

## 2 VALUE PROPOSITION

The purpose of the Value Proposition is to define a number of metrics or interesting facts that clearly demonstrate the value of the existing *Xpress* system to external audiences including riders, potential riders, policy makers, and anyone who may make a financial contribution to the service through their tax dollars. Development of the Value Proposition included the selection of various metrics, development of methodologies that ensure their precision and accuracy over time, and determination of the answers to those metrics for use in Georgia Regional Transportation Authority (GRTA) marketing and messaging. The purpose of the Value Proposition is to create a set of facts to be used in external communication, some of which will be updated on a regular (annual) basis.

Figure 2-1 outlines a list of metrics for the Value Proposition, as well as a “takeaway” associated with each metric. The methodology for the development of the Value Proposition is described below.

### VALUE PROPOSITION DEVELOPMENT

*Xpress* service offers benefits for both taxpayers and riders—*Xpress* makes commutes easier for everyone. Metrics chosen for the Value Proposition benefit both groups. Riders benefit from cost savings, time savings, and regional access to jobs.

After identifying metrics that are valuable to taxpayers and riders, metrics were grouped within seven categories to further describe the benefits of *Xpress* service. The categories include congestion, economic impact, efficiency, cost, public value, public value and space efficiency, and environment.

Metrics chosen for the Value Proposition use data from a variety of sources. GRTA provided data related to transit operations, including passenger trips, passenger miles, vehicle miles, fuel consumption, passenger fares, and average speed. In addition to data provided by GRTA, data sources for the Value Proposition include the Georgia Transportation Institute (GTI), State Road and Tollway Authority of Georgia (SRTA), U.S. Census Bureau, Center for Economic Studies (CES), Longitudinal Employer-Household Dynamics (LEHD), Atlanta Regional Commission (ARC), Office of the Assistant Secretary for Research and Technology (OST-R), Automobile Association of America (AAA), Texas A&M Transportation Institute (TTI), U.S. Environmental Protection Agency (EPA), U.S. Energy Information Administration (EIA), and Victoria Transport Policy Institute (VPTI).

Additional data used in this analysis included average automobile vehicle occupancy, average fuel efficiency by vehicle type, average gasoline cost, automobile operating cost per mile, value of time per hour, cost per parking space, fuel carbon content, worker residence locations, peak hour person and vehicle throughput, and traffic volumes.

In total, *Xpress* passengers gain more than 2 million productive hours per year, for a total of 19 days in annual productive time gained per passenger. Taxpayers benefit from reduced congestion, which means fewer vehicles on the road and increased travel capacity on existing roadways. *Xpress* is a cost effective solution for reducing congestion and provides a 4-to-1 return on investment for taxpayers. Everyone in the region benefits from reductions in emissions and improved air quality as a result of *Xpress* service.

## ***Xpress*: A Shared Value**

As part of the Value Proposition exercise, a short promotional video called *Xpress: A Shared Value* was produced to highlight some of the benefits of *Xpress* to the community and its riders. Benefits described in the video include the following:

- Passengers from 44 counties travel 56 million miles per year on *Xpress*.
- *Xpress* removes 175,000 cars from I-285 and I-20 interchange annually. This location is identified as one of the worst bottlenecks in the U.S.
- *Xpress* saves \$125 million each year in regional congestion costs—a 4-to-1 return on investment for taxpayers.
- *Xpress* provides a connection between 3.4 million residents and 375,000 jobs across the region<sup>1</sup>.

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<sup>1</sup> Population living within a 10-mile radius from existing park-and-ride lots

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Figure 2-1 Value Proposition Metrics

Perspective	Category	Proposed Metric / Unit	Description	Preliminary Outcome	Takeaway	Data Required
Taxpayer and Rider	Congestion	<b>Annual Passenger Miles/Trips Taken on Xpress (Avoided VMT)</b>	A summation of the estimated FY13/14 passenger miles traveled on <i>Xpress</i> services. <i>Source: GRTA</i>	Daily: 213,103 miles Annual: 56,271,554 miles	Every day, <i>Xpress</i> nearly takes enough vehicle miles off the road to travel to the moon.	Passenger miles
Taxpayer	Congestion	<b>Vehicles Removed from Road</b>	Total ridership considering average Atlanta vehicle occupancy and that a vehicle is removed in both ways in peak direction. <i>Source: GRTA, GTI</i>	Approximately 2,085,800 vehicles removed from the freeway annually.	<i>Xpress</i> service removes over two million cars annually from congested freeways and interchanges in the Atlanta region.	Passenger trips, average vehicle occupancy
Taxpayer	Congestion	<b>Increased Travel Capacity into Downtown</b>	Highway off-ramps represent a significant bottleneck in traveling into downtown Atlanta. GRTA services help alleviate congestion in these locations by reducing the number of automobiles on the road. <i>Source: GRTA, GTI</i>	There are 3,300 boardings during the morning peak on <i>Xpress</i> routes traveling into downtown Atlanta, contributing to a reduction of 2,820 vehicles utilizing highway off-ramps, which equates to a 5% reduction of trips using downtown off-ramps in the morning peak.	During the peak hour, <i>Xpress</i> services reduce the number of vehicles on downtown ramps by 2,800 cars (5% of total traffic volume), improving mobility for all downtown commuters.	Peak traffic volumes, average vehicle occupancy, number of <i>Xpress</i> trips
Taxpayer	Congestion	<b>Increased Travel Capacity in Managed Lanes</b>	<i>Xpress</i> services contribute to increased travel capacity in managed lanes on highways in the region by carrying more people while using existing infrastructure. <i>Source: GRTA, SRTA</i>	<i>Xpress</i> commuter services account for 2% of the vehicles but 30% of the people in the managed lane during the morning peak.	<i>Xpress</i> services increase managed lane capacity by carrying 30% of people with only 2% of the vehicles in the managed lane during the morning peak period.	Peak hour person throughput, peak hour vehicle throughput, number of <i>Xpress</i> trips

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Perspective	Category	Proposed Metric / Unit	Description	Preliminary Outcome	Takeaway	Data Required
Taxpayer and Rider	Economic Impact	Enhanced Access to Regional Labor Pool	The total number of employees living within five miles of a GRTA park-and-ride lot. <i>Source: U.S. Census Bureau, CES, LEHD</i>	Businesses in the region have enhanced access to the regional labor pool due to <i>Xpress</i> services. There are 1,160,763 workers living within a 5-mile radius of <i>Xpress</i> park-and-ride lots.	<i>Xpress</i> services allow at least 1,160,763 workers in the regional labor pool access to jobs in the region.	Employee home locations
Taxpayer and Rider	Economic Impact	Jobs Accessed within 15 Minute Walk of <i>Xpress</i> Service (Annual)	Number of jobs within a ½ mile (straight-line buffer) around GRTA Bus stops <i>Source: GRTA, ARC</i>	367,415 jobs within a 15-minute walk of <i>Xpress</i> bus stops	Passengers have access to more than 367,000 jobs within walking distance of GRTA <i>Xpress</i> bus stops	Work locations, bus stop locations
Taxpayer	Economic Impact	Passenger Savings Reinvested into Local Economy	Wealth retained in the local community due to fuel and vehicle upkeep savings from using transit. <i>Source: CEOs for Cities New York City's Green Dividend</i>	The average <i>Xpress</i> passenger saves \$6,414 annually in fuel and vehicle operational costs. <sup>2</sup> According to research by CEOs for Cities, 75% of this number is retained in the local community, for an annual influx of up to \$22,861,614 into the local economy.	Reinvestment due to passenger savings in fuel and vehicle operational costs contributes up to \$22,861,614 annually to the local economy.	Average daily one-way passenger trips, passenger miles, average passenger vehicle fuel economy
Taxpayer and Rider	Economic Impact	Number of Counties Served	The extent of <i>Xpress</i> service coverage provides ample opportunity for drivers to utilize alternative transportation. <i>Source: GRTA</i>	GRTA service operates in 12 counties and draws from 44 of Georgia's 159 counties, allowing for greatly enhanced regional access.	GRTA service operates in 12 counties and draws from 44 of Georgia's 159 counties.	On-board survey

<sup>2</sup> Described in the Personal Transportation Costs Saved (at \$0.51/mile) metric

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Taxpayer and Rider	Efficiency	Miles per Gallon per Passenger	Miles per gallon average based on fuel consumption, distance traveled and passengers. <small>Source: GRTA</small>	<i>Xpress</i> has a fuel efficiency of approximately 41 miles per gallon per person.	On a per person basis, <i>Xpress</i> buses have roughly the same fuel efficiency as a Toyota Camry Hybrid.	Passenger miles, estimated fuel consumption
Taxpayer and Rider	Efficiency	Cost per Passenger Mile	Operational costs divided by total passenger miles. <small>Source: GRTA, AAA</small>	<i>Xpress</i> cost per person is approximately \$0.37/mile versus a typical vehicle is \$0.52/mile.	<i>Xpress</i> service is 41% more cost efficient on a mile-per-mile basis than driving alone.	Total operating cost, passenger miles
Rider	Cost	Fuel Costs Saved (Annual)	Passenger money saved based on no longer paying for fuel on their commute. <small>Source: GRTA, Atlantagasprices.com, OST-R Fuel Efficiency Average.</small>	\$1,948 annually per passenger	<i>Xpress</i> riders save an estimated \$1,900 each year in fuel costs.	Passenger miles, average passenger vehicle fuel economy
Rider	Cost	Personal Transportation Costs Saved (at \$0.51/mile)	Passenger money saved based on reduced total vehicle operational costs associated with their commute. <small>Source: GRTA, Atlantagasprices.com, OST-R Fuel Efficiency Average, AAA.</small>	\$6,414 annually per passenger	When considering total personal vehicle operational costs, <i>Xpress</i> riders save an estimated \$6,400 per year (including fuel).	Passenger miles, average passenger vehicle fuel economy
Rider	Cost	Cost Difference of <i>Xpress</i> versus Vehicle Ownership (Annual)	Cost difference between 12 months of <i>Xpress</i> ridership versus additional vehicle ownership. <small>Source: GRTA, AAA</small>	12 months of average sedan operation: \$9,122; 12 months of unlimited <i>Xpress</i> : \$1,500.	When people ride <i>Xpress</i> instead of owning a second car, they save over \$7,500 each year.	Average cost of automobile ownership, <i>Xpress</i> monthly pass fares
Rider	Public Value	Monetary Value of Time Saved/Personal Time Gained	Determination of hours on-board <i>Xpress</i> service where passengers can read, sleep, work, etc. <small>Source: GRTA, TTI</small>	Monetary equivalent of time saved or personal time gained: \$36,338,438 annually	<i>Xpress</i> provides a value of over \$36 million in productive time (not stuck in traffic) gained each year.	Average speed, passenger miles, value of time per hour

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Perspective	Category	Proposed Metric / Unit	Description	Preliminary Outcome	Takeaway	Data Required
Taxpayer	Environment	<b>Reduced Carbon Emissions (Annual)</b>	Reduction in million metric tons of carbon dioxide equivalent (MT CO <sub>2</sub> e). <i>Source: EPA, EIA</i>	<i>Xpress</i> services save 56,271,554 vehicle miles annually, equating to a net reduction of 13,821 MT CO <sub>2</sub> e after accounting for emissions generated by revenue and deadhead miles.	<i>Xpress</i> services contribute to a net reduction of 13,821 MT CO <sub>2</sub> e.	Passenger miles, average vehicle occupancy, average light duty vehicle fuel efficiency, average freight truck fuel efficiency, fuel carbon content
Taxpayer	Public Value and Space Efficiency	<b>Reduced Parking Needs (Annual)</b>	<i>Xpress</i> service reduces overall parking demand in Midtown and Downtown Atlanta, which could result in deferring the need for new parking construction. <i>Source: GRTA, VPTI</i>	Reducing the amount of vehicles in Downtown/Midtown equates to \$57 million in parking costs.	Fewer cars on the road reduce the demand for parking spaces, saving the equivalent of \$57 million in parking construction costs.	Cost per parking space, passenger trips, average vehicle occupancy