WARNER ROBINS AREA TRANSPORTATION STUDY (WRATS)

TRANSIT FEASIBILITY STUDY
PREFERRED PUBLIC TRANSIT SERVICE PLAN AND POTENTIAL SERVICE IMPROVEMENTS
10/9/12

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Introduction

The Metropolitan Planning Organization (MPO) for the Warner Robins Urbanized Area is the Warner Robins Area Transportation Study (WRATS). WRATS plans and coordinates transportation improvements for the Warner Robins metropolitan planning area consistent with federal surface transportation legislation.

The Warner Robins metropolitan planning area consists of all of Houston County and the northeastern portion of Peach County, Georgia. It includes the incorporated cities of Warner Robins, Byron, Centerville and Perry, as shown in Figure 1. The metropolitan planning area of Warner Robins consists of 417 square miles and approximately 149,000 people.

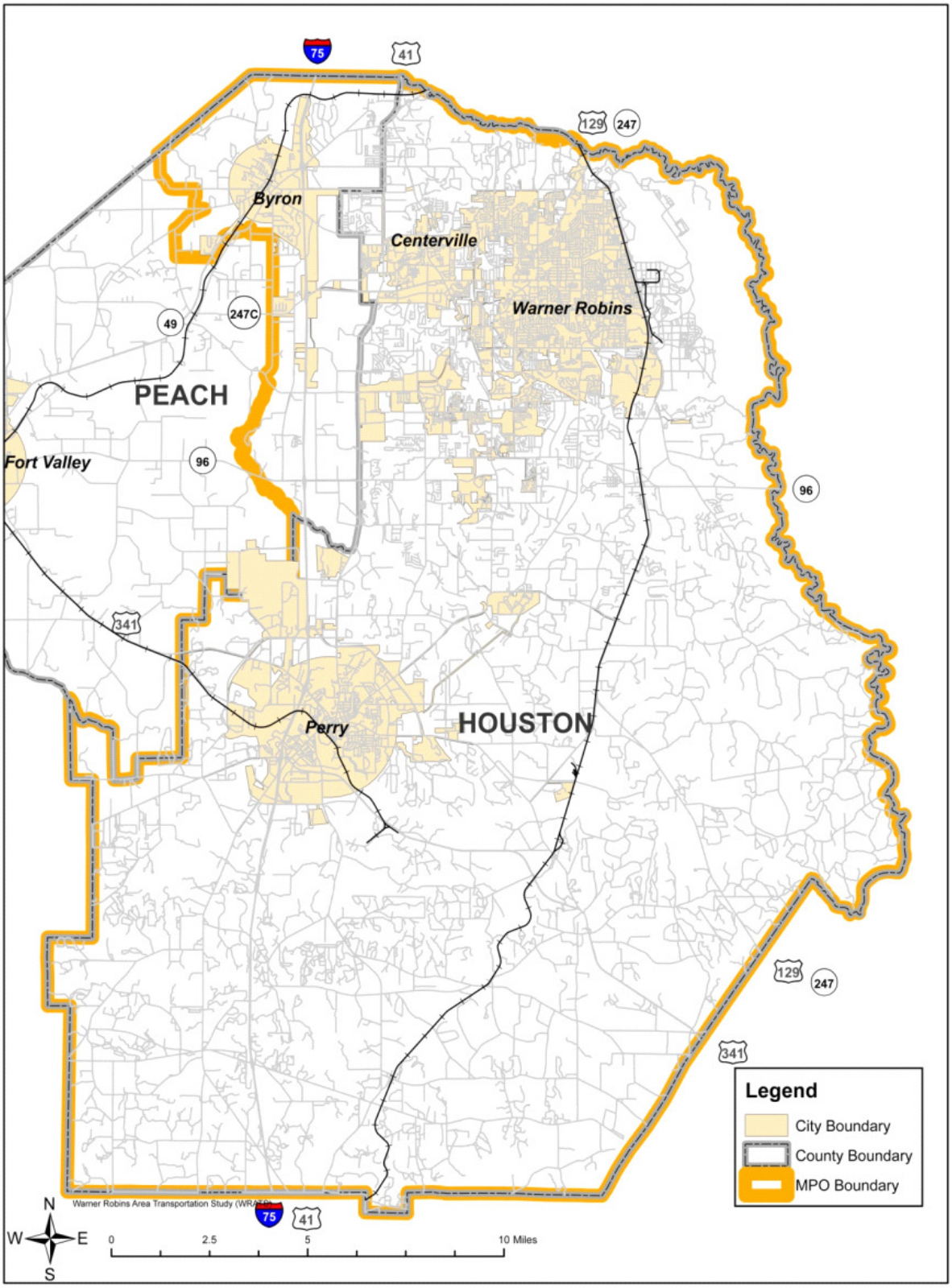
The Transit Feasibility Study (TFS) examines the need for transit services in the Warner Robins metropolitan planning area. As the area continues to grow and develop there is increasing interest in the potential for transit service. Recent success of the BiRD commuter bus service between Macon and Robins Air Force Base (RAFB) underscores the potential for similar service within the Warner Robins metropolitan area. In addition, numerous human service agencies and not for profits have stated that there is a need for transit service in Warner Robins among the populations that they serve. RAFB has been a strong supporter of transit and vanpool service, on base shuttle service, and commute alternatives as a means of reducing the number of vehicles entering and exiting the base and the amount of parking necessary on the base.

A transit feasibility study conducted by WRATS in 2003 recommended possible phased transit service options and assessed probable ridership and costs. However no action was taken as a result of the 2003 TFS, in part due to concern about who would pay for transit operations and operate the service, and in part due to concerns about the effectiveness of transit service in Warner Robins. A 2001 transit route feasibility study for service between Macon and RAFB resulted in the successful BiRD commuter service.

The 2012 WRATS TFS will update the study conducted in 2003 to reassess the market for transit taking into account demographic and development changes since 2003, and collecting new information from the public and stakeholder agencies on their views about the need for transit service in the Warner Robins metropolitan area. The TFS will provide a Transit Master Plan that identifies costs and funding associated with any recommended transit service options and an Implementation Plan that addresses phasing, marketing and operations for any recommended transit services.

This document recommends the preferred public transit service plan for the Warner Robins metropolitan planning area. The recommendation of the preferred service plan is based on input from the project Steering Committee, along with the operating requirements and level of service, O&M cost estimates, and order-of-magnitude capital cost estimates for the options described in the initial public transit service options report. The preferred transit service plan is fully described below in terms of operating requirements, O&M and capital cost estimates, projected ridership, and farebox revenue projections. It also describes potential long range service improvement options that may be considered once initial transit service has been established and the stronger performing routes have been identified.

Figure 1 – WRATS Study Area



Preferred Public Transit Service Plan

Based on the input received from stakeholders and the general public, the preferred transit service plan for the Warner Robins metropolitan planning is to introduce Alternative 3 as identified in the Initial Public Transit Service Options report—weekday express, local, flex and separate paratransit service—upon initial implementation. Doing so provides a comprehensive transportation network that takes the first steps toward meeting the diverse needs of the area. It also allows economies of scale to be realized when developing the operating and capital infrastructure to support the new transit system. In addition, providing a separate paratransit service ensures that on-time performance and service reliability for the entire transit service network will be of the utmost importance, which ultimately will build confidence among the system's riders.

Summary of Estimated Operating Requirements

Projected hours, miles and vehicle requirements, both daily and annualized, as presented in the Initial Public Transit Service Options report, are summarized below in Figure 2.

Figure 2 – Estimated Operating Requirements for Preferred Transit Service Plan

Route Name	Route Description	Preferred Service Plan		
		Daily Revenue Bus-Hours	Daily Revenue Bus-Miles	Peak Vehicles Required
Express Service: 5:00-9:00 a.m./2:30-6:30 p.m.		**8 a.m. trips/8 p.m. trips**		
Brown	Byron-Centerville-RAFB	16	165	2
Purple	Perry-Lake Joy-RAFB	24	272	3
Local Service: 6:00 a.m.-8:00 p.m.		**60-minute frequency**		
Red	Watson Boulevard	14	162	1
Blue	Russell Parkway	14	210	1
Green	South Houston Lake Road	14	176	1
Orange	Davis Drive	14	210	1
Flex Service - 6:30 a.m.-8:30 p.m.		**120-minute frequency**		
Pink	Perry Flex Bus	15	176	1
ADA Paratransit Service: 6:00 a.m.-8:00 p.m.				
ADA Paratransit Service		21	315	3
Total Daily Statistics		***132***	***1,686***	***13***
Total Annual Statistics		**32,700**	**418,100**	

Notes:
The Red and Green routes would be interlined
The Blue and Orange routes would be interlined

Summary of Estimated O&M Costs

The O&M cost methodology and results documented in the initial service options report provide a comparison of the costs associated with three illustrative scenarios, based on MTA and MGCAA cost models developed from actual operating experience in the area. Scenarios C and D apply to the preferred service plan. In Scenario C, MTA is assumed to operate all services. In Scenario D, MTA is assumed to operate the express, local, and flex routes, while MGCAA would operate the ADA paratransit service.

As shown in Figure 13 of that report, the total annual estimated O&M costs for these two scenarios are as follows:

- Scenario C (Separate Paratransit System Operated by MTA) $2,339,000
- Scenario C (Separate Paratransit System Operated by MTA and MGCAA) : $2,243,000

The more cost-effective Scenario D is assumed for the purposes of financial planning in the remainder of this study's tasks.

Summary of Estimated Capital Costs

The initial service options report also provides capital cost estimates associated with the preferred service plan, including vehicles, passenger amenities, an operations and maintenance facility, and miscellaneous equipment and start-up costs. Figure 3 presents order-of-magnitude costs for these items, in 2013 dollars.

As noted in the report, one of the most significant capital costs associated with new transit service in the Warner Robins area would be the establishment of an operations and maintenance facility centrally located in the service area. However, until a service provider has been selected, the cost of such a facility is largely an unknown. This study assumes that maintenance, storage, and fueling functions could be accommodated at an existing fleet maintenance facility owned by the local government, or, if service is contracted out, at a facility provided by the contractor. Similarly, the costs associated with park & ride spaces on private property is also unknown at this time. For those reasons, no costs have been included for these two capital items.

Figure 3 – Order-of-Magnitude Capital Cost Estimates for Preferred Service Plan

Cost Item	Units	Total Capital Costs
Buses for Express and Local Service	12	$1,512,000
Small Buses for ADA Paratransit and Flex Service	5	$375,000
Bus Stop Signs	800	$200,000
Passenger Waiting Shelters with Benches	16	$160,000
Park & Ride Lot Lease Costs	3	Unknown
Operating & Maintenance Facility	1	Unknown
Bus Related Equipment (Fareboxes, Destination Signs, Radios)	17	$210,000
Computer Hardware/Software	n/a	$40,000
Start-up Marketing Program	n/a	$50,000
System Total		**$2,547,000**

Summary of Projected Ridership

Ridership projections for the preferred public transit service plan are documented in the Transit Ridership Estimation report. The results of this analysis are summarized in Figure 4.

Figure 4 – Projected Ridership for Preferred Transit Service Plan

Route Name	Route Description	Ridership Projections		
		Average Weekday Passenger Trips	Passenger Trips per Revenue Hour	Annual Passenger Trips
Brown	Byron-Centerville-RAFB	121	7.6	30,000
Purple	Perry-Lake Joy-RAFB	118	4.9	29,300
Total Express Service		**239**	**6.0**	**59,300**
Red	Watson Boulevard	340	24.3	84,300
Blue	Russell Parkway	230	16.4	57,000
Green	South Houston Lake Road	280	20.0	69,400
Orange	Davis Drive	280	20.0	69,400
Pink	Perry Flex Bus	140	9.3	34,700
Total Local/Flex Route Service		**1,270**	**17.9**	**314,800**
ADA Paratransit Service		33	1.6	8,200
Total ADA Paratransit Service		**33**	**1.6**	**8,200**
System Total		**1,542**	**11.7**	**382,300**

Passenger Revenue Projections

Revenue forecasts were estimated by first assuming a fare structure for different types of service (e.g., express, local, flex, ADA paratransit), classes of passengers (e.g., adults, seniors, youth), and fare media (e.g., cash fare, discounted passes or tickets). Then, the average fare per passenger was estimated for each service type based on the experience of the MTA and other comparable peer transit agencies. Annual passenger farebox revenue was projected by applying the average fare per passenger to the ridership forecasts. The assumed fare structure

for the proposed transit services is as follows:

Express Service	**One-Way Fare**
Cash fare	$3.00
Monthly passes or multi-ride tickets	Price and media to be determined

Local Service	**One-Way Fare**
Base adult cash fare	$1.25
Senior citizens & persons with disabilities	$0.60
Youth 18 years old and under	$0.75
Child (shorter than farebox)	Free
Transfers	$0.50
Monthly passes or multi-ride tickets	Price and media to be determined

ADA Paratransit Service	One-Way Fare
Cash fare	$2.50
Monthly passes or multi-ride tickets	Price and media to be determined

The full fare for the express service was assumed to be $3.00, consistent with what MTA currently charges for the BiRD route to RAFB. For the proposed local and flex routes, the full fare would be $1.25. The full fare for ADA paratransit service was assumed to be twice the full fare for local service (or $2.50), consistent with what the ADA allows.

The average fare for express and ADA paratransit service was assumed to be 100% of the full fare, as half-fare requirements for seniors and persons with disabilities do not apply to these services. The average fare for local service was assumed to be a conservative 50% of the adult cash fare, based on a mix of full cash fares and discounted fares (seniors, persons with disabilities, youth and multi-trip passes). Figures 5 and 6 present the projected farebox revenues and farebox recovery ratios for the preferred transit service plan.

Figure 5 – Projected Farebox Revenues for Preferred Transit Service Plan

Route Name	Route Description	Farebox Revenue Projections		
		Annual Passenger Trips	Average Fare Assumptions	Annual Farebox Revenue
Brown	Byron-Centerville-RAFB	30,000	$3.00	$90,000
Purple	Perry-Lake Joy-RAFB	29,300	$3.00	$87,900
Total Express Service		**59,300**	**$3.00**	**$177,900**
Red	Watson Boulevard	84,300	$0.63	$52,700
Blue	Russell Parkway	57,000	$0.63	$35,600
Green	South Houston Lake Road	69,400	$0.63	$43,400
Orange	Davis Drive	69,400	$0.63	$43,400
Pink	Perry Flex Bus	34,700	$0.63	$21,700
Total Local/Flex Route Service		**314,800**	**$0.63**	**$196,800**
ADA Paratransit Service		8,200	$2.50	$20,500
Total ADA Paratransit Service		**8,200**	**$2.50**	**$20,500**
System Total		**382,300**	**$1.03**	**$395,200**

Figure 6 – Projected Farebox Recovery Ratios for Preferred Transit Service Plan

Service Type	Projected Farebox Recovery		
	Annual Farebox Revenue	Annual O&M Cost Estimates	Farebox Recovery Ratio
Express Bus	$177,900	$913,000	19.5%
Local/Flex Bus	$196,800	$1,249,000	15.8%
Demand Response (ADA Paratransit)	$20,500	$81,000	25.3%
System Total	**$217,300**	**$1,330,000**	**16.3%**

Potential Long Range Service Improvements

Throughout the study process, Steering Committee members and stakeholders expressed a desire to phase in public transit service in the Warner Robins metropolitan planning area, starting with a relatively small system that could grow over time. This section discusses the importance of monitoring the performance of the preferred service plan for approximately one to two years before considering possible service improvements. It then provides a number of potential service improvements Warner Robins may want to consider in the future, and describes each in terms of incremental revenue-hours, revenue-miles, and peak vehicles. Estimated annual O&M costs, capital costs, projected ridership, farebox revenues, and funding needs associated with future service improvements would need to be assessed prior to the proposed implementation year.

Performance Monitoring

Typically, transit service takes 12 to 24 months before its full ridership potential is realized. This initiation period allows riders to develop seasonal ridership patterns and planners to collect enough data to identify month to month variations associated with summer and holiday periods. During this startup period, ridership data should be collected daily at a route level and summarized each month. Periodic trip and stop level data that records the number of boardings and alightings should also be collected to better identify productive (and nonproductive) trips and route segments. Besides raw ridership data, route productivity should also be measured through a variety of criteria.

Many of these criteria were identified in the Peer Analysis earlier in this study and may include:

- Passenger boardings per hour
- Passenger boardings per mile
- Passenger boardings per trip
- % of farebox recovery
- Subsidy per passenger trip

These performance measures can be calculated at a system level to compare with the before-mentioned peers. However, it is also important to calculate these performance measures at the route level so that corrective adjustments can be made to poorer performing routes while additional investments are targeted toward stronger routes.

Potential Service Improvements

Once the service is established and the stronger performing routes have been identified, there are a number of service improvements that may be considered for implementation. It is unknown which of these may be in the greatest demand until the initial service plan is actually implemented and has had the opportunity to take root. Thus, this section outlines several service improvement options listed in no particular order. The additional revenue-hours, revenue-miles and peak vehicles (if applicable) have been calculated for each of these and are outlined in the sections below. Route level operating statistics are provided in greater detail in Appendix A at the conclusion of this document.

Weekday Evening Service

The base level of service in the preferred transit service plan recommends that all local routes operate between 6:00 a.m. and 8:00 p.m. on weekdays only. This means the last round trip on the **Watson Boulevard**, **South Houston Lake Road** and **Russell Parkway** routes would depart Galleria Mall at 7:00 p.m. Since the mall typically closes at 9:00 p.m. on weeknights, riders who are employed at the mall may not be able to use transit for their return trip home. Thus, this service improvement would extend service two hours later on all routes. The additional revenue-hours, revenue-miles and peak vehicles (if applicable) are summarized in Figure 7 below.

Figure 7 – Incremental Operating Requirements for Weekday Evening Service

	Revenue-Hours	Revenue-Miles	Peak Vehicles
Local/Flex Route Service			
Daily (Weekdays)	**10**	**132**	**0**
Annualized	**2,500**	**32,700**	**0**
ADA Paratransit Service			
Daily (Weekdays)	**2**	**30**	**0**
Annualized	**500**	**7,500**	**0**
Total Daily (Weekdays)	**12**	**162**	**0**
TotalAnnualized	**3,000**	**40,200**	**0**

Saturday Service

The base level of service in the preferred transit service plan recommends that all local routes operate on weekdays only. However, many potential riders are employed in service and medical industries that also require availability to work on Saturdays. Thus, this service improvement would extend the base level of service that is provided on weekdays (6:00 a.m. until 8:00 p.m.) to Saturdays as well. The additional revenue-hours, revenue-miles and peak vehicles (if applicable) are summarized in Figure 8 below.

Figure 8 – Incremental Operating Requirements for Saturday Service

	Revenue-Hours	Revenue-Miles	Peak Vehicles
Local/Flex Route Service			
Saturdays	**71**	**934**	**0**
Annualized	**3,700**	**48,600**	**0**
ADA Paratransit Service			
Saturdays	**8**	**150**	**0**
Annualized	**400**	**7,800**	**0**
Total Saturday	**79**	**1,084**	**0**
TotalAnnualized	**4,100**	**56,400**	**0**

Saturday Evening Service

Like weekdays, many mall employees may be required to work until closing time on Saturdays. Thus, this service improvement would extend service two hours later on all routes to complement the Saturday service improvement described above. The additional revenue-hours, revenue-miles and peak vehicles (if applicable) are summarized in Figure 9 below.

Figure 9 – Incremental Operating Requirements for Saturday Evening Service

	Revenue-Hours	Revenue-Miles	Peak Vehicles
Local/Flex Route Service			
Saturdays	10	132	0
Annualized	500	6,900	0
ADA Paratransit Service			
Saturdays	1	14	0
Annualized	100	700	0
Total Saturday	11	146	0
TotalAnnualized	600	7,600	0

Weekday Frequency Improvement (Local Routes)

The base level of service recommends that the four local routes operate at 60-minute frequency on weekdays. Once service has been established and ridership begins to grow, passenger loads may reach a point where available capacity is fully utilized. Outside of purchasing larger buses (at a greater capital cost), it may be prudent to improve frequency on the local service instead. Doing so will not only alleviate crowding, but will also make transit a more convenient option as riders' wait times would be cut in half, ultimately increasing ridership. This service improvement would improve frequency to every 30 minutes on the four local routes from 5:30 a.m. until 7:30 p.m. The additional revenue-hours, revenue-miles and peak vehicles (if applicable) are summarized in Figure 10 below.

Figure 10 – Incremental Operating Requirements for 30-Minute Weekday Frequency (Local Routes)

	Revenue-Hours	Revenue-Miles	Peak Vehicles
Local/Flex Route Service			
Daily (Weekdays)	50	674	4
Annualized	12,400	167,100	4
ADA Paratransit Service			
Daily (Weekdays)	0	0	0
Annualized	0	0	0
Total Daily (Weekdays)	50	674	4
TotalAnnualized	12,400	167,100	4

Weekday Frequency Improvement (Flex Route)

The base level of service in the preferred transit service plan recommends that the Perry Flex Bus operate at 120-minute frequency on weekdays. Once service has been established and ridership begins to grow, passenger loads may reach a point where available capacity is fully utilized. Outside of purchasing larger buses, which may be less adaptable for a flex bus application, it may be prudent to improve frequency on the flex route service instead. Doing so will not only alleviate crowding, but will also make transit a more convenient option as riders' wait times would be cut in half, ultimately increasing ridership. This service improvement would improve frequency to every 60 minutes on the Perry Flex Bus from 7:30 a.m. until 9:30 p.m. The additional revenue-hours, revenue-miles and peak vehicles (if applicable) are summarized in Figure 11 below.

Figure 11 – Incremental Operating Requirements for 60-Minute Weekday Frequency (Flex Route)

	Revenue-Hours	Revenue-Miles	Peak Vehicles
Local/Flex Route Service			
Daily (Weekdays)	**13**	**152**	**1**
Annualized	**3,200**	**37,700**	**1**
ADA Paratransit Service			
Daily (Weekdays)	**0**	**0**	**0**
Annualized	**0**	**0**	**0**
Total Daily (Weekdays)	**13**	**152**	**1**
TotalAnnualized	**3,200**	**37,700**	**1**

Appendix A

Detailed Operating Statistics for Potential Service Improvements

Potential Service Improvements

Base Level Weekday Service Plus Later Evening Service

Route ID	Route Description	Service Frequency				Daily Trips	Peak Period		One-Way Distance (Miles)	Average Weekday		Bus Requirements			
		AM Peak Period	Midday Period	PM Peak Period	Eve. Period		Time (Min.)	Cycle Time		Rev. Hrs.	Rev. Miles	AM Peak Period	Midday Period	PM Peak Period	Eve. Period
	EXPRESS SERVICE														
BROWN	Byron-Centerville-RAFB	30	n/a	30	n/a	16	31	60	10.3	16.0	164.8	2.00	0.00	2.00	0.00
PURPLE	Perry-Lake Joy-RAFB	30	n/a	30	n/a	16	51	90	17.0	24.0	272.0	3.00	0.00	3.00	0.00
	LOCAL SERVICE														
RED	Watson Boulevard	60	60	60	60	32	23	60	5.8	16.0	185.6	1.00	1.00	1.00	1.00
GREEN	South Houston Lake Road	60	60	60	60	32	26	60	7.5	16.0	240.0	1.00	1.00	1.00	1.00
BLUE	Russell Parkway	60	60	60	60	32	22	60	6.3	16.0	201.6	1.00	1.00	1.00	1.00
ORANGE	Davis Drive	60	60	60	60	32	26	60	7.5	16.0	240.0	1.00	1.00	1.00	1.00
	FLEX ROUTE SERVICE														
PINK	Perry Flex Bus	120	120	120	120	17	41	120	11.7	17.0	198.9	1.00	1.00	1.00	1.00
TOTALS						**177**		**510**		**121.0**	**1502.9**	**10.00**	**5.00**	**10.00**	**5.00**

Note: PINK layover time is inclusive of deviation hours and miles.

Add Saturday Service

Route ID	Route Description	Service Frequency				Daily Trips	Peak Period		One-Way Distance (Miles)	Average Weekday		Bus Requirements			
		AM Peak Period	Midday Period	PM Peak Period	Eve. Period		Time (Min.)	Cycle Time		Rev. Hrs.	Rev. Miles	AM Peak Period	Midday Period	PM Peak Period	Eve. Period
	EXPRESS SERVICE														
BROWN	Byron-Centerville-RAFB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PURPLE	Perry-Lake Joy-RAFB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	LOCAL SERVICE														
RED	Watson Boulevard	60	60	60	60	28	23	60	5.8	14.0	162.4	1.00	1.00	1.00	1.00
GREEN	South Houston Lake Road	60	60	60	60	28	26	60	7.5	14.0	210.0	1.00	1.00	1.00	1.00
BLUE	Russell Parkway	60	60	60	60	28	22	60	6.3	14.0	176.4	1.00	1.00	1.00	1.00
ORANGE	Davis Drive	60	60	60	60	28	26	60	7.5	14.0	210.0	1.00	1.00	1.00	1.00
	FLEX ROUTE SERVICE														
PINK	Perry Flex Bus	120	120	120	120	15	41	120	11.7	15.0	175.5	1.00	1.00	1.00	1.00
TOTALS						**127**		**360**		**71.0**	**934.3**	**5.00**	**5.00**	**5.00**	**5.00**

Note: PINK layover time is inclusive of deviation hours and miles.

Potential Service Improvements (Continued)

Add Saturday Service Plus Later Evening Service

Route ID	Route Description	Service Frequency					Peak Period		One-Way	Average Weekday		Bus Requirements			
		AM Peak Period	Midday Period	PM Peak Period	Eve. Period	Daily Trips	Time (Min.)	Cycle Time	Distance (Miles)	Rev. Hrs.	Rev. Miles	AM Peak Period	Midday Period	PM Peak Period	Eve. Period
	EXPRESS SERVICE														
BROWN	Byron-Centerville-RAFB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PURPLE	Perry-Lake Joy-RAFB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	LOCAL SERVICE														
RED	Watson Boulevard	60	60	60	60	32	23	60	5.8	16.0	185.6	1.00	1.00	1.00	1.00
GREEN	South Houston Lake Road	60	60	60	60	32	26	60	7.5	16.0	240.0	1.00	1.00	1.00	1.00
BLUE	Russell Parkway	60	60	60	60	32	22	60	6.3	16.0	201.6	1.00	1.00	1.00	1.00
ORANGE	Davis Drive	60	60	60	60	32	26	60	7.5	16.0	240.0	1.00	1.00	1.00	1.00
	FLEX ROUTE SERVICE														
PINK	Perry Flex Bus	120	120	120	120	17	41	120	11.7	17.0	198.9	1.00	1.00	1.00	1.00
TOTALS						**145**		**360**		**81.0**	**1066.1**	**5.00**	**5.00**	**5.00**	**5.00**

Note: PINK layover time is inclusive of deviation hours and miles.

Improve Peak and Midday Weekday Frequency on Local Routes from 60 to 30 Minutes

Route ID	Route Description	Service Frequency					Peak Period		One-Way	Average Weekday		Bus Requirements			
		AM Peak Period	Midday Period	PM Peak Period	Eve. Period	Daily Trips	Time (Min.)	Cycle Time	Distance (Miles)	Rev. Hrs.	Rev. Miles	AM Peak Period	Midday Period	PM Peak Period	Eve. Period
	EXPRESS SERVICE														
BROWN	Byron-Centerville-RAFB	30	n/a	30	n/a	16	31	60	10.3	16.0	164.8	2.00	0.00	2.00	0.00
PURPLE	Perry-Lake Joy-RAFB	30	n/a	30	n/a	16	51	90	17.0	24.0	272.0	3.00	0.00	3.00	0.00
	LOCAL SERVICE														
RED	Watson Boulevard	30	30	30	60	52	23	60	5.8	26.0	301.6	2.00	2.00	2.00	1.00
GREEN	South Houston Lake Road	30	30	30	60	52	26	60	7.5	26.0	390.0	2.00	2.00	2.00	1.00
BLUE	Russell Parkway	30	30	30	60	52	22	60	6.3	26.0	327.6	2.00	2.00	2.00	1.00
ORANGE	Davis Drive	30	30	30	60	52	26	60	7.5	26.0	390.0	2.00	2.00	2.00	1.00
	FLEX ROUTE SERVICE														
PINK	Perry Flex Bus	120	120	120	120	17	41	120	11.7	17.0	198.9	1.00	1.00	1.00	1.00
TOTALS						**257**		**510**		**161.0**	**2044.9**	**14.00**	**9.00**	**14.00**	**5.00**

Note: PINK layover time is inclusive of deviation hours and miles.

Potential Service Improvements (Continued)

Improve Peak and Midday Weekday Frequency on Flex Route from 120 to 60 Minutes

Route ID	Route Description	Service Frequency					Peak Period		One-Way	Average Weekday		Bus Requirements			
		AM Peak Period	Midday Period	PM Peak Period	Eve. Period	Daily Trips	Time (Min.)	Cycle Time	Distance (Miles)	Rev. Hrs.	Rev. Miles	AM Peak Period	Midday Period	PM Peak Period	Eve. Period
	EXPRESS SERVICE														
BROWN	Byron-Centerville-RAFB	30	n/a	30	n/a	16	31	60	10.3	16.0	164.8	2.00	0.00	2.00	0.00
PURPLE	Perry-Lake Joy-RAFB	30	n/a	30	n/a	16	51	90	17.0	24.0	272.0	3.00	0.00	3.00	0.00
	LOCAL SERVICE														
RED	Watson Boulevard	60	60	60	60	28	23	60	5.8	14.0	162.4	1.00	1.00	1.00	1.00
GREEN	South Houston Lake Road	60	60	60	60	28	26	60	7.5	14.0	210.0	1.00	1.00	1.00	1.00
BLUE	Russell Parkway	60	60	60	60	28	22	60	6.3	14.0	176.4	1.00	1.00	1.00	1.00
ORANGE	Davis Drive	60	60	60	60	28	26	60	7.5	14.0	210.0	1.00	1.00	1.00	1.00
	FLEX ROUTE SERVICE														
PINK	Perry Flex Bus	60	60	60	120	28	41	120	11.7	28.0	327.6	2.00	2.00	2.00	1.00
TOTALS						**172**		**510**		**124.0**	**1523.2**	**11.00**	**6.00**	**11.00**	**5.00**

Note: PINK layover time is inclusive of deviation hours and miles.