tracing economic impacts as they flow through a local economy is a complex task. To aid economists, a method called "input-output" modeling was developed. Input-output models are mathematical representations of how the various industry sectors and final demands of an economy are linked. The most widely used input-output tool is IMPLAN, which is an acronym for "Impact Analysis for Planning". It is a method that allows researchers to build a model that is individually tailored for a given year and geographic location. IMPLAN was chosen because it is the most up-to-date and widely accepted representation of current inter-sector relationships and it accurately represents Duval County's industrial composition. IMPLAN is quite detailed, as it breaks the economy down into 509 sectors. The models can be modified to suit different situations and results of IMPLAN are thoroughly peer reviewed and well accepted throughout the academic and professional community. IMPLAN requires detailed spending and tax information as model 'inputs'. The spending and tax revenue data used in the analysis were gathered from JTA financial statements.

Table 1.1 shows the Total Net Impact (after taxes) of all JTA operations and capital spending over the 10-year period 2002-2011. The impact of road projects, public transportation, capital spending,

[2] We assume that the gas and sales tax revenues are 100% percent paid by households living in the Duval County, rather than from outside visitors. This results in a more conservative estimate of the net economic impact.

operations and tax revenues are shown in Tables 1.2-1.6 in the Appendix. All values shown are 2012 real (after inflation adjustment) dollars.

JTA has a large and significant impact on employment and earnings in Jacksonville 2002-2011. JTA activities are responsible for about 3,022 jobs annually and over $1 million per year in labor income for Duval County residents. JTA activities generate more than 229 million dollars in new sales and revenues in Duval County *per year* even after accounting for the higher sales and gas taxes that are imposed to help pay for JTA activities. The 10-year totals show that JTA has sustained a high level of economic activity that has helped support businesses and workers locally, even after taxes. Between 2002-2011, JTA spending and operations supported more than 3000 jobs per year, adding more than one billion in wages and labor income and more than two billion in sales and gross revenues for businesses in Duval County over the course of these 10 years. During the economic recession of 2008-2010, due in part to federal economic stimulus and other grants, Jacksonville workers and businesses benefited significantly from JTA operations. JTA was able to maintain high levels of economic activity adding extensively to the health of the Jacksonville economy.

These results were obtained with conservative assumptions (about sales and gas taxes), state-of-the-art software providing region-specific information with the most current data available. The analysis provides insight into the importance of JTA as a driver of business revenues and labor income, especially during the economic recession 2008-2011. Aside from the other benefits gained from public transportation (Part 2) and road improvement projects (Part 3) accruing to the community and region as a whole, on a purely quantitative level, this analysis shows that JTA operations consistently support a large number of jobs in Jacksonville, provided more than one billion in new labor income to Duval County residents and two billion in new revenues to local business over 10 years. The investment in sales and gas taxes by residents has paid off (at least) three to one, meaning that every dollar invested by Duval County residents in higher taxes, pays for itself at least three times over: more than three times the income, jobs and revenues are created by the initial investment of (sales and gas) tax dollars.

Table 1.1 The Total Net (After Taxes) Impact of JTA Spending in All Areas

Year	Employment	Labor Income	Total Value Added	Output
2002	2,555	$91,838,109	$124,128,496	$208,618,900
2003	2,720	$95,115,435	$127,827,212	$213,210,352
2004	3,234	$117,865,736	$160,384,308	$275,542,914
2005	2,212	$74,403,144	$96,052,116	$176,579,318
2006	2,805	$89,514,386	$118,543,162	$189,884,584
2007	3,484	$123,667,813	$168,078,031	$290,823,387
2008	4,034	$142,539,996	$195,308,183	$316,641,393
2009	3,562	$121,201,009	$167,272,485	$271,687,623
2010	3,149	$101,263,269	$139,515,968	$223,578,713
2011	2,465	$67,829,241	$91,701,277	$129,728,839
Total	30,218	$1,025,238,136	$1,388,811,237	$2,296,296,023
Average	3,022	$102,523,814	$138,881,124	$229,629,602

PART 2: MOBILITY, TRAVEL IMPROVEMENT AND OTHER BENEFITS

In Part 1 of this report, we found that JTA's public transportation activities have a significant economic impact on Jacksonville creating more than 2900 jobs, more than $87,000,000 in labor income for residents in Jacksonville and more than $179,000,000 in gross revenues for businesses directly and indirectly working with the public transportation system, annually[3]. Part 2 analyzes the mobility, travel improvement and economic benefits of JTA public transportation in Jacksonville, beyond the economic impact of its operating and capital spending covered in Part 1. There are numerous 'mobility benefits' due to public transportation that are shared by all stakeholders in Jacksonville. JTA provides a wide variety of services to residents, students, employees, local businesses and visitors to the local community and there are measureable benefits to having public transit services accessible on a timely and widely available basis. For example, many low-income students, seniors and residents depend on buses for work, school, healthcare, routine errands and recreation. It would not be overstating it to say that public transportation is a fundamental requirement for a well functioning business climate. Dependable and timely transportation of goods and services increases business productivity and without access to affordable public transportation many employees would have to seek new employment, causing significant disruptions for both workers and businesses.

Currently more than 55% of peak travel hours are plagued by traffic congestion in Jacksonville and every year this causes huge time delays, driver stress and millions of gallons in wasted fuel (TTI). A principal benefit of having public transportation is that without it, these problems would be much worse. Public transportation in Jacksonville is widely utilized and significantly reduces traffic congestion during peak hours; in 2010 JTA had more than 10 million in ridership who traveled more than 55 million passenger miles annually (TTI). There is clear evidence that public transportation saves time and money, for riders that use the system, commuters who drive independently as well as for businesses that depend upon commercial deliveries and reliable access to labor markets (Weisbrod et al., 2001; Litman, 2008).

[3] These are values are annual averages 2007-2011.

Building on previous literature using a well established methodology (Weisbrod et al., 2001; Litman, 2008), Part 2 of this report measures the economic benefits of enhanced mobility and travel improvement associated with a well functioning public transportation system in Jacksonville. Specifically, estimates contained in Part 2 provide information about the value of having JTA public transportation, as compared to not having these services available in Duval County. The 'measureable' mobility benefits of having a public transportation system included in this report are the following: 1) time and fuel savings associated with reduced congestion, 2) less wear and tear on roads leading to reduced cost of road maintenance 3) personal monetary savings for commuters using public transportation versus driving, and 4) access to employment for millions of workers and access to employees for thousands of businesses. In the sections that follow, Part 2 calculates the monetary values associated with each of these benefits.

Time and Fuel Savings

Road congestion is a costly problem that causes an estimated one billion hours of commuter delays and 1.9 billion gallons of wasted fuel in the U.S., annually (TTI, 2010). Like other cities of similar size, Jacksonville commuters exhausted more than seven million gallons of fuel and 20 million hours waiting in traffic in 2010 (TTI, 2010). Transportation economists and policymakers recognize that there are sizeable benefits associated with reducing congestion which accrue to commuters, commercial deliveries and businesses that have a more reliable and timely transportation system (Litman, 2008; Forkenbrock and Weisbrod, 2001). Research done by the Texas Transportation Institute (TTI) finds that Jacksonville's public transportation system significantly reduces road congestion and its associated costs[4]. TTI calculates the cost of congestion using the cost of wasted fuel ($2.75 per gallon) and the cost of time lost waiting in traffic ($15.50 per hour). Economists and transportation policy analysts routinely value the time lost in traffic because congestion slows employee travel and commercial deliveries which increase

[4] Urban Mobility Report is a long running annual report documenting a variety of metrics including the effects of congestion and public transportation policy. To develop the report, TTI joined with INRIX, a nationally recognized supplier of travel and shipping information which uses millions of data points from nearly every road in the U.S. and with the Highway Performance Monitoring System (HPMS) that includes an array of information on highway conditions, extent and usage.

costs to employers who must pay for additional worker time spent in traffic either directly or as reduced productivity per hour. Trips made for personal reasons also have a value that is well established in economic research measured in willingness to pay surveys. USDOT Highway Economic Requirement System uses this same methodology which values time wasted in traffic as the median hourly cost of labor in Jacksonville which is $15.50 (Florida Occupational Employment and Wage, Florida Agency for Workforce Innovation).

In summary, the study finds that without public transportation, Duval County commuters would be delayed by more than 500,000 additional hours in a year, impacting Jacksonville's business productivity and quality of life. Furthermore the report finds that if public transportation were not available, there would be increased traffic delays and wasted fuel amounting to $10,500,000 dollars a year.

Reduced Cost of Road Maintenance

Well functioning road and traffic systems maintenance is critical to everyone in the community. Roads and transportation structures in need of repair can limit mobility, increase congestion and travel times, have dangerous consequences during natural disasters, and cause damage that raises vehicle operating costs. Evidence suggests that even considering the maintenance impact created by buses, costs rise when drivers switch from public transport to their own vehicles (Halliday, 2005; Weisbrod, 2009).

We calculate the higher cost of road maintenance by first estimating the number of riders who would switch to their own cars, use a taxi or get ride from a friend or relative. If bus service were not available, about 33% of riders would drive, take a taxi or otherwise add new vehicle miles that would increase wear and tear on the roads raising maintenance and repair costs. These data come from a national survey of the American Public Transportation Association (APTA, 2007) which finds that without access to public transportation, 23% of former riders would drive, 9.9% would take a taxi, 22% would ride with others, friends and relatives, 21% would choose to not make the trip and the remainder have 'other means' of getting to their destination. This implies that at least 33% of passenger miles previously traveled on JTA buses would become new vehicle miles traveled (VMT) if public

transportation were not available. Another comprehensive study (Weisbrod, 2009) estimated a higher percentage would switch to cars and there would be between 91% and 37% new VMT without public transportation[5].

Next, we calculate that the number of new vehicle miles due to former riders changing modes of transportation in Jacksonville is equal to 24,424,620. We find 24.424 million as the percent of riders switching from public transportation to driving/taxi (33%, APTA, 2007) multiplied by total number of JTA passenger miles (74,014,000) traveled annually (JTA, 2010). Next we subtract the actual road miles currently traveled by JTA busses and shuttles (14,355,000 miles) and find that without public transportation there would be 10,069,620 new vehicle miles traveled if there were no public transportation available. Thus, there is a total of 10.706 million new vehicle miles causing more wear and tear on Jacksonville roads which raises the costs of maintaining roads and bridges. Road maintenance costs are partially paid by State and Federal funds and estimates vary depending upon what is included; the long-run costs of replacing bridges, roads and transportation systems can add up to $8 per vehicle mile for full replacement (Halliday, 2005) whereas short-run, ongoing maintenance, repair and traffic management cost per vehicle mile is estimated to be considerably less (VTPI, 2009). A number of studies conclude an average maintenance value between $.045-$.09 per vehicle mile (VTPI, 2009). We use the average estimate of $.067 per mile which implies that public transportation saves at least $679,700 in road maintenance and repair costs in Jacksonville, annually. These short-run costs (and arguably more long-term costs) are avoided by keeping vehicles off the road and are part of the benefit of having public transportation in Jacksonville. These calculations are shown in Table 2.1.

[5] Our assumption of 33% is a conservative estimate especially over the long run. Evidence presented in other studies (ICF, 2008; Litman 2004) suggests a much larger impact of public transportation longer term. As the public transportation system expands many travelers give up their cars and switch from private transportation to public, resulting in significant reductions in vehicle miles traveled on the order of 3.5 per passenger mile supporting the notion that sustained investment in public transportation reduces congestion significantly long term.

Table 2.1 Increased Road Maintenance Costs Due to Drivers Switching From Public Transportation to Private

Percent of Former Public Transit Riders Who Drive/Taxi (ATPA, 2007)	33%
JTA Passenger Miles 2011 (JTA)	74,014,000
New Vehicle Miles Traveled by Former Public Transit Riders = 74 m * .33	24,424,620
Actual Miles Traveled by JTA Bus and Shuttle 2011 (JTA)	14,355,000
Total New Vehicle Miles Traveled = 24.4 m -14.4 m	10,069,620
Cost per Vehicle Mile Road Maintenance (VTPI, 2009)	$0.0675
Total Increase in Road Maintenance Cost = 10.069*.0675	$679,699

Personal Costs of Travel

If the public transportation were not available many commuters would be forced to drive themselves, take a taxi or catch a ride with relatives or friends increasing their personal costs of commuting. We estimate this added cost of commuting as the amount paid in maintenance, gas and depreciation per trip per day less the avoided bus fare per trip, per day. First we estimate the amount it costs, per trip, to drive (instead of take public transportation in Jacksonville). There are a variety of measures used to estimate the cost of driving per mile but one well established measure used in the transportation literature is the IRS reimbursement rate for maintenance, gasoline, oil and depreciation which is equal to $0.58 per mile (Weisbrod, 2009). We multiply the costs per mile and the average miles per trip for the typical commuter (5.9 miles per trip (JTA)) and calculate that it would cost a typical commuter $3.45 per trip to drive in Duval County. The cost of bus fare in Jacksonville is $1.50 per trip, although many commuters pay less when they purchase bus fare on a monthly basis. These figures imply an increased cost to drive of $3.45 minus $1.50 or at least $1.95 per trip. Ignoring the costs of parking, because there is little empirical data on parking costs, we find that for the typical commuter in Jacksonville who commutes five days a week, 50 weeks a year, there is an annual savings of $975 dollars a year using public transit versus driving a car. These calculations are shown in Table 2.2.

Table 2.2 Annual Savings Using Public Transit Versus Driving

Cost per Mile to Drive Includes Gas, Oil, Maintenance and Depreciation (IRS, Weisbord, 2009)	$0.58
Average Miles per Passenger Trip on Public Transit (JTA)	5.9 Miles
Average Trip Cost to Drive for JTA Commuter ($0.58 * 5.9 miles)	$3.45
Retail Cost of Bus Fare in Jacksonville	$1.50
Increased Cost Per Trip to Drive Instead of Use JTA Public Transit	$1.95
Annual Savings When Using JTA Public Transit Versus Driving Assuming Five Days a Week, 50 Weeks a Year Commute	$975

We use the fact that there is an added $1.95 per trip cost to drive, when calculating the total added costs of week day commuting for passengers that switched from public transportation to driving, in Jacksonville. There are 40,300 boardings per day on an average weekday on JTA public transportation and about 42% of riders make one transfer which implies there are about 28,380 individual passenger trips from origin to destination [6] (OD Survey). Ignoring weekend travel and assuming these commuters travel five days a week, 50 weeks a year, Jacksonville commuters take 7,095,000 trips on public transportation each year. Using information from Table 1, 33% of passengers will switch to driving (or using a taxi, which will have an even higher cost). This implies about 2,341,300 = (7,095,000*.33) trips would switch from public transit to driving, if public transportation were not available. In total, we calculate that Jacksonville commuters save an estimated $4,565,700 annually by using public transportation versus driving ($4,565,700 = $1.95 (higher cost of commuting per trip versus bus fare) * 2,341,300 increase number of trips driving). These calculations are shown in Table 2.3.

[6] About 58 percent of riders have no transfer and about 42% transfer once thus we calculate number of passengers as follows: 40,300=.58x + .42*2x, where x is number of passengers.

Table 2.3 Total Annual Savings From Using Public Transit Versus Driving

Total Number of Passengers Trips From Origin to Destination per Week Day (JTA O&D Survey)	28,380
Total Trips per Year Assuming Five Days a Week, 50 Weeks a Year Commute	7,095,000
Percent of Trips That Switch to Driving or Taxi	33%
Passenger Trips That Switch From Public Transit to Driving (.33*7,095,000)	2,341,000
Savings per Trip Taking Public Transit Versus Driving (Table 2)	$1.95
Total Annual Cost Saving Using Public Transit Versus Driving ($1.95 * 3,324,000)	$4,565,700

Access to Employment Opportunities for Workers and Access to Workforce for Employers

Weisbrod (2009) highlights the fact that public transportation allows local businesses to have access to a broad spectrum of employees with diverse skills which contribute to business productivity and innovation. Public transportation is also important for access to a broad customer base which stimulates economic activity. Although public transportation impacts business productivity in a variety of ways this section focuses on the important role that public transit plays in connecting workers with their jobs.

When one analyzes the reasons for using public transportation, it becomes quite obvious that public transportation is not a luxury, but more of a necessity. Most trips on public transportation are work related (59%) and another 14% are medical or education related (APTA, 2008). Fully 46% of Duval County passengers are low income making below $25,000 in household income (O&D Survey), more than half (54%) do not have a driver's license and nearly two-thirds (64%) of JTA passengers do not own a registered vehicle. No doubt, public transit plays a critical role in Duval County worker's ability to access employment opportunities which raises wages and supports community well-being in a wide variety of ways. While many higher income households take the best job offered, low income people's job opportunities are limited by transportation barriers (Halliday, 2005).

If public transportation were not available in Duval County, low wage workers that rely on public transportation would be disproportionately affected. Workers who have no other means of transportation would have to quit their jobs and search for new ones. Businesses would have to search for well trained and experienced workers as replacements, greatly increasing search and hiring costs. Using established

methods (McHone, 2007) we estimate the amount of economic disruption as the income lost by riders who quit their jobs if JTA were to discontinue public transportation. We calculate the amount of lost wages using the following information. In Jacksonville, there are approximately 28,380 passenger trips from origin to destination per day, during the week. Assuming they are traveling both to and from their destinations this means there are approximately 14,190 different passengers and 59% (APTA, 2008) of them (8,372 = .59* 14,190) are commuting to work daily. A survey of riders in Lee County, Florida (Lee County Public Transit Survey, 2005) found that 20% of riders who used the public transportation system to commute to work would quit their jobs if public transit were not available. Using this information, we find that approximately 1,674 commuters in Jacksonville would quit work if there were no access to public transportation (1,674= .2*8,372). Using U.S. Census Bureau data along with JTA data on passengers' addresses we calculate that average per capita income of JTA passengers is $24,900[7]. Assuming these workers could not find work for a year after quitting, this implies lost wages and economic disruption of $41,693,000 if public transportation were not available. These calculations are shown in Table 2.4.

Table 2.4. Lost Wages if Public Transit Ceases Operation

Number of Passenger Trips From Origin to Destination (JTA O&D Survey)	28,380
Number of Independent Passengers Assuming Passengers Travel Both to and From Destination	14,190
Percent of Public Transit Riders Who Commute to Work (APTA, 2008)	59%
Total Riders Commuting to Work on Public Transportation in Jacksonville, Daily	8,372
Percent of Workers Who Would be Forced to Quit Work Without Access to Public Transportation (Lee County Survey, 2005)	20%
Number of Commuters Who Would be Forced to Quit Work if Public Transportation Were Not Available	1,674
Average per Capita Income of JTA Riders (O&D Survey)	$24,900
Lost Wages and Economic Disruption Assuming Workers do not Find Work for One Year	$41,693,000

[7] Using the JTA Origin and Destination Survey we were able to geocode the address of riders linking it to 2010 census data that provides mean per capita income by zip code. We calculated average per capita income equal to $24,900 for public transit riders in Duval County.

PART 3: FUTURE IMPACTS, THE JTB/I-95/US 1 EXPANSION

In the previous two parts of this report, we presented the economic impacts of JTA expenditures over a 10-year study period (2002-2011) and we also examined some of the other benefits of JTA activity beyond this impact such as the benefits associated with fuel savings and work accessibility. The results from this analysis show conclusively that JTA adds substantially to the overall economic health of Duval County. As the city of Jacksonville continues to grow in the future, attracting new businesses and residents, it is important for JTA to properly plan for this growth and address the ongoing concerns of congestion, motor vehicle safety and other issues that arise in any urban transportation system.

To this end, JTA currently has a plan to improve the traffic operations and safety of the SR 202 corridor from US 1 to Belfort Road. This plan involves a system-to-system interchange at SR 202, Interstate 95, and US 1. JTA expects that improving the flow of traffic at this major interchange will result in a substantial benefit in terms of reduced congestion and improved traffic safety relative to the costs of the project. In a recent cost/benefit analysis carried out for JTA, evidence of substantial benefits relative to costs is given. Table 3.1 provides a summary of the cost benefit analysis from that report for the planned construction period, 2015-2018.

In addition to the net benefits from reduced congestion and improved motor vehicle safety that result if this project is successfully carried out, the proposed activity should have significant direct, indirect, and induced economic impacts associated with it. This project is a massive undertaking and JTA estimates that completing the project will require $120 million in construction costs over a four-year period. An investment of this magnitude will certainly increase the wages of local workers directly associated with the project as well as other households and capital owners through secondary (i.e. indirect and induced) effects.

A key aspect of the analysis in this part involves estimating these economic impacts based on the proposed construction costs of the project. To do so, we utilize IMPLAN, the input-output model discussed in Part 1 of the report. Recall, IMPLAN develops a sophisticated model which estimates the

interrelationships among industries in a given area and calculates important multipliers which are used to determine how the input and output of one sector of the economy impact the overall economic system. In the case of this proposed road construction project, JTA produces a highway interchange system (the output) using inputs such as employment to do so. The result of this investment is measurable economic impacts that we can estimate using the IMPLAN model.

Recall from Part 1 that the total economic impact of the labor income and output provided by JTA is measured in three different categories—direct, indirect and induced impacts. Direct impacts refer to the permanent jobs, wages and output of the JTA itself while indirect impacts refer to the jobs, wages and output created by firms and businesses that provide goods and services that are essential to the operations of JTA. Finally, the induced impacts refer to the spending of the wages and salaries of the direct and indirect employees on consumption items such as food and housing. Table 3.2 presents the estimated impacts over the planned construction period, 2015-2018, for employment, labor income, total value-added and output.

Table 3.2 Potential Economic Impacts of JTB Road Construction Project (2015-2018)

	Employment	Labor Income	Total Value Added	Ouput
Direct Effect	674	$36,747,243	$44,281,574	$99,422,451
Indirect Effect	277	$14,833,891	$21,935,990	$36,962,685
Induced Effect	365	$15,277,277	$27,381,298	$43,167,068
Total Effect	1,317	$66,858,412	$93,598,862	$179,552,204

As with the analysis in Part 1 of this report, the largest impacts are direct impacts, but through the multiplier process we get significant indirect and induced impacts as well. The information on employment indicates that over the four-year construction period, the investment in construction costs will support over 1300 total jobs. The direct jobs supported over this four-year period are 674, implying a job multiplier of 1.95 (total employment divided by direct employment) over the construction period. So

we expect that for every one job created directly by the proposed expansion to the JTB interchange, two total jobs are supported in the local economy.

The data on labor income show how the project investment raises the labor income of workers over the four-year construction period. Labor income here refers to employee compensation (wages plus benefits) and proprietor income. The results of this analysis indicate that the total impact on labor income between 2015-2018 is $66.8 million. In addition to labor income, the effects for total value-added and output are shown in the Table 3.2. Value-added refers to the difference between an industry's or an establishments total output and the cost of its intermediate inputs. It can also be thought of as the industry's contribution to the gross regional product (GRP), a measure of the value of final goods and services produced within a local economy. Our results indicate that over the four-year construction period, the investment of construction spending on the planned road project will produce a total of $93.5 million in total value-added. Finally, output refers to the value of production or sales within an industry. Our analysis suggests that over $179 million in total output results over the construction period as a result of the planned roadway construction project.

In discussing the impacts of this construction investment, we are assuming that the funding the $120 million in construction costs does not require raises in local taxes. This assumption is based on input from JTA regarding its goal to seek federal and state grant funding for the total cost of the project. Of course, if total funding through state and federal means is not possible and local taxes are required to fund a portion of the project, the estimated impacts in our discussion will be reduced to account for the reduced welfare of households that arise from the tax. Nevertheless, as we illustrated in Part 1 of this report, even when accounting for this reduction in household income via a sales/gas tax, we still expect a significant and sizable net economic impact.

SUMMARY OF FINDINGS

This report examines the economic effects of JTA public transit and road infrastructure using financial and operational data provided by JTA. JTA provides important transportation services and construction for Duval County which produces significant economic impacts in the local community. This report focuses on the economic impacts that arise from the capital and operating expenditures of JTA over the 10- year period 2002-2011. Additionally, the report investigates substantial benefits from JTA activity that transcends the typical economic impacts reported in most economic impact analyses. Specifically, we look at the mobility, travel improvement and economic benefits of JTA public transportation in Jacksonville, beyond the economic impact of its operating and capital spending. These benefits include time and fuel savings, reduced cost of road maintenance, personal costs of travel and employee/employer access to the workforce. Finally, the report examines the potential impact of a planned roadway construction projection on Butler Boulevard (JTB) at I-95 and US 1, the major interchanges in Duval County.

In the first part of the report, which examined the 10-year impacts of JTA expenditure, we found that on average over the 10-year period JTA's public transportation activities have the following significant economic impact on Jacksonville:

- ***More than 3000 jobs are supported,***
- ***More than $102 million in labor income is generated for Duval County residents,***
- ***JTA activity leads to over $138 million in value-added in the local economy and***
- ***Over $229 million in gross revenue for business is generated directly and indirectly as a result of the public transportation system.***

While almost all economic impact studies show the effects on income, output and value-added that result from a dollar investment in a local economy, often the true overall benefit of this investment is greater and involves other benefits that are not as readily observed and quantified. Such is the case with this analysis. We show that beyond the benefits generated through the economic multiplier process, there are other benefits that result from having public transportation in the Duval County. If public

transportation were not available, many riders would switch to other modes of travel. Multiple reports clearly show that with a public transportation system many more cars would be on the road adversely impacting traffic and road congestion which causes travel delays and wasted fuel. Using conservative assumptions we find that Jacksonville would lose at least $10,500,000 dollars annually in wasted fuel and wasted time if public transportation were not available.

Another benefit of public transportation is reduced wear and tear on roads and reduced road maintenance costs as passengers switch from driving to buses. These costs are substantial and are borne both by drivers and more broadly by taxpayers. Our study finds that there are road maintenance cost savings equal to $679,700 annually in Duval County due to public transportation.

If public transportation were not available, many commuters would be forced to drive themselves, take a taxi or catch a ride with relatives or friends increasing their personal costs of commuting. We estimate this added cost of commuting as the amount paid in maintenance, gas, and depreciation per trip, per day, less bus fare. We estimate that Jacksonville public transit passengers save $4,565,700 annually by riding buses instead of driving.

Finally, if public transportation were not available in Duval County, thousands of low-wage workers that rely on public transportation to commute to work would have to quit their jobs and search for new ones and businesses would have to search for replacements, greatly increasing search, hiring costs and costs of unemployment. Assuming these workers could not find work for a year afterward, there would be lost wages and an economic disruption equal to at least $41,693,000. In Table 5 we total these savings and find that Duval County mobility and travel improvement benefits associated with public transportation services amount to $57,438,000 annually and these benefits are shared by all residents in Duval County.

Table 4.1 Total Annual Savings in Mobility and Travel Improvement Due to Public Transportation Availability Jacksonville, FL

Reduced Traffic Delays and Wasted Fuel	$10,500,000
Decrease in Road Maintenance Cost	$679,699
Total Annual Cost Saving Using Public Transit Versus Driving Jacksonville, FL	$4,565,700
Lost Wages and Economic Disruption Assuming Workers do not Find Work for One Year	$41,693,000
Total Annual Savings in Mobility and Travel Improvement Due to Public Transportation Availability Jacksonville, FL	$57,438,000

Part 3 of the report examines the potential impacts of a future road construction project on Butler Boulevard at I-95 and US 1. This is a major planned construction project and projects such as these are critically important as the urban area grows to maintain improve traffic flow and motor vehicle safety. We provide estimates of the potential economic impacts of this planned expansion, which are summarized below.

- ***Every (one) direct job created by JTA supports two jobs in the overall economy, with over 1300 total jobs supported during the four-year construction period.***
- ***The construction will add a projected $66.8 million in labor income over a four-year period.***
- ***The contribution to gross regional product (i.e. total value-added) exceeds $93.5 million.***
- ***Businesses will gain over $179 million in gross revenue (output) over the four years.***

There are many other benefits to public transportation that not calculated in this report but that are nonetheless very tangible. For example, we know that public transit reduces congestion which reduces traffic accidents and fatalities, air pollution and driver stress. In addition because public transportation reduces congestion, there are improvements in transportation reliability (defined as the amount of extra time allocated in daily planning to allow for traffic congestion and 'unexpected' delays). This saves time for all commuters and improves commercial delivery systems and worker productivity. This report finds that JTA provides a wide variety of services and there are measureable benefits to having public

transit services in Jacksonville. Stakeholders throughout the community benefit from the public transportation system in Duval County.

APPENDIX

Table A1 The Impacts of Road Project Spending in Duval County ($)

Year	Employment	Labor Income	Total Value-added	Output
2002	1,038.30	52,708,761.80	73,789,968.20	141,552,484.50
2003	1,173.40	58,094,015.60	81,329,088.70	156,014,900.80
2004	1,551.40	76,446,371.90	107,021,587.30	205,301,234.80
2005	1,276.60	61,986,828.20	86,778,856.60	166,469,278.50
2006	1,008.50	49,139,570.50	68,793,256.00	131,967,211.10
2007	1,629.30	79,505,512.10	111,304,250.20	213,516,736.00
2008	1,613.80	79,657,227.20	111,516,644.60	213,924,175.60
2009	1,168.00	59,087,442.00	82,719,842.40	158,682,806.10
2010	817	41,474,125.20	58,061,966.80	111,381,206.20
2011	234.1	11,371,223.90	15,919,217.60	30,538,091.50

Table A2 The Impact of Public Transportation Service Expenditure in Duval County ($)

Year	Employment	Labor Income	Total Value-added	Output
2002	2,142.30	67,138,665.20	99,764,558.70	137,813,204.80
2003	2,248.40	67,907,972.30	100,907,709.00	139,392,334.70
2004	2,327.70	70,300,437.40	104,462,787.40	144,303,264.70
2005	1,802.10	48,961,167.50	72,753,744.10	100,500,887.00
2006	2,717.90	79,387,150.60	117,965,169.80	162,955,245.10
2007	2,700.20	79,644,911.50	118,348,189.10	163,484,341.90
2008	3,256.20	98,345,584.40	146,136,414.80	201,870,563.30
2009	2,946.50	87,413,055.20	129,891,245.90	179,429,740.40
2010	2,920.20	85,704,058.80	127,351,766.30	175,921,742.90
2011	2,922.00	85,755,415.30	127,428,079.50	176,027,160.80

Table A3 The Economic Impact of Capital Equipment Expenditure in Duval County ($)

Year	Employment	Labor Income	Total Value-added	Output
2002	26.3	1,464,910.70	3,192,743.90	14,659,777.30
2003	15.3	849,309.90	1,851,054.20	8,499,285.80
2004	24.1	1,336,371.60	2,912,595.50	13,373,450.10
2005	30	1,674,795.60	3,650,184.00	16,760,155.30
2006	10.3	581,167.40	1,266,643.00	5,815,907.80
2007	32.8	1,828,287.90	3,984,717.40	18,296,196.40
2008	0.1	4,210.20	9,176.10	42,133.00
2009	20	1,097,666.30	2,392,342.10	10,984,659.10
2010	28	1,558,577.60	3,396,889.20	15,597,128.90
2011	15	833,847.60	1,817,354.40	8,344,550.00

Table A4 The Impacts of JTA Operating Expenditure in Duval County ($)

Year	Employment	Labor Income	Total Value-added	Output
2002	168.2	5,001,277.70	7,431,638.10	10,265,948.80
2003	121	3,520,118.70	5,230,713.00	7,225,625.30
2004	161.5	4,735,119.30	7,036,140.60	9,719,614.80
2005	37.7	1,095,515.20	1,627,878.40	2,248,725.80
2006	30.5	889,476.10	1,321,715.10	1,825,796.60
2007	28.3	835,671.30	1,241,764.00	1,715,353.30
2008	22.9	674,572.60	1,002,379.70	1,384,671.60
2009	183	5,428,864.90	8,067,010.40	11,143,642.30
2010	119.6	3,511,507.70	5,217,917.50	7,207,949.80
2011	32.2	946,305.00	1,406,159.90	1,942,447.30

Table A5 The Impact of Sales Tax in Duval County ($)

Year	Employment	Labor Income	Total Value	Output
2002	-819.9	-34,475,506.50	-60,050,412.70	-95,672,515.10
2003	-838.4	-35,255,981.90	-61,491,353.40	-97,921,794.40
2004	-831.1	-34,952,564.10	-61,048,803.20	-97,154,650.10
2005	-934.9	-39,315,163.00	-68,758,547.50	-109,399,728.50
2006	-962.2	-40,482,978.40	-70,803,622.00	-112,679,576.20
2007	-906.9	-38,146,570.10	-66,800,889.70	-106,189,240.70
2008	-858.8	-36,141,598.60	-63,356,432.40	-100,580,151.00
2009	-755.9	-31,826,019.90	-55,797,955.60	-88,553,225.10
2010	-736.2	-30,985,000.30	-54,512,571.60	-86,529,315.00
2011	-738.7	-31,077,550.90	-54,869,534.40	-87,123,410.50