Central Ohio Transit Authority

DRAFT
Short-Range Transit Plan
2007 to 2011

PREPARED BY:
Central Ohio Transit Authority

March 2007

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1.0 INTRODUCTION

1.1 Purpose of the Short-Range Transit Plan

The Central Ohio Transit Authority (COTA) is the primary provider of public transit services in the central Ohio region. COTA strives to deliver safe, reliable and cost-effective transportation services to the public. As such, COTA biennially develops a five-year plan known as the Short-Range Transit Plan (SRTP). The SRTP analyzes the transit market in central Ohio and the ability of the current COTA system to serve the market.

The SRTP serves as a vital tool to assess COTA's current operations, describe future transit enhancements, and detail methods for prioritizing expenditures, service, and funding in order serve the community's transit needs. The SRTP also fulfills state, federal and regional reporting requirements, and is an important planning document justifying grant applications to the state and federal governments.

1.2 Coordination with the Long-Range Transit Plan (LRTP)

Since the preparation of the last SRTP, significant changes have occurred in the central Ohio transit market. While population, employment, and traffic congestion continued to increase, public transit service in the central Ohio area was significantly reduced. For example, according to the Mid-Ohio Regional Planning Commission (MORPC), population grew by 7.3 percent from 2000 through 2005 in the seven-county, central Ohio area, including a 5.0 percent increase in Franklin County. During this same period, as a result of declining sales-tax receipts, declining federal and state assistance, and increases in fuel and healthcare costs, COTA reduced annual fixed-route service hours of operation by 25 percent.

Realizing that COTA was not fully meeting the region's existing public transit needs, and the need for a more robust transit system will be even greater in the future, in late 2005, COTA began soliciting public and community stakeholder input in order to develop the Long-Range Transit Plan (LRTP). Through a seven-month public involvement process, COTA was able to collect important input about needed transportation improvements, and how the future transit system should look (for additional information about the LRTP, see Section 4).

After the COTA Board of Trustees adopted the LRTP in August 2006, COTA placed on the November 7, 2006 ballot a, 10-year renewable 0.25 percent sales and use tax levy (Issue 7). Issue 7 passed, and will be combined with COTA's permanent 0.25 percent local sales tax approved by voters in 1999. The successful passage of Issue 7 was critical in helping to begin expansion of public transit services in central Ohio.

1.3 Transportation Improvement Program

This SRTP serves as a tool to carefully identify where COTA plans to modify or implement new transit resources during the 2007-2011 time period, as outlined in the LRTP. Of noteworthy importance, the SRTP incorporates the Transportation Improvement Program (TIP), which can be found in Section 11. The TIP is based on the present and projected four-year service needs of the area and identifies the capital needs, cost projections, funding requirements, and programmed service improvements for each year.

1.3.1 Operating Summary of the TIP

Although Issue 7 was approved by voters in November 2006, collection of the new tax will become effective April 1, 2007. It should be noted that beginning April 1, 2007, COTA elected to hold its current .25 percent permanent tax in abeyance for nine months. Suspending the permanent sales tax was done in order to fulfill a promise to the community to not increase the overall effective sales tax rate in Franklin County. This commitment was made in anticipation of an already planned .25 percent reduction in the sales tax by Franklin County, effective December 31, 2007.

Actual collection of both COTA levies will not begin until January 1, 2008, and due to a three month processing time for disbursements of sales tax receipts by the State of Ohio, receipt of the full .5% sales tax revenue will not be realized until April 2008. As a result, COTA will begin a gradual increase in annual fixed-route service hours in 2007, followed by a more aggressive increase in fixed-route hours between 2008 and 2011. Recognizing the tremendous commercial and residential growth that has occurred throughout the entire central Ohio region, additional service hours will be distributed throughout COTA's service area, which includes Franklin, and small portions of Delaware, Fairfield, and Licking Counties.

Because it will take time to receive the additional sales tax revenue, hire and train operators, and purchase more buses, COTA will initially focus on adding service to relieve overcrowded buses and expanding hours of operation (e.g., extending hours later in the evenings). In the short term, morning peak routes, off-peak travel hours, and weekend service improvements will not require additional buses. Following these actions, COTA will begin implementing new transit services.

Included in this SRTP, COTA will:

- Add 29,013 hours of fixed-route service in 2007 (approximately 40,000 annualized hours). For 2008-2011, COTA will add approximately 60,000

annualized hours of service per year. In total, COTA fixed-route service hours will increase from 623,932 to 893,598 between 2007 and 2011 (43.2 percent increase).

- Beginning in 2008, COTA's mobility service program, Project Mainstream, is estimated to grow 5.8 percent from 2007 service levels. Project Mainstream is demand-responsive service for persons with disabilities which limit their ability to use the fixed-route bus system. Despite prior reductions in fixed-route service within the past few years, this complementary paratransit service has increased significantly during the last eleven years as COTA came into compliance with Title II of the Americans with Disabilities Act (ADA).

Due to an increase in ridership in mobility services and decrease in federal and state funding, COTA continues to face the challenge of identifying and evaluating cost-effective measures to provide transportation solutions for the growing population of persons with disabilities and low incomes. One component in providing alternative methods to traditional mobility service delivery is the use of sedan vouchers. In 2004, COTA implemented the more flexible Sedan Voucher program. The Sedan Voucher Service program will be expanded to provide better service at a lower cost to persons with special transit needs in the community. This service is available 24-hours a day, 7- days a week. For 2007, it is projected that COTA will provide approximately 158,000 total trips for persons with disabilities. By 2011, COTA's mobility service's budget is estimated to increase 29 percent from 2006 mobility services expenditures.

Major service initiatives during 2007-2011 are presented in Section 5. Although receipt of additional sales tax revenue does not begin until April 2008, service improvements for 2007 include:

- Improving weekday peak and off-peak travel time service frequencies in order to reduce overcrowding problems on major local routes, including the #1 Cleveland/Livingston Ave., #2 N. High/E. Main St., #6 Mt. Vernon/Sullivant Ave., #10 E. Broad/W. Broad St., #11 Oak-Bryden/St. Clair Ave., and the #15 Grove City locals;

- #2 N. High St. Local – add later evening service until 2:45 a.m. on Friday and Saturday nights between downtown and The Ohio State University.

- Improving frequency on several express routes that currently have only one trip during morning or evening peak commute times. A second trip will be added AM and PM for the following express routes:

    - #29 Polaris (reverse commute service)

- #33 North Central
- #38 Northeast
- #39 New Albany
- #43 E. Broad St.
- #49 Southeast
- #51 ODOT/ODPS (additional trip added in AM, currently two trips in the PM)
- #53 Lincoln Village
- #57 Hilliard
- #60 Arlington
- #67 East Hilliard

In addition to continued service improvements on existing routes (e.g., improved frequency of service, minor realignments, etc.) during 2007-2011, COTA will implement several new routes, establish new park and ride facilities, extend evening hours of operation on weekdays, Saturdays, and Sundays, and continue to explore new and innovative service delivery methods. Highlights include:

- Extending the weekday 10:45pm and 11:45pm downtown line-ups to 11:00pm and 12:00 midnight
- Adding an 11:00pm and midnight downtown line-up on Saturdays
- Adding an 8:00pm and 9:00pm downtown line-up on Sundays
- #3 Northwest Blvd Local – Extend route north from Kingsdale Shopping Center to the Sawmill Road/Summit View Road area.
- #3 W. Mound Street Local – Extend from Georgesville Rd/Industrial Mile area to Hall Rd/Galloway rd. area.
- #6 Mt. Vernon Avenue Local – Extend service to the new Chalmers P. Wylie Veterans Center located on James Rd.
- #6 Sullivant Avenue Local – Extend to W. Broad St. and Galloway Rd. area.
- #9 Leonard/Brentnell Local – Realign route by discontinuing service to Northern Lights and extending to the Easton area.
- #83 Oakland-Weber Crosstown – Extend service west from Kingsdale Shopping Center to Hilliard-Rome Rd. area.
- #89 Hamilton Road Crosstown – Extend north to the Easton area.
- #92 James Road Crosstown – Extend service to the Chalmers P. Wylie Veterans Center located on James Rd.
- #17 Greenlawn/Gantz Local – Begin new service between downtown and Grove City Park and Ride
- #21 OSU/Easton Express – Begin new weekend evening express service between OSU and the Easton area.
- #29 Polaris Express – Establish a new Polaris area park and ride and peak period, peak direction express service between Polaris and downtown.
- #40X Sunbury Rd. Express – Establish a new Sunbury Rd./SR-161 area park and ride, and express service between the Sunbury Rd./SR-161 area and downtown.

- #49X US-33 Express – Establish a new Gender Rd./US-33 area park and ride, and express service between the US-33/Gender Rd. area and downtown.
- #50 South Columbus Express – Establish a new US-23 Rathmell Rd. area park and ride, and express service between the US-23/Rathmell Rd. area and downtown.
- #55 Avery Perimeter Express – Establish a new Dublin area park and ride, and express service between the US-33 /Avery Rd. area and downtown
- #55X – Add new express service between the Dublin area and the OSU campus area
- #59 Sawmill Express – Establish a new Sawmill Rd./Summitview Rd. area park and ride, and express service between the Sawmill/Summitview area and downtown
- #85 Brice/Gender Crosstown – Add new crosstown service between Canal Winchester and the I-270 E. Broad St. area.
- #93 Polaris Crosstown – Add new crosstown service between the Westerville Park and Ride and the Crosswoods area via Polaris Parkway.
- #94 SR-161 Crosstown – Add new crosstown service between the Cleveland Ave/SR-161 area and Avery Rd./Perimeter Loop area.
- #96 E. Fifth Ave. Crosstown – Add new midday and later evening service.
- #97 Georgesville/Phillipi Crosstown – Add new crosstown service between Georgesville Square and Fisher Rd.
- #100 Hilliard-Rome Rd. Crosstown – Add new crosstown service between Westwoods Park and Ride and Avery Rd./Perimeter Loop area.

As a result of the proposed service expansion presented in this SRTP, COTA's projected operating expenses are projected to increase from $70,774,928 in 2007 to $100,839,151 in 2011.

1.3.2 Capital Summary of the TIP

Capital items required for public transit service include vehicles, vehicle maintenance facilities, passenger amenities (such as shelters and benches), transit facilities (e.g., park and rides/transit centers), various hi-tech computer and security related systems, etc. Many capital elements will be required to improve and expand COTA's transit services over the next five years, including:

- Fixed-route buses: In general, the procurement process for ordering and delivery of fixed-route buses takes approximately 18 to 24 months. As such, beginning in 2007 and for each year thereafter, COTA will order forty buses per year. This smoothing approach for bus purchases better allows COTA to replace vehicles in a predictable and timely manner, and allows COTA to ramp up service levels as quickly as possible within our financial constraints. It should be noted that COTA will replace one 1987 GMC 40', and thirty-one Flxible 35' and 40' buses in the fourth quarter 2007 with 35' Gillig buses.

These replacement buses were ordered in mid-2006 as part of the prior year's planning activities, and are not included in the 2008-2011 TIP tables.

As part of future bus purchases, COTA will increase the use of smaller, neighborhood friendly 30' buses. The Authority plans to purchase thirty large 40' and ten small 30' buses in each of the 2008-2011 TIP years. The smaller buses will allow for better matching of bus resources to passenger load demands, and due to their lower unit cost for the 30' vehicles, will help COTA maximize available dollars for much needed capital investments. During this SRTP cycle, the following vehicles will be replaced:

- 2008 – Two 31' Chance Trolleys, four 35' and eleven 40' 1993 Flxibles, seven 35' and five 40' 1995 Flxibles
- 2009 – No replacements as all new vehicles delivered will be for expansion
- 2010 – Eighteen 40' 1995 Flxibles
- 2011 – Nine 35' and fifteen 40' 1995 Flxibles

In addition to replacement buses, in order to facilitate future growth of COTA's fixed route system, COTA's fleet will expand each year as follows:

- 2008 – Ten small 30' and one large 40' vehicles
- 2009 – Ten small 30', forty large 40' and refurnish five 40' Flxible from 1995
- 2010 – Ten small 30' and twelve large 40' vehicles
- 2011 - Ten small 30' and six large 40 vehicles

As a result of service expansion efforts over the next five years, the total fixed-route active bus fleet will increase from 234 in 2007 to 342 buses in 2011.

- COTA will need to replace fifty-one Project Mainstream vehicles between 2007-2011. An additional eight vehicles will be purchased to support expansion of Project Mainstream delivery services.

- COTA plans to begin preliminary engineering in 2007 and complete final design of a paratransit maintenance and storage facility. The facility will begin construction in SFY 2009, and complete construction in 2010.

- Park and rides/transit centers: During the 2007-2011 planning period, COTA will make a significant investment in the design and construction of several park and ride/transit center facilities in order to support expanded express-route service. Locations and planned construction timeframes include:

  - SR-161/US 33 and Avery Rd/Perimeter Loop area (2009-2010)

- I-71 and Polaris Parkway area (2009-2010)
- US-33 and Gender Rd. area (2009-2010)
- I-70 and SR-256 area (2010-2011)
- Sawmill Rd. and Summitview Rd. area (2010-2011)

For the Avery Road/Perimeter Loop and Polaris Parkway locations, until land parcels are purchased by COTA, and construction of the park and ride is completed, COTA will seek to establish temporary park and ride agreements with area businesses.

Additionally, COTA will:

- Investigate relocating the south Hilliard area park and ride currently located just east of Hilliard-Rome Road and south of Trabue Road, closer to Hilliard-Rome Road and I-70 (2008-2009).
- Expand the number of parking spaces from 37 to approximately 59 at the Delawanda Park and Ride, located just north of the intersection of Morse Road and North High St. (2008)

The SRTP provides the community with a performance and service delivery based approach to meet immediate transit needs while proactively mapping out strategies to provide workable and sustainable transit initiatives for the future. Throughout the implementation of this plan, COTA's Board of Trustees and management staff will continue to work vigorously to provide affordable, cost effective public transit services to the citizens of Central Ohio.

2.0 PUBLIC TRANSIT IN THE COLUMBUS METROPOLITAN STATISTICAL AREA

2.1 Formation of COTA

In 1970, the Columbus and Southern Ohio Electric Company, parent corporation of the Columbus Transit Company (CTC), announced its decision to dispose of the bus company. In order to preserve transit in the central Ohio region, a group of citizens formed the Advisory Committee on Transit. One of the Committee's first actions was to lobby the State legislature to permit the formation of regional transit authorities. Once enacted, the next step was the creation of the Central Ohio Transit Authority (COTA), as an entity.

The agreement creating COTA was authorized by the Franklin County Commissioners and the City Councils of Bexley, Columbus, Gahanna, Grandview Heights, Grove City, Hilliard, Reynoldsburg, Upper Arlington, Westerville, Whitehall, and Worthington. A thirteen member Board of Trustees was created for COTA. The Board of Trustees is composed of eleven trustees appointed by the mayors of the eleven member cities, and two trustees selected by the Franklin County Commissioners.

On June 29, 1973, an agreement for COTA to purchase the privately owned bus company from CTC and the Columbus and Southern Ohio Electric Company was signed. The actual transition occurred in January 1974. Ridership in the last year of CTC ownership (1973) was 12,975,000.

2.2 Historical Ridership Trends and Local Funding Efforts

As shown in Appendix B, Annual Passenger and Operating Statistics, COTA ridership and service began to grow in the first year of public operation. Ridership reached its peak in 1985 with 26,700,334 passengers and 822,289 hours of operation. In 1986 and 1987, work stoppages negatively affected the amount of service provided and ridership. In 1988, the downward trend was reversed as both ridership and service increased.

With the defeat of a local-sales tax issue in November of 1988, COTA was required to make significant reductions in service in order to stretch its resources to the November 1989 election. As a result, COTA's ridership dropped in 1989. In November 1989, COTA passed a temporary ten-year, 0.25 percent sales tax that provided the essential local funds to restore the productive service eliminated in 1989 and provide for modest growth in the system.

In order to provide financial support for implementation of COTA's 1995 Expanded Bus Plan, COTA placed an additional 0.25% 10-year temporary sales tax issue on the ballot in November 1995. Following the close defeat of this issue, COTA developed a long-term plan titled "Vision 2020" which included both expansion of COTA's bus service and the introduction of commuter and light rail (see Section 4).

Facing the expiration of the 1990 ten-year 0.25 percent sales tax, COTA sought permanent funding for existing levels of service and additional funding to implement Vision 2020. Two separate 0.25 percent sales tax issues, Issues 20 and 21 were placed on the November 1999 ballot for voter approval. Issue 20 successfully passed and established for the first time in COTA's history a permanent source of funding; however, Issue 21 did not pass.

Over the past several years, strategic partnerships aimed to expand transit service and increase ridership have been formed with many local colleges, universities, social service agencies, and businesses. These partnerships made a positive impact towards improved transit service in the central Ohio area, however, as the national economy began experiencing a downward trend in 2001, public transit systems across the country, including COTA, experienced dwindling local, state, and federal assistance.

Over the past several years, COTA yearly budgets were negatively impacted by rapidly increasing healthcare insurance, fuel, and utility costs. During the six-year period from 2001 to 2006, COTA was forced to reduce fixed-route service hours by approximately 25 percent. In January 2006, in an effort to maintain a balanced and fiscally responsible budget, COTA was forced to raise fixed-route and mobility service bus fares by an average of 12 percent. As a result, COTA's fixed-route ridership declined to 14,797,951 passengers in 2006 (Appendix B-1 provides annual data on passengers, service hours and miles for the years 1974-2006).

During these difficult times, COTA recognized that as the region was growing, unmet transportation needs were also increasing throughout the community. In the fall of 2005, COTA began soliciting public and community stakeholder input in order to develop the Long-Range Transit Plan (LRTP). In November 2006, COTA placed before voters a 10-year, renewable 0.25 percent sales tax levy (Issue 7). Issue 7 successfully passed, and effective January 1, 2008, will be combined with COTA's permanent 0.25 percent local sales tax approved in 1999.

2.3 Transit Market in the Columbus Metropolitan Statistical Area

The Columbus Metropolitan Statistical Area (MSA) consists of seven counties in central Ohio. The counties include: Delaware, Fairfield, Franklin, Licking, Madison, Morrow, and Pickaway. The population for this area is 1,714,227[1].

Franklin County has a population of 1,131,7751, making it the MSA's largest county in terms of population. A map of the Columbus MSA and Franklin County are shown in Figures 2-1 and 2-2, respectively. There are twenty-five incorporated municipalities in Franklin County. Columbus is the largest city in Franklin County, with a population of 739,364[2] in Franklin County, and a total population of 754,837[3].

COTA's service and taxing areas consist of Franklin County and small portions of Delaware, Fairfield, and Licking Counties (see Figure 2-2). The areas served outside of Franklin County are within municipalities that were signatories to the agreement which created COTA (i.e. Columbus, Reynoldsburg, and Westerville).

2.4 COTA System

COTA's public transit services are provided via two primary service operations: fixed-route bus service and mobility services. The following information describes in greater detail the important roles each of these programs serves in providing transit service to central Ohio residents.

2.4.1 Fixed-Route System

The backbone of COTA's public transit system is fixed-route bus service. Service is provided on a repetitive, fixed-schedule basis along specific routes, with vehicles stopping to pick up passengers at, and deliver passengers to, specific locations. COTA operates four types of fixed routes:

- Local: which make all stops and travel through or end downtown;
- Express: which make few or limited stops and start or terminate downtown;
- Crosstown: which operate between two non-downtown points; and

[1] Mid Ohio Regional Planning Commission (MORPC)
[2] U.S. Census Bureau/MORPC
[3] U.S. Census Bureau/MORPC

- LINK: which circulate through major activity centers or residential development areas. LINK routes are designed for smaller (approximately 30') buses, and serve as a connector to regular fixed-route services, and to COTA transit centers.

A timed-transfer system goes into effect at 10:00 p.m. on weekdays allowing passengers to conveniently transfer in the downtown. Currently, the final trip from the downtown is 11:45 p.m. on weekdays, 10:00 p.m. on Saturdays, and 7:00 p.m. on Sundays.

Table 2-1 on page 2-9 summarizes the COTA system by day of week and time of day. Maps of the entire COTA system, as well as evening, Saturday and Sunday service follow the Existing Service Table. COTA's current passenger fare structure is included in Table 2-2, located on page 2-15.

Over the past several years, COTA has been forced to reduce service during a period in which development continued to occur in outlying areas, resulting in large low-density areas not being served or being underserved by public transit. During the 2001 to 2006 period, COTA's annual service hours declined 25 percent. In addition, the frequency of service on many routes was stretched resulting in longer scheduled times between buses. In brief, through a number of recent public meetings regarding COTA's future plans for improving transit service, COTA heard how the quality of life in the central Ohio region has diminished as the role of public transit in our region's transportation system has declined. As part of addressing these concerns, this SRTP serves to initiate a commitment for fixed-route service improvements that focus on four key areas of improvement:

- Improved service frequency;
- Expanded service coverage area;
- Expanded hours of operation; and
- Decreased travel times.

A description of fixed-route service improvements planned for the 2007-2011 timeframe can be found in Section 5.

2.4.2 Bus Only Freeway Shoulder Program

COTA has partnered with the Ohio Department of Transportation (ODOT) to implement a pilot project to operate express buses on freeway shoulders. Beginning in November 2006, buses traveling on I-70 east of downtown are now able to merge onto the freeway shoulder to avoid congestion delays. Only COTA buses are authorized to use the shoulders. This system is being used successfully on

Buses on Freeway Shoulder in Minneapolis, Minnesota

more than 230 miles of the freeway system in Minneapolis.

Guidelines for shoulder use by express buses were developed in cooperation with ODOT, MORPC, Ohio State Highway Patrol, Federal Highway Administration, City of Columbus, and the Columbus Police Department. Upon successful completion of the pilot, the program will be expanded to other key freeways (I-71 north and south of downtown Columbus, I-670 east and west, I-70 west of downtown, and State Route 315). Express buses on freeway shoulders will also be considered on I-270 and other limited-access highways.

By opening up freeway shoulders for bus-only operations, transit customers will realize time savings and improved reliability. In Minneapolis, this service has boosted express performance and increased ridership. In addition, the bus-only freeway shoulder program has increased roadway capacity and serves as a low-cost approach to reducing freeway congestion.

2.4.3 U-Pass Program

U-Pass is short for "Universal Pass" and is usually characterized by providing unlimited access to transit services at a reduced cost. Effective March 31, 1997, COTA added service to its system as a result of an overwhelming majority vote by The Ohio State University's (OSU) undergraduate and professional student body to pay an additional $9.00 fee per quarter ($13.50 for professional students), for unlimited use of the COTA system.

After a successful twenty-month trial period, the option to continue this was approved again by OSU students in January 1999. Continuation of the GO BUS! U-Pass program was approved by an overwhelming majority (90 percent) of voting students. The GO BUS! program has provided improved frequency of service and/or modified alignments on North High Street and Neil Avenue, additional crosstown service from the campus area to the Lennox Town Center (including late night service on the weekdays as well as weekend service), and expanded new local service to the Bethel/Sawmill and Tuttle Mall areas. COTA also provides limited express service at the beginning and end of each quarter from the OSU campus area to Port Columbus Airport. In total, there are ten bus routes that provide service in and around the OSU campus. As part of the bus expansion program, weekend late night service is planned on North High Street between OSU and downtown. Additionally, new evening express service is planned between OSU and the Easton shopping and entertainment area.

COTA also has formed similar U-Pass partnerships with the Columbus College of Art & Design and Columbus Public Schools.

2.4.4 Bike 'n Bus

As of September 2005, each COTA fixed-route bus is equipped with a bike rack that allows a customer to take their bike along with their bus trip. Providing this multimodal service helps reduce the number of automobiles on the road, increases bus stop accessibility, and provides safety for bike riders who may encounter bad weather, mechanical problems, fatigue, or poor visibility due to darkness at night or in the early morning. Throughout the SRTP timeframe, in conjunction with partners such as the Central Ohio Bicycle Coalition and Columbus Outdoor Pursuits, COTA will continue to build on the progress of this successful program, ensuring all new fixed-route buses are equipped with bike racks, and that the Bike 'n Bus program is promoted across the central Ohio community.

COTA Bike 'n Bus

Additionally, COTA will continue to promote and explore expansion of its bike locker program. Five park and ride lots have bike storage lockers located on site providing security for customers who would like to ride their bike only to their boarding location, then take the bus. COTA will also investigate installing low-security bike racks near destinations along various routes in the transit system. Bike storage locations and other bike-friendly amenities are included on system maps and printed timetables.

FIGURE 2-1
THE COLUMBUS MSA

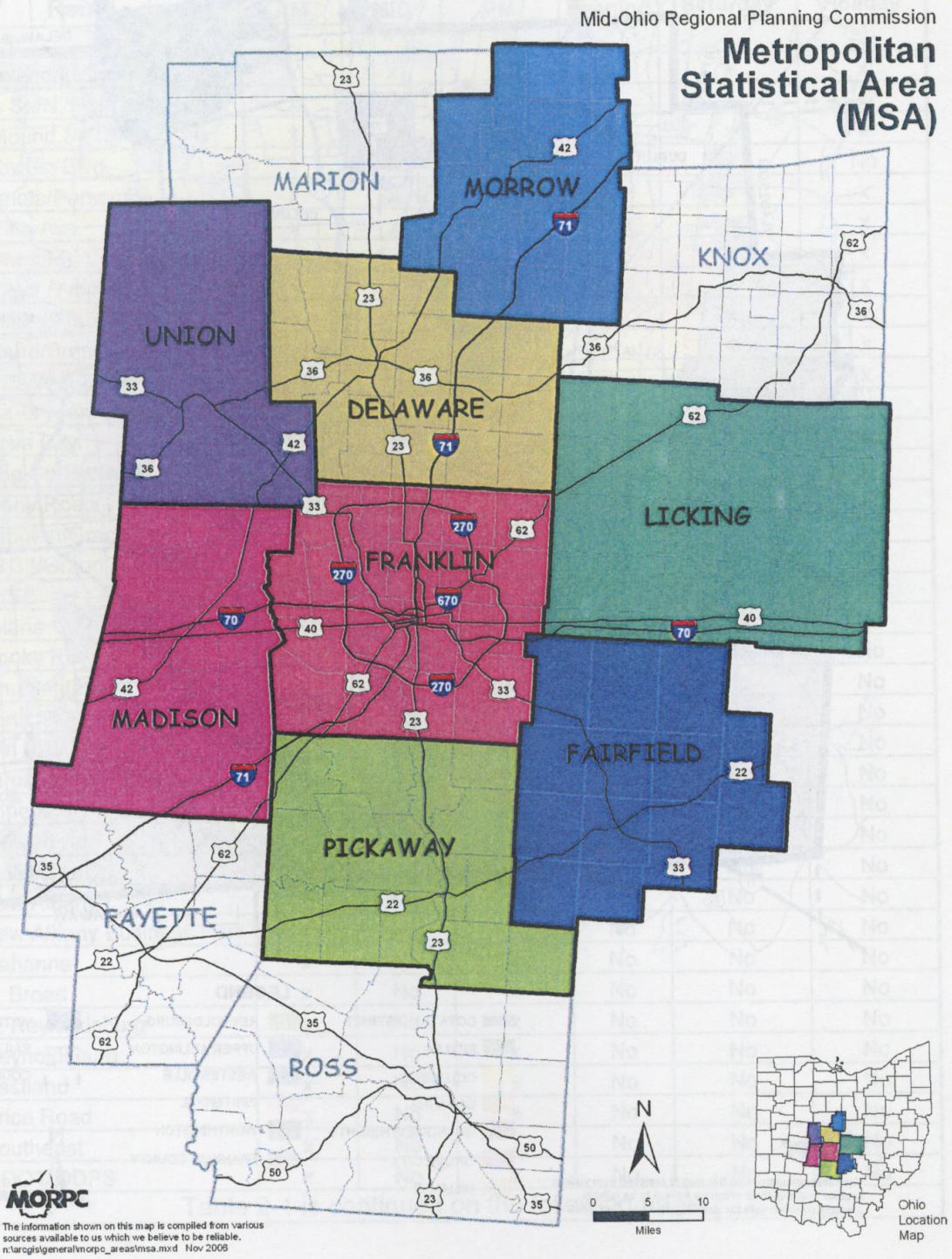
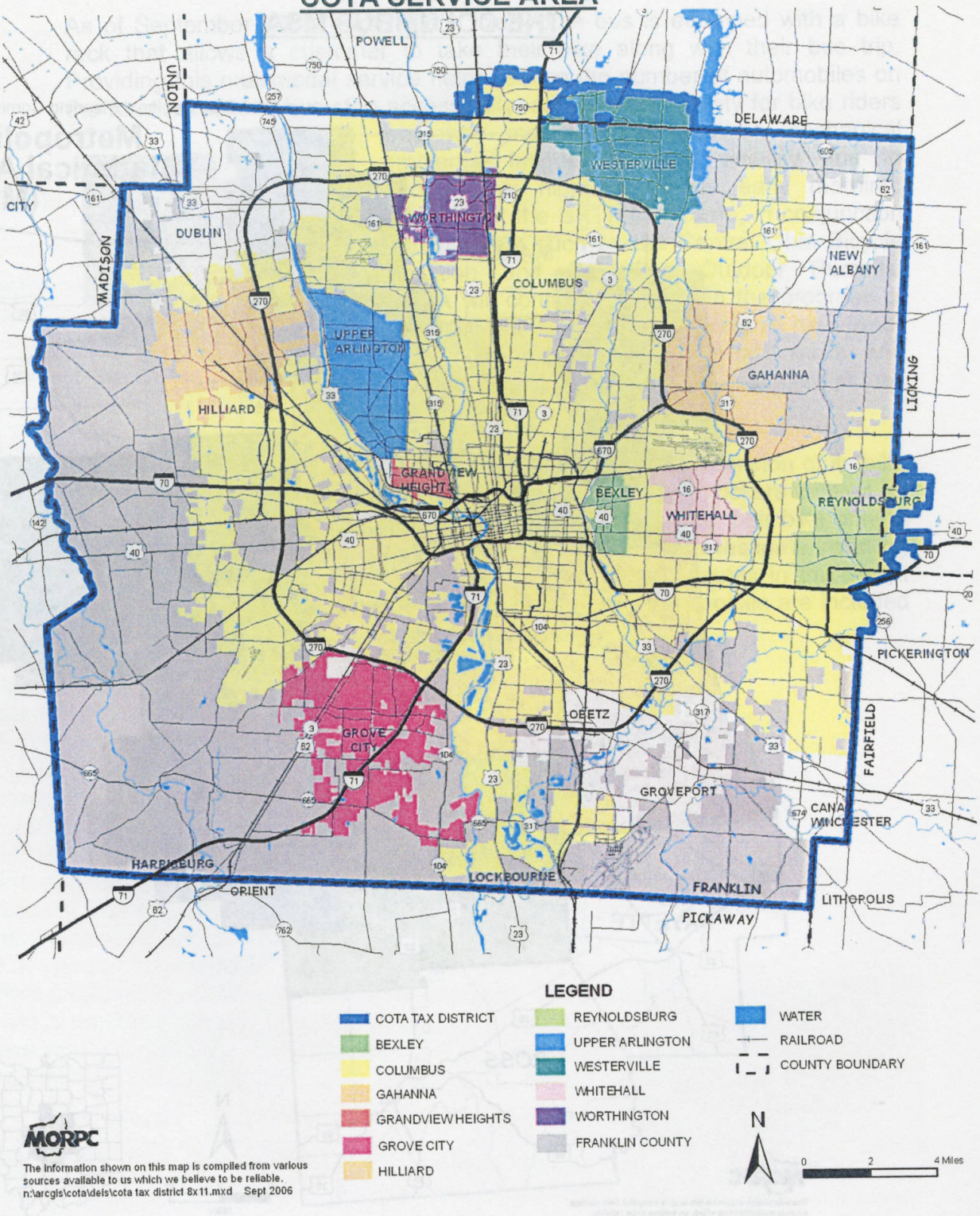


FIGURE 2-2
COTA SERVICE AREA



LEGEND

- COTA TAX DISTRICT
- BEXLEY
- COLUMBUS
- GAHANNA
- GRANDVIEW HEIGHTS
- GROVE CITY
- HILLIARD
- REYNOLDSBURG
- UPPER ARLINGTON
- WESTERVILLE
- WHITEHALL
- WORTHINGTON
- FRANKLIN COUNTY
- WATER
- RAILROAD
- COUNTY BOUNDARY

N

0 2 4 Miles

MORPC

The information shown on this map is compiled from various sources available to us which we believe to be reliable.
n:\arcgis\cota\dels\cota tax district 8x11.mxd Sept 2006

TABLE 2-1
EXISTING COTA SERVICE AS OF MARCH 2007

Route	Weekday				Saturday	Sunday & Holiday
	AM	MID	PM	Evening		
LOCALS						
#1 Cleveland/Livingston	x	x	x	x	x	x
#2 Main St./N. High St.	x	x	x	x	x	x
#3 W. Mound St.	x	x	x	x	x	x
#3 Northwest Blvd.	x	x	x	x	x	No
#4 Indianola/Parsons Ave.	x	x	x	x	x	x
#5 W. Fifth Ave.	x	x	x	x	x	x
#6 Sullivant/Mt. Vernon Ave	x	x	x	x	x	x
#7 Neil Ave./Whittier St.	x	x	x	x	x	x
#8 Hamilton/Frebis Ave.	x	x	x	x	x	x
#9 Leonard/Brentnell	x	x	x	x	x	x
#10 East/West Broad St.	x	x	x	x	x	x
#11 Oak-Bryden/St.Clair	x	x	x	x	x	x
#15 Grove City	x	x	x	x	x	No
#16 Long St.-Easton/S. High	x	x	x	x	x	x
#18 Kenny Road	x	x	x	x	x	x
#19 Arlington/Grandview	x	No	x	No	No	No
#69 US 33/Grandview Ave.	x	No	x	No	No	No
EXPRESS						
#29 Polaris	x	No	x	No	No	No
#30 Smoky Row	x	No	x	No	No	No
#31 Worthington	x	No	x	No	No	No
#33 North Central	x	No	x	No	No	No
#34 Karl Road	x	No	x	No	No	No
#35 Tamarack	x	No	x	No	No	No
#36 Annehurst	x	No	x	No	No	No
#37 Westerville	x	No	x	x	No	No
#38 E. Westerville	x	No	x	No	No	No
#39 New Albany	x	No	x	No	No	No
#40 New Albany Business Park	x	No	x	No	No	No
#41 Gahanna	x	No	x	No	No	No
#43 E. Broad	x	No	x	No	No	No
#44 N. Reynoldsburg	x	No	x	No	No	No
#45 Reynoldsburg	x	No	x	No	No	No
#46 Eastland	x	No	x	No	No	No
#47 Brice Road	x	No	x	No	No	No
#49 Southeast	x	No	x	No	No	No
#51 ODOT/ODPS	x	No	x	No	No	No

Table 2-1 is continued on the following page

TABLE 2-1 (Continued)

EXISTING COTA SERVICE AS OF MARCH 2007

Route	Weekday				Saturday	Sunday & Holiday
	AM	MID	PM	Evening		
EXPRESS (continued)						
#52 OSU/Airport (operates at beginning and end of OSU academic quarters)	x	x	x	x	x	x
#53 Lincoln Village-New Rome	x	No	x	No	No	No
#54 London-Groveport	No	x	x	x	No	No
#56 Tuttle	x	No	x	No	No	No
#57 Hilliard	x	No	x	No	No	No
#58 Dublin	x	No	x	No	No	No
#60 Arlington	x	No	x	No	No	No
#61 Kenny Road	x	No	x	No	No	No
#64 Grove City	x	No	x	No	No	No
#67 East Hilliard	x	No	x	No	No	No
CROSSTOWNS						
#81 Hudson/Ohio	x	x	x	x	x	No
#83 Oakland-Weber	x	x	x	x	x	No
#84 Arlington/OSU/Lennox/ Grandview	x	x	x	x	x	x
#87 Agler-Cassady	x	x	x	No	x	No
#89 Hamilton Road	x	x	x	x	x	x
#92 James Road	x	x	x	x	x	x
#95 Morse/Henderson	x	x	x	x	x	No
#96 Fifth Avenue	x	x	x	x	No	No
LINKS						
Linden	x	No	x	x	No	No

FIGURE 2-3
WEEKDAY SERVICE AS OF MARCH 2007

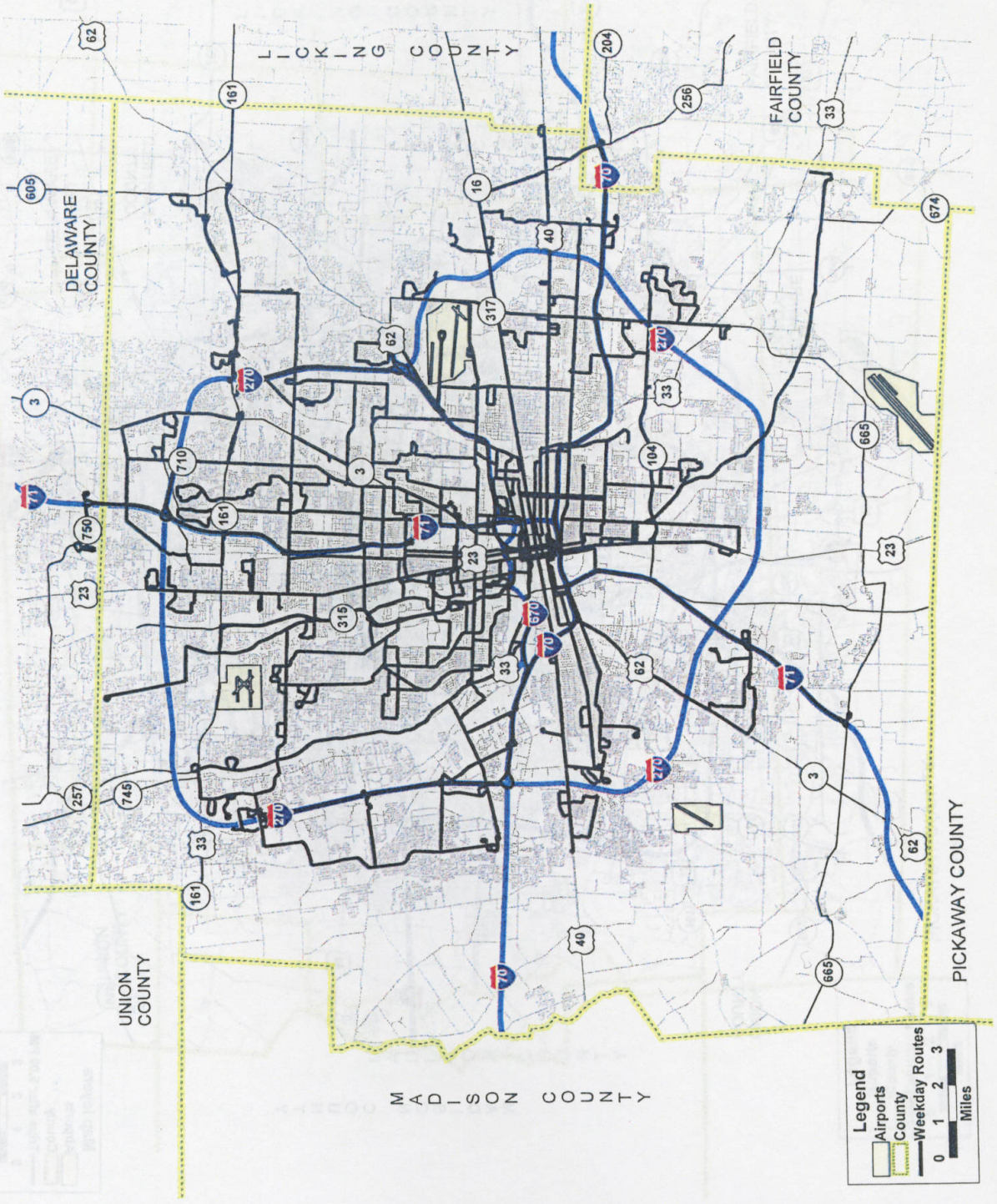


FIGURE 2-4
WEEKDAY ROUTES OPERATING ONE COMPLETE TRIP AFTER 6:00 P.M. AS OF MARCH 2007

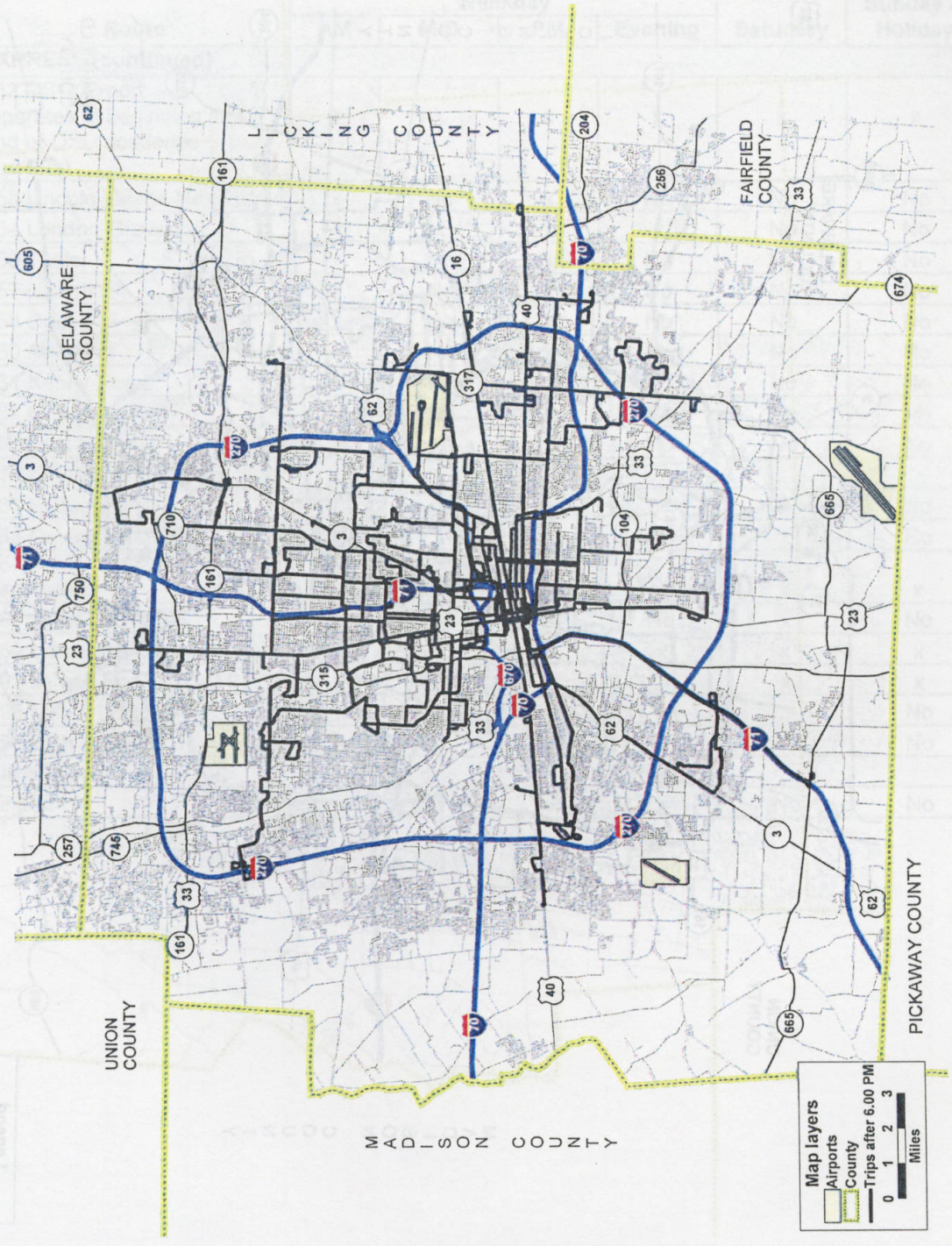


FIGURE 2-5

SATURDAY SERVICE AS OF MARCH 2007

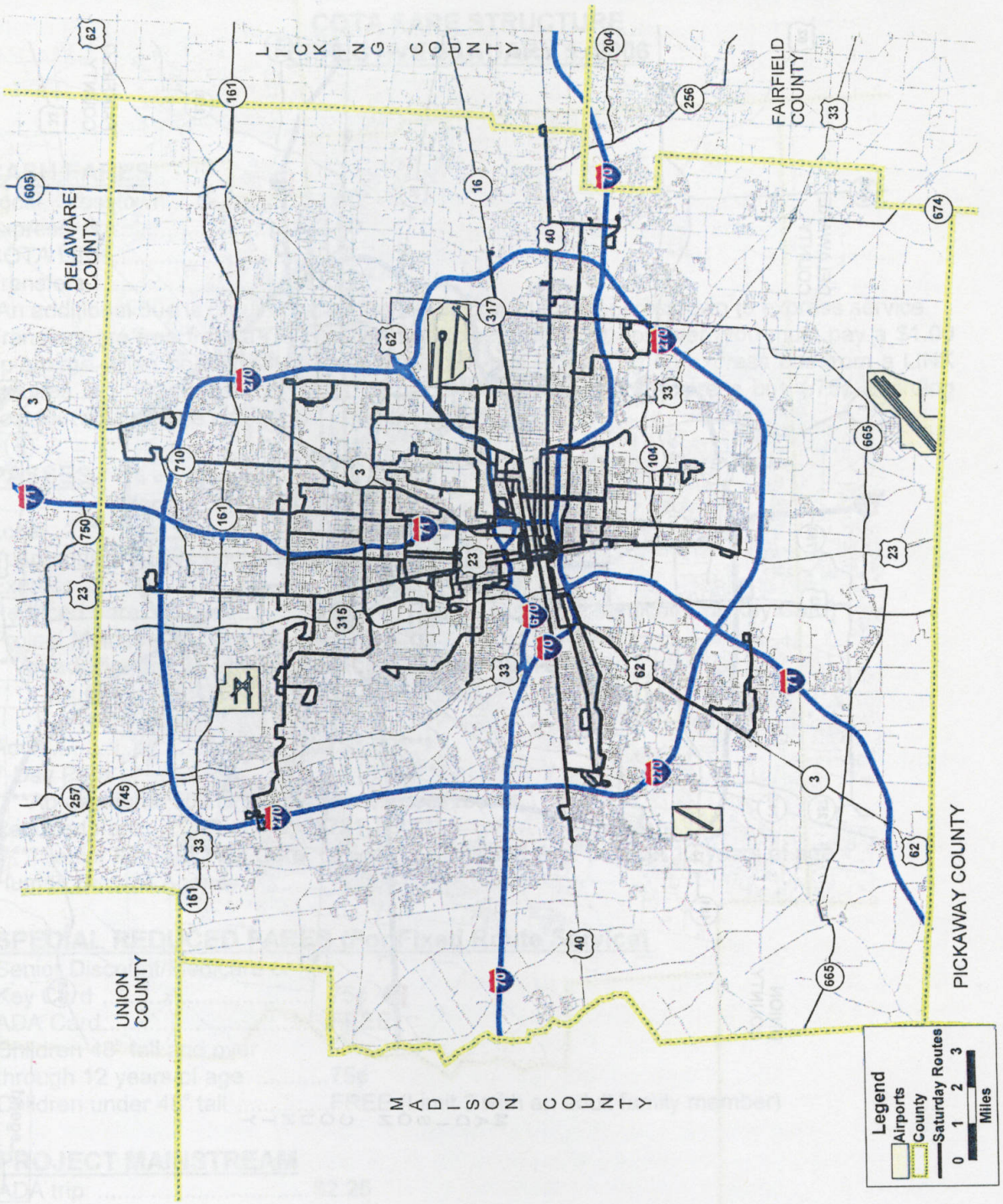


FIGURE 2-6

SUNDAY/HOLIDAY SERVICE AS OF MARCH 2007

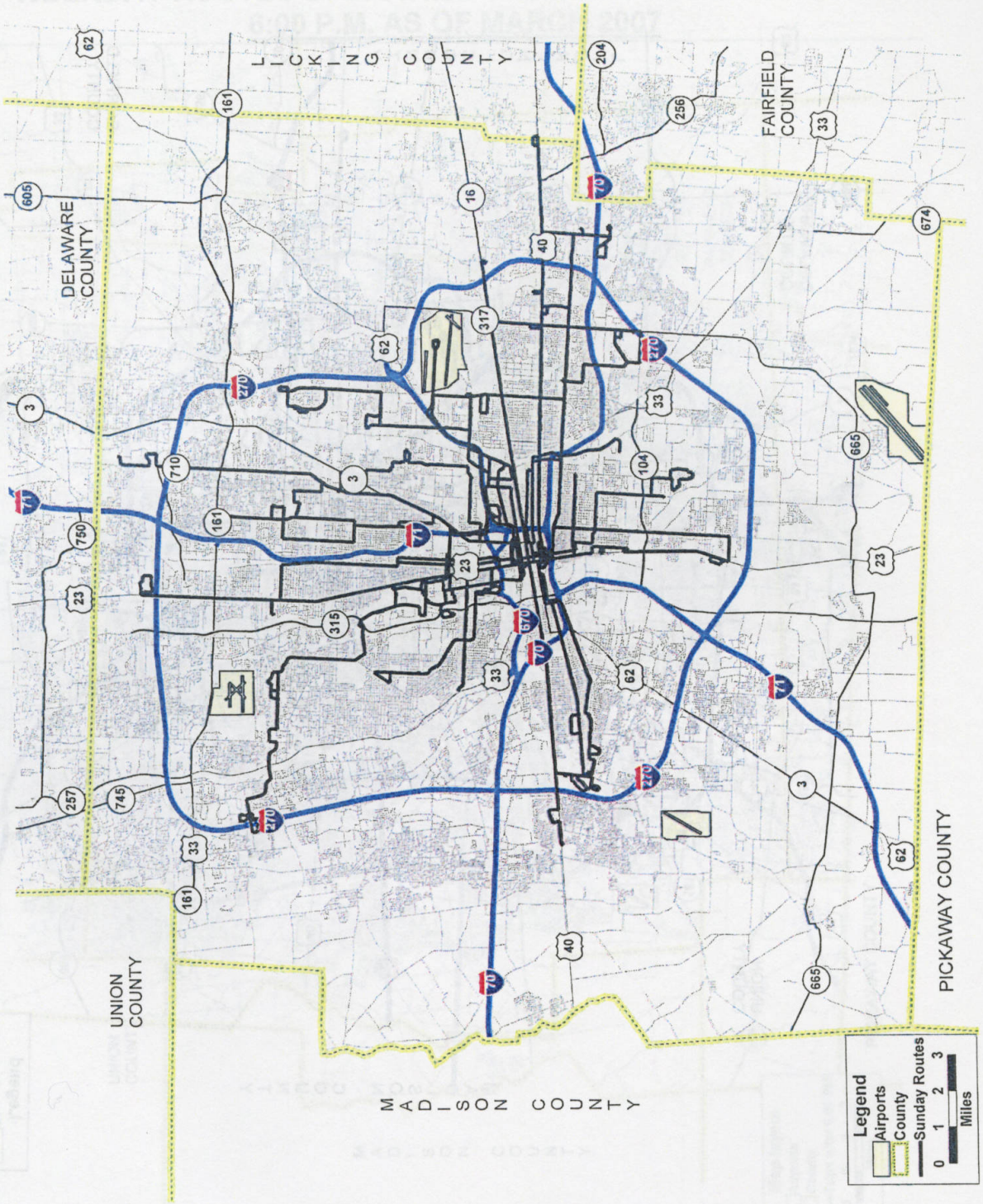


TABLE 2-2

COTA FARE STRUCTURE
EFFECTIVE JANUARY 1, 2006

CASH FARES

Local, Crosstown..... $1.50*
Express $2.00
COTA LINK..... 50¢*
Transfers..... FREE*

*An additional 50¢ is required when transferring from local or crosstown to express service. Transfers are free from a COTA LINK to a fixed-route bus; however, you must pay a $1.00 up-charge when boarding a local or crosstown bus. Boarding an express bus from a LINK requires a $1.50 up-charge, which is paid when boarding the express bus (.75¢ boarding cost for reduced fare categories – see below).

PASSES

Monthly

Local $45.00**
** An additional 50¢ upcharge when used on express routes
Express $62.00
Reduced Fare ..... $22.00 (Senior Discount, Medicare, or Key Card)
Project Mainstream $70.00***
***An additional $.75 upcharge required for non-ADA trips

Day Pass

Adult..... $3.50****
7-Day Pass $18.00****
****An additional 50¢ is required on express routes
Reduced Fare $1.75*****
*****Senior ID Card, Key Card, Children 48" tall and over through 12 years of age
Human Service Agency $3.00

SPECIAL REDUCED FARES (For Fixed Route Service)

Senior Discount/Medicare or
Key Card ..... 75¢
ADA Card..... FREE
Children 48" tall and over
through 12 years of age ..... 75¢
Children under 48" tall ..... FREE (Limit 3 with an adult family member)

PROJECT MAINSTREAM

ADA trip $2.25
Non ADA trip..... $3.00

2.5 Key Operating Statistics

COTA provides the Federal Transit Administration with financial and operating statistics on a yearly basis. The annual National Transit Database Report summarizes this data. Key operating statistics from COTA's unaudited 2006 National Transit Database Report are found in Appendix B.

2.6 Special Services

2.6.1 Special Events

In previous years, COTA has provided supplementary bus service for the following seasonal special events:

- Red, White, and Boom (Columbus' downtown Independence Day celebration): COTA augments its normal service with additional trips on local routes as well as evening express service from selected park and ride lots.

- COTA's "GO BUS" program for Ohio State home football games: Due to strong demand for parking and limited availability of spaces on campus, COTA, OSU, and the Ohio Expositions Commission have partnered together since 1998 to provide bus service from the Ohio State Fairgrounds parking lot to Ohio Stadium. COTA also provides football Saturday service at Crosswoods and Delawanda park and rides, and increased frequency of service on the #2 North High Street and #18 Kenny Road locals routes.

- Christmas Service: COTA provides special service from downtown Columbus to the Columbus Zoo for the "Wildlight Wonderland" event, which occurs annually between Thanksgiving and New Years.

- Zoo Bus: COTA has operated the Zoo painted bus seven days a week during the summer between downtown and the Columbus Zoo for many years. The Columbus Zoo and other local businesses subsidize the cost of this service. Passengers pay the regular fare, and as a result, receive special discount admissions to both the Columbus Zoo and Wyandot Lake.

Staff and COTA's Board of Trustees continually review the merits of each of these services on a case-by-case basis before a decision is made to commit transit resources.

2.7 Passenger Information

COTA provides information to its passengers in a variety of ways:

2.7.1 COTA Connection Customer Information Center

On December 11, 2000, COTA relocated its customer service center, named the "COTA Connection", from 177 South High Street to 60 East Broad Street in downtown Columbus. Monthly passes, DayPasses, Senior Discount and Key-Cards, and schedule information can be obtained at this location. A customer information center (which provides telephone information to the public), COTA's Quality Service Office, and the Lost and Found Department are also housed at this location. Additionally, Monthly passes and DayPasses are available for purchase at 90 locations in Franklin County.

In 2003, COTA finished upgrading its aging Megadyne automated customer information system to a Microsoft Windows platform named Trapeze INFO. Consisting of several software modules, Trapeze INFO now allows customers to obtain schedule and other information interactively via the telephone or COTA's website 24 hours a day. During 2006, COTA's customer information call system received 1,226,513 telephone calls.

COTA's lease at 60 East Broad Street will expire on December 31, 2007. As a result, during 2007, COTA staff will re-evaluate the best site location option for the COTA Connection. While 60 East Broad Street remains a potential future site, the goal of this study will be to ensure that COTA best meets the daily needs of our customers, and that customer service staff has the proper tools to carry out their duties.

2.7.2 COTA Website

In March 1997, COTA established a web site on the Internet for those individuals who wish to obtain information about COTA services via the computer. Information can be found about COTA's routes, trip times, service changes, job postings, and other public transit related items. COTA's Internet address is www.cota.com.

Since 2003, advances in computer technology and the Internet have allowed COTA to provide web-based customer trip planning. In brief, after a customer enters both origin and destination locations and trip times, a printable trip itinerary, including a map, is generated. In October 2006, a new Internet-trip planner module named "Trip Pro" was made available at COTA's website. Additionally, "real-time" bus finder information is now available on the web, offering customers

the opportunity to follow, on an interactive map, any COTA vehicle that is on the road. Users can simply click on a bus symbol and find out the bus number, bus assignment (block), and schedule adherence. As part of the SRTP, COTA will continue to monitor and invest in the latest computer hardware and software, and Internet technologies available to deliver accurate and timely transit information to central Ohio residents.

COTA also makes available through its website the ability to "Tell Us How We Are Doing", which provides for submittal of feedback about route service suggestions, complaints, web site problems, or any other topic related to COTA services.

2.7.3 Automatic Vehicle Annunciators

Over the past several years, COTA has made a significant investment in Intelligent Transportation Systems (ITS), to better manage and improve how COTA communicates and offers services to the public (see page 9-4). One component of ITS, the Automatic Vehicle Annunciators (AVA) is a project that was initiated in January of 2003 and was fully functional for public use in May 2005. The AVA automatically announces and displays next stop information for the benefit of hearing and vision-disabled passengers. This system also improves service to COTA's riders, especially to people not familiar with the stops of a particular route; or, to all riders when visibility is poor or limited due to night time hours or inclement weather conditions. The AVA System enables COTA to meet or exceed all ADA requirements and will be included in all future bus buys.

2.7.4 Service Change Public Meetings and other Public Communications

COTA regularly communicates in writing to its passengers on board the bus via Commuter Bulletins, interior placards, and information brochures that feature upcoming events and news about the COTA system. In addition, COTA staff holds public meetings to discuss refinements to the service prior to the annual January, May, and September service changes.

2.7.5 Planning and Community Outreach Public Meetings

COTA routinely solicits public input and feedback when planning future transit enhancements. Beginning in November 2005 and continuing through the summer of 2006, COTA conducted the LRTP public involvement process which was focused on obtaining input from riders and the general public on the types of new and improved services desired in the future. The service changes and improvements which were proposed in the LRTP are being carried out via this SRTP, and have been created based on an extensive public outreach program. Utilizing feedback received via 18 public meetings,

five focus groups, numerous stakeholder meetings, online surveys, bus rides by management staff, COTA's website, and COTA's Customer Service Center, the public involvement process serves as the foundation for the development of both the LRTP and SRTP.

From 2000 through 2006, MORPC and COTA also studied the feasibility of various transit options from downtown Columbus to the Polaris area. During the course of this study, known as the North Corridor Transit Project (NCTP), public participation and input were encouraged at monthly Advisory Group meetings.

Between 2003 until the completion of the Administrative DEIS in 2006, COTA followed a detailed public involvement plan that engaged the general public, agencies, and community stakeholders in various ways including public announcements in local newspapers, public forums, newsletters, website, comment forms, toll free telephone line, committee meetings, etc.

The NCTP examined high capacity transit alternatives for the North Corridor and adjacent areas in the City of Columbus and Franklin and Delaware Counties within the metropolitan area of Columbus. Various modes of transit were studied to address the transportation problems in the North Corridor, including light rail, streetcars, Bus Rapid Transit (BRT), and a no build option (expanded bus service only). For more information about the NCTP, see Section 4.

3.0 STANDARDS FOR SERVICE DESIGN

3.1 Overview

Transit industry comprehensive operational analyses (COA) are conducted in order to analyze the performance of transit services; understand existing and potential markets for transit service; and to provide recommendations and a plan that best meet the needs of transit customers. As part of a COA that was conducted in 2000, COTA requested its project consultant develop new route and schedule design standards along with route performance evaluation measures based on current industry practices. The proposed standards and route evaluation measures were presented to the COTA Board of Trustees Business Development Subcommittee in January 2001.

The Route & Schedule Design Standards codifies good transit planning and operations practices. These guidelines and standards serve several purposes:

1. To inform decision-makers, who may not have a background in the transit industry, about good transit practices.
2. Provide an objective basis for planning new services and evaluating existing services.
3. To serve as a "compass" to both staff and decision-makers who often may be caught up in reactive responses to external factors.
4. Support the route performance evaluation process and standards described in the second set of performance monitoring indicators.

A second set of indicators, Route Performance Evaluation Measures, are the factors used in a periodic (i.e., annual) evaluation of existing services that generates recommendations for service changes designed to improve the productivity of existing and planned services.

The recommended Route & Schedule Design Standards and Route Performance Evaluation Process are described in the following sections.

3.2 Route & Schedule Design Standards

3.2.1 Service Categories

As discussed in Section 2, COTA operates the following types of routes:

- Local routes make all stops and operate between downtown Columbus and various neighborhoods or townships within COTA's service area (see Figure

2-2). The vast majority of COTA vehicle service hours are operated on local routes.

- Express routes operate to provide fast, line-haul service between downtown Columbus and suburban areas and/or park and ride facilities. Service is usually operated only in the peak periods (AM and PM) in the peak direction of travel. However, some routes serve "reverse commute" markets and operate in the non-peak direction of travel (i.e., from downtown to outlying employers in the AM). Between downtown Columbus and the outlying segments of the route, most buses operate with "closed doors" (i.e., no stops).

- Crosstown routes operate between various neighborhoods or townships within COTA's service area and do not serve the downtown area.

- LINK routes are generally short routes operated by smaller vehicles that are intended to serve short, non-work trips or serve as feeders to local and/or express routes, and neighborhood activity centers, including COTA transit centers.

3.2.2 Route Directness Standards

COTA bus routes shall be designed to operate as directly as possible to and from a major destination in order to minimize passenger travel time. Routes shall operate on major arterial streets as much as possible. However, there may be situations in which a route may deviate from the shortest, most direct routing. Such situations include a mid-route deviation to serve a particular trip generator or an end-of-line terminal loop, and LINK routes, which are designed to collect and distribute people in a specified service area, are exempt from this standard.

When a deviation exists or is being considered, the gain in convenience to those passengers who are boarding or alighting during the deviation must be balanced against the additional travel time for the passengers traveling through. The following standards shall be applied to all route deviations and/or terminal loops:

1. To the extent possible, two-way service shall be provided on the same street.
2. Express service shall be routed in the most direct manner possible.
3. Deviations from the basic route alignment to serve activity centers will be made only when they have the potential to attract new riders equal to or exceeding the route performance evaluation standard (riders per hour) for the corresponding route category.
4. Additional time to operate route deviations should not exceed five minutes (one-way) or ten percent of the one-way run time, whichever is less.
5. No mid-route loops shall be operated.

6. Terminal loops shall not exceed 25% of a route's total length.

3.2.3 Route Variations

It is sometimes more efficient to provide service to a certain area with one route having several branches than to operate several different routes. In addition, some bus trips on a route may not go to the end of the line due to very low ridership in that area at a particular time of day (i.e., "turnback"). However, these actions can result in a system that is much more difficult for current as well as potential transit passengers to understand and utilize. Therefore, to provide a user-friendly service and to encourage maximum use of the system by all current and potential riders, the following standards for branches and turnbacks shall apply:

- No route shall have more than two (2) distinct branches.
- No route shall have more than one (1) turnback.
- When two routes are interlined (e.g., #2 North High, #31 Worthington Express), each route shall be treated as a separate route for the application of this standard.

3.2.4 Hours of Operation

Hours of operation refer to the time between the first and last trip operated on a route (also referred to as the "span of service"). In order to maximize the opportunities for passengers to connect with other routes, a consistent span of service is desirable. While this SRTP includes extending the hours of operation for bus service later into the evenings on weekdays, Saturdays, and Sundays/holidays, the proposed minimum span of service for each Service Category is:

3.2.5 Minimum Hours of Service Guideline

Weekday
Local ..... 5:30 a.m. to 10:30 p.m.
Express ..... 6:00 to 8:30 a.m. and 4:00 to 6:30 p.m.
Crosstown 6:00 a.m. to 8:00 p.m.
LINK --Will vary by LINK route --

Saturday
Local ..... 6:00 a.m. to 10:30 p.m.
Express ..... Not operated
Crosstown ..... 6:00 a.m. to 8:00 p.m.
LINK ..... -- Will vary by LINK route –

Sunday & Holidays
Local ..... 7:30 a.m. to 7:30 p.m.
Express ..... Not operated
Crosstown ..... 7:30 a.m. to 7:30 p.m.
LINK ..... -- Will vary by LINK route --

Due to differences in ridership levels and funding limitations, some variation in days operated and start/end times among routes are expected. For this reason, the proposed spans of service are intended as guidelines rather than standards.

3.2.6 Service Frequency

The frequency of service on a particular route (i.e., headway, or time interval between successive buses) will be based on the existing or projected ridership and load standards (i.e., maximum number of passengers onboard a bus). However, on some routes, during certain periods of low ridership, determining frequency based on ridership demand may lead to very infrequent service. So infrequent, in fact, that the service is no longer viewed by passengers as a reliable or convenient means of travel. Therefore, minimum standards of service frequency may be applied to assure that a reliable, attractive level of service is available throughout the day.

The following are minimum guidelines for COTA service frequency for each Service Category:

Time Period	Local	Express	Crosstown	LINK
Weekday				
AM, PM peak	30 min.	60 min.	30 min.	NA
Midday	60 min.	NA	60 min.	NA
Night	60 min.	NA	NA	NA
Saturday	60 min.	NA	60 min.	NA
Sunday	60 min.	NA	60 min.	NA

Clock headways (e.g., service frequency intervals of 10, 15, 20, 30 and 60 minutes) should be maintained whenever possible. This helps to make the service easier to understand and more predictable to a rider, which is particularly important during periods when the service is infrequent (i.e., more than 30 minutes). Although clock headways are recommended, current funding levels and vehicle availability make this operating structure difficult to implement on a system-wide basis.

3.2.7 Load Standards

The intent of load standards is to balance passenger comfort and safety with operating costs. These standards define maximum passenger loads at different times of day to ensure acceptable levels of rider comfort and safety, while providing COTA good operating efficiencies. The load standards shown below represent the total number of riders as a percent of the number of seats on the bus:

Time Period	Local	Express	Crosstown	LINK
Weekday				
AM, PM peak	120%	100%	120%	120%
Midday	100%	100%	100%	100%
Night	100%	100%	100%	100%
Saturday	100%	100%	100%	100%
Sunday	100%	100%	100%	100%

These load standards should be applied to the average ridership and number of seats per bus for a period of 60 minutes. Passenger loading on individual bus trips may exceed the standard. If the load standard is exceeded for any 60-minute period, COTA will evaluate the potential for improving the service frequency (i.e., reducing the headway, or interval between buses). If the standard is exceeded for particular trips, but not for a sustained 60-minute period, COTA will evaluate the possibility of adjusting schedule times to focus more service before and after the overloaded trip(s).

The maximum time that an individual passenger should be expected to stand on a given trip is 15 minutes.

3.2.8 On-Time Performance

To ensure that transit riders have confidence that the service will perform reliably in accordance with the public timetables prepared and distributed by COTA, on-time performance standards have been established. A vehicle is considered "on-time" when its arrival is from zero to 4 minutes and 59 seconds after the scheduled time. A vehicle is considered "late" when it arrives five minutes or more after the scheduled time. No vehicles should arrive before the scheduled time, or "early".

It is impossible to achieve and maintain 100% on-time performance due to varying traffic and weather conditions, construction activity, detours, accidents and other service interruptions. Nevertheless, every effort will be made to ensure that all COTA buses operate on-time. The following on time performance standards shall apply:

- 80 - 90% of all buses should arrive at scheduled time points "on-time".

If a route or individual trip(s) is consistently running late, then a review of the schedule will be conducted and remedial actions (e.g., schedule and/or run modification if needed, improved on-street supervision, etc.) taken at the earliest opportunity.

3.2.9 Missed Trips

COTA, like all other transit agencies, misses scheduled trips due to a shortage of drivers, mechanical problems or accidents. The percentage of trips operated is defined as the ratio of trips actually operated divided by the scheduled number of trips. The annual objective shall be to operate a minimum of 99% of scheduled trips (i.e., less than 1% trips not operated or "missed").

3.3 Route Performance Evaluation Process

COTA continually receives requests from throughout its service area for changes to existing service and for new service in growing areas in and around Franklin County. Additionally, COTA may be operating some routes that are not attracting enough riders to justify operating these services. In order to be consistent in the evaluation of service proposals, and to ensure that the service being operated represents the most cost-effective use of available resources, the following Route Performance Evaluation Process has been developed.

The Route Performance Evaluation Process relies on the analysis and ranking of existing and proposed routes based on a ridership productivity standard – ridership per revenue hour of service or passengers per revenue trip. The Evaluation Process also uses a ridership economic standard of subsidy per passenger trip for all routes. The process is as follows:

1. Develop productivity standards for each Service Category,
2. Calculate performance measures for all proposed and existing routes,
3. Identify "substandard" services,
4. Evaluate service modifications,
5. Obtain approval from appropriate decision-makers,
6. Implement the modifications and
7. Monitor route performance.

The application of productivity and economic standards to existing routes is a flexible process. The purpose of the standards is to help identify routes that are most in need of service modifications, such as restructuring to eliminate lower-productivity segments or branches, adjusting service frequency to better reflect

the demand for service, or providing additional promotion of routes with low ridership. Elimination of routes is only intended as a last resort, when it has been determined that no cost-effective actions are able to improve the productivity of the route.

In addition, the evaluation of existing routes is not intended to preclude changes to routes that meet the minimum standards. In many cases, it may be possible to improve the productivity of routes that meet or exceed the standards by making minor changes to service frequency, span of service or trip times.

The productivity of existing routes will be reported each trimester. The evaluation of possible service modifications and approval and implementation of recommended modifications will be conducted annually. Additionally, the productivity standards will be reviewed annually, using ridership and other data for the previous 12-month period for which data is available.

3.3.1 Productivity and Economic Standards

COTA uses ridership productivity and economic subsidy as its primary measures of transit performance. Ridership productivity is measured in terms of riders per revenue hour of service (Local, Crosstown and LINK routes) or riders per revenue trip (Express routes). Economic performance is measured by calculating the subsidy per passenger trip (boarding). Routes within each service category will be ranked according to the productivity and measures and compared to the minimum standards identified for each service category. A productivity rating will then be calculated for each route and a corresponding list of actions (e.g., marketing promotions, service modifications, elimination, etc.) will be identified for further evaluation (see Table 3-5).

New routes should meet the applicable standards for the service category after one year of operation. All new routes will be reviewed each trimester and routes that have not shown adequate progress toward meeting the standards will be targeted for marketing promotions or possible service modifications to increase productivity.

The ridership and economic standards are calculated as follows:

Passenger boardings per revenue hour – The number of average daily boardings per route (as reported by COTA's automatic passenger counter data) divided by the daily number of revenue hours of service. The standard is calculated as the average of all routes in each service category.

Passenger boardings per revenue trip – Because express routes may vary significantly in route length and one-way travel times, a different ridership

productivity measure is used. This measure is defined as the number of average daily boardings (as reported by COTA's farebox data) divided by the number of daily revenue trips. The standard is calculated as the average of all express routes.

Operating subsidy per passenger boarding – The average daily operating cost (direct operating cost) of a route less average daily passenger revenue divided by number of passenger boardings. The standard is calculated as the average of all routes in each service category.

The ridership productivity measure for each route then will be ranked and their productivity rating will be calculated as a percentage of the productivity standards:

Local, Crosstown and LINK routes:

$$\text{Ridership productivity rating} = 1 + \frac{\text{(Route riders per hour – Standard riders per hour)}}{\text{Standard riders per hour}}$$

Or

Express routes:

$$\text{Ridership productivity rating} = 1 + \frac{\text{(Route riders per trip – Standard riders per trip)}}{\text{Standard riders per trip}}$$

And

$$\text{Economic productivity rating} = 1 + \frac{\text{(Standard oper. Subsidy – Route oper. Subsidy)}}{\text{Standard operating subsidy}}$$

Tables 3-1 through 3-4 summarize these productivity standards for the local, crosstown, LINK and express service categories, respectively.

3.3.2 Potential Actions

The potential actions that may be evaluated, recommended and ultimately implemented for each route will be determined by its productivity rating. A productivity rating greater than 100% (i.e., better than average performance), may indicate a need to increase service on the route in order to better serve unmet transit demands or reduce passenger loads (passengers per seat). On the other hand, a productivity rating less than 100% (i.e., worse than average performance) may indicate a need for actions to increase ridership or reduce service levels.

For any route that has a productivity value less than 50%, an in-depth analysis of that route's performance should be conducted. That analysis should assess the comparative productivity of each scheduled trip and route segment (for weekdays, Saturdays and Sundays) with the objective of identifying unproductive services. Potential actions designed to increase ridership and/or reduce service levels include marketing promotions, reducing the span of service (i.e., eliminating early morning or night trips), decreasing the service frequency, changing the route alignment and, as a last resort, eliminating the route. COTA may also elect to hold informal public meetings to elicit comments from existing and potential riders regarding ways to improve service.

Similarly, an in-depth analysis should be conducted for any route that has a ridership productivity value greater than 150%. Potential actions may include increasing the span of service (e.g., adding early morning or night trips, implementing new Saturday or Sunday service), improving the service frequency, or adding a new route.

Less detailed analyses should be conducted for the remaining routes that have productivity values greater than 50% and less than 150%. Table 3-5 lists potential actions that can be evaluated for varying levels of new productivity ratings.

Table 3-1
Local Routes Productivity

Line #	Line Name	Weekday				
		Productivity (Pass / hr. or trip)	Productivity Index	Subsidy per Passenger	Subsidy Index	Combined Index
1	Cleveland/Livingston	33.5	1.27	$1.16	1.41	1.34
2	Main/North High	33.8	1.26	$1.09	1.49	1.38
3	W. Mound/Northwest	17.9	0.66	$2.90	0.56	0.61
4	Indianola/Parsons	22.6	0.84	$2.10	0.78	0.81
5	West Fifth Ave	17.3	0.63	$3.09	0.53	0.58
6	Sullivant/Mt. Vernon	26.2	0.96	$1.74	0.94	0.95
7[1]	Neil/Whittier	24.8	0.90	$1.77	0.92	0.91
8	Hamilton/Frebis	23.5	0.88	$2.04	0.80	0.84
9	Leonard/Brentnell	19.3	0.71	$2.68	0.61	0.66
10	East/West Broad	31.2	1.17	$1.28	1.28	1.22
11	Oak-Bryden/St. Clair	25.5	0.90	$1.95	0.84	0.87
15	Grove City Local	16.0	0.56	$3.37	0.48	0.52
16	Long/S. High St.	22.3	0.82	$2.24	0.73	0.77
18	Kenny Road Local	18.2	0.65	$2.74	0.60	0.62
19[2]	Arlington/Grandview	9.6	0.39	$5.97	0.27	0.33
69[3]	US 33/Dublin Rd.	2.0	0.10	$32.12	0.05	0.08
	Standard for Route Type	27.0	1.00	$1.63	1.00	1.00

[1] Route subsidized in part by Job Access & Reverse Commute Grant Funds.
[2] Service reduced to peak period only, with 60 minute frequency of service.
[3] Route operates peak period only trips between downtown and COTA McKinley Ave. garage. Most service hours on this line would transfer into deadhead hours on other lines if this line were discontinued.

Table 3-2
Crosstown Routes Productivity

Line #	Line Name	Weekday				
		Productivity (Pass / hr. or trip)	Productivity Index	Subsidy per Passenger	Subsidy Index	Combined Index
81	Hudson/Ohio	14.7	0.86	$3.76	0.87	0.86
83	Oakland/Weber	11.5	0.70	$5.10	0.64	0.67
84	OSU/Arlington/Grandview	13.3	0.77	$4.18	0.78	0.78
87	Agler/Cassady	13.2	0.80	$4.33	0.76	0.78
89	Hamilton Road	20.6	1.27	$2.60	1.26	1.27
92	James/Stelzer	25.5	1.51	$1.96	1.67	1.59
95	Morse/Henderson	14.8	0.89	$3.79	0.86	0.88
96	Fifth Avenue Crosstown	12.6	0.75	$4.60	0.71	0.73
	Standard for Route Type	16.8	1.00	$3.27	1.00	1.00

Table 3-3
LINK Routes Productivity

Line #	Line Name	Weekday				
		Productivity (Pass / hr. or trip)	Productivity Index	Subsidy per Passenger	Subsidy Index	Combined Index
74[1]	Linden LINK	7.7	1.00	$8.24	1.00	1.00
	Standard for Route Type	7.7	1.0	$8.24	1.00	1.00

[1] Route subsidized in part by Job Access & Reverse Commute Grant Funds.

Table 3-4
Express Routes Productivity

Line #	Line Name	Weekday				
		Productivity (Pass / hr. or trip)	Productivity Index	Subsidy per Passenger	Subsidy Index	Combined Index
29[1]	Polaris	10.9	0.89	$4.71	0.83	0.86
30	Smoky Row	11.8	1.30	$4.16	0.94	1.12
31	Worthington	17.3	1.67	$2.24	1.74	1.70
33	North Central	12.2	1.22	$3.83	1.02	1.12
34	Karl Road	13.5	1.08	$3.86	1.01	1.04
35	Tamarack Blvd.	9.3	0.97	$6.08	0.63	.74
36	Annehurst	13.3	1.15	$3.18	1.22	1.19
37	Westerville	10.0	0.95	$5.37	0.73	0.84
38	East Westerville	7.3	0.63	$7.61	0.51	0.57
39	New Albany	12.1	1.22	$3.66	1.06	1.14
40[1]	New Albany Bus. Park	4.6	0.49	$12.63	0.31	0.40
41	Gahanna	13.0	0.59	$3.40	1.14	0.87
43	East Broad	9.9	0.76	$5.35	0.73	0.74
44	North Reynoldsburg	11.0	0.92	$4.40	0.89	0.90
45	Reynoldsburg	14.2	0.92	$3.38	1.15	1.04
46	Eastland	7.8	0.71	$7.09	0.55	0.63
47	Brice Road	17.1	1.29	$2.18	1.79	1.54
49	Southeast	10.6	1.05	$4.77	0.82	0.94
51	ODOT/ODPS	6.5	0.24	$9.40	0.41	0.33
53	Lincoln Village/New Rome	11.5	0.86	$4.15	0.94	0.90
54[1]	London/Groveport	5.9	0.33	$10.46	0.37	0.35
56	Tuttle	9.2	0.69	$5.28	0.74	0.71
57	Hilliard	12.9	1.38	$4.23	0.92	1.15
58	Dublin	13.4	1.07	$3.42	1.14	1.10
60	Arlington	8.7	0.76	$6.02	0.65	0.70
61	Kenny Road Express	15.5	1.22	$2.92	1.33	1.28
64	Grove City Express	14.3	0.89	$3.21	1.21	1.05
67	East Hilliard Express	8.3	0.53	$6.48	0.60	0.56
	Standard for Route Type	12.4	1.00	$3.90	1.00	1.00

[1] Route subsidized in part by Job Access & Reverse Commute Grant Funds.

Table 3-5
Potential Actions for Ridership Productivity Ratings

Potential Actions	0-25%	25-50%	50-75%	75-100%	100-150%	150+%
Reduce Service / Increase Productivity						
1. Marketing Promotions	Yes	Yes	Yes	Yes	No	No
2. Reduce Span of Service	Yes	Yes	Yes	Yes	No	No
3. Stretch Service Frequency	Yes	Yes	Yes	Yes	No	No
4. Change Route Alignment	Yes	Yes	Yes	Yes	No	No
5. Eliminate Route	Yes	Yes	No	No	No	No
Increase Service / Decrease Productivity						
1. Increase Span of Service	No	No	No	No	Yes	Yes
2. Improve Service Frequency	No	No	No	No	Yes	Yes
3. Add New Route	No	No	No	No	No	Yes

3.3.3 Implementation Process

The Route Performance Evaluation Process described above should be conducted annually. For remedial actions that constitute a non-substantial change in service (less than 25% of daily revenue hours or route miles), COTA's Planning Department should make recommendations to the Vice President of Planning and the President/CEO for approval and implementation.

For major actions (more than 25% of daily revenue hours or route miles), the Planning Department should present its recommendations to a staff committee comprised of the Operations and Planning Divisions. After concurrence by this committee, recommendations should be advanced to the Vice President of Planning, the President/CEO and Board of Trustees for approval and implementation. Major actions may also require public hearings prior to implementation.

3.3.4 Other Considerations

In the course of applying the Route Performance Evaluation Process, COTA has recognized that there are special circumstances that should also be considered in addition to the technical measures described above. For certain routes, a quantitative evaluation alone may not accurately portray the benefits

that are derived to both riders and non-riders. Following are four categories of routes that may be exempt from the Route Performance Evaluation Process.

- "Lifeline" routes serve disadvantaged constituents, primarily low-income riders. Without the existence of bus service, the users or residents would not be able to obtain key services. Lifeline locations include the following four categories: subsidized housing, publicly-operated social service facilities, publicly-operated hospitals, and public post-secondary schools. A lifeline route uniquely serves one or more of the above locations (no other local route operates within ¼ –mile of the location).

- Newly implemented routes are exempt from the Route Performance Evaluation Process for a period of one year from the start-up date. During this period, route performance should be monitored and reported each trimester and minor revisions can be made to improve performance. However, major revisions to the newly implemented routes should not be made until the end of the one-year "break-in" period. This exception can also be applied to poorly performing routes that have a major service revision within the past year.

- Certain COTA routes may be implemented as demonstration services intended to address a particular function (e.g., #51 Ohio Department of Transportation / Ohio Department of Public Safety) for a specified time period. These routes may be exempt from the Route Performance Evaluation Process if the service has regional or local significance.

- A portion of operating expenses for certain routes may be subsidized by other public agencies, government programs or private businesses (e.g., Federal Job Access and Reverse Commute grants, OSU, the Columbus Compact, etc.). COTA may elect to exempt these routes from the Route Performance Evaluation Process, or add the subsidy contribution to the passenger revenue in the economic productivity criteria.

3.4 Data Collection and Service Change Process

Route performance data is used to evaluate service. COTA collects data in a number of ways:

- Thirty five buses equipped with automatic passenger counters (APC) provide COTA with travel time, passenger load data and other statistics used in route planning. For effective sampling and data collection, as COTA's fleet size expands during the 2007-2011 SRTP period, COTA will

target 15% of the active fleet to be equipped with APC's. By 2011, COTA expects to have an active fleet of 342 buses and 52 APC units.

- The GFI Electronic Fareboxes collect revenue and ridership data through customer and driver interaction with the units. COTA's entire active fleet of fixed-route buses is equipped with these fareboxes.
- The Scheduling Department has a checker who rides routes and conducts on/off counts, maximum load counts and travel time checks.
- The Planning Department has a Data Collection/Survey specialist who assists the department by conducting and tabulating various passenger surveys. Additional responsibilities include ride checks, bus stop counts, park and ride counts and maximum load counts.

The Planning Department recommends service changes with the concurrence of the Service Planning/Scheduling Department. The two departments prepare a list of changes which are reviewed by the Board of Trustees and the President/CEO. The final set of service changes are then directed to the offices and departments that have responsibility for the implementation of new service. Service Planning monitors the progress of each service change to ensure that the process stays on schedule. Changes are scheduled three times a year on the first Monday of January, May and September.

3.5 Title VI Adherence

In addition to the previously discussed evaluation procedures, COTA's planning process is sensitive to the needs of minority communities. As a federally funded transit provider, through the Federal Transit Administration, COTA has a responsibility to adhere to the objectives of Title VI of the Civil Rights Act of 1964. The objectives of the FTA Title VI program are as follows:

1. To ensure FTA-assisted benefits and related services are equitably distributed without regard to race, color or national origin.
2. To ensure that both the level and quality of transit services provide equal access and mobility for any person without regard to race, color or national origin.
3. To ensure that access to the planning and decision-making process is open and without regard to race, color or national origin.

4. To ensure that decisions on the location of transit facilities and services are made without regard to race, color or national origin.

These objectives are the basis for the implementation of the FTA Title VI program. To comply with these objectives, COTA has adopted the suggested methodology and framework set forth in the Title VI reporting guidelines (FTA Circular 4702.1, Chapter IV) for compliance assessment.

By using this methodology, COTA will monitor and compare performance of all its routes based on level of service and quality of service criteria. To facilitate this evaluation, COTA will continue to collect data relating to its service standards, such as load factor, vehicle assignment, headway, and on time performance. These analyses will be conducted on a route-by-route basis, thus enabling a system-wide evaluation. The findings of these analyses will be used to modify service delivery, to bring it in line with the stated objectives of the Title VI program, where a variance exists.

COTA has submitted a report to FTA which documented the results of this methodology and showed COTA's compliance with the Title VI regulations. The Federal Transit Administration approved the current Title VI program on February 24, 2006.

4.0 COMPREHENSIVE PLANNING PROCESS

The Columbus metropolitan area has changed markedly over the past 10-20 years as new growth, both population and employment, has gravitated around the I-270 outerbelt. This growth has led to a shift in travel patterns (work trips and otherwise) by area residents and workers. During this tremendous growth period, local funding for operations (via a county-wide sales tax) remained at 0.25 percent. As a result, COTA faced a continuing challenge of stretching these operating dollars to provide transportation services for the central Ohio area.

For example, between 1990 and 2000, the central Ohio region added over 120,000 jobs, an increase of 18 percent. According to MORPC, between 2000 and 2030 the region will add 385,000 jobs, an increase of 48 percent. Newly developed areas such as Easton, Tuttle, Polaris, and Rickenbacker have seen an explosion in commercial, retail, and residential development (see Table 4-1). With this push in growth towards suburban areas comes a greater demand for extending transit access to jobs, education and medical services within these areas.

Table 4-1
Population, Households, Employment for Years 2000, 2005 and 2030 in Developing Employment Nodes

Node	Population			Households			Employment		
	2000	2005	2030	2000	2005	2030	2000	2005	2030
Easton	267,882	289,029	320,218	111,205	119,270	146,068	130,518	145,053	180,680
Tuttle	191,216	211,188	240,420	78,177	86,869	108,988	106,917	114,287	203,088
Polaris	197,573	222,485	253,954	79,380	87,949	109,235	108,933	133,639	159,283
Rickenbacker	30,279	33,497	61,871	11,062	12,278	25,517	20,521	25,937	64,310
Change		**2000-2005**	**2005-2030**		**2000-2005**	**2005-2030**		**2000-2005**	**2005-2030**
Easton		21,147	31,189		8,065	26,798		14,535	35,627
Tuttle		19,972	29,232		8,692	22,119		7,370	88,801
Polaris		24,912	31,469		8,569	21,286		24,706	25,644
Rickenbacker		3,218	28,374		1,216	13,239		5,416	38,373
Percentage Change		**2000-2005**	**2005-2030**		**2000-2005**	**2005-2030**		**2000-2005**	**2005-2030**
Easton		8%	11%		7%	22%		11%	25%
Tuttle		10%	14%		11%	25%		7%	78%
Polaris		13%	14%		11%	24%		23%	19%
Rickenbacker		11%	85%		11%	108%		26%	148%

Source: MORPC land use variables (08/02/2006)

Future population, employment, and traffic congestion levels are all projected to increase over the next 25 years in central Ohio. MORPC has projected that by 2030 the central Ohio area can expect to see a:

- 35 percent increase in population;
- 48 percent increase in employment; and
- 46 percent increase in highway traffic congestion.

As the region continues to grow, significant increases in traffic congestion are projected on the regional freeway system and the regional arterial road network. Regional development patterns have included strong and sustained residential growth on the fringes of the urbanized area, combined with infill development that is expected to significantly increase the urban density of the entire region. These patterns will require a variety of transportation approaches to respond to the different types of development occurring in the region. Transportation solutions should include not only increases in highway capacity, but also expanded mass transit service and alternative mode options.

In an effort to tackle present day transportation needs, and to provide long-term mobility strategies that address traffic congestion, quality of life, air quality, and overall mobility, COTA completed several comprehensive studies which are described in further detail below.

4.1 Long-Range Transit Plan (August 2006)

Developed over a ten-month period, the Long-Range Transit Plan (LRTP) is a comprehensive strategy for enhancing significantly the public transit system for the central Ohio region over the next 25 years. Utilizing a variety of methods to ensure public participation, the LRTP was developed in order to respond to the growing transportation needs of the central Ohio region by providing an expanded, reliable, and safe transit system.

After the COTA Board of Trustees adopted the LRTP in August 2006, COTA placed on the November 7, 2006, ballot, a 10-year, renewable 0.25 percent sales and use tax levy (Issue 7). Issue 7 passed, and will be combined with COTA's permanent 0.25 percent local sales tax approved by voters in 1999. The successful passage of Issue 7 was critical to funding expanded public transit services in central Ohio.

4.2 LRTP Public Input

Public input regarding transit services and facilities in central Ohio for the next 25 years was essential throughout the long-range planning process. From the outset, each component of the plan was shaped by what COTA heard from the general public, business and community leaders, bus riders, and focus groups. COTA's public involvement process was focused on obtaining input from riders and the general public on the types of new and improved services desired in the future.

Participants at the various meetings offered many suggestions for service improvement changes, including:

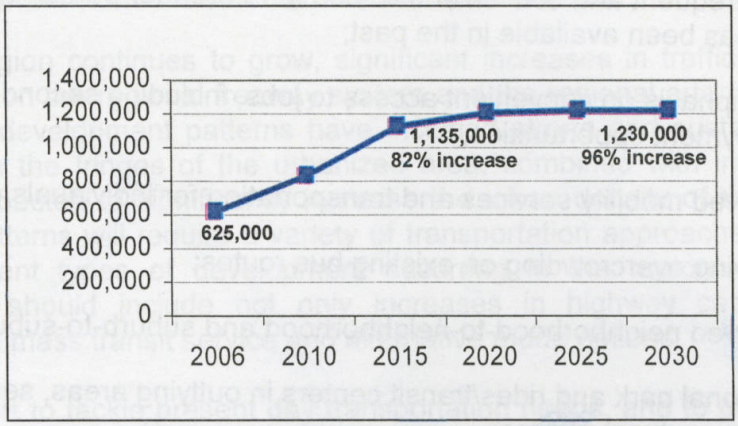
- More frequent and convenient service for a broader portion of the community than has been available in the past;
- An emphasis on convenient access to jobs, including second- and third-shift employment opportunities;
- Improved mobility services and transportation for individuals with disabilities;
- Relieving overcrowding on existing bus routes;
- Improved neighborhood-to-neighborhood and suburb-to-suburb connections;
- Additional park and rides/transit centers in outlying areas, served by faster and more direct service;
- More timely and easier access to route and schedule information via the use of current technologies including the Internet, variable electronic message displays, cell phones, and PDAs;
- Consideration of fixed-guideway options such as light rail, high-occupancy vehicle (HOV) lanes, etc.; and
- Development of alternatives to rising gas prices.

4.3 LRTP Components

4.3.1 Fixed-Route Bus Service

The LRTP calls for an aggressive, system-wide expansion of COTA's fixed-route bus service, including an 82 percent increase in service hours by 2015 and a 96 percent increase by 2030. Section 5 describes in greater detail COTA's 2007-2011 fixed-route service expansion plan, which represents the first phase of implementing the LRTP service level goals.

Figure 4-1
LRTP Increase in Annual Fixed-Route Bus Service Hours



Additionally, service frequencies will be increased to add capacity and improve convenience to meet existing and future demand. New routes will provide extended coverage to growth areas around the region and will provide direct transit service between suburban communities and activity centers. Extended hours of operation will provide access to second- and third-shift jobs. Of noteworthy importance is that most service expansion will take place in the initial years of the plan.

4.3.2 Mobility Services

Mobility Services is demand-responsive service to persons with disabilities (for additional information, see Section 7). The LRTP provides a substantial increase in COTA's Project Mainstream service that addresses the needs of the mobility challenged community. This component will become increasingly important as the average age of central Ohio residents increases.

- Service will be increased by nearly 40 percent by 2015 and by 50 percent by 2030 to reflect historical trends and the anticipated growth in the region's elderly population.
- COTA's Sedan Voucher Service program will be expanded to provide better service at a lower cost to persons with special transit needs in the community.
- Project Mainstream will emerge as a "one-stop" resource for trip planning so that customers will experience faster turnaround and more convenient transportation to and from their destinations.

- Project Mainstream will cultivate more community partnerships to maximize available funding and resources that can strengthen the efficiency of mobility services.

4.3.3 Intelligent Transportation Systems (ITS)

ITS is high-tech applications designed to:

- Make bus travel easier and more convenient for passengers;
- Help reduce traffic congestion;
- Provide timely and comprehensive transit information;
- Improve on-time performance of transit vehicles; and
- Facilitate integration of COTA's operations into a regional transportation network.

The LRTP calls for implementing a variety of ITS technologies, including:

- Passenger information systems that provide real-time bus arrival/departure information at major bus stops, park and rides and transit centers, and on the web;
- Signal priority systems that adjust traffic signal timing to expedite bus travel; and
- "Smart Card" fare collection systems which speed up passenger boarding, and provide opportunities for riders to renew bus passes remotely, using the Internet.

Please refer to Section 9 for further information relating to ITS, and implementation activities within the 2007-2011 timeframe.

4.3.4 Planning for Future Strategic Transit Investments

Improving transportation capacity in the region will require investing in resources that make transit more convenient, reliable, and responsive. These investments could include:

- Planning for high-capacity transit options in congested travel corridors;
- Strategic acquisition of rights-of-way (ROWs) to plan for alternative transit options in high-demand travel corridors; and

- Procurement of potential sites for new park and ride facilities, multi-use transit centers, and intermodal transit hubs.

4.4 Bus Shoulder Pilot Program

Included in the LRTP is an innovative program that promises great long-term potential for strengthening fixed-route service. COTA has partnered with ODOT to implement a pilot project to operate express buses on freeway shoulders. Effective November 2006, buses traveling on I-70 east are now able to merge onto the freeway shoulder to avoid congestion delays. This system is being used successfully on more than 230 miles of the freeway system in Minneapolis, Minnesota.

Upon successful completion of the pilot, the program will be expanded to other key freeways (I-71 north and south, I-670 east and west, I-70 west, and State Route 315). Express buses on freeway shoulders will also be considered on I-270 and other limited-access highways.

By opening up freeway shoulders for bus-only operations, transit customers will realize time savings and improved on-time performance. In Minneapolis, this service has boosted express performance and increased ridership. In addition, the bus-only freeway shoulder program has increased roadway capacity and serves as a low-cost approach to reducing freeway congestion.

4.5 Fixed-Guideway Studies

As a part of continuing efforts to meet the future transportation needs of the Columbus Metropolitan Area, COTA continually analyzes transit options that would complement standard bus operations. With the region's growing population and development activity, the need to transport commuters quickly and safely while also reducing traffic congestion is a top priority. COTA is one of many transit agencies across the country that has identified fixed-guideway transit as a potential tool to meet long-term transportation needs.

4.6 North Corridor Transit Project (NCTP)

COTA's most recent effort to secure Federal Transit Administration (FTA) funding for a fixed-guideway project began in 2000. With cooperation and guidance from the FTA, COTA updated the first Major Investment Study of the North Corridor, which was completed in 1995.

Upon revising the information contained in the 1995 study, COTA submitted a request to the FTA for permission to enter Preliminary Engineering (PE) and

complete a Draft Environmental Impact Statement (DEIS) as part of the New Starts process in June 2001.

In the financial plan for the project, COTA proposed a 50 percent contribution from federal funds via the New Starts process. In January 2002, the FTA notified COTA that the project received a 'Recommended' rating and approved the project to move forward into the PE/DEIS phase. In cooperation with MORPC and the FTA, COTA initiated the PE/DEIS and the FTA published a Notice of Intent in the Federal Register on July 1, 2003.

From 2003 until completion of the draft Administrative DEIS, COTA followed a detailed public involvement plan that engaged the general public, agencies, and community stakeholders in various ways, including public announcements in local newspapers, public forums, newsletters, Internet websites, comment forms, a toll free telephone line, committee meetings, etc.

As a result of public input and technical analysis, three modal alternatives were identified for a more thorough detailed analysis. The three modes identified in the DEIS were Light Rail Transit (LRT), Streetcar, and Bus Rapid Transit (BRT). Following FTA guidance, all three alternatives were analyzed for their impacts and benefits versus a No Build alternative (expanded bus only option) for environmental comparison and a Baseline alternative to identify against the New Starts guidelines.

4.6.1 Technology Modes Considered for the North Corridor

4.6.1.1 Light Rail Vehicles


Minneapolis LRT

Light rail vehicles (LRV) are essentially a modern version of the conventional tram, trolley, or streetcar. COTA considered low-floor vehicles in order to provide the best possible accommodations to all riders, particularly with respect to the ADA community. These vehicles are low-boarding to accommodate ADA requirements, and about 65-70 percent of the floor is at this level. The remaining floor area is at a higher elevation to accommodate the trucks that propel the vehicle.

4.6.1.2 Streetcar Vehicles

In contrast to LRVs, which are relatively fast-moving, large cars designed to transport high numbers of people rapidly between suburban and urban areas,

streetcars are intended for shorter distance trips, in highly populated city neighborhoods that operate in mixed traffic. They typically stop for passengers more frequently and offer a level of service appropriate for a high-density urban neighborhood.


Portland Streetcar

It is important to note that there is no sharp distinction between modern streetcars and light rail vehicles. There is also no clear line of demarcation beyond which a streetcar line becomes a light rail line. Instead, there is a continuum between vehicles/operations that are distinctly streetcar in character and those that are unmistakably modern LRT. LRT, at an extreme, can be almost indistinguishable from electrified commuter railroad operations; however, many, if not most LRT operations include segments of route that are very streetcar-like in character. Only modern streetcars were considered for use in the project's DEIS. This was necessary to ensure the vehicle used meets the current regulations such as ADA, are mechanically reliable and efficient, and provide modern passenger needs such as air conditioning.

4.6.1.3 Bus Rapid Transit Vehicles

BRT utilizes buses as part of a rapid transit mode that does not require tracks, can bypass vehicles stopped at stations, and can provide high-speed connections between a variety of origins and destinations. BRT vehicles can operate in a variety of street settings including specially identified dedicated lanes. The BRT system essentially emulates the service quality of LRT utilizing bus technology.


Pittsburgh's West Busway
Dedicated Roadway for BRTs

BRT can use standard length low-floor buses such as have been used in the Los Angeles Metro Rapid service or Pittsburgh's West Busway. At the other extreme are futuristic-looking articulated low-floor buses such as Las Vegas' new MAX system. Since some BRT operations (including COTA's BRT Study) include station platforms that are on the left side of the guideway, BRT vehicles with left-hand doors are available. BRT vehicles would have similar loading characteristics of LRT vehicles, are ADA accessible and can have either on or off-board fare collection. Vehicles can be powered by traditional diesel engines, compressed natural gas engines, or hybrids with multiple power sources.

4.6.2 Summary Comparison North Corridor Modal Alternatives

Table 4-2, summarizes some of the most significant differences between modal alternatives for the NCTP. As indicated in the table, the environmental impacts varied somewhat between the alternative modes. These variances, nonetheless, were not significant and deemed reasonable to mitigate in a subsequent Final Environmental Impact Statement. The FTA cost effectiveness index results were, however, substantially above the current FTA threshold of $23.00 and none of the three build alternatives qualified for federal funding.

Table 4-2 Alternative Comparisons

Assessment Area	Bus Rapid Transit	Streetcar	Light Rail Transit (LRT
Travel Times	38 minutes	41 minutes	35 minutes
Parking spaces on street	25 eliminated	10 eliminated	10 – 50 eliminated
Rail Corridor Gate Closures (24 hr period)	Reduced 27 minutes	Increased 118 minutes	Increased 118 minutes
Noise: Exceeds FTA standards	Yes (on street/residential area)	No	Yes (on sharp curves)
Historical Impacts	1 resource	7 resources	3 – 7 resources
Acquisitions/Displacements	Low	Medium	Medium – High
Daily Ridership	6,000 – 7,000	9,000 – 13,200	9,000 – 12,800
* Capital Cost	$228 - $379	$511 - $626	$511 - $654
** Cost Effectiveness Index	$38 - $55	$82 - $111	$82 - $123

*Cost in millions in 2006 dollars
**Current FTA Criteria below $23 for eligible federal funding

4.6.2.1 North Corridor Locally Preferred Alternative

Once the project team completed the analysis on the impacts and benefits of the project, the next step was to select a LPA from the alternatives that best met the local needs of the community.

- No Build (bus expansion only)
- BRT
- LRT
- Streetcar

COTA conducted five public meetings throughout the corridor so the public had an opportunity to comment on the analysis prior to the COTA Board of Trustees officially selecting the LPA.

As a result of the analysis, none of the three build alternatives were eligible for federal funding with Cost Effectiveness Index (CEI) numbers exceeding the current FTA threshold of below $23.00. Without the 50 percent federal match required for the capital construction cost, the project was beyond COTA's financial capacity; therefore, COTA management recommended the No Build alternative (bus expansion only option) to the COTA Board of Trustees, and the No Build alternative was adopted on July 10, 2006.

Although the NCTP analysis resulted in a CEI number that failed to meet the current FTA criteria, it is plausible that the FTA policy and/or corridor conditions could alter the results of the CEI number and future projects could meet the FTA criteria.

The FTA acknowledged in the latest New Starts guidance published in the Federal Register on May 22, 2006, that cities, like Columbus, where a fixed-guideway system is not already in operation are disadvantaged as the evaluation process is under-representing the projected travel time benefits. Most recently, the FTA proposed new rules in the Federal Register that include methodologies for addressing unallocated benefits that recognize current ridership models. These proposed policy changes could improve the CEI for projects in the future whereby projects in central Ohio could compete for federal funding; however, until the rules have been adopted and implemented, it is too early to determine the impact of the changes.

4.6.2.2 High Capacity Transit Corridors

As part of the long-range planning process, MORPC conducted a general analysis of the major travel corridors in central Ohio. Based upon population, employment, and travel predictions, MORPC identified three corridors as meriting consideration for fixed-guideway options: North, Northwest, and East. As noted above, the COTA Board of Trustees has adopted a LPA for the North Corridor that focuses upon bus service improvements, and does not include any fixed-guideway options. It may become appropriate at some time in the future to re-examine that decision under several scenarios, such as: a rapid increase in travel within the corridor, a major increase in gasoline prices, or a change in the method the FTA evaluates projects.

4.7 Relationship of the City of Columbus Streetcar Project with the LRTP

The City of Columbus enlisted a 42-member Downtown Streetcar Working Group to evaluate the feasibility of a downtown streetcar project to increase circulation, mobility, and enhance economic development in the downtown area. COTA is a member of the working group and is participating in the evaluating the project merits. The working group identified several route options for consideration. Segments of all the options overlap with the preferred High Street LRT route.

There are two major aspects of the Columbus Streetcar that should be linked with COTA's planning activities as they develop. First, the design and location of the streetcar along High Street will need to integrate the downtown bus operations with the Streetcar service plan to enhance overall service within the downtown market. The second consideration would be to preserve long-term

transit options by evaluating the benefits of designing the infrastructure to meet LRT design standards. As the project progresses to the next level of analysis, these opportunities will be examined.

4.8 Summary of the COTA Vision 2020 (1999) and Vision 2020 Plus (2004) Plans

In 1995, COTA and MORPC completed a long-range planning process which identified the projected transit needs of the central Ohio area through the year 2010 and recommended a comprehensive set of bus improvements to address the projected growth. After a period of extensive public review and comment, COTA adopted the Expanded Bus Service Alternative in July 1995.

In 1998, COTA and MORPC created the Vision 2020 Plan. Vision 2020 built upon the 1995 planning effort, projecting transit needs through the year 2020. In November 2004, COTA developed Vision 2020 Plus, which served as an update to the previous Vision 2020 Plan. Vision 2020 Plus provided updated ITS and mobility management information, and added BRT as a new service delivery option.

Major service assumptions for the plans mentioned above included:

- Significant expansion of transit services into growth areas of COTA's service area;
- Provide for intra-suburban and inter-suburban transit demand and dramatically expand COTA's reverse commute service to the employment centers around I-270;
- Significant expansion of paratransit services; and
- New transit services which remove COTA's vehicles from the congested highway network.

Vision 2020 and Vision 2020 Plus also investigated various ITS technologies used to facilitate the movement of buses on the arterial highway network.

4.9 Operation: Excellence

In May 2000, COTA launched Operation: Excellence, a comprehensive look at all routes and services. This project was a diagnostic tool designed to help analyze the cost effectiveness of various services, assess ridership and review all aspects of COTA's operations.

Operation: Excellence began with an extensive outreach program to determine what the residents of Franklin County thought of existing COTA services and what improvements they thought were needed to make the system easier to use, more accessible, and more efficient to operate. Public opinion data was gathered by placing surveys in area newspapers, on board buses, and on COTA's website (nearly 2,000 responses were received). Surveys were also completed by COTA employees, and several public meetings were conducted throughout the central Ohio area.

A major component of Operation: Excellence was the development of a Comprehensive Operational Analysis (COA) for COTA's fixed-route bus system. For this task, COTA contracted with Manuel Padron & Associates, a leading national transit consulting company. The COA was intended to achieve the following objectives:

- Provide a reliable database upon which existing service can be evaluated with respect to measures of efficiency and effectiveness;
- Evaluate COTA's existing fixed-route bus service to determine changes to route alignments, schedules and service frequencies that will improve individual route and system productivity;
- Provide a solid foundation for future service expansion by making the existing route system more productive;
- Develop route-specific service proposals that will better reflect the changing demographics and travel patterns of the Columbus metropolitan area;
- Design a future expansion plan that generates new travel markets and provides improved service to current riders; and
- As a part of the COA, a ridecheck survey was conducted on 100 percent of COTA's fixed-route service (April – June, 2000). Data was collected on all trips at each bus stop for weekday, Saturday, and Sunday bus service. After an extensive analysis of this data and the survey information, a Recommended Service Plan was developed which documented the proposed operations and capital improvements for COTA's fixed-route transit system which was used to guide service analysis and planning during the following five-year period.

5.0 PLANNED SERVICE CHANGES

Over the next five years, COTA will make major improvements to the route system. These improvements have been planned in large part by efforts during the past two years in which COTA embarked on a major public involvement initiative to gain community input about designing improvements for mass transit in central Ohio.

COTA's transit plans center on improving the region's economic vitality and quality of life, and as such, address transportation needs identified by the community in several ways, including:

- More frequent and convenient service for a broader portion of the community than has been available in the past;
- An emphasis on convenient access to jobs, including second- and third-shift employment opportunities;
- Improved neighborhood-to-neighborhood and suburb-to-suburb connections; and additional park and rides/transit centers in outlying areas, served by faster and more direct service.

The SRTP fixed-route service improvements presented in this section focus on four key areas of improvement (please see Section 7 for additional information related to COTA's Mobility Management services, including paratransit services):

- Improved service frequency;
- Expanded service coverage area;
- Expanded hours of operation; and
- Decreased travel times.

To support expansion plans outlined in the LRTP (see Section 4) in November 2006, COTA placed before voters a ten-year, renewable 0.25 percent sales tax initiative (Issue 7) to supplement COTA's existing permanent 0.25 percent sales tax. Although Issue 7 was approved, collection of the combined sales tax will not begin until January 2008. Due to a three-month processing time for disbursements of sales-tax receipts by the State of Ohio, COTA will not begin receiving additional sales tax revenue until April 2008.

During 2007, COTA will begin procuring new vehicles and recruit new operators and other support staff necessary to carry out the proposed service expansion plans. As this process is undertaken, in 2007, COTA will initially phase in service that requires fewer additional resources. In general, the 2007-2011 service plan priorities will focus on relieving overcrowding problems on existing routes by improving the frequency of service on major local and crosstown routes, extend service hours of operation (referred to as "span of service") in order to provide later service in the evenings on weekdays, Saturdays, and

Sundays, and add new and expanded routes in order to provide greater transit service throughout the community. The plan is designed to ensure that transit improvements are distributed throughout the community as much as possible.

Tables 5-1 and 5-2 on the following pages provide a listing of the major service improvements that are scheduled over the next five years. It should be noted, however, that timing for implementing future service enhancements may be affected by several factors, including changes in the financial forecast, potential bus manufacturer delivery delays, hiring of operators, etc. In addition, further evaluation of public input, major employment-related commercial developments, etc., may lead to modifications to the service plan. COTA recognizes the importance, however, of the need to plan and prioritize future service plans so that they may come to fruition.

To support expanded express route service, new park and ride/transit centers are planned for the following areas (see Figure 5-1 on page 5-14):

- SR-161 and Avery Road/Perimeter Loop (2009-2010)
- Sawmill Road and Summitview Road (2009-2010)
- US-33 and Gender Road (2010-2011)
- South High Street and Rathmill Road (2010-2011)
- I-71 and Polaris Parkway (2010-2011)
- I-70 and SR-256 (2010-2011)
- Sunbury Road/SR-161 (2011)

A map illustrating the SRTP's proposed expanded coverage is shown on page 5-13. Additionally, Appendix C provides descriptions of the plan's fixed-route service expansion within four quadrant areas of central Ohio: northwest, northeast, southeast, and southwest, as well as the central city area.

TABLE 5-1
Schedule of Major Service Improvements for 2007

Month	Route	Type	Modification	Day	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
May	#1 Cleveland Ave	Local	Improve service frequency in the midday	Wkd	0	1,836
May	#1 Livingston Ave	Local	Improve service frequency in the midday	Wkd	0	1,913
May	#2 N High St	Local	Improve service frequency in the midday	Wkd	0	3,570
May	#2 E Main St	Local	Improve service frequency in the midday	Wkd	0	2,295
Sept.	#2 N High St	Local	Add later evening service Saturdays between downtown & OSU	Sat	0	520
Sept.	#2 N High St	Local	Add later evening service Friday between downtown & OSU	Wkd	0	510
Sept.	#6 Mt Vernon Ave	Local	Improve service frequency in the midday	Wkd	0	2,040
Sept.	#6 Sullivant Ave	Local	Improve service frequency in the midday	Wkd	0	2,295
Sept.	#10 E Broad St	Local	Improve service frequency in the midday	Wkd	0	4,335
Sept.	#10 W Broad St	Local	Improve service frequency in the midday	Wkd	0	4,080
Sept.	#11 Oak/Bryden	Local	Improve service frequencies from 42 to 30 minutes	Wkd	0.5	2,193
Sept.	#11 St Clair Ave	Local	Improve service frequencies from 42 to 30 minutes	Wkd	0.5	1,275
Sept.	#15 Grove City	Local	Improve service frequency from 60 min to 45 min	Wkd	1	4,208
Sept.	#29 Polaris Pkwy	Express	Improve from 1 reverse commute trip per peak to 2 reverse commute trips per peak	Wkd	1	893
Sept.	#33 North Central	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	956
Sept.	#38 Northeast	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	829
Sept.	#39 New Albany	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	1,148
Sept.	#43 East Broad	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	956
Sept.	#49 Southeast	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	956
Sept.	#51 ODOT/ODPS	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	0	128
Sept.	#53 Lincoln Village	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	956
Sept.	#57 Hilliard	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	956
Sept.	#60 Arlington	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	861
Sept.	#67 East Hilliard	Express	Improve from 1 trip each peak to 2 trips each peak	Wkd	1	956
Note: The timing of September 2007 service changes is contingent upon 32 new buses being delivered on time and recruiting / training of additional bus operators.			**Total 2007 Fixed-Route Service**		**12**	**40,665**

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#1 Cleveland Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	159
#1 Cleveland Ave	Local	Add 11:00 pm line up	Sat	0	104
#1 Cleveland Ave	Local	Add 12:00 midnight line up	Sat	0	104
#1 Cleveland Ave	Local	Add 8:00 pm line up	Sun	0	116
#1 Cleveland Ave	Local	Add 9:00 pm line up	Sun	0	116
#1 Cleveland Ave	Local	Improve service frequency in peak hours	Wkd	1	383
#1 Livingston Ave	Local	Add 8:00 pm line up	Sun	0	116
#1 Livingston Ave	Local	Add 12:00 midnight line up	Sat	0	104
#1 Livingston Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	159
#1 Livingston Ave	Local	Add 9:00 pm line up	Sun	0	116
#1 Livingston Ave	Local	Add 11:00 pm line up	Sat	0	104
#1 Livingston Ave	Local	Improve service frequency in peak hours	Wkd	1	383
#2 N High St	Local	Add 9:00 pm line up	Sun	0	116
#2 N High St	Local	Add 8:00 pm line up	Sun	0	116
#2 N High St	Local	Add 12:00 midnight line up	Sat	0	104
#2 N High St	Local	Add 11:00 pm line up	Sat	0	104
#2 N High St	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#2 N High St	Local	Improve service frequency most of day	Sat	0	780
#2 N High St	Local	Improve service frequency in the pm peak hours	Wkd	2	1,020
#2 E Main St	Local	Add 11:00 pm line up	Sat	0	104
#2 E Main St	Local	Add 9:00 pm line up	Sun	0	116
#2 E Main St	Local	Add 8:00 pm line up	Sun	0	116
#2 E Main St	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#2 E Main St	Local	Add 12:00 midnight line up	Sat	0	104
#2 E Main St	Local	Improve service frequency most of day	Sat	0	520
#2 E Main St	Local	Improve service frequency from 8 min peak/10 min off peak to 5 min pm peak	Wkd	2	1,020
#3 W Mound St	Local	Add 9:00 pm line up	Sun	0	116
#3 W Mound St	Local	Add 8:00 pm line up	Sun	0	116
#3 W Mound St	Local	Add 11:00 pm line up	Sat	0	104

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#3 W Mound St	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#3 W Mound St	Local	Improve service frequency in the midday and during peak hours	Wkd	0	3,570
#3 W Mound St	Local	Add 12:00 midnight line up	Sat	0	104
#3 W Mound St	Local	Improve service frequency in peak hours	Wkd	1	638
#3 W Mound St	Local	Extend from Georgesville & Industrial Mile to Hall & Galloway Rd 700a-700p	Wkd	1	3,825
#3 Northwest Blvd	Local	Add 9:00 pm line up	Sun	0	174
#3 Northwest Blvd	Local	Add 8:00 pm line up	Sun	0	174
#3 Northwest Blvd	Local	Add 12:00 midnight line up	Sat	0	52
#3 Northwest Blvd	Local	Add 11:00 pm line up	Sat	0	52
#3 Northwest Blvd	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#3 Northwest Blvd	Local	Improve service frequency in the midday and during peak hours	Wkd	0	2,805
#3 Northwest Blvd	Local	Improve service frequency in peak hours	Wkd	1	663
#3 Northwest Blvd	Local	Extend from Kingsdale to Sawmill & Summit View via Fishinger, Reed, Henderson & Sawmill from 700a-1000p	Wkd	2	8,670
#4 Indianola Ave	Local	Add 11:00 pm line up	Wkd	0	510
#4 Indianola Ave	Local	Add 12:00 midnight line up	Wkd	0	510
#4 Indianola Ave	Local	Add 11:00 pm line up	Sat	0	104
#4 Indianola Ave	Local	Add 12:00 midnight line up	Sat	0	104
#4 Indianola Ave	Local	Add 8:00 pm line up	Sun	0	116
#4 Indianola Ave	Local	Add 9:00 pm line up	Sun	0	116
#4 Indianola Ave	Local	Improve service frequency in the midday and during peak hours	Wkd	2	2,423
#4 Parsons Ave	Local	Add 12:00 midnight line up	Sat	0	104
#4 Parsons Ave	Local	Add 8:00 pm line up	Sun	0	116
#4 Parsons Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#4 Parsons Ave	Local	Add 11:00 pm line up	Sat	0	104
#4 Parsons Ave	Local	Add 9:00 pm line up	Sun	0	116
#4 Parsons Ave	Local	Improve service frequency in the midday and during peak hours	Wkd	2	3,060

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#5 W Fifth Ave	Local	Add 11:00 pm line up	Sat	0	104
#5 W Fifth Ave	Local	Add 9:00 pm line up	Sun	0	116
#5 W Fifth Ave	Local	Add 12:00 midnight line up	Sat	0	104
#5 W Fifth Ave	Local	Add 12:00 midnight line up	Wkd	0	510
#5 W Fifth Ave	Local	Add 11:00 pm line up	Wkd	0	510
#5 W Fifth Ave	Local	Add 8:00 pm line up	Sun	0	116
#5 W Fifth Ave	Local	Extend service to Hilliard-Rome Road 700a-700p	Wkd	1	3,060
#6 Mt Vernon Ave	Local	Extend service to the new VA Hospital on James Rd	Sat	0	0
#6 Mt Vernon Ave	Local	Extend service to the new VA Hospital on James Rd	Sun	0	0
#6 Mt Vernon Ave	Local	Extend service to the new VA Hospital on James Rd	Wkd	0	0
#6 Mt Vernon Ave	Local	Add 11:00 pm line up	Sat	0	104
#6 Mt Vernon Ave	Local	Add 9:00 pm line up	Sun	0	116
#6 Mt Vernon Ave	Local	Add 8:00 pm line up	Sun	0	116
#6 Mt Vernon Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#6 Mt Vernon Ave	Local	Add 12:00 midnight line up	Sat	0	104
#6 Mt Vernon Ave	Local	Improve service frequency in peak hours	Wkd	1	638
#6 Sullivant Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#6 Sullivant Ave	Local	Add 9:00 pm line up	Sun	0	116
#6 Sullivant Ave	Local	Add 8:00 pm line up	Sun	0	116
#6 Sullivant Ave	Local	Add 12:00 midnight line up	Sat	0	104
#6 Sullivant Ave	Local	Add 11:00 pm line up	Sat	0	104
#6 Sullivant Ave	Local	Improve service frequency in peak hours	Wkd	1	638
#6 Sullivant Ave	Local	Extend to W Broad St & Galloway Rd via Sullivant and Galloway Rds 700a-1000p	Wkd	1	3,953
#7 Neil Ave	Local	Add 8:00 pm line up	Sun	0	116
#7 Neil Ave	Local	Add 9:00 pm line up	Sun	0	116
#7 Neil Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#7 Neil Ave	Local	Add 12:00 midnight line up	Sat	0	104
#7 Neil Ave	Local	Add 11:00 pm line up	Sat	0	104

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#7 Neil Ave	Local	Improve service frequency	Sat	0	468
#7 Whittier St	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#7 Whittier St	Local	Add 11:00 pm line up	Sat	0	52
#7 Whittier St	Local	Add 12:00 midnight line up	Sat	0	52
#7 Whittier St	Local	Add 8:00 pm line up	Sun	0	58
#7 Whittier St	Local	Add 9:00 pm line up	Sun	0	58
#7 Whittier St	Local	Improve service frequency	Sat	0	468
#8 Frebis Ave	Local	Improve service frequency in the midday and during peak hours	Wkd	0	2,168
#8 Frebis Ave	Local	Add 12:00 midnight line up	Sat	0	52
#8 Frebis Ave	Local	Add 8:00 pm line up	Sun	0	58
#8 Frebis Ave	Local	Add 11:00 pm line up	Sat	0	52
#8 Frebis Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#8 Frebis Ave	Local	Add 9:00 pm line up	Sun	0	58
#8 Frebis Ave	Local	Improve service frequency in the pm peak hours	Wkd	1	510
#8 Frebis Ave	Local	Improve service frequency	Sat	0	858
#8 Hamilton Ave	Local	Improve service frequency in the midday and during peak hours	Wkd	0	2,168
#8 Hamilton Ave	Local	Add 11:00 pm line up	Sat	0	104
#8 Hamilton Ave	Local	Add 9:00 pm line up	Sun	0	116
#8 Hamilton Ave	Local	Add 12:00 midnight line up	Sat	0	104
#8 Hamilton Ave	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#8 Hamilton Ave	Local	Add 8:00 pm line up	Sun	0	116
#8 Hamilton Ave	Local	Improve service frequency in the pm peak hours	Wkd	1	510
#9 Leonard/Brentnell	Local	Improve service frequency in the midday and during peak hours	Wkd	2	3,570
#9 Leonard/Brentnell	Local	Add 11:00 pm line up	Sat	0	156
#9 Leonard/Brentnell	Local	Add 11:00 pm line up	Wkd	0	510
#9 Leonard/Brentnell	Local	Add 12:00 midnight line up	Wkd	0	510
#9 Leonard/Brentnell	Local	Add 12:00 midnight line up	Sat	0	156
#9 Leonard/Brentnell	Local	Add 8:00 pm line up	Sun	0	174

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#9 Leonard/Brentnell	Local	Add 9:00 pm line up	Sun	0	174
#9 Leonard/Brentnell	Local	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way	Wkd	2	6,630
Leonard/ Brentnell	Local	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way	Sat	0	936
#10 E Broad St	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#10 E Broad St	Local	Add 11:00 pm line up	Sat	0	104
#10 E Broad St	Local	Add 12:00 midnight line up	Sat	0	104
#10 E Broad St	Local	Add 8:00 pm line up	Sun	0	174
#10 E Broad St	Local	Add 9:00 pm line up	Sun	0	174
#10 E Broad St	Local	Improve service frequency in the midday and during peak hours	Wkd	2	1,275
#10 E Broad St	Local	Extend service east to Licking Co. line from approximately 7:00 am to 10:00 pm	Wkd	1	4,463
#10 W Broad St	Local	Add 9:00 pm line up	Sun	0	116
#10 W Broad St	Local	Add 8:00 pm line up	Sun	0	116
#10 W Broad St	Local	Add 11:00 pm line up	Sat	0	104
#10 W Broad St	Local	Extend 10:45 & 11:45 pm line ups to 11:00 pm and 12:00 midnight	Wkd	0	128
#10 W Broad St	Local	Add 12:00 midnight line up	Sat	0	104
#10 W Broad St	Local	Improve service frequency in the midday and during peak hours	Wkd	2	1,275
#10 W Broad St	Local	Discontinue S. Murray Hill Loop.	Wkd	0	0
#11 Oak/Bryden	Local	Extend service from Alum Creek & Winslow Drive to new 911 Center on Alum Creek Drive	Wkd	0	0
#11 Oak/Bryden	Local	Add 11:00 pm line up	Wkd	0	510
#11 Oak/Bryden	Local	Add 12:00 midnight line up	Wkd	0	510
#11 Oak/Bryden	Local	Add 11:00 pm line up	Sat	0	104
#11 Oak/Bryden	Local	Add 12:00 midnight line up	Sat	0	104
#11 Oak/Bryden	Local	Add 8:00 pm line up	Sun	0	116
#11 Oak/Bryden	Local	Add 9:00 pm line up	Sun	0	116
#11 St Clair Ave	Local	Add 12:00 midnight line up	Wkd	0	255

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#11 St Clair Ave	Local	Add 9:00 pm line up	Sun	0	58
#11 St Clair Ave	Local	Add 8:00 pm line up	Sun	0	58
#11 St Clair Ave	Local	Add 12:00 midnight line up	Sat	0	52
#11 St Clair Ave	Local	Add 11:00 pm line up	Wkd	0	255
#11 St Clair Ave	Local	Add 11:00 pm line up	Sat	0	52
#15 Grove City	Local	Improve service frequency in the midday and during peak hours	Sat	0	702
#15 Grove City	Local	Extend service further east of Stringtown & I-71 into growing retail complex	Wkd	0	0
#15 Grove City	Local	Improve service frequency in peak hours	Wkd	1	2,423
#15 Grove City	Local	Add evening service to 10:00p line up	Wkd	0	1,658
#16 E Long St	Local	Improve service frequency in the midday and during peak hours	Wkd	1.5	8,351
#16 E Long St	Local	Add 12:00 midnight line up	Sat	0	104
#16 E Long St	Local	Add 8:00 pm line up	Sun	0	116
#16 E Long St	Local	Add 11:00 pm line up	Sat	0	104
#16 E Long St	Local	Add 12:00 midnight line up	Wkd	0	510
#16 E Long St	Local	Add 11:00 pm line up	Wkd	0	510
#16 E Long St	Local	Add 9:00 pm line up	Sun	0	116
#16 E Long St	Local	Improve service frequency	Sat	0	1,560
#16 S High St	Local	Improve service frequency in the midday and during peak hours	Wkd	1.5	2,525
#16 S High St	Local	Add 9:00 pm line up	Sun	0	58
#16 S High St	Local	Add 8:00 pm line up	Sun	0	58
#16 S High St	Local	Add 11:00 pm line up	Sat	0	52
#16 S High St	Local	Add 12:00 midnight line up	Wkd	0	510
#16 S High St	Local	Add 11:00 pm line up	Wkd	0	510
#16 S High St	Local	Add 12:00 midnight line up	Sat	0	52
#16 S High St	Local	Improve service frequency	Sat	0	1,118

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
Greenlawn/ Gantz	Local	Add Peak-Hour service at a 60-minute frequency from Grove City Park & Ride, Stringtown Rd, Gantz Rd, Southpark Pl, Hardy Parkway, Brown Rd, Stimmel Rd, Harmon Ave, Greenlawn Ave, Greenfield Dr, Griggs Rd, Harmon Ave, Souder Ave, Thomas Lane, Davis Ave, then Rich & Town Streets to/from downtown	Wkd	2	4,080
#18 Kenny Rd	Local	Add 9:00 pm line up	Sun	0	319
#18 Kenny Rd	Local	Add 8:00 pm line up	Sun	0	319
#18 Kenny Rd	Local	Add 12:00 midnight line up	Sat	0	286
#18 Kenny Rd	Local	Add 11:00 pm line up	Sat	0	286
#18 Kenny Rd	Local	Add 10:00 pm line up	Sat	0	312
#18 Kenny Rd	Local	Add 12:00 midnight line up	Wkd	0	1,403
#18 Kenny Rd	Local	Add 11:00 pm line up	Wkd	0	1,403
#18 Kenny Rd	Local	Improve service frequency in peak hours	Wkd	3	5,993
#18 Kenny Rd	Local	Improve service frequency in the midday and during peak hours	Wkd	0	4,973
#19 Grandview/ Marble Cliff	Local	Improve peak frequency, truncate at 1st Community Village	Wkd	2	3,060
#19 Grandview/ Marble Cliff	Local	Add midday service	Wkd	0	3,060
#21 OSU/Easton Express	Local	Add Friday evening service between OSU and Easton	Wkd	0	765
#21 OSU/Easton Express	Local	Add Saturday evening service between OSU and Easton	Sat	0	3,825
#29 Polaris Pkwy	Express	Add park and ride and 4 commute trips and 1 reverse commute trip each peak	Wkd	2	2,550
#35 Tamarack	Express	Modify alignment to use Schrock Rd between Sharonwoods & Skywae rather than Hillandale & Justice	Wkd	0	110
#36 Annehurst	Express	Add pm trip leaving downtown at 5:45 pm	Wkd	0	319
#39 New Albany	Express	Discontinue Sunbury Loop & improve peak service levels from 2 trips to 4 trips	Wkd	2	2,295
#40X Sunbury Road	Express	Add park & ride and service from Sunbury/ SR161 via I-270/I-670 to downtown	Wkd	2	2,040
#41 Gahanna	Express	Improve from 2 to 4 trips each peak	Wkd	0	1,211

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#44 North Reynoldsburg	Express	Add park & ride at 256 & I-70. Increase number of trips from 2 each peak to 4 each peak	Wkd	1	2,678
#49X US 33 Express	Express	Add new park & ride at Gender & US 33 and new route via US-33/I-70 or SR-104 with 4 trips each peak	Wkd	3	3,953
#50 South Columbus	Express	Add new park & ride at US23/Rathmell and new service between S. High St/Rathmell Rd. and downtown via S. High, I-270, and I-71, 2 trips each peak	Wkd	2	2,040
#55 Avery/ Perimeter	Express	Add park & ride and new service, 2 trips each peak. Travel via Avery, SR 161, I-270, I-70, I-670 to/from downtown Columbus	Wkd	2	2,040
#55X Dublin/OSU	Express	Add new direct service between Dublin and OSU. Location in Dublin to be determined.	Wkd	2	2,295
#56 Tuttle	Express	Improve from 2 to 3 trips each peak	Wkd	0	956
#57 Hilliard	Express	Investigate feasibility of moving park & ride location closer to Hilliard/Rome & Renner Rd. intersection	Wkd	0	0
#58 Dublin	Express	Add 1 am and 2 pm reverse commute trips	Wkd	1	1,020
#59 Sawmill	Express	Add park & ride and service via Sawmill Rd, I-270, SR 315, I-670 to/from Downtown Columbus, 2 trips each peak	Wkd	2	1,785
#60 Arlington	Express	Improve from 2 to 3 trips each peak	Wkd	1	861
#81 Hudson/Ohio	Crosstown	Improve service frequency in the midday and during peak hours	Wkd	1	3,953
#81 Hudson/Ohio	Crosstown	Improve service frequency in the midday and during peak hours	Sat	0	806
#83 Oakland/Weber	Crosstown	Improve service frequency in the midday and during peak hours	Wkd	1	3,953
Oakland/Weber	Crosstown	Extend service to Main & Cemetery in Hilliard at 60 min frequency	Wkd	1	3,953
#84 OSU/Arlington	Crosstown	Modify alignment to travel Lane Ave, Redding Rd, Ridgecliff to Tremont.	Wkd	0	0
#85 Brice/Gender	Crosstown	Add peak hour service between Canal Winchester & E Broad/Fairway	Wkd	2	4,590

TABLE 5-2
Schedule of Service Improvements for 2008-2011

Route	Type	Modification	Service	Change in Peak Fleet	Estimated Change in Annualized Vehicle Hours
Note: Exact implementation dates are contingent upon timely delivery of future bus purchases and the hiring and training of new operators. In addition to the service changes listed below, COTA will also continually refine the fixed-route network and service levels in order to best match supply and demand for transit services.					
#85 Brice/Gender	Crosstown	Add midday service between Canal Winchester and E. Broad/Fairway	Wkd	0	4,590
#87 Agler/Cassady	Crosstown	Extend service earlier into am and later into pm	Wkd	1	3,953
#89 Hamilton Road	Crosstown	Extend service north to Gahanna and Easton	Wkd	2	9,435
#89 Hamilton Road	Crosstown	Extend service to Blacklick Estates	Sat	0	546
#89 Hamilton Road	Crosstown	Extend service north to Gahanna and Easton	Sat	0	1,716
#92 James/Stelzer	Crosstown	Deviate service into the new VA Hospital on James Rd	Wkd	0	0
#92 James/Stelzer	Crosstown	Deviate service into the new VA Hospital on James Rd	Sun	0	0
#92 James/Stelzer	Crosstown	Deviate service into the new VA Hospital on James Rd	Sat	0	0
#92 James/Stelzer	Crosstown	Extend service from 830pm to 1000pm	Wkd	0	3,698
#93 Polaris Crosstown	Crosstown	Add service between Westerville Park & Ride, Polaris & Crosswoods Park & Ride	Wkd	2	8,925
#94 SR 161 Crosstown	Crosstown	Add peak hour service from SR 161/Cleveland to Dublin Hospital/Innovation Park Areas	Wkd	3	5,865
#94 SR 161 Crosstown	Crosstown	Add midday service from SR 161/Cleveland to Dublin Hospital/Innovation Park Areas	Wkd	0	5,865
#95 Morse / Henderson	Crosstown	Improve midday frequency and extend to 8:00 pm.	Wkd	0	3,328
#95 Morse/ Henderson	Crosstown	Extend service until 1000pm	Wkd	0	3,698
#96 East Fifth Avenue	Crosstown	Add midday service and later evening service	Wkd	0	3,009
#97 Georgesville / Phillipi	Crosstown	Add peak-hour service between Georgesville Square and Fisher Rd	Wkd	2	3,315
#100 Hilliard-Rome Rd./Avery Rd.	Crosstown	Add service between Westwoods P&R and Avery Rd/Perimeter Loop area	Wkd	2	8,033
		Total 2008 – 2011 Fixed Route Service		**78**	**238,913**

FIGURE 5-1
2007-2011 Existing and Proposed Weekday Route System

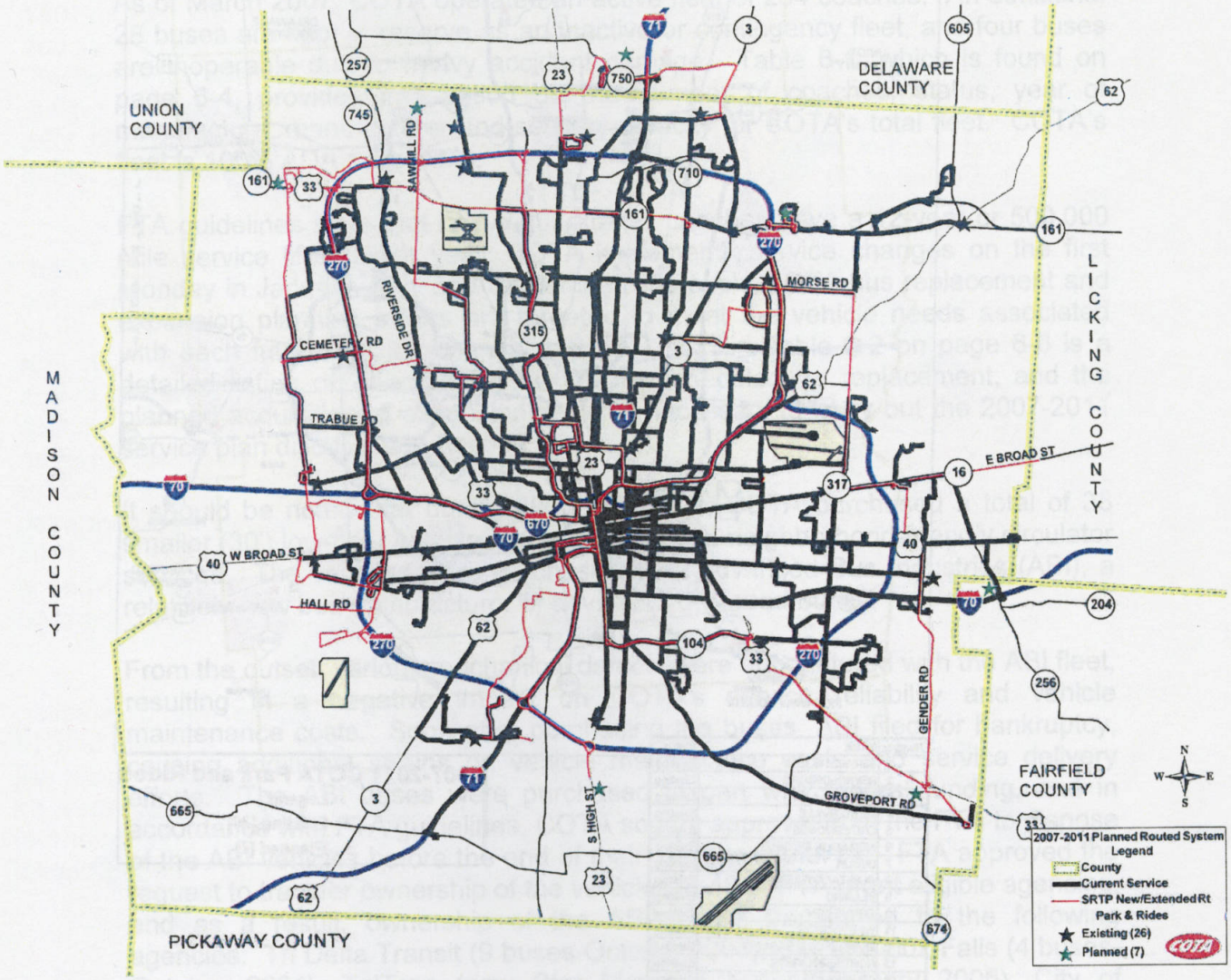
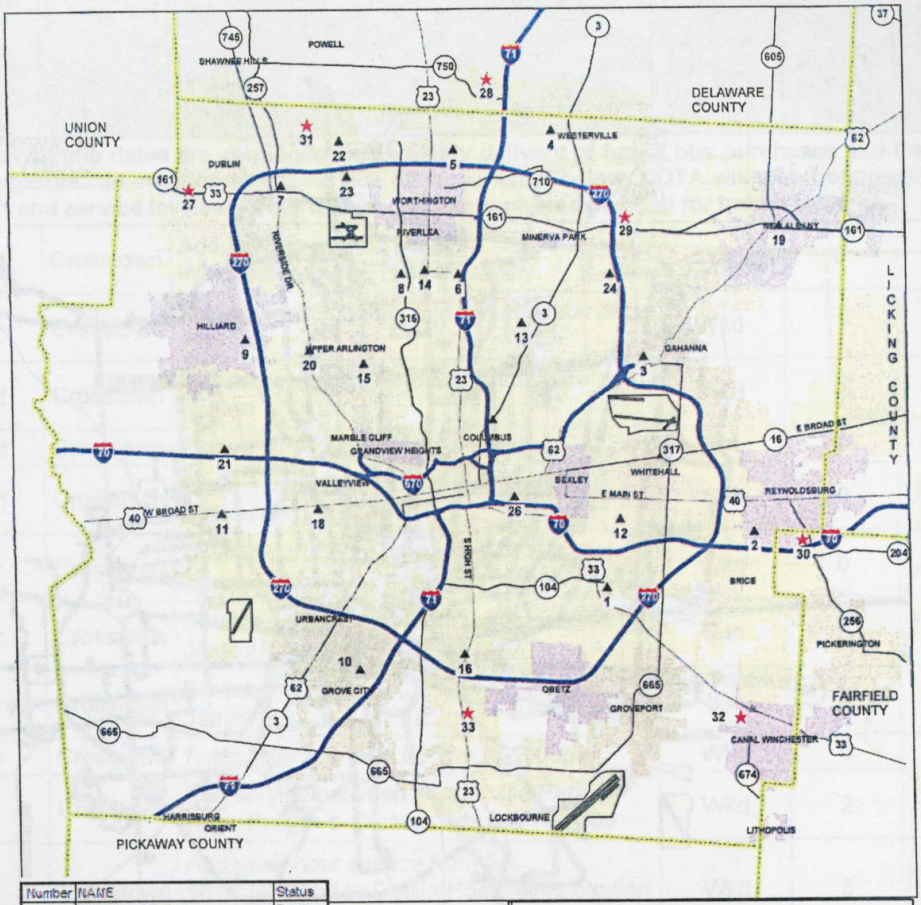


FIGURE 5-2
Existing and Planned Park and Rides (2007-2011)



Number	NAME	Status
1	BERWICK PLAZA	Existing
2	REYNOLDSBURG	Existing
3	ROYAL PLAZA	Existing
4	WESTERVILLE	Existing
5	CROSSWOODS	Existing
6	INDIANOLA & MORSE	Existing
7	DUBLIN	Existing
8	GLENTANGY-BETHEL	Existing
9	HILLIARD	Existing
10	GROVE CITY	Existing
11	WESTWOODS	Existing
12	LIVINGSTON & BARNETT	Existing
13	NORTHERN LIGHTS	Existing
14	DELAWANDA	Existing
15	KINGSDALE SHOPPING CENTER	Existing
16	GREAT SOUTHERN	Existing
17	WHITEHALL	Existing
18	BROAD & SOUTHAMPTON	Existing
19	NEW ALBANY	Existing
20	GRIGGS DAM	Existing
21	HILLIARD-ROME RD	Existing
22	ST. ANDREW	Existing
23	ST PETER'S	Existing
24	EASTON	Existing
25	LINDEN	Existing
26	NEAR EAST	Existing
27	PERIMETER	Planned
28	POLARIS	Planned
29	SUNBURY & SR-161	Planned
30	SR 256 & I-70	Planned
31	SAWMILL & SUMMIT VIEW	Planned
32	CANAL WINCHESTER	Planned
33	SR-665 & RATHMELL	Planned

2007-2011 COTA Park and Rides
Legend
▲ Existing (26)
★ Planned (7)

6.0 COTA FIXED-ROUTE BUS FLEET

6.1 Active Fleet

As of March 2007, COTA operated an active fleet of 234 coaches. An additional 28 buses are kept in reserve as an inactive or contingency fleet, and four buses are inoperable due to heavy accident damage. Table 6-1, which is found on page 6-4, provides information on the number of coaches, status, year of manufacture, manufacturer and seating capacity for COTA's total fleet. COTA's fleet is 100% ADA accessible.

FTA guidelines state that heavy-duty transit coaches have a 12-year or 500,000 mile service life. Each year, COTA implements service changes on the first Monday in January, May and September. As such, COTA bus replacement and expansion planning efforts are targeted to meet the vehicle needs associated with each future service change period. Listed in Table 6-2 on page 6-6 is a detailed listing of when COTA buses are scheduled for replacement, and the planned acquisition of expansion vehicles necessary to carry out the 2007-2011 service plan discussed in Section 5.

It should be noted that during 2000 and 2001, COTA purchased a total of 38 smaller (30') low-floor vehicles for crosstown and neighborhood-friendly circulator services. The vehicles were purchased from Advanced Bus Industries (ABI), a relatively new bus manufacturer of advanced designed buses.

From the outset, various mechanical defects were encountered with the ABI fleet, resulting in a negative impact on COTA's service reliability and vehicle maintenance costs. Soon after purchasing the buses, ABI filed for bankruptcy, causing additional strains on vehicle maintenance costs and service delivery efforts. The ABI buses were purchased in part with federal funding, and in accordance with FTA guidelines, COTA sought approval from the FTA to dispose of the ABI vehicles before the end of their 10-year useful life. FTA approved the request to transfer ownership of the vehicles to other FTA grant eligible agencies, and as a result, ownership of the ABI's were transferred to the following agencies: Tri Delta Transit (9 buses-October 2004), City of Sioux-Falls (4 buses-October 2004), TalTran (now Star Metro, 4 buses-February 2005), City of Colorado Springs (15 buses-July 2005), and Jackson State University (6 buses-June 2006). COTA received no proceeds from the transfer of the ABI vehicles.

6.2 Fleet Spare Ratio

As of March 2007, COTA operated 185 coaches in the morning peak period and 195 coaches in the PM peak period. The remaining active vehicles are retained as emergency spares (i.e., for breakdowns and passenger overloads) or for preventive maintenance. The ratio of spare vehicles to the afternoon peak period

fleet is currently 20.0 percent. Table 6-3 (page 6-7) displays important COTA fleet data for each year of the TIP (i.e., 2007-2011).

6.3 Future Bus Purchases

COTA will replace 31 of the 1993 series buses and one (1) refurbished 1987 GMC during the second and third trimesters of 2007. Gillig, the oldest transit bus manufacturer in North America, will manufacture the buses. These replacement buses were ordered in mid-2006 as part of the prior year's planning activities, and are not included in the 2008-2011 TIP tables. In the second and third trimester of 2008, COTA will continue the replacement of the remaining fifteen 9300 series coaches.

With the success of Issue 7 in November 2006, a significant increase in fixed-route service hours will occur over the next 10 years. In general, the procurement process for ordering and delivery of fixed-route buses takes approximately 16 to 18 months. As such, beginning in 2007 and for each year thereafter, COTA will order 40 buses per year. A "smoothing" approach to bus purchases was developed and is being implemented that allows COTA to replace vehicles in a predictable and timely manner, and allows COTA to ramp up service levels as quickly as possible within financial constraints. In Table 6-2 for example, 40 new buses will be purchased for expansion and replacement each year during calendar years 2008-2011. Additionally, during 2008, four 1995 Flxible buses will be brought back from retirement, and completely refurbished in order to meet 2009 service expansion needs, resulting in a total of 44 expansion buses added to the fleet in 2009.

As part of future bus purchases, COTA will increase the use of smaller, neighborhood friendly 30' buses. COTA plans to purchase 30 large 40' and 10 smaller 30' buses in each of the 2008-2011 TIP years. The smaller buses will allow for better matching of bus resources to passenger load demands on express, crosstown and LINK routes, and due to their lower cost and better fuel efficiency, will help COTA maximize available dollars for much needed capital investments.

6.4 Funding of Future Bus Purchases

Funding future replacement and expansion bus needs involves a variety of sources, including Federal Congestion Mitigation and Air Quality (CMAQ) grants, Federal Section 5309 grants, Federal Section 5307 Urban Formula grants, ODOT's Public Transit Grant Program funds, and COTA's local sales tax receipts. CMAQ provides funding for projects and programs in air quality non-attainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation related emissions. CMAQ funds are administered by MORPC, and are apportioned to qualifying agencies according

to a formula based on population and severity of pollution in ozone and carbon monoxide areas.

Every two years, MORPC solicits applications for transportation projects and programs that are located within its transportation planning area. In July 2006, MORPC solicited applications for awarding funding to projects and programs for SFY's 2008-2013. At the present time, COTA is scheduled to receive MORPC attributable CMAQ funds to help purchase 34 replacement vehicles (1995s) during SFY's 2008-2011.

The competition for federal and state assistance is extremely intense and therefore COTA cannot be confident about the availability of various federal and state monies to fund all future bus replacement and expansion needs. COTA will actively pursue all other possible sources of capital grant monies. In this regard, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) allows a region much greater discretion in the allocation of transportation monies between highway and public transit improvements. COTA will work with the MORPC to identify opportunities for funding COTA's bus replacement needs which this legislation has created. Further, the successful passage of Issue 7 by voters was critical in providing additional local funding resources to help offset shortfalls in federal and state capital assistance, and in allowing for COTA to expand much needed transit services in the central Ohio area.

TABLE 6-1
ROSTER OF EQUIPMENT
Active Fleet *As of March 2007 (Note: All buses are ADA accessible)*

Year of Manufacture	Manufacturer	Length	Seating Capacity	Equipment	Number of Vehicles	Replacement Year
2005	New Flyer	40'	39	A/C – Ramp	5	2017
2005	GILLIG	35'	32	A/C – Ramp	3	2017
2004	GILLIG	35'	32	A/C – Ramp	9	2017
2004	New Flyer	40'	39	A/C – Ramp	5	2017
2003	New Flyer	40'	39	A/C – Ramp	5	2017
2003	New Flyer	40''	39	A/C – Ramp	5	2016
2001	New Flyer	40'	39	A/C – Ramp	28	2016
2001	New Flyer	40'	39	A/C – Ramp	23	2015
2001	New Flyer	40'	39	A/C – Ramp	11	2014
1999	Nova	40'	39	A/C – Ramp	11	2014
1999	Nova	40'	39	A/C – Ramp	17	2013
1995	Flxible	40'	42	A/C – Lift	5	2013
1995	Flxible	35'	35	A/C – Lift	1	2013
1995	Flxible	40'	42	A/C – Lift	17	2012
1995	Flxible	35'	35	A/C – Lift	5	2012
1995	Flxible	40'	42	A/C – Lift	15	2011
1995	Flxible	35'	35	A/C – Lift	9	2011
1995	Flxible	40'	42	A/C – Lift	18	2010
1995	Flxible	35'	35	A/C – Lift	8	2008
1993	Flxible	40'	42	A/C – Lift	11	2008
1993	Flxible	35'	35	A/C – Lift	4	2008
1996	Chance/Trolley	31	25	A/C – Lift	2	2008
1993	Flxible	40'	42	A/C – Lift	1	2007
1993	Flxible	35'	35	A/C – Lift	15	2007
**1987	GMC	40'	45	A/C – Lift	1	2007
				Total	234	

Notes:
* Four (4) 1995 Flxible buses will be refurbished to meet expansion needs in 2009. During 2009, COTA's replacement and expansion needs require 44 buses; however, 40 buses are planned for purchase.

** Fully refurbished with wheelchair lift in 2000 (GMC = General Motors Corporation)

TABLE 6-1 (continued)
ROSTER OF EQUIPMENT

Contingency Fleet

Year of Manufacture	Manufacturer	Length	Seating Capacity	Equipment	Number of Vehicles
1997	Chance	31'	25	A/C – Lift	1
1993	Flxible	40'	42	A/C – Lift	26
1963	GMC	40'	53	NO A/C	1
				Total Contingency Fleet	28

Out-of-Service / Heavy Repair Fleet

Year of Manufacturer	Manufacturer	Length	Seating Capacity	Equipment	Number of Vehicles
2001	New Flyer	40'	39	A/C – Ramp	1
1995	Flxible	40'	42	A/C – Lift	1
1995	Flxible	35'	32	A/C – Lift	2
				Total Out-of-Service / Heavy Repair Fleet	4

TABLE 6-2
BUS REPLACEMENT SCHEDULE

		2007			2008			2009			2010			2011		
Year Entered in Service	Number of Buses	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri
1987*	1			1												
1993	16			16												
1993	15					7	8									
1995	50						**12				5	8	5	12	8	4
1996	2					2										
1995	28															
1999	28															
2001	62															
2003	10															
2004	14															
2005	8															
Totals	234															
Service Reduction		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Expansion		0	0	15	0	11	0	17	13	14	9	6	7	4	5	7
Replacement		0	0	17	0	9	20	0	0	0	5	8	5	12	8	4
Total Active Fleet		234	234	249	249	260	260	277	290	304	312	318	326	329	335	342

Notes:
* Fully refurbished bus (with wheelchair lift) in 2000.
** Four (4) 1995 buses will be refurbished to augment the 40 new buses purchased for replacement and expansion needs in 2009

TABLE 6-3
PEAK FLEET UTILIZATION
35'/40' Fixed Route Buses
(Calendar Year)

	2007			2008			2009			2010			2011		
	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri	1st Tri	2nd Tri	3rd Tri
Active PM Peak Fleet	195	195	207	214	216	216	230	237	253	260	265	271	274	279	285
Available Spare Fleet In Higher Peak (PM)	39	39	42	43	44	44	46	48	51	52	53	55	55	56	57
COTA Spare Ratio (%)	20.0	20.3	20.3	20.0	20.4	20.4	20.0	20.2	20.2	20.0	20.0	20.3	20.0	20.0	20.0
Total Active Fleet	234	234	249	257	260	260	276	285	304	312	318	326	329	335	342

Notes:

1. The PM Peak Fleet is planned to exceed the AM Peak Fleet by approximately 5 to 10 buses
2. Active PM Peak Fleet are those vehicles planned to be in service during the evening peak period.
3. Available Spare Fleet Is the Total Active Fleet minus the higher Active Peak Fleet requirements.
4. COTA Spare Ratio = Total Spare Fleet / Highest Peak Fleet
5. Total Active Fleet is all buses determined to be eligible for active service. Does not include vehicles which are out of service due to a major accident or fire damage.

6.5 The COTA Contingency Fleet Plan

As of March 2007, COTA operated an active fleet of 234 fixed-route buses. Of this fleet, 195 buses operate in the PM peak period with 39 vehicles held as spares (i.e., 20.0% spare ratio). In addition to the active fleet, COTA maintains 28 coaches in a contingency fleet.

COTA maintains a contingency fleet in order to respond to vital community needs in a timely fashion. These community needs include:

- **Growth of the COTA Peak Fleet** – COTA's ability to add new service is dictated by the growth in our sales tax receipts. The contingency fleet allows COTA the flexibility to add to the peak fleet as funding permits. Beginning January 1, 2008, COTA's permanent 0.25 percent sales tax will be supplemented by a 10-year, renewable 0.25 percent sales tax. Because the State of Ohio distributes sales tax revenue three months in arrears, COTA will actually begin receiving the additional revenue in April 2008. The additional sales tax was sought in order to help fund COTA's LRTP, and will be used to begin a significant expansion of fixed-route and paratransit services, the construction of new park and ride/transit facilities, and imitate planning for future strategic transit investments (e.g., high-capacity transit options in congested travel corridors, etc.). This SRTP represents the first planning phase of implementing the LRTP, and assumes a rapid increase in fixed-route service and vehicles during the next ten years.

- **Job Access Service** – In prior years, COTA's Mobility Services department has been successful in attracting FTA Job Access/Reverse Commute Grant funds. In addition, COTA has been successful in partnering with major local employers in the creation of new first and second shift transit services. COTA has been required to draw from our contingency fleet in order to address these vital community needs, and will continue to work with area agencies and partners to develop innovative new services to meet these needs (please refer to Section 7 for additional details on these new coordination efforts).

- **Supplemental Service for Highway Reconstruction Projects** – Since 1992, COTA has partnered with the City of Columbus and ODOT to provide supplemental peak period bus services for four major highway reconstruction projects. These services were added in an effort to reduce congestion during the peak travel time periods. COTA has provided between 3 and 10 additional peak period buses to meet these community needs. For example, in 2001, COTA provided three peak period coaches to assist in mitigating the traffic impacts of the I-70 East Reconstruction Project. COTA is currently an active partner with ODOT as plans for the I-70/71 South Innerbelt construction project near downtown are developed. This major construction project is scheduled to begin in 2010.

- **Supplemental Service for Special Events** – In June of 2000, COTA was involved in assisting the City of Columbus with planning for the three day "Presidents Empowerment Zone Conference". This conference required the extensive movement of over 1,000 conference delegates to various sites and receptions in the Columbus Empowerment Zone. The availability of a contingency fleet allowed COTA to provide supplemental service for this event and other similar events.

- **Volatile Energy Prices** – Since 2004, rapid increases in gasoline prices across the country have raised awareness of public transit benefits. Additionally, public transit is taking a prominent role in the dialogue about reducing the nation's energy consumption. Many transit agencies have experienced nearly double-digit increases in ridership, particularly on express routes which offer greater benefits for travelers facing longer commute distances. Following the immediate surge in gas prices as a result of Hurricane Katrina in 2005, COTA experienced a nearly 10 percent increase in ridership. COTA's customer service center received a tremendous increase in phone calls requesting bus service to low-density suburban areas that presently have limited or no service. The maintenance of a contingency fleet allows COTA to add peak period service to address this added demand preventing pass-ups and over loads. The capability to add supplemental service during an energy crisis is critical to the central Ohio community.

In order to provide for these essential community needs, COTA will maintain a 10 bus contingency fleet during the time period of this Short Range Transit Plan (2007-2011).

6.6 Alternative Fuels

In April 2004, the federal Environmental Protection Agency (EPA) designated the central Ohio region as "non-attainment" for failing to meet minimum air quality standards for ozone. Additionally, the EPA has mandated a reduction in the emissions of nitrous oxide, sulfur dioxide, hydrocarbons, and particulate matter. In 2000, COTA joined forces with MORPC's Air Quality Program, which was formed to address the region's growing air quality issues. This program's membership includes representation from local governments, health-based organizations, businesses, and environmental interests.

Low-sulfur petrodiesel engine emission reductions, mandated by the EPA, are deemed to offer significant opportunities for fine particulate matter and ozone improvements. Through the use of alternative engine fuels, COTA will continue to be very proactive in helping to improve air quality in the region. Reducing the dependency on petrodiesel fuel by using alternative fuels such as biodiesel, helps improve the region's air quality and quality of life for area residents. MORPC's Air Quality Program study suggested that the use of biodiesel compared to particulate traps or oxygen catalysts provides the most significant

reduction in emission of particulate matter, sulfur dioxide, hydrocarbons, and possible nitrous oxide.

COTA's current fleet of 234 fixed-route buses consumes over two million gallons of diesel fuel a year. Based on the service expansion proposed in the LRTP, the fleet size is projected to grow by 87 percent, or to 438 buses. COTA understands that while expanded service is necessary to help meet the community's transportation needs and is an important component to the region's overall transportation system, much effort is also needed to help improve the region's air quality.

In early 2006, COTA conducted a 60-day pilot program utilizing Ohio grown, soybean based biodiesel fuel in 33 buses. The pilot program utilized a 20 percent soybean mixture (20 percent soybean oil and 80 percent low-sulfur petrodiesel). During this period, fuel consumption was improved by 1.5 percent. In addition to its lower cost, over time, biodiesel also cleans the buses' engines, resulting in better mileage and less engine maintenance. Engines using biodiesel have demonstrated wear rates as much as 50 percent lower than those using regular commercial fuels, effectively doubling engine life. COTA's biodiesel contains soybeans grown, processed, and produced in Ohio, and is an environmentally-friendly, renewable energy source.

Following the success of the pilot program, COTA established a regular program that incorporates the use of biodiesel fuels, and serves to establish a long-term commitment for improving air quality in the central Ohio area. COTA's fuel program calls for tank blending biodiesel at 10 to 50 percent with either low sulfur or ultra low sulfur petrodiesel depending on the time of year. Optimal utilization of biodiesel fuel is dependent on ambient temperatures. During winter months, due to colder temperatures, biodiesel thickens, and mixture ratios must be reduced in order to prevent engine reliability issues.

Biodiesel fuel has significantly reduced black soot and strong fuel odors from COTA buses. Complying with new EPA air quality standards (effective October 1, 2006), continued investments in biodiesel fuel and ultra-low sulfur biodiesel is assisting COTA in protecting vehicle assets from potential failure due to the drastic reduction in sulfur from 500 parts per million (ppm) to 15ppm.

6.7 Fleet Maintenance Objectives

The main objective of the Vehicle Maintenance Department is to have safe and reliable coaches on the street for COTA passengers at all times. To ensure maximum performance of COTA coaches, aggressive preventive maintenance

programs have been designed to identify potential failures prior to the actual failure occurring.

The "A" chassis inspection is completed every 6,000 miles. This inspection encompasses checking and evaluating 105 separate items including changing the engine oil and filters, and a thorough brake inspection. The "B" at 12,000 and "C" at 24,000 miles respectively, incorporate the inspection items inspected in the "A" inspection with the addition of the fuel, air, and transmission filters. During the "D" inspection at 45,000 miles or annually, the transmission and differential fluids are changed. All ADA related items are included in each inspection.

The wheelchair inspection is completed every 4,500 miles. During this inspection, all swivel points are lubricated. The limiter switches are checked to ensure proper clearance is maintained, in addition to numerous other checks to ensure optimum performance.

The air conditioning (A/C) system is inspected twice each year. This inspection incorporates an internal and external evaluation of the system and a performance test. Acidic tests are conducted to evaluate the condition of the refrigerant and compressor oil, and radiator flushing is performed every two years or 72,000 miles. Additionally, COTA inspects the A/C compressor oil condition and coolant condition. A compressor and performance test is completed to ensure that the compressor and associated parts can maintain operation in severe use during the summer.

A yearly chassis corrosion inspection enables COTA to reduce the magnitude of corrosion on the underside of the coach. Prior to the process of resealing the underside of the coach, the area is completely cleaned of road dirt and corrosion. When this is completed, the complete understructure is sprayed with an undercoating to prolong the life of the understructure.

A premium cleaning is completed on 117 coaches each month. This reflects half the fleet is detailed inside and out to provide a clean environment for our riders. Supervisors on each shift conduct quality assurance spot inspections. A minimum of 10 coaches is checked for proper cleanliness and overall condition. For continuity of operations, standard operating procedures (SOP) are being developed to enhance quality and productivity.

In an effort to further manage maintenance costs and reduce the overall cost per mile of operating the fleet, in the first quarter of 2007 COTA installed a major upgrade to the organizational-wide asset management software, MIMS/Ellipse. MIMS/Ellipse is an enterprise asset management system with a primary function of efficiently managing the maintenance and repair of COTA's bus fleet. Among other benefits, MIMS/Ellipse better allows COTA to track on a real time basis, bus parts and maintenance costs for each bus enabling COTA staff to make

better decisions, respond faster and improve the performance and reliability of the entire bus fleet. In addition to bolstering COTA's preventative maintenance program for buses, Ellipse also improves procedures used to store and tack spare part inventory, plan and schedule work, provide bus bill of materials, standard jobs, and reporting of key performance indicators. The MIMS/Ellipse system also encompasses Inventory, procurement and accounts payable functions.

Utilizing these types of preventative maintenance programs enables COTA passengers to have a safe, reliable, and comfortable environment to travel to their destination.

6.8 "Like New" Bus Program

The "Like New" program was initiated in order to improve the look and extend the useful life of the aging 1995 Flxible buses that remain in COTA's active fleet. Due to COTA's significant service expansion over the next ten years, several of the 1995 series buses are scheduled to remain in the fleet through 2011. Developed internally, this process uses the latest technologies and procedures for body preparation, paint process, and structural repair. The "Like New" program goal is to extend the use of the 1995 Flexibles for a minimum of three additional three years. Since September 2005, COTA has rehabbed four buses, with each additional bus providing improved quality finish and workmanship, and reduced refurbishing costs.

In order to continually improve COTA's image and appearance of older buses, this process will be applied to 1999 and newer series coaches by in-house maintenance staff, while the older 1995 buses will be refurbished utilizing external vendors adopting COTA "Like New" standards for extending the life of the bus.

6.9 Other Equipment

In addition to obvious passenger amenities such as buses, park and ride lots, bus stops and shelters, COTA has other equipment and facilities which are a part of a behind-the-scenes effort to keep operations running efficiently. This equipment is described below:

6.9.1 Non-Revenue Vehicles

COTA has established a replacement schedule and identified additional fleet requirements to support the transit operations through 2001. Various types of service vehicles are distributed among the departments utilized that support the operations, which include company passenger automobiles and vans, police cruisers, heavy-duty service trucks (bucket, box, flat bed), and pickup trucks.

Over the span of the SRTP (2007-2011), 40 vehicles in total are scheduled for purchase. COTA staff utilizes these vehicles for administration functions, maintaining COTA infrastructures, and supporting maintenance activities on the fixed-route fleet. As identified in the TIP, the cost of the non-revenue vehicles is $1,909,462 and will be funded from the dedicated local sales tax.

6.9.2 Non-Revenue Equipment

During 2001, COTA replaced 330 bus radios. These radios provide two-way communication between the driver and COTA's radio/communications personnel. Additionally, 51 non-revenue vehicles and 45 Project Mainstream vehicles were also equipped with new radios.

7.0 MOBILITY SERVICES

In January 2003, COTA's Paratransit and Mobility Management departments were combined in an effort to ensure overall access and coordination of transportation services. COTA's Mobility Services department is comprised of transportation service delivery for persons with disabilities and for low-income individuals seeking employment. Additionally, Mobility services seeks to develop alternative transportation options that go beyond COTA's traditional fixed-route service. To assist the organization in the transformation process from simply being a "bus company" to that of a full-service mobility manager requires a variety of functions and activities that have been developed and will continue to be developed over the next five-year period.

7.1 Project Mainstream Paratransit Service

Project Mainstream is complementary paratransit service for individuals who are unable to use the regular fixed-route bus service due a disability. The service is based on Americans with Disabilities Act (ADA) eligibility criteria. Transportation service is provided throughout the COTA service area that includes Franklin County and select portions of Delaware, Fairfield, and Licking Counties (See Figure2-2).

COTA's Project Mainstream Vehicle

COTA's service provider, First Transit, is currently in the first year of a five-year contract that expires July 31, 2011. COTA completed a competitive Request for Proposal (RFP) in February 2006 for a comprehensive transportation program. First Transit was the successful bidder and was awarded a five-year contract that commenced on August 1, 2006. ATC/Veolia, the former contractor, completed a four-year contract period that extended from August 1, 2002, to July 31, 2006.

Operating statistics for Project Mainstream are monitored on a regular basis. The service provider contract requires ADA compliance as well as adherence to various performance standards including zero ADA trip denials, on-time performance, and productivity goals for passenger trips per revenue hour, missed trips, on-board monitoring and vehicle-maintenance requirements. Statistical outcomes also include customer-service requests, customer trips, operating expenses, revenue recovery and other indicators. The outcomes are tracked and reported monthly. Information is compared to prior months and prior years to analyze and assess significant trends or anomalies regarding service delivery. Table 7-1 summarizes Project Mainstream operating results for COTA's calendar years 2005 and 2006.

Project Mainstream provides reservations (maximum seven days in advance) and subscription (standing orders) service. Subscription customers have the ability to travel from the same origin to the same destination at least once a week. Reservation customers may request trips as needed. In compliance with ADA regulations, COTA schedules 50% or less of total trips during any service hour as subscription service. Changes in customer demand may result in subscription trips that exceed the 50% requirement. New subscription service requests may be suspended for that service hour until subscriptions return to a level of 50% or less of total trips.

TABLE 7-1
PROJECT MAINSTREAM REPORT FOR 2005-2006

		2005	2006	CHANGE
PASSENGER TRIPS				
Subscription				
Weekday		28,821	28,250	-1.98%
Saturday		1,084	998	-7.93%
Sunday		1,027	1,131	10.13%
	TOTAL	30,932	30,379	-1.79%
Reservation				
Weekday		98,446	99,349	0.92%
Saturday		8,380	8,723	4.09%
Sunday		6,433	7,071	9.91%
	TOTAL	113,259	115,143	1.66%
Total Weekday		127,267	127,599	0.26%
Total Saturday		9,464	9,721	2.72%
Total Sunday		7,460	8,202	9.95%
	TOTAL TRIPS	144,191	145,522	0.92%
PRODUCTIVITY				
Operating Expenses		$4,405,018	$4,454,643	1.13%
Cost/Passenger		$29.93	$30.13	0.67%
Service Days		365	365	0.00%
Vehicle-Hours		125,318	121,688	-2.89%
Total Revenue Generated		$137,018	$157,025	14.60%
Revenue/Cost		3.11%	3.52%	13.18%
Passengers/Revenue Vehicle Hour		1.38	1.42	2.90%
Cancellations		32,007	32,579	1.79%
No Shows		4,784	4,081	-14.69%
Total Service Denials		4,424	4,133	-6.58%
Complaints		618	478	-22.65%
ADMINISTRATIVE				
Applications Requested		2,221	2,237	0.72%
Applications Processed		1,505	1,604	6.58%
New Subscription Users		4	5	25.00%
Subscription Waiting List		70	87	24.29%
Subscription Users		120	116	-3.33%
TOTAL CERTIFIED USERS		3,114	3,049	2.09%

Note: The passenger trip data above pertains only to eligible Project Mainstream customers who were transported by Project Mainstream buses. The Sedan Voucher Program and Will Call programs provided an additional 7,020 and 357 trips respectively in 2006. In 2005, 7,556 sedan vouchers were used. The Will Call program began in August 2006.

COTA Project Mainstream fleet requirements are reviewed on a semi-annual basis to ensure compliance with ADA regulations and to meet possible increases in paratransit service demands. Currently, COTA operates 51 vehicles. All vehicles are owned by COTA and operated by First Transit. Peak travel periods in the AM and PM require 43 vehicles. Eight spare vehicles are provided in order to maintain a 20% spare ratio. The number of vehicles needed to perform service delivery has remained flat since 2004, due in part to fixed-route service reductions.

Project Mainstream vehicles can accommodate up to three mobility devices (wheelchairs/scooters) and six ambulatory customers. New technology has fully integrated Project Mainstream with COTA's fixed-route wireless communication system. Mainstream vehicles are equipped with wireless radio, mobile data terminals, and automatic vehicle location equipment. The integration helps to improve paratransit operating efficiency and support future coordination of services between fixed-route and paratransit vehicles.

A total of 22 replacement vehicles are scheduled for delivery in 2007 (eleven vehicles in both March and September). In conjunction with the planned expansion of fixed-route service hours during the 2007-2011 SRTP timeframe, COTA anticipates purchasing additional paratransit vehicles to accommodate expected increases in paratransit service. As a result, the Mainstream fleet is projected to expand by two vehicles each year from 2008 through 2011, resulting in a fleet size of 59 vehicles by 2011 (see Table 7-4). It should be noted that in order to improve service flexibility and cost-effectiveness, COTA plans to procure a combination of cutaway buses, sedans, and minivans. By introducing an appropriate level of minivans and sedans less capital will be required and smaller vehicles will reduce fuel consumption while maintaining the level of service. A procurement schedule is as follows:

TABLE 7-2
PARATRANSIT VEHICLE PROCUREMENT PLAN

	2007	2008	2009	2010	2011
Cut-aways	18	16	13	9	16
Minivan	2	0	1	2	0
Sedan	2	0	0	2	0
	22	16	14	13	16

Note: the first 11 cutaways planned are planned for delivery in calendar year 2007, SFY 2007. The second 11 are planned for a September delivery timeframe occurring in SFY 2008.

A Project Mainstream fleet roster and vehicle-replacement schedule is included in Table 7-3 and Table 7-4, respectively, on page 7-5.

TABLE 7-3
PROJECT MAINSTREAM FLEET ROSTER AS OF MARCH 2007

Year	Manufacturer	Length	Seating Capacity	Equipment	Number of Vehicles	Expansion Vehicles	Replacement Year
2002	Starcraft	30'		Lift	12		2007
2003	Coach & Equip	30'		Lift	12		2007
2003	Coach & Equip	30'		Lift	0		2008
2004	Starcraft	30'		Lift	15		2008
2004	Starcraft	30'		Lift	0		2009
2006	Starcraft	30'		Lift	12		2009
2006	Starcraft	30'		Lift	0		2010
					51		

Contract agreement with First Transit, COTA must supply 43 peak vehicles and 8 spares for total of 51

TABLE 7-4
PROJECT MAINSTREAM VEHICLE REPLACEMENT SCHEDULE

Entered Year in Service	Number of Buses	2007	2008	2009	2010	2011
2002	12	12				
2003	12	10	2			
2004	15		12	3		
2005	0					
2006	12			9	3	
2007	22				8	14
2008	16					
2009	14					
Service Reduction		0	0	0	0	0
Replacement		22	14	12	11	14
New Expansion		0	2	2	2	2
Total Vehicles Purchased		22	16	14	13	16
Total Active Fleet		51	53	55	57	59

7.2 Development of Alternative Paratransit Service Delivery Options

Due to the rising cost of paratransit service and the increase in the demand for service, COTA continues to explore methods of cost reduction while meeting the transportation needs of the community. Following are examples of efforts that COTA will continue to develop over the next five years.

7.2.1 Fixed-Route Free Fare Program for Eligible Paratransit Customers

In September 2003, a free fare program for eligible paratransit customers was implemented. Eligible Mainstream customers can ride the fixed-route system for free by showing the driver their eligibility identification card (ADA card). To date, approximately 9,000 trips per month are being used by paratransit customers.

7.2.2 Sedan Voucher Program

On July 1, 2004, COTA implemented a sedan voucher program for eligible paratransit customers. The taxi-type service provides customers the opportunity to travel without a prior reservation. The service provider is Urban Express Limousine Service. Trips are available to customers served by Project Mainstream.

COTA's downtown customer service center, the "COTA Connection" is responsible for providing customers with vouchers. Staff maintains a log of all customer requests for vouchers. In addition, customers are sent via mail, 10 vouchers for the month. Customers are able to use vouchers from one month to the next. Customers can contact the COTA Connection to request monthly vouchers that will be sent via mail. COTA pays $17.00 per trip and the customers pay $3.50 per trip.

Customers may call Urban Express directly to schedule the ride. Service is offered 24 hours a day, seven days a week. The sedan is dispatched to the customer's pickup location within a specified period of time (e.g. one hour window). Customers must provide the voucher, COTA identification, and have the exact fare in order to utilize service.

In order to properly ensure compliance and credibility, the Mobility Management department is responsible for reviewing vouchers returned by Urban Express for payment and to input information from vouchers and company log into the computer database.

7.2.3 Will Call Program

On August 1, 2006, COTA implemented a "Will Call" program for eligible paratransit customers who require long-term medical treatment e.g. dialysis,

chemotherapy, etc. The program was designed to supplement Project Mainstream service and help alleviate customers having to wait on the vehicle upon completion of treatment.

Customers contact the Will Call transportation provider directly to schedule trips. The service is available Monday through Friday from 7:00 a.m. to 9:00 p.m. The cost of the service is $3.00, the same as a Project Mainstream non-ADA trip (see Table 2-2 on page 2-15).

7.3 Paratransit Community Involvement

COTA staff works closely with members of its Accessible Transportation Advisory Committee (ATAC), as well as with other groups representing individuals with disabilities. With Project Mainstream customers, ATAC members and COTA staff, COTA's long and short-range paratransit planning was refined based on the initiatives identified through the retreat. During 2005 and 2006, individuals with disabilites played a vital role in helping develop the LRTP. In addition to attending public meetings for the LRTP, a targeted mobility focus group was held in 2006 with community residents and agencies representing indiviuals with disabilities.

Representatives from the disabled community also particpate on the Mobility Advisory Board. Additional information about this Board can be found on pages 7-9 and 7-10.

7.4 Future Paratransit Service Activities

The SRTP provides a substantial increase in Project Mainstream service that addresses existing and future needs of the mobility-challenged community. As such, COTA's Mobility Services Department plans the following initiatives during the next five years:

- A 28 percent increase in the paratransit services budget from 2007 to 2011;
- Increasing paratransit services to complement fixed-route service increases. This will include increases in the Sedan Voucher and Will Call programs which provide cost effective alternative transportation solutions;
- An update to the Trapeze scheduling software system that will enable customers to schedule and confirm trips via the Internet. In addition, customers will have wireless cell phone access to route and trip information;
- Implement subscription feeder service enabling paratransit customers to use Project Mainstream to get to a fixed-route bus stop and travel by a fixed-route

bus to their final destination. This will be of special value to customers who reside in non-ADA areas; and

- Implement a vehicle fleet mix that will include cutaway buses, sedans, and minivans.

7.5 Americans with Disabilities Act

As required by regulations implementing Title II of the Americans with Disabilities Act (ADA), the 1996 Plan Update was submitted and approved by the Federal Transit Administration. The Plan will be updated by December 2007 to include policy and program changes that have occurred during the past three years.

Project Mainstream's eligibility application form was revised in 2004 and includes a re-certification process that occurs every three years. The form provides more detailed and focused questions with reference to the individual's ability or inability to used fixed-route bus service. In 2007, a conditional eligibility process is planned for implementation and will be used to determine if a customer is able to use the service on a limited basis such as a need for service based on weather related conditions.

Project Mainstream's active fleet is currently 51 cutaway vehicles and will expand to 59 vehicles during the next five years. In 2007, COTA plans to include sedans and minivans as a part of the fleet mix. The fleet mix will reduce capital and operating expenses while maintaining the level of service.

In 2005, the paratransit fare was increased from $1.75 per trip to $2.25 for ADA trips. A charge of $3.00 was established for non-ADA trips. Customers may also purchase an ADA monthly pass for $70 with a $0.75 upcharge for non-ADA trips.

7.6 Accessible Fixed-Route Service

In 2006, lifts on the accessible buses in fixed-route service were used 18,280 times versus 17,532 in 2005. Although COTA reduced total fixed-route service hours by 9 percent in January 2006, and as a result, reduced the number of buses in the active fleet, lift usage increased by 4.3 percent. COTA provides fully accessible ADA compliant service on all routes during the weekdays, Saturdays, Sundays, and holidays.

COTA continues to improve the accessibility of bus stops based on passenger requests and information from previous bus-stop inventories. Additionally, COTA has implemented several Intelligent Transportation Systems (ITS) projects - such as automated-voice annunciators to help improve transit services for individuals with disabilities. Further information about ITS related projects can be found in Section 9.

7.7 Mobility Services/Transportation Coordination

COTA's Mobility Management Department continues to assist the organization in the transformation of services to the general public, and respond to and influence the demands of the markets. Undertaking these actions and supportive strategies, directly or in collaboration with others, COTA provides a full range of transportation options. These initiatives are clearly aligned with COTA's overall strategic goals and mission for the organization.

Due to the increase in ridership for paratransit services and decrease in federal and state funding, staff has been tasked with identifying and evaluating cost effective measures that could provide transportation solutions for seniors, disabled and low income individuals. To assist in transportation efforts, COTA applied for and was granted Job Access and Reverse Commute (JARC) funding by the FTA. A major component of the grant was to work collaboratively and leverage financial resources with other entities to create transportation solutions for welfare recipients and other low-income persons for rides to and from jobs, job training programs, and educational activities related to employment.

7.8 Mobility Advisory Board

In January 2004, COTA and community agencies began to meet monthly to discuss client transportation issues. The Board is comprised of members from human service agencies that represent low-income individuals, persons with disabilities, and seniors.

The Board was established to advise COTA on possible transportation solutions and provide partnerships for matching federal Job Access and Reverse Commute (JARC) grants, with a goal to better meet the mobility needs of central Ohio residents. This group replaced the Transportation Coordination Committee that was established by MORPC in 2000. The following agencies are represented:

Jewish Family Services, Ohio Department of Transportation, OSU Extension Center, Workforce Investment Act Board, St. Stephens Community House, Faith Mission, Central Ohio Agency on Aging, Lifecare Alliance, MORPC, Godman Guild, American Red Cross, Bureau of Vocational Rehabilitation, Life Skills Center, DMN Enterprises, Ohio Development Council, Adult Day Care Services Association for the Developmentally Disabled, Franklin County Department of Human Services, Columbus Workforce Alliance, and the Governor's Council on Disabilities.

7.9 United We Ride

In December 2003, the FTA selected the City of Columbus for the launch of a new campaign entitled "United We Ride," a program to encourage better coordination of transportation services with human service agencies. Since transportation continues to be a major barrier for many low-income individuals, states are being tasked to do a better job supporting the needs of the public, and to use funding resources more efficiently. In many cases, duplicity of transportation services is reviewed to reduce and control costs.

During 2004, COTA began community partnerships with agencies and transportation providers to assist in service delivery as specified by federal funding regulations. COTA also collaborated with other transportation providers, government agencies, businesses and community-based organizations to form a more cohesive network.

To be successful in these initiatives, COTA identified the following components that play a major role in the organization's success in becoming a full-service mobility manager:

- Increase stakeholder collaboration - COTA will continue to involve a variety of stakeholders from the public and private sector. This engagement with the community will assist COTA in being able to better identify the needs of the community.

- Coordination of service - Having the ability to pool money and resources will help to provide a better product to the community. This approach will be more cost effective for all involved.

- Seek opportunities to be a part of the city, state, and local planning process - COTA must continue to play an active role and have the ability to influence transit-friendly development in the region. This will become more important as the population grows and as businesses continue to expand operations in the outlying areas of the region.

- Integrate transportation with employment support services - Having the ability to be responsive to the transportation needs of the community is vital. COTA's development of transit centers is an example of integrated transportation. For instance, the Linden Transit Center offers day care and medical services, Easton also provides day care services, and medical services are provided at the Near East Transit Center.

7.10 Mobility Services

The following information describes COTA's particpation in coordinated mobility projects.

7.10.1 Van Pilot Programs

In 2004, COTA partnered with the Mid-Ohio Regional Planning Commission (MORPC) and The Ohio State University to provide demand-response van service to assist customers going to work and job training.

Two pilots were implemented in May and June 2004. The van pilot programs provided demand-responsive service to customers who could not be served on fixed route. The service did not replace or operate as a fixed-route service but fed into existing routes and transported customers to fixed-route service whenever possible. The van pilot program was concluded in December 2004.

COTA also partnered with MORPC to offer the "Clean Air Van Pool Program". The goal of this program was to provide progressive mobility solutions to get customers to work while improving air quality in the central Ohio community. The van service provider was ECOVAN, whose vehicles utilized green fuels, specifically natural gas, which burns cleaner than gasoline or diesel. Green fuels reduced each vehicle's emissions by over 90 percent compared to pollutants emitted by gasoline- and diesel-fueled vehicles.

ECOVAN was paid through a matching funds partnership agreement involving COTA and MORPC. MORPC submitted an invoice to COTA for 50% of the cost of service. This process included the submission of the reservation documents and travel logs that detailed information regarding trips provided. The overall cost of the service was $35.00 per hour, which included the cost of insurance, fuel, driver salaries and vehicle maintenance. The customer was charged a $1.75 flat rate for a trip.

7.10.2 Franklin County Board of Mental Retardation (FC/MRDD)

On October 2005, COTA entered into a partnership agreement with FC/MRDD to pilot a transportation program for low-income individuals who required transportation to work. The program was approved for a second year and provides rides to approximately 250 disabled adults who are employed on janitorial work crews located at the Rhodes Office Tower, Vern Riffe Center and William Green Building which are all located in downtown Columbus. The cost of the program is a total of $900,000 for the two-year period; half of the funds are paid from COTA's Job Access Reverse Commute grant.

7.10.3 Franklin County Department of Job and Family Services (FCDJFS)

The FCDJFS in partnership with COTA implemented a demand-response transportation service for public assistance individuals who receive assistance under Temporary Assistance for Needy Families (TANF) and who are currently employed, engaged in employment related activities, such as job training or taking children to child care.

All TANF eligible participants are required to be enrolled through a designated FCDJFS Job Center or Opportunity Center.

COTA fixed-route service will continue to be the first option for transportation to work, job training, and childcare services. For those who need transportation to a childcare facility in addition to work, however, the total trip time on fixed route, including childcare stops is evaluated to determine if the program is applicable. Transportation is available 24 hours a day, seven days a week with accessible vehicles if needed.

The total program cost is $600,000 for a one-year period and half of the funds are paid from COTA's Job Access Reverse Commute grant.

7.11 Potential Mobility Management Service Options

During the 2007-2011 SRTP timeframe, COTA has identified innovative service options and programs that include but are not limited to the following areas:

- Extend fixed-route service coverage
- Extend hours of operation
- Enhance reverse commute service
- Partner with agencies that provide employment van shuttle service
- Continued partnership with transportation providers for MRDD and Franklin County Jobs and Family Services
- Partner with agencies for demand-response service
- Partner with agencies on the development of a dial-a-ride program
- Develop trip-planning program
- Increase sedan and taxi voucher programs usage
- Continue to participate in vanpooling/ridesharing programs

7.12 Coordinated Transportation Plan

Since the spring of 2006, MORPC has been convening public transportation providers from throughout the region. The objective of this "Transit Forum" is to facilitate the sharing of planning and service activities among local transit agencies and become a catalyst for encouraging consistency in the locally developed human services transportation coordination plans, as required under

the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Newly available federal grant monies through SAFETEA–LU require a coordination project seeking federal funding be derived from a local coordinated plan beginning in State fiscal year 2007.

In December 2006, COTA was named "Designated Recipient" for receipt of grant funds available under Section 5310- Elderly and Individuals with Disabilities, Section 5316(g)- Job Access and Reverse Commute (JARC), and Section 5317(f) – New Freedom grants. As the Designated Recipient, COTA will have the responsibility for overseeing distribution of funds in accordance with federal regulations. Through September 2007, forum participants will be taking a complete look at gaps in transportation service for people with disabilities, low incomes, and the elderly. The Coordination Plan will identify a process to allocate certain federal dollars for improving transportation services to these targeted populations. Development of the plan includes MORPC, private, and public transportation partners, local elected officials, advocacy groups, and the general public. The overall goal is to reach a wider range of people through a collaborative approach to transportation planning.

7.13 Travel Training

COTA provides trip-specific travel training to individuals or groups who would like to learn how to ride COTA. COTA provides this service via:

- A subcontractor, currently the Association for the Developmentally Disabled (ADD): Travel training is offered for free, and teaches the necessary skills required to travel the fixed-route bus system. Areas covered in training include reading public timetables, fare payments, navigation of a particular fixed route, etc. On average, approximately 120 individual and 20 group-training sessions are conducted each year.

- In October 2006, COTA applied for a Transportation Rights Grant through the Ohio Developmental Disabilities Council (ODDC). The purpose of the grant was to increase service for persons with developmental disabilities. In addition, COTA plans to develop a "Train the Trainer" guide which would be shared with other human service agencies, rural transportation providers, and others who will then be able to develop a program of their own. COTA was awarded the grant for $24,000 which is renewable for a five-year period.

A COTA employee, who among other duties, prepares for and provides travel training at various area elementary schools, and senior and neighborhood centers. This individual develops travel "trips" related to the specific school or center at the place of interest in their area, and trains individuals on how to use COTA effectively to meet their transportation needs.

8.0 COTA FACILITIES

8.1 Bus Storage, Maintenance and Administrative Office Facilities

8.1.1 McKinley Avenue – Bus Storage, Maintenance and Administrative Office Facility

Located in Columbus at 1600 McKinley Avenue, this 400,000 square foot bus storage and maintenance facility was completed in 1980. It has indoor storage capacity for 240 large 40' buses. Both heavy and light maintenance are performed at this location, and buses are routinely kept clean through the use of two-automated bus washers. In addition to bus operations, the facility is the site of COTA's administrative headquarters. During 2001 through 2006, COTA coordinated a three-phase project for replacing the roof material with a new three-ply insulated system, which has a 30-year manufacturer's warranty. COTA also contracted the resurfacing and striping of the 70-car administrative parking lot. As of March 2007, fifty-three routes operate out of the McKinley Avenue facility.

Since the McKinley Avenue facility has exceeded twenty-five years of service, the facility has experienced some mechanical, electrical, and equipment failures. Consequently, COTA facility staff is undertaking a plan prioritizing major repairs and upgrades to the building and grounds. The staff plans to replace and upgrade major components of the facility such as air handlers, vehicle maintenance lifts, vehicle-exhaust systems, lighting fixtures, and recondition the bus and vehicle maintenance parking facilities. The consultant employed to prioritize the facility improvements will consider other facility improvements that could reduce operating costs such as new electronic controls the heating system as well as upgrading safety equipment.

COTA Fixed-Route Storage and Maintenance Facility and Administrative Offices, 1600 McKinley Ave

8.1.2 Fields Avenue – Bus Storage, Light Maintenance and Temporary Paratransit Operations

Located in Columbus at 1333 Fields Avenue, this 240,000 square foot bus storage facility was designed to store 200 large 40' buses and provide and area for light maintenance on the bus fleet. Fields Avenue opened in September

1984. This facility features advanced technology in the areas of ventilation, energy conservation, and maintenance, and has two automated bus washers. COTA's radio control room is also housed at this facility.

Following several years of service cuts, including a nine percent reduction of service in January 2006, COTA consolidated all fixed-route operations to the McKinley Avenue complex. In conjunction with this consolidation, Project Mainstream operations were relocated to Fields from a formerly leased facility (located at 101 Phillipi Road) where Mainstream service had been operating since June 2002. COTA signed a five-year lease at Phillipi Road in order to house Project Mainstream dispatch and reservation operations, and to store and maintain COTA-owned Project Mainstream vehicles. The Fields' facility is closer to the center of the Project Mainstream trip activity, therefore, operating cost savings could be realized by moving Project Mainstream service to a more central location. Prior to June 2002, Laidlaw Inc., COTA's former contractor for Project Mainstream services, leased their own office space at 6400 Huntley Road

Fixed-Route Bus Storage and Temporary Paratransit Facility, 1333 Fields Avenue

With a plan to significantly increase fixed-route service hours over the next five years (see Section 5), the Fields facility will be reopened to accommodate expanded fixed-route operations. It is estimated that by 2030, COTA's long-range plan will require space for approximately 440 fixed-route buses. The McKinley Avenue and Fields Avenue buildings will meet this future bus storage need. While continuing to operate paratransit service from Fields Avenue, COTA plans to re-open the facility for fixed route by 2009. The combined operations are scheduled to remain housed at Fields until a new paratransit facility is operational in 2010.

Similar to the McKinley Avenue site, the age of the Fields facility results in significant building maintenance. The concrete floor in the bus storage and vehicle maintenance areas and on the service roads located outside the facility are spalling, scaling, and subsiding, creating unsafe walking and maintenance conditions. Mechanical, electrical, and equipment failures are becoming more common as the building ages. COTA will undertake a prioritized capital investment program to evaluate and invest in major facility improvements over the next five years.

8.1.3 Fields Avenue - Proposed New Paratransit Facility

With plans to increase fixed-route and paratransit service over the next 25 years by 96 percent and 50 percent respectively, COTA plans to undertake the design

and construction of a new paratransit facility located on the 7.28 acres directly across from the existing Fields Avenue facility. The new paratransit facility will be designed for approximately 100,000 square feet of capacity for indoor storage and maintenance of 100 paratransit vehicles. The facility will have fueling stations, washing facilities, maintenance areas with vehicle lifts, locker rooms, and administrative office space.

Through the two latest congressional transportation bills, Transportation Equity Act for the 21st Century (TEA-21) and SAFETEA-LU, approximately $9 million has been earmarked, appropriated, or authorized for the facility. The project costs are estimated to be $18.6 million. COTA plans to commence with the preliminary engineering in 2007 and complete the design process in 2008. Construction would begin by 2009, and the new facility would open before the end of 2010.

Original plans called for this new facility to be constructed on a parcel of land owned by COTA, located adjacent to the east end of the McKinley Avenue facility; however, further analysis indicated that a more central location for the paratransit operations would be adjacent to the Fields Avenue facility (located just west of I-71 and north of I-670). By locating the facility at a more centralized location, COTA anticipates reduced operating costs for Project Mainstream services.

8.2 Transit Centers

8.2.1 Linden Transit Center - 1394 Cleveland Avenue, Columbus

Located at the intersection of Cleveland and 11th Avenues, this inaugural urban transit center opened in October 1999. The 20,500 square-foot facility is part of COTA's Livable Communities Initiative (LCI) project for the Linden area, and includes such amenities as child and health care, as well as banking offices. Eight bus routes presently serve the transit center. In May 2001, the Linden LINK neighborhood circulator route was implemented, providing improved neighborhood transportation and connections to COTA's fixed-route services. Express bus routes serving the Linden Transit Center also provide vital connections to job centers around the I-270 Outerbelt, such as the Polaris area located just north of I-71 and I-270, and the Easton development area near Morse Rd. and I-270.

Linden Transit Center
1390 Cleveland Avenue

Since opening, Linden has also served as a successful community-based facility providing increased services for the surrounding neighborhood (e.g., providing accessible/affordable meeting space for neighborhood civic groups, community meetings, election polling location, and other get-togethers). Funding for the Linden Transit Center was provided by the Federal Transit Administration ($2.1 million), and the Ohio Department of Transportation ($268,000). With revenue generated through tenant occupancy, the operating costs are fully recovered.

8.2.2 Easton Transit Center - 4260 Stelzer Road, Columbus

Easton Transit Center

In July 2001, COTA began construction on a second transit center at Easton, and in May 2002, held the official grand opening ceremony. The facility is located on 2.76 acres of land that was generously donated by the Limited and Georgetown Companies. Serving commuters in northeastern Franklin County, the Easton Transit Center is located just north of Morse Road at the southeast corner of Transit Drive and Stelzer Road.

As part of COTA's LCI project for the Easton area, the transit center contains a 1,360 square foot enclosed waiting area, staff attendant booth and restroom, an ATM machine, 41 parking spaces, four dedicated large-bus bays, and platform space for four to five smaller, circulator-type buses. Three bus routes presently serve the transit center, including local, crosstown, and express service, providing direct connections to many of Easton's shopping, dining, and entertainment venues.

8.2.3 Easton Daycare Facility - 4242 Stelzer Road, Columbus

Constructed in 2005, the daycare is conveniently located on a contiguous parcel with the Easton Transit Center providing easy access for COTA passengers. The 9,948 square-foot facility consists of administrative offices, conference rooms, dedicated infant, toddler and pre-school rooms (with dedicated restroom facilities for each area), activity areas, a kitchen, public restrooms, and a fenced outside play area. This facility can accommodate up to 135 children. COTA entered into a ten-year lease agreement with a daycare provider commencing on July 1, 2006, and extending through June 30, 2016. The provider is responsible for monthly lease payments to COTA for the facility, and is responsible for all operating costs. The lease payments cover

Easton Day Care Center
Easton Transit Center

the yearly maintenance costs for the transit center.

8.2.4 Near East Transit Center - 1125 East Main Street


Near East Transit Center
1125 E. Main Street

In January 2005, COTA entered into a contract agreement for construction of the 9,647 square-foot transit center, located on the southeast corner of East Main Street and Champion Avenue. Through a partnership with the Columbus Compact Corporation (a non-profit 501 (c) (3) organization charged with the administration of the Department of Housing and Urban Development (HUD) designated Empowerment Zone (EZ) for distressed communities), COTA obtained the 0.74 acre parcel. The building opened in September 2005 with a medical facility as the major tenant. Approximately ten months later, a cellular telecommunications store opened. Both tenants serve to help attract COTA customers. COTA passengers are able to wait inside the facility, which is equipped with comfortable benches. There remains one space, occupying approximately 1,124 square feet, which remains to be leased. Two bus routes currently serve the Near East Transit Center. The building's operating costs are covered through lease payment revenues.

8.3 Downtown Express Terminals

COTA has two downtown terminals that are utilized by numerous express routes. They are described in greater detail in the following paragraphs.

8.3.1 North Terminal - 33 West Spring Street, Columbus

The North Terminal is located on Spring Street between High and Front Streets. There are six bays for express routes. There are currently seven express routes using the North Terminal to serve passengers in the north downtown area. As of March 2007, the North Terminal is averaging approximately 31,200 boardings and alightings per year.

8.3.2 City Center Terminal - 25 East Rich Street, Columbus

In November 1989, COTA moved into its 41,000 square-foot City Center Express Terminal. The terminal is located east of High Street between Rich and Main Streets in the City Center parking garage. Access to the terminal is from both Rich and Main Streets. Elevators at both entrances provide pedestrian access to

the terminal from all floors. The terminal is able to accommodate ten buses at one time, five in each direction. The terminal design permits buses to pull in at an angle and pull out directly after passenger loading and unloading. This feature increases the safety for COTA's passengers and facilitates the smooth flow of buses through the terminal. Currently, seventeen express routes serve the City Center Terminal. As of March 2007, the City Center Terminal is averaging approximately 53,000 boardings and alightings per year.

8.4 Customer Service

8.4.1 Customer Information Center - 60 East Broad Street, Columbus

With a goal to provide improved service at a more convenient location, COTA relocated its downtown Customer Service Center, named the "COTA Connection", to 60 East Broad Street in December 2000. This location is much closer to the hub of COTA's route system at Broad and High Streets in downtown Columbus. Prior to the Broad Street move, COTA's Customer Service office was located at 177 South High Street. The current lease for 60 East Broad Street expires on December 31, 2007. COTA management will be considering alternate locations as well as discussing with the current landlord, terms for extending the lease. A decision could be made before July 2007. If the option is to relocate, it is anticipated that six months would be sufficient time to move into a new facility.

This location houses the Customer Service Center, the Customer Information Center and provides a convenient lounge area for operators waiting to start or return to service.. This location serves as the main pass sales outlet for COTA passes, as well as the location where customers can be photographed in order to obtain a Senior or Key Discount ID Card.

During 2006, COTA received over 1.2 million calls to the Customer Service Center. Recently, several major computer software and hardware enhancements were implemented at 60 East Broad Street in order to further improve COTA's ability to provide quality products and services to customers. They are:

- Trapeze Info Agent (Jan-02). While speaking to customers on the telephone, this software now enables COTA customer service personnel to provide accurate and timely computerized itinerary trip plans for a requested trip.

- Trapeze INFO Interactive Voice Response (IVR) System (Mar-02). When calling COTA's Customer Service Center for next bus arrival or schedule information, you may now use a telephone touch pad to collect trip information rather than waiting to speak to a customer service representative. To date, the IVR system has resulted in a nearly 40 percent reduction in calls handled by a live customer service representative; as a result, this frees

customer service representatives to help customers whose needs exceed the IVR schedule information capabilities.

- Trapeze INFO COM (Jan-03). This software module provides a computerized customer contact management database and reporting system for COTA Quality Service representatives. Benefits of this system include allowing customer service representatives to forward customer inquiries, complaints or accommodations directly to individual departments so that customer inquiries can be resolved in a timely manner.

- Trapeze INFO WEB (Nov-02). This computer module allows the general public to create trip itineraries via COTA's website (www.cota.com). After entering information such as trip origin, trip destination, time and date of trip, etc., INFO WEB displays various trip options, which are ranked by user preference (e.g., minimum number of transfers, minimum walking distance, etc.). A map of the requested trip is also created with the trip itinerary.

- Five New Point of Sale (POS) Cash registers – These new cash registers will replace outdated cash registers that have been in-service for over 10 years. The new equipment is compatible with Excel software and eliminates a three-step process that required manual inputs. This new system will permit Customer Service and Finance to be networked where the information is shared on sales and inventory levels. The new equipment should arrive in the second quarter of 2007.

- New communication system – COTA's current voice-radio communication recording system, Dictaphone, is in disrepair and obsolete. A temporary solution has been for Franklin County to record all of COTA's radio communication until COTA installs the new system. The new system will permit COTA to record conversations for security and customer service on all radio channels and selected telephone lines. The procurement process will include a maintenance agreement for an estimated five-year period. A Request For Proposal has been released by COTA, and bid responses are currently being evaluated. The new system should be installed before the end of the second quarter of 2007.

Numerous operational efficiencies have been gained by these enhancements, including cost savings in staffing the Customer Service Center. For example, as of September 2002, COTA no longer staffs this facility on the weekends.

8.5 Park and Ride Lots

COTA serves and operates a network of commuter park-and-ride lots throughout Franklin County and encourages their use in order to reduce central Ohio traffic congestion during peak period travel times, and to help improve the region's air

quality. Park-and-ride facilities allow commuters from throughout the area to conveniently access COTA's bus lines. Each park and ride provides free parking. Residents can drive to the park and ride, park their cars, and board a bus that will take them to various destinations, including downtown Columbus. As an alternative to the single occupancy vehicle, commuters can enjoy gas and parking cost savings while relaxing during their commute.

As of March 2007, COTA has 26 established park-and-ride lots located throughout Franklin County. A description of these lots is located in Table 8-1 and Figure 8-1. There are 2,131 park-and-ride spaces in these lots, as well as an additional twenty-four spaces available at two parking loops. Usage of the lots, as of March 2007, is shown in Table 8-2. The lots at Delawanda (near N. High St. and Morse Rd.), Kingsdale Shopping Center, Northern Lights Shopping Center, and St. Peter's Church have the highest usage percentage, while Reynoldsburg has the highest average number of spaces used.

8.5.1 Recent Park-and-Ride Development

In June 2001 COTA was contacted by a developer in regards to the purchase of, or "land swap" of the former Jeffrey Place Park and Ride located on North High Street just south of Morse Road. Occupying less than a third of an acre, the Jeffrey Place parcel represented the last parcel needed to construct a neighborhood pharmacy and retail store. COTA was seeking relocation of Jeffrey Place due to its location on the east side of North High Street (in the outbound direction from downtown). COTA agreed to a property "swap" for a land parcel on the west side of High Street just north of Rathbone Avenue and Morse Road, which included the developer covering all costs associated with acquiring and constructing the new site. Following development of this site, in October 2003, COTA opened the new Delawanda Park and Ride.

Delawanda Park and Ride

COTA also operated a similar sized park and ride one block south of Jeffrey Place, named the Royal Forest Park and Ride. Like Jeffrey Place, Royal Forest was also a site not well suited for park-and-ride services (e.g., the location on the outbound side of North High Street, encouraged jaywalking, etc.). Following the opening of Delawanda, COTA Planning staff determined that it would be advantageous to sell Royal Forest, and consolidate all park-and-ride operations in this area to the Delawanda facility. The Royal Forest park and ride was sold in December 2004.

As a result of the second "Livable Communities Initiative Project", in May 2002, COTA opened the Easton Transit Center (see page 8-3), which includes a 41-space park-and-ride facility for residents of northeast Franklin County. The Easton lot provides excellent connections to several of COTA's fixed-route services, and along with the adjacent transit center, was designed to incorporate simple, yet cost-effective elements while maintaining a unique aesthetically pleasing presence within the community.

COTA's park and rides include a mixture of COTA owned and jointly operated facilities. For example, COTA has partnered with two area churches (St. Peter's and St. Andrew's) in order to provide much needed park-and-ride service in the northwest area. In addition, COTA has entered into several low-cost lease agreements with neighborhood shopping centers, providing benefits to both local retail merchants and COTA customers.

Park-and-ride locations include various passenger amenities including enclosed and comfortable passenger shelters, bus schedule information, and at four park and rides, bicycle lockers (Crosswoods, Reynoldsburg, Grove City; and Westwoods). The Delawanda and Easton park and rides include permanent, in-ground bike racks for safely securing a bike before boarding a bus.

8.5.2 Future Park and Ride Development

As part of the development of the LRTP, several areas were identified for the location of future park-and-ride sites. The spaces will be needed both to accommodate the region's growing population and to grow the transit system as called for in the LRTP. The following areas were identified as priority areas for future park and ride and/or transit center development over the next five years:

- SR-161/US-33 and Avery Road/Perimeter Loop
- Sawmill Road and Summitview Road
- US-33 and Gender Road
- I-71 and Polaris Parkway
- I-70 and SR-256
- South High Street (US 23) and Rathmill Road
- Sunbury Road/SR-161

In addition to building new facilities, two existing park and rides have been identified for either expansion or possible relocation in order to better serve customers' needs and improve operational efficiencies:

- Delawanda – COTA will seek to expand the number of spaces available at this facility by approximately 23 parking spaces.

- Hilliard-Rome Road – Currently located just south of Trabue Road and east of Hilliard-Rome Road, COTA will investigate the feasibility of relocating this park-and-ride facility closer to the more densely developed and congested Hilliard-Rome Road, as near to the I-70 interchange area as possible. This analysis will include leasing and joint development opportunities, or the purchase of land by COTA for development at a more suitable location to better capture south Hilliard and far west Columbus area residents commuting to and from the downtown area.

TABLE 8-1
COTA PARK & RIDE LOTS AS OF MARCH 2007

Map Site	Name and Date Effective	Location	City	Number Of Spaces	Shelter	Serving	Agreement
1	Berwick 2/24/75	Refugee Rd. & Winchester Pike	Columbus	60	Yes	#46	Informal agreement (No Lease)
2	Broad & Southampton 1/1/74	W. Broad St. & Southampton Ave.	Columbus	68	Yes	#10, #53	COTA Owned
3	Crosswoods 7/4/93	7460 Huntington Park Dr.	Columbus	169	Yes	#2, #31	COTA Owned
4	Delawanda	High & Rathbone	Columbus	37	Yes	#2, #31, #95	COTA Owned
5	Dublin Park & Ride 1995	4450 Dale Dr.	Dublin	82	Yes	#58	COTA Owned
6	Easton	4260 Stelzer (Stelzer Rd. & Transit Dr.)	Columbus	41	Yes	#16, #39, #40, #95	COTA Owned
7	Great Southern 1974	South High St. & Obetz Rd.	Columbus	84	Yes	#4, #16	Lease at $1/year has expired and a renewal lease is being negotiated
8	Griggs Dam 12/18/95	Griggs Dam Reservoir	Columbus	28	Yes	#58	City of Columbus Informal Agreement - No Lease
9	Grove City 9/17/84	2321 Old Stringtown Rd.	Grove City	150	Yes	#15, #64	COTA Owned
10	Hilliard 9/2/86	4199 Parkway Ln.	Hilliard	89	Yes	#67	COTA Owned
11	Hilliard-Rome Road December 22, 1997	5660 Trabue Rd.	Columbus	80	Yes	#5, #57	COTA Owned
12	Indianola & Morse 10/81	4720 Indianola Ave. (Morse Rd. & Indianola Ave)	Columbus	105	Yes	#4, #95	25-year lease $1/year expiring 4/05
13	Kingsdale 1974	Northwest Blvd. & Zollinger Rd.	Upper Arlington	35	Yes	#3, #60, #83, #84	Informal Agreement (No Lease)
14	Livingston & Barnett 9/29/82	3380 E. Livingston Ave.	Columbus	101	Yes	#1, #92	COTA Owned
15	New Albany 4/02	20 S. Third St. (United Methodist Church)	New Albany	26	No	#39	1-year lease Automatic Renewal $.50/space/weekday

TABLE 8-1 (Continued)
COTA PARK & RIDE LOTS AS OF MARCH 2007

Map Site	Name and Date Effective	Location	City	Number of Spaces	Shelter	Serving	Agreement
16	Northern Lights 1978	Cleveland Ave. at Innis Rd.	Columbus	60	Yes	#1, #9, #35 # 37, #38, #83, #87	Lease at $1/year has expired and a renewal lease is being negotiated
17	Olentangy and Bethel 1982	Olentangy River Rd. and Bethel Rd.	Columbus	150	Yes	#30, #95	Automatic Renewal with City of Columbus -Lease $1/year
18	Reynoldsburg 7/85	2100 Birchview Dr.	Reynolds-Burg	214	Yes	#1, #45 #47	COTA Owned
19	Royal Plaza 7/86	Agler Rd. & Stygler Rd.	Gahanna	40	Yes	#10,#41	Leased-Automatic Renewal $1/yr $.50/space/weekday
20	St. Peter's 11/10/94	6899 Smoky Row Rd.	Columbus	20	No	#30	Leased-Automatic Renewal $.50/space/day
21	St. Andrew 11/10/94	1985 Swansford Dr.	Dublin	14	No	#30	Leased-Automatic Renewal $.50/space/day
22	Westerville 1/9/81	Main St., east of Cleveland Ave.	Westerville	230	Yes	#1,#33, #36,#37	Lease at $1/year has expired and a renewal lease is being negotiated
23	Westwoods 10/25/94	55 West-woods Blvd.	Columbus	100	Yes	#10,#53	COTA Owned
24	Whitehall 6/28/93	4540 E. Broad St.	Whitehall	148	Yes	#10,#43, #87,#89	COTA Owned

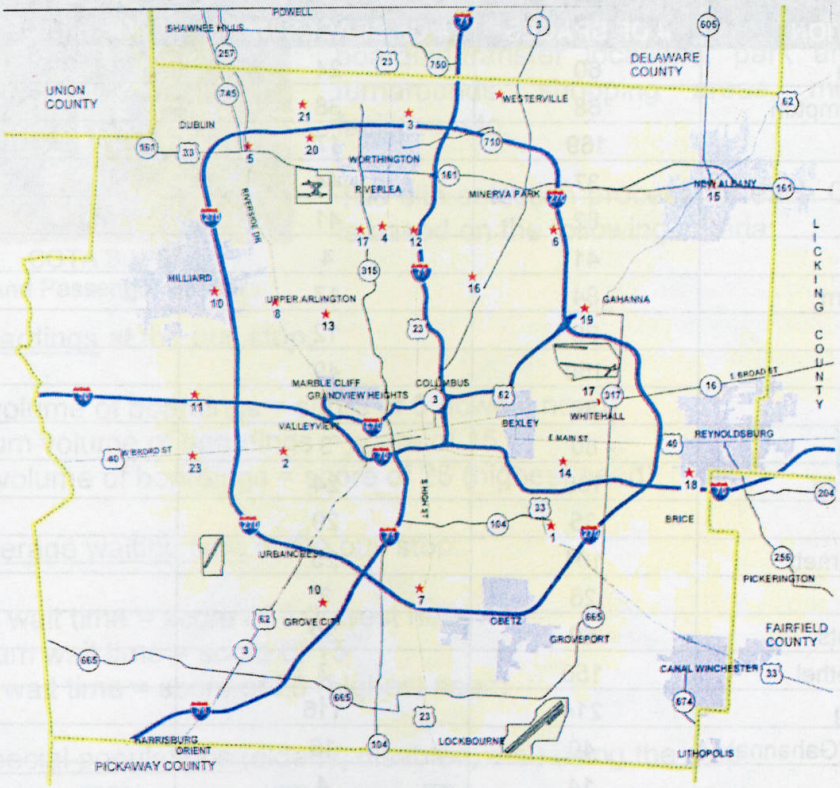
2,131 Park and Ride spaces

Loops Used For Parking

Name	Location	City	Number of Spaces	Shelter	Serving	Agreement
Cleveland & Mecca	Cleveland Ave. & Mecca Rd.	Columbus	12	No	#1,#35 #37,#38	COTA Owned
Main & Weyant	E. Main St. & Weyant Ave.	Columbus	12	Yes	#2	COTA Owned

24 Loop Parking Spaces

FIGURE 8-1
COTA PARK AND RIDE LOCATIONS AS OF MARCH 2007

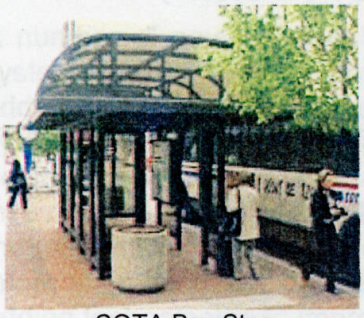


Park & Ride	Number of Spaces	Routes Serving
1. Berwick	60	#46
2. Broad & Southampton	68	#10, #53
3. Crosswoods	169	#2, #31
4. Delawanda	37	#2, #31, #95
5. Dublin Park & Ride	82	#58
6. Easton	41	#16, #40, #95
7. Great Southern	84	#4, #16
8. Griggs Dam	28	#58
9. Grove City	150	#15, #64
10. Hilliard	89	#67
11. Hilliard-Rome	80	#5, #57
12. Indianola & Morse	105	#4, #95
13. Kingsdale	35	#3, #60, #83, #84
14. Livingston & Barnett	101	#1, #92
15. New Albany	26	#39
16. Northern Lights	60	#1, #9, #35, #37, #83, #87
17. Olentangy & Bethel	150	#30, #95
18. Reynoldsburg	214	#1, #45, #47
19. Royal Plaza	40	#41
20. St. Peter's	20	#30
21. St. Andrew's	14	#30
22. Westerville	230	#1, #33, #36, #37
23. Westwoods	100	#10, #53
24. Whitehall	148	#10, #43, #87, #89
	2,131 Park & Ride Spaces	

TABLE 8-2
PARK & RIDE UTILIZATION AS OF MARCH 2007

LOCATION	# OF SPACES	# OF SPACES USED	% OF SPACES USED
Berwick Plaza	60	24	40.0%
Broad/Southampton	68	38	55.9%
Crosswoods	169	17	10.1%
Delawanda	37	44	118.9%
Dublin	82	41	50.0%
Easton	41	4	9.8%
Great Southern	84	17	20.2%
Griggs Dam	28	12	42.9%
Grove City	150	49	32.7%
Hilliard	89	5	5.6%
Hilliard-Rome	80	3	3.8%
Indianola/Morse	105	24	22.9%
Kingsdale	35	29	82.9%
Livingston/Barnett	101	25	24.8%
New Albany	26	8	30.8%
Northern Lights	60	39	65.0%
Olentangy/Bethel	150	3	2.0%
Reynoldsburg	214	116	54.2%
Royal Plaza (Gahanna)	40	16	40.0%
St. Andrew's	14	4	28.6%
St. Peter's	20	13	65.0%
Westerville	230	74	32.2%
Westwoods	100	20	20.0%
Whitehall	148	14	9.5%
TOTAL P/R SPACES	2131	639	30.0%
LOOPS			
Cleveland & Mecca	12	2	16.7%
Main & Weyant	12	4	33.3%
TOTAL LOOP SPACES	24	6	25.0%
TOTALSPACES – ALL LOTS	2155	645	29.9%

8.6 Passenger Shelters



COTA Bus Stop
And Passenger Shelter

COTA currently owns and maintains 387 passenger shelters. These shelters are located throughout Franklin County and serve major boarding/transfer locations, park and ride lots, turnarounds, shopping areas, medical/elderly facilities, etc.

The site selection process for each COTA shelter is based on the following criteria:

A) Boardings at the bus stop:

Low volume of boardings = score of 5 (lowest need)
Medium volume of boardings = score of 15
High volume of boardings = score of 25 (highest need)

B) Average waiting time at the bus stop:

Short wait time = score of 5 (lowest need)
Medium wait time = score of 15
Long wait time = score of 25 (highest need)

C) Special populations (elderly, disabled, etc.) using the stop:

Low number of special user score of 0 (lowest need)
High number of special user score of 30 (highest need)

D) Park and Ride, Terminal, Bus Loop, and Bus Stops

The overall score for each bus stop is the combined score for each indicator. All bus stops are ranked according to their overall score. Bus stops on new routes are placed on the list before the route is implemented.

Any or all of the following conditions render a potential bus shelter infeasible:

- Maximum boardings are equal to or less than 25 passengers per day.
- Adequate shelter of some type is readily available.
- Another COTA shelter is in the near vicinity.
- Shelter location is not approved by the local authorities.
- Shelter location generates severe local citizen/business opposition.
- Site geometrics are prohibitive.
- Directional orientation of shelter is prohibitive.
- Excessive high maintenance costs for a relatively low boarding volume.

Features to be available with each COTA shelter are divided into two categories, necessary and desired. The following features are necessary:

- Benches (not necessarily full length).
- Accessible to passengers with disabilities.
- Security of the shelter by limitation of nearby vegetation and non-obscured visibility and nearby/attached lighting.
- Bus stop location is directly accessible from the shelter.

The following features are desired:

- Newspaper facilities
- Full shelter site
- Public service announcements (with no other advertising).

Twenty-seven shelters and receptacles will be installed in calendar year 2007 at a cost of $131,500. The planned locations for shelter replacements and new installations will include, but are not limited to: High Street in the downtown area, Cleveland and Livingston Avenues, and East Main and North High Streets. New shelters will be used in part to replace older, existing structures, while the remainder will be available for new locations that meet the criteria mentioned above. A complete list of the existing shelters is listed in Appendix A.

8.7 Bus Stop Signs

As of March 2007, COTA has 4,212 bus stops installed throughout the service area. COTA has an adequate inventory of bus stop signs and signposts for the 2007 calendar year.


COTA Bus Stop

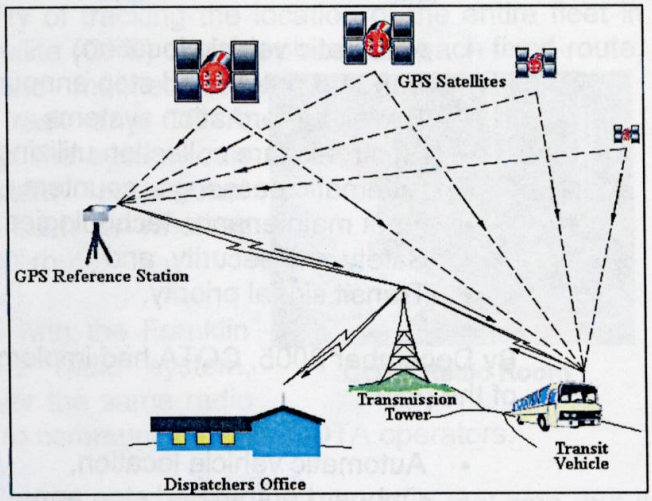
In 2006, COTA initiated a project to provide information at our bus stops in the OSU area. OSU students, employees, neighborhood residents, and visitors represent a significant customer base for COTA. This spring, 34 new display cases will be installed at bus stops and shelters throughout COTA's OSU service area. Twenty-one will be placed on High Street, five on Summit Street, three on Kenny Road, two at the Lennox Town Center, two on Neil Avenue and one at Cannon Drive and Lincoln Towers.

The display cases will provide essential COTA information to customers including departure times for all routes serving the bus stop, destinations, attractions and activity centers, COTA's bike 'n ride program, service to Port Columbus International Airport, paratransit services, and contact/customer service information. The display cases are planned to be installed for the May 2007 service changes.

9.0 INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

A number of newer technologies are already being utilized to support the bus system, including those which improve on-time performance and reliability. In addition, COTA will implement technologies such as "smart card" fare collection systems which speed up passenger boarding, and provide the opportunity for riders to renew bus passes remotely using the Internet. COTA will also investigate the feasibility of traffic signal priority timing at intersections to allow for the rapid movement of public transit vehicles at busy intersections. The following information describes and identifies COTA's short range plans for enhancing and adding technologies to improve operations and enhance service to customers.

Most transportation professionals agree that we cannot simply build our way out of urban traffic congestion problems. As one of several alternatives to costly build solutions, ITS provides the technology to enable people to make smart travel choices, and continued deployment of ITS strategies is an important component of COTA's long-range and short range transit plans.



ITS encompasses a broad range of systems and technologies and has created many new opportunities for transportation professionals to respond proactively to increasing demand for effective transportation services, and to convey information to the traveling public. This can include global positioning technology that provides real-time schedule information to riders, electronic fare payment for greater customer convenience, and devices that integrate with traffic signal systems allowing transit vehicles priority over other vehicles. An example includes use of COTA's website to answer the question, "When will my bus arrive?"

COTA's ITS plan is focused to improve enterprise productivity of its current operations and provide enhanced service to the customer. This includes implementing advances in vehicle dispatching, tracking, and telecommunications that translate into real transit-user benefits: safer, more reliable, more responsive and more accessible service. Further, COTA's ITS enhancements are designed to:

- Make bus travel easier for all passengers, including those with hearing and vision disabilities;
- Avoid traffic congestion and improve on-time performance;
- Provide timely and comprehensive transit information through kiosks and variable-message signs installed not only in transit centers and at park-and-ride locations, but also at various other locations throughout the region such as hotels, arenas, shopping malls and office buildings; and
- Make complete schedules and a host of itinerary-planning features available through COTA's web site and web-equipped devices such as cell phones, PDAs and pagers.

Specifically, components of COTA's ITS plan include:

- Automatic vehicle location,
- Onboard automated stop announcements,
- Traveler information systems,
- Electronic fare collection utilizing "smart cards,"
- Automatic passenger counters,
- Fleet maintenance technologies,
- Safety and security, and
- Transit signal priority.

By December 2005, COTA had implemented the following ITS components of the plan:

- Automatic vehicle location,
- Onboard automated stop announcements,
- Automatic passenger counters, and
- Safety and security systems.

Although COTA successfully obtained federal earmarks dating back to 2002 for the projects in COTA's ITS plan that would provide 50 percent funding for ITS related projects, in 2005, plans to implement the remaining ITS components were put on hold. During the past several years COTA experienced significant financial constraints as a result of continued budget deficits. Consequently, COTA began a downsizing of overall operations, including a 25 percent reduction in service hours during the period 2001-2006. A decision was made to defer new ITS projects until additional local funding could be obtained without negatively affecting COTA's service levels.

With the passing of an additional 10-year, renewable 0.25 percent sales tax levy in November 2006 (to take effect in January 2008), COTA is positioned to move forward with these projects, and in 2008, begin utilizing existing federal ITS

earmarks. As a result of continued technology changes and delays in implementing the ITS Plan, however, COTA will submit to FTA and FHWA updated plans for the following ITS components, scheduled to be implemented during the 2007-2011 SRTP timeframe:

- Traveler Information Systems,
- Electronic fare collection utilizing "smart cards,"
- Fleet maintenance technologies, and
- Transit signal priority.

9.1 Automatic Vehicle Location

The heart of COTA's ITS program is its computer-aided dispatch and automatic vehicle location (CAD/AVL) system. This system provides COTA dispatchers and supervisors with the capability of tracking the location of the entire fleet in real-time. Global Positioning Satellite (GPS) devices placed on each fixed-route, demand-response, supervisor and maintenance vehicle allows dispatchers to track any COTA vehicle at any time. Additionally, the system can automatically calculate important operational metrics for fixed-route vehicles, such as whether the bus is running late, early, or off-route.

COTA Radio Room

The system, which is integrated with the Franklin County Government's 800 MHz radio system, sends and receives fleet data over the same radio frequencies used by dispatchers to communicate with COTA operators.

Not only does the system track the location of the entire fleet in real-time, but it also archives information for analysis and incident/dispute resolution at a later date. This archive function provides the capability to "playback" events as they actually happened, allowing a wide range of incidents and disputes to be resolved quickly and easily; eliminating the need to spend numerous hours of already limited staff time resolving these issues. Additional analysis includes the ability to determine if the current route structure is providing the greatest efficiencies, and if recent service changes are having the desired effect.

COTA's CAD/AVL system forms the basis for all other ITS components that are built upon and integrated with it. The system was implemented in 2001 and went live in 2002. Since that time, technology has changed and the Microsoft NT operating system has become obsolete. The system, both software and hardware, needs to be upgraded to newer technology in order to move forward with the ITS Plan and add the proposed new components. The current plan is to replace the existing system in 2008 with newer technology that also incorporates and completes three of the planned ITS components:

- Electronic Manifest for paratransit operations (extends CAD/AVL functionality to demand response service- currently only available for fixed route),
- Vehicle Component Monitoring (Fleet Maintenance technologies), and
- Common logon for the drivers eliminating the need to log onto four different systems on the vehicles.

9.2 Onboard Automated Stop Announcements

Enhancing the experience of riding on a COTA vehicle is a major component of the ITS program. COTA recently completed installation of an Automated Voice Annunciator (AVA) system to make bus travel easier for all passengers, especially those with hearing and vision disabilities.

As a bus approaches a stop, the AVA system automatically announces the next stop, as well as displaying it on a variable message sign inside the bus. The announcements are made using the bus' existing public address system that has speakers inside and outside the bus. The variable message signs are ceiling-mounted at the front of each bus inside the vehicle.

Utilizing a CAD/AVL system which track locations of all buses, COTA's fixed-route fleet provides benefits, not only for passengers with hearing and vision disabilities, but also to other riders who may not be familiar with the stops of a particular route. These benefits would also apply to individuals who, due to poor or limited visibility caused by night or inclement weather conditions, have difficulty identifying their bus stop location.

9.3 Traveler Information Systems

Providing complete and timely information to travelers is critical to COTA's success in providing quality transit services to central Ohio residents and visitors. This ITS program provides a web-based itinerary planner through which customers can access interactive screens on the COTA web site to input origin/destination and arrival/departure information, generate quick itineraries for trips, use look-ups for popular destinations, and receive complete, printable itineraries including maps, transfers, stop locations, fares, and written travel instructions.

COTA Traveler Information Kiosks

Future travel information initiatives planned for the 2009-2010 timeframe will feature "next bus" information at high volume passenger locations, a web-based

email subscription service to notify customers via email when their bus is within a specified time from the stop, or if there is an unexpected change in normal bus operation. Since this information can be displayed on any Internet-ready device, real-time data could be sent to devices including kiosks at transit centers, or flat panel displays at bus shelters. In the future, COTA will display "next bus" information at their main transit hubs, transit centers, and other high volume bus shelters via display panels. These signs will provide a time-based countdown for the arrival of the next bus in addition to informing the customer if the bus they were waiting for has left or is yet to arrive. Countdown is considered to be the most user-friendly format for presentation and can be readily implemented with scheduled time, current time and schedule adherence data. COTA will also investigate partnering with local private entities to provide other data such as weather forecasts, news headlines, and other relevant information.

Real Time Bus Information

9.4 Electronic Fare Collection via "Smart Cards"

Providing easier payment options is another way in which COTA's ITS program will enhance the customer's experience. Currently, the fare boxes support exact change (using both coin and paper) and COTA's magnetic fare cards. Upgrading the fare-box system to incorporate "smart card" technologies would allow COTA to:

Smart Card Example

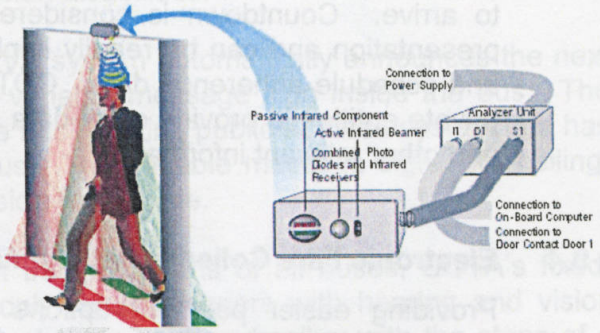
- Reduce the number of different fares and different discounts available;
- Quicken passenger boarding times at bus stops;
- Generate ridership information based on data gathered by fare boxes;
- Integrate data associated with "flash" passes with existing fare box data;
- Integrate ridership data with the GPS system to allow passenger boarding data to be evaluated at the bus stop level; and
- Reduce fare-box maintenance costs.

COTA's objective is to upgrade fare boxes to accommodate a system-wide Electronic Payment System (EPS) using smart cards, stored value cards, and credit cards with an embedded chip to store and process information in the 2010-2011 timeframe. EPS will enable:

- Increased convenience to transit users;
- Less cash handling and improved security of fare revenues;
- Equitable fare structure; and
- Overall cost reduction.

9.5 Automatic Passenger Counters

ITS applications will continue to significantly enhance COTA's ability to ensure that transit routes serve as many potential customers as possible. Investments will continue to be made in our Automatic Passenger Counter (APC) system. With APCs, electronic sensors near the front and rear doors of selected COTA fixed-route vehicles count daily boardings and alightings, while also recording where on the route boarding and alightings occur. Utilizing this data, COTA planners can make timely decisions affecting route alignments and improved vehicle on-time performance, all with a goal to increase ridership, improve system reliability and ultimately, customer satisfaction levels.



Automatic Passenger Counter

9.6 Fleet Maintenance

Another element of COTA's ITS program planned for 2008 as part of the CAD/AVL enhancement program is the ability to provide enhanced maintenance capabilities to the fleet through vehicle component monitoring (VCM). VCM, or preventive maintenance software, enables automatic monitoring of transit vehicle engine components and provides warnings to COTA's maintenance personnel if failures are about to occur. This element would integrate with COTA's existing maintenance software that manages the maintenance records of transit vehicles.

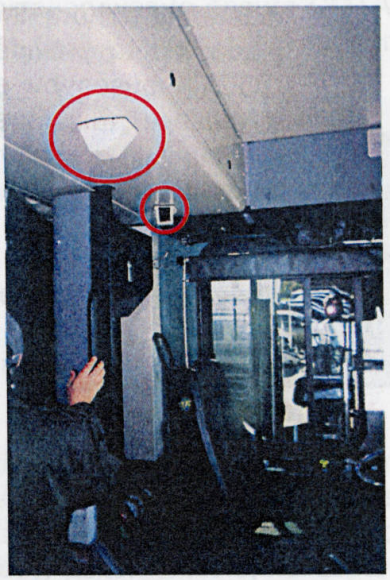
To monitor the COTA vehicle, an on-board microcomputer will be connected to various input devices: engine sensors, GPS receiver, ramp deployment signals, and odometer sensors, which can record characteristics such as acceleration/deceleration, speed/RPM, engine run time, and cumulative distance

traveled. External sensors can also be connected to the on-board microcomputer to record temperatures (engine, coolant, interior passenger comfort), road conditions (vibration), air compression usage (tire pressure), and stress on brakes. When the vehicle returns to the garage, the data will be downloaded via the wireless local area network to the maintenance system in order to help maintenance personnel conduct proactive fleet maintenance in a more timely and efficient manner, reducing overall maintenance costs.

COTA's future ITS program plan had also included an Intelligent Vehicle Initiative (IVI). IVI systems are designed to enhance the safety of the bus by providing crash warning and crash avoidance capabilities. IVI systems address behaviors including following too close, unintended lane departures, driving too fast in turns, and other operational characteristics. The plan to implement IVI technologies is currently being re-evaluated and is not being planned for deployment in the 2008-2011 timeframe.

9.7 Safety and Security

Ensuring the safety of customers and operators is one of COTA's highest priorities. Over the last few years, COTA, along with many other public organizations, has increased their interest in security to include their fleet and facilities.



Security Cameras on Buses

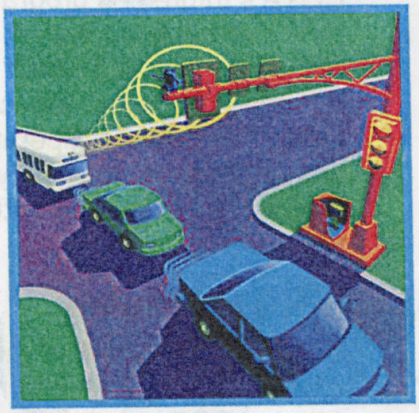
Examples of ITS technologies used in ensuring a safe and secure environment include a video surveillance system which incorporates three cameras in each fixed-route bus, images from which are stored automatically to hard drives on the buses. Additional on-board security features include emergency alarms and other sensitive security features which allow dispatchers to monitor situations on the bus and act accordingly.

COTA also currently monitors its facilities with a Closed Circuit Television surveillance system. Finally, each COTA facility has controlled access through a swipe card system. The swipe badges control not only access to the buildings but also the associated parking areas.

In the future, the COTA ITS plan will integrate these currently disparate systems and provide the agency a cohesive security and surveillance approach that is integrated with their dispatch control center operations.

9.8 Transit Signal Priority

Over the past few years, implementation of various ITS technologies has been conducted by several local municipalities. For example, the City of Columbus and ODOT have installed real-time cameras at numerous intersections and highway areas in central Ohio in order to help monitor traffic flow, reduce the running of red lights, quicken traffic incident response times, and improve overall safety of operations.



Transit Signal Priority

Another potential area of ITS integration and partnering with local agencies includes the ability to interface with the city of Columbus' traffic signal system and provide COTA buses priority at certain intersections when buses are running late. During this short-range planning period, COTA, with the assistance of MORPC, will continue investigating the feasibility of integrating with the Columbus signal system in order to determine how the City's system can be adapted to provide transit signal priority to COTA buses by extending the green time (within certain parameters) when the bus is running late. In the future, as the city's system evolves, this is another key integration project which would improve on-time performance and system reliability.

Through these efforts COTA hopes to build a system that not only achieves the goals of improving operating efficiency and enhancing customer experience, but also provides a system that benefits the central Ohio region as a whole.

10.0 SECURITY AND EMERGENCY SERVICES

Since September 11, 2001, transportation security has experienced a renewed emphasis for transportation agencies nationwide, and in particular, public transit authorities. Public transit is available to everyone, and COTA seeks to provide a reliable, easily accessible, and low cost service readily available to the general public. Helping to ensure the safest possible environment for the general public is of vital importance to COTA. In addition to developing in-house security programs, COTA is an active community partner in regional security and emergency response planning. This following information details many of COTA's security and emergency preparedness activities.

10.1 Passenger and Facility Security

Since September 11 COTA reorganized and increased its special duty officer assignments though use of off-duty Columbus police officers. These officers provide enhanced protection for passengers and employees and secure facility locations and equipment. The object of the reorganization was to ensure COTA passenger safety, and to provide an environment that is welcoming to our customers.

In 2000, COTA purchased two used 1996 and 1997 marked Ford Crown Victoria police cars for officers to patrol COTA's service area. The 1997 vehicle has 167,000 miles and has been placed out of service. The 1996 unit has 145,000 miles and remains in active service. The capital plan includes the purchase of two new patrol cars in SFY 2008 to replace the 1996 and 1997 models.

COTA Police Cruiser

Officers have the advantage of direct contact with the Columbus' Division of Police Communications Room for quick incident response. The marked cruisers allow officers to respond quickly to a bus requesting immediate attention, and enable a coordinated and timely response from on-duty police officers, helicopter units, etc., when needed.

Uniformed and plain clothed police officers ride COTA coaches while in service, providing an additional level of protection for customers and operators. At their discretion, police departments across Franklin County are asked to stop coaches and conduct a courtesy walk-through.

With the development of the Homeland Security Color Coding System, COTA has developed Authority level response plans and procedures that include increasing armed patrols and searching motor coaches and facilities with Transportation Security Administration's (TSA) bomb-sniffing dogs. TSA K-9

Units are used twice a month to search in-service motor coaches during an "elevated" (yellow) condition. The searches serve as a deterrent for anyone that may be considering plans to cause harm to the transit system. COTA will spend $382,192 in 2007 to hire off-duty police officers to perform the functions described above.

In addition, security related devices on buses include the following:

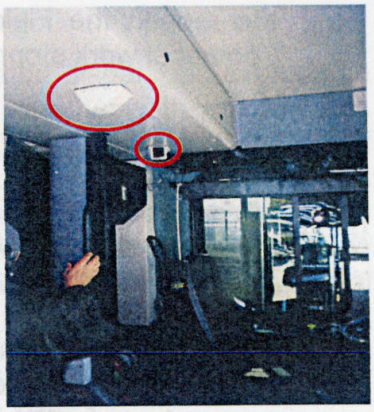
- Destination signs can be activated to read "Emergency, Please Call Police", followed by a silent alarm to COTA's Radio Room.
- Convex mirrors to allow complete vision of passengers by the operator.
- Bus identification numbers are painted on coach tops for easy aerial view (e.g., by police helicopters, etc.).
- A GPS radio installed on coaches to provide real-time bus location information.
- Emergency buttons included in upgraded radio system in order to provide priority and second level of priority notification to the Radio Room.

Operator procedures are to contact the Radio Room immediately either by pressing the emergency alarm or by pressing the 'Priority Button' on the radio. Radio Central will provide the appropriate actions for the situation. The radio system is monitored by police dispatchers for immediate assistance as needed.

Following the attacks of 9/11, COTA began to enhance the security around all facilities, including the Easton, Linden, and Near East transit centers. Electronic proximity identification card readers are located at exterior entrances and exits at COTA's facilities. Pedestrian gates and employee ID card readers control access of employees to main parking areas at COTA's two larger bus maintenance and storage facilities.

Alarms are installed at remote transit centers and at the City Center Terminal to warn of unauthorized entry during closed hours. The alarms are monitored by a third-party vendor who notifies the police and Director of Security when an alarm sounds. Authorized employees and tenants that occupy leased space in transit centers have authorized codes to disable the alarms during normal duty hours.

Closed Circuit Television Cameras (CCTV) have been installed on COTA's bus fleet and in facilities. The facility cameras are remotely viewed to allow immediate response to vandals, criminals, and utility emergencies. Since the installation of the CCTV, several criminal activities have been detected, and suspects arrested or removed from various buses operating throughout the route system. The CCTV also provides evidence for positive identification of suspects whom cause disturbances, and for individuals falsifying accident claims. COTA's investment in CCTV equipment has been significant; however, not all exterior entrances to COTA facilities or properties are canvassed by CCTV equipment.



Security Cameras on Buses

FTA security audits were conducted in 2004 and 2006 which revealed several weaknesses in the perimeter fence-line and lighting around facility and park and ride locations. Continued efforts are being made to increase the security at these locations. The audit pointed out several key "Counter Measures Recommendations" to the findings of the audit, including increasing the security coverage (guard patrol inspection rounds); ensuring exterior doors are secured, canine dog searches of facilities and vehicles, facility lighting, fence line repairs, and procedures for on-site cameras to be monitored.

Facility Security Camera

All audit weaknesses have been addressed except for augmenting on-site cameras, minor lighting and fence line issues around the facilities. The minor lighting and fence repairs are scheduled for repair in 2007. The on-site cameras are funded through COTA's capital budget, and the security plan identifies programmed installations to increase COTA's security.

During the 2007-2011 timeframe, security plans include enhancing and replacing CCTV equipment and existing security systems at COTA's various facilities, and installing systems at the new paratransit facility and park and ride locations. Seven new, and one relocated park and ride are planned by 2011. For 2007, COTA has budgeted $169,429 for security guard staffing at various facilities.

In January 2006, COTA consolidated its Fields Avenue fixed-route vehicle fleet operations into the McKinley Garage. The potential for increased risks and security vulnerabilities at McKinley Avenue have increased in conjunction with the consolidation of operations into one facility. By 2009, however, COTA plans

to reopen the Fields Avenue facility and as a result, reduce the exposure to potential work stoppages related to acts of terrorism or other harmful actions.

10.2 OPTA Security Sub-Committee

In November 2006, members of the COTA Operations Department recommended and initiated a new Ohio Public Transit Association (OPTA) Security Sub-Committee. This group has representatives from every major, and many of the smaller and rural transportation systems within Ohio. The members provide training and development for the System Security Program Plan, Emergency Disaster and Contingency Plan, Security Tool Kit ingredients, and procedures for the National Incident Management System (NIMS).

COTA's Vice President of Operations was named the first chairperson for the Security Subcommittee. This committee will spearhead the Ohio Homeland Security's Transportation version of the computer-based "Law Enforcement Response Plan (LERP). The primary purpose of the LERP is to identify equipment and other resources each authority has available, which can be utilized during emergency evacuation situations.

Specialties and best practices initiatives have been identified and shared with all transit agencies involved in this effort. Agencies have developed key networking partners to assist in the planning and design of their particular authority's security program.

10.3 Capital Crossroads Special Improvement District

Since COTA's inception, downtown Columbus has been the heart of COTA's transit market, and remains the largest employment center in the central Ohio region. Capital Crossroads is a private sector organization created by downtown property owners in 2001. Its primary purpose is to make downtown Columbus the cleanest, safest, and most attractive commercial area in central Ohio. Funded by more than 360 property owners, the Special Improvement District (SID) serves a 32-square block area between the Greater Columbus Convention Center and I-70. The downtown SID Ambassadors provide safety and cleaning services to the District seven days per week.

COTA continues to be an integral funding partner to the Capital Crossroads SID project. COTA's participation in the funding for the SID will protect and enhance COTA's downtown facilities and be a great benefit to Authority personnel and its customers. In 2007, COTA will renew its yearly agreement with the SID, and contribute $100,000 towards providing supplemental maintenance, security and other essential services within the District.

10.4 Evacuation Transportation Group

Following the aftermath of Hurricane Katrina and related disparaged evacuation efforts in New Orleans, in August 2006, MORPC, together with the Franklin County Emergency Management Agency (FCEMA), COTA, and the City of Columbus, formed a regional evacuation transportation group to discuss emergency response, evacuation routing, signage, and transportation resources with agencies in Greater Columbus that would have a stake in evacuation planning. As part of this regional evacuation transportation group, several subgroups discussed the following topics:

- Transportation resources
- Evacuation routing and signage
- Review of existing evacuation plans
- Incident management

The vision of a cross-jurisdictional evacuation transportation group is to develop a regional transportation plan that adds to and complements existing emergency preparedness plans. This strategy should contain a summary of transportation options in the event of an evacuation, including evacuation routes out of the area, fuel and food supply provision routes to the area, sheltering of ingress and egress population, flexible and static signage, use of ITS, traffic signal coordination, and enforcement. Other more specific tasks include:

- Enhance working relationships among personnel from multiple organizations responsible for emergency preparedness and response in Franklin County;
- Improve cross-jurisdictional communications;
- Identify pick-up, drop-off and alternate drop-off locations that allow evacuees to have fresh drinking water, protection from the elements and latrine facilities;
- Conduct exercises to ensure timely and efficient response of resources;
- Identify and accumulate local resources; and
- Determine a central communications center that governments, agencies and individuals can contact in the event of an emergency.

The Security/Transportation group is developing proactive evacuation plans that include what is referred to as the "transportation disadvantaged population," a population that was not served adequately following the devastation that occurred as a result of Hurricane Katrina. COTA's Director of Security was named the first chairperson for the Security/Transportation subcommittee.

Currently, the core agencies actively involved in the planning efforts are COTA, ODOT, FCEMA, emergency medical service (EMS) personnel (police, fire, hospitals), and City of Columbus. A number of area agencies are making transportation vehicles available in an effort to coordinate an emergency evacuation plan (e.g., COTA, Columbus Public Schools, Franklin County MRDD, OSU, etc.). Utilizing all available vehicles, the object of the committee is to become the first organization in the United States with a plan that can evacuate residents of Franklin County in less than 23 trips utilizing all available vehicles.

The efforts of this group have also resulted in the identification of some key critical facilities and transportation system elements in Franklin County's transportation system (e.g., transit systems, rail operators, airports, the Interstate system, national highway system routes, etc.). Eventually, the working group will be expanded to not only include Franklin County and its agencies but also the adjacent counties that comprise the MORPC transportation planning area. This will allow continued identification of not only critical transportation infrastructure in Franklin County, but throughout the central Ohio region.

10.5 Other Emergency Services Coordination

COTA is also the transportation representative of the Ohio Department of Homeland Security's (ODHS) "Border/Transportation Security CBRNE (Chemical, Bio-logical, Radiological, Nuclear and Explosive) Advisory Committee." The object of this committee is to review and revise all policies and procedures to protect the borders of Ohio from attacks via water-ways, land, or air. The committee participants include but are not limited to the ODHS, Ohio State Highway Patrol, Ohio Department of Natural Resources, Transportation Security Administration, Amtrak, CSX Transportation, Norfolk Southern Railroad, Ohio Central Railroad, Ohio National Guard, and the United States Coast Guard.

COTA also coordinates closely with the FCEMA and Chemical Emergency Preparedness Advisory Council on evacuation training in the event of an emergency. This training has included a simulated plane crash at Port Columbus International Airport. In addition, COTA has been involved in several emergency evacuations in Franklin County in recent years.

11.0 2008-2011 TRANSPORTATION IMPROVEMENT PROGRAM

11.1 Background

The Transportation Improvement Program (TIP) delineates a four-year operating and capital plan. Listed in the TIP tables on the following pages are annual service levels, operating and capital expenses, and anticipated financing levels.

To avoid confusion, it should be noted that although this program was designed to span four State fiscal years (2008-2011), it actually covers five fiscal years for the Central Ohio Transit Authority (COTA). COTA begins its fiscal year January 1st, while the State of Ohio begins its fiscal year July 1st, and the Federal Government begins its fiscal year October 1st. Therefore, it is necessary for the span of this document to encompass five COTA fiscal years (i.e., 2007-2011) in order to meet state and federal requirements of a four-year program.

A discussion of the operating and capital components of the TIP follows.

11.2 Operating Plan

The following is a summary, with supporting tables, of the four-year operating component of the TIP including years 2008 through 2011. The most recently projected data for 2007 has also been included in each of the tables. Table 11-1 on page 11-10 displays the existing and projected bus hours of service based on Tables 5-1 and 5-2 of Section 5. The hours of service represent the initial five-year phase of COTA's Long-Range Transit Plan (LRTP), which is described in greater detail in Section 4.

In addition to flat sales tax collections, over the past several years COTA experienced declines and slow growth in state and federal assistance. In response to the resulting deficit operations, COTA reduced fixed-route service hours 25 percent (210,000 annualized hours) between 2001 and 2006, and increased passenger fares by an average of 12.5 percent in order to ensure the Authority remained financially solvent.

In a continuing effort to combat these declining service trends, COTA successfully completed the new LRTP in August 2006. In November 2006, COTA received voter approval for an additional 10-year, renewable, 0.25 percent sales tax increase necessary to begin implementation of new services described in the LRTP. As a result of the passage of Issue 7, this plan assumes COTA has the financial capacity to maintain all planned services without assuming any new local sources of operating revenue.

COTA will begin implementation of the LRTP in 2007 by initially restoring some service, followed annually by a significant expansion of the fixed route and paratransit operations. While the new 0.25 percent sales tax will become effective April 1, 2007, COTA elected to hold its current 0.25 percent permanent tax in abeyance for the remaining nine months of the year. Suspending the permanent sales tax was done in order to fulfill a promise to the community to not increase the overall effective sales tax rate in Franklin County. This commitment was made in anticipation of an already planned 0.25 percent reduction in the sales tax by Franklin County, effective December 31, 2007. Actual collection of both COTA levies will not begin until January 1, 2008 and due to a three-month lag in processing by the State of Ohio, receipt of the full 0.5 percent sales tax revenue will not be realized until April 2008.

The 2007-2011 five-year TIP operating plan represents COTA's response to the growing transportation needs of the central Ohio region by providing an expanded, reliable, and safe transit system. The TIP calls for an aggressive, system-wide expansion of COTA's fixed-route and paratransit bus service. Overall, the five-year plan calls for a 43.2 percent increase in fixed-route service hours by 2011. As a result of the increase in the area of fixed-route service coverage and expansion of the Project Mainstream fleet, the Mobility Services budget, which includes Project Mainstream, will increase 27.3 percent between 2007 and 2011. A more detailed discussion of Mobility Services and Project Mainstream is contained in Section 7.

Ultimately, vehicle hours drive each year's operating expenses. Direct cost per hour and indirect expenses as budgeted for 2007 are included in Table 11-1. From 2007 through 2011 the direct cost per hour will be escalated at approximately 1.5 percent per year to account for general inflation and escalating fuel and benefits costs. A 3.5 percent increase in cost per year has been budgeted for expanded Project Mainstream services in order to offset inflation.

Operating revenue has been estimated based on operating revenue during 2006, and historical operating revenue trends. As a result of the successful passage of Issue 7 in November 2006, operating revenue significantly increases from 2007 to 2011. A larger percentage increase occurs 2008 through 2011 due to the deferral of the additional 0.25 percent sales tax until January 2008. In order to catch up with inflation, and to maintain a consistent farebox recovery ratio, a fare increase has been budgeted to take effect in 2009. In addition, this plan assumes that the average rate of portfolio interest on COTA's investments will increase at 5 percent per year from 2007-2011.

The financial summary of the TIP serves to summarize the various sources of revenue and assistance and relates this income to total operating and capital expenses.

11.3 Local Funding

In November 1999, COTA won approval by voters to make its existing 0.25 percent temporary sales tax permanent. At this time, COTA also sought voter approval of a 10-year 0.25 percent sales tax to be used for long-term expansion of the transit system, including the introduction of light and commuter rail lines. This ballot initiative was not approved by voters. The LRTP, which is an update to COTA's previous long-range plan, was adopted by COTA's Board of Trustees in August 2006 (see Section 4). Following adoption of the LRTP, in November 2006, Issue 7 was placed before voters. Issue 7 was approved by voters, and includes an additional ten-year renewable, 0.25 percent sales tax to help fund expanded transit services described in the LRTP. Therefore, the SRTP and TIP reflect the passage of the additional tax and subsequent implementation of various LRTP components. The TIP analysis assumes that the tax receipts will grow at an annual rate of 1.05 percent for 2007, and 2.0 percent each year for years 2008-2011.

11.4 Capital Plan

An outline of the Capital Acquisition Plan is provided in Table 11-2, page 11-11. All projects in the 2007 column have been fully funded as outlined by the Authority's approved budget. Major capital items in Table 11-2, such as buses, park and rides, and other facilities are described in greater detail in Sections 6 and 8 respectively. Major capital items will be funded with Federal Section 5309 Discretionary grants, Section 5307 Formula Assistance, Congestion Mitigation Air Quality funds, or Section 5208 ITS monies. In order to account for inflation, this plan assumes capital costs will grow at an annual rate of 4.0 percent per year through 2011.

With the passage of the federal Transportation Equity Act of the 21st Century (TEA-21) and its successor Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), regional transit authorities were given the latitude to use their Section 5307 Federal Formula Assistance on the capitalization of maintenance. Beginning in 2008, this plan assumes that Section 5307 Formula Assistance will be targeted toward shortfalls in revenue vehicle replacement and/or other qualifying capital projects.

COTA will pursue Discretionary Section 5309 Federal Capital Assistance and SAFETEA-LU attributable funds to address various major capital needs. Section 5309 requests have been made as part of the ODOT statewide earmark process or as a separate request through central Ohio's U.S. Congressional Representatives. SAFETEA-LU stipulates an 80 percent

federal and 20 percent local and state participation on all CMAQ and Section 5307and 5309 grants.

11.5 Major Capital Projects

The total five-year Capital Acquisitions Plan is projected to cost $151,173,524 as identified in Table 11-2. Following the recent passage of Issue 7 to support COTA's LRTP, COTA is proposing significant capital improvement investments aimed to restore and strengthen transit services in the central Ohio area.

11.5.1 Bus Replacement and Expansion

Replacement of aging existing coaches and purchasing new coaches necessary to meet future fixed-route and paratransit expansion plans is one of COTA's highest priorities.

- In addition to the traditional FTA funding sources (i.e., Section 5307 and 5309), COTA has programmed Section 11-10 Congestion Mitigation/Air Quality funds (i.e., SAFETEA-LU Attributable Funds) in the regional Transportation Improvement Program. During SFYs 2008-2011, $10,453,004 in MORPC attributable CMAQ funding will be used towards the purchase of 34 fixed-route replacement coaches.

- In conjunction with a significant increase in fixed-route service hours, COTA will be increasing the fixed-route active fleet from 234 coaches to 342 during the 2007-2011 SRTP timeframe. The procurement process for ordering and delivery of fixed-route coaches takes approximately 16 to 18 months. As such, beginning in 2007 and for each year thereafter, COTA will order 40 buses per year. A "smoothing" approach to bus purchases was developed and is being implemented that allows COTA to replace vehicles in a predictable and timely manner, and allows COTA to ramp up service levels as quickly as possible within financial constraints.

- COTA currently uses 51 vehicles to operate "Project Mainstream," a complementary paratransit service for individuals who are unable to use the regular fixed-route bus service due to a disability. As the fixed-route system expands from 2007 through 2011, COTA anticipates purchasing additional paratransit vehicles to accommodate expected increases in paratransit service. As a result, the Mainstream fleet is projected to expand by two vehicles each year from 2008 through 2011, resulting in a fleet size of 59 vehicles by 2011.

11.5.2 Non-Revenue Vehicles

Non-revenue vehicles are utilized to assist in the operations of COTA's services. COTA has established a consistent replacement schedule for service vehicles. Examples include vehicles for street supervisors, street facility and road call crews, security operations, etc. The non-revenue fleet mix includes cars, vans, large trucks, dump trucks, and pick-up trucks. The estimated program cost for non-revenue support vehicles over the next five years will be $1,909,461.

11.5.3 Facility Construction Projects

A Paratransit Bus Maintenance Facility has been included in the Capital Plan with preliminary work beginning in 2007 and construction completed in 2010. To date, funding identified for preliminary engineering, final design, and construction of this facility includes $8,919,361 in Section 5309 monies. All but $534,578 has been programmed to use State of Ohio toll revenue credits as the local match to the Section 5309 appropriations. A recent request was submitted in 2007 for additional earmarks totaling $5.8 million. COTA plans to use local funds for matching this request.

Over the next five years, COTA will implement a significant park and ride expansion program. A total of $18,826,829 has been programmed for the feasibility and environmental assessment study, land purchase, design, and construction of five new park and rides located near the areas of:

- US-33/SR-161 and Avery Road/Perimeter Loop
- Sawmill Road and Summitview Road
- US-33 and Gender Road
- I-71 and Polaris Parkway
- I-70 and SR-256

Additionally, COTA will seek to acquire a small parcel of land in order to expand parking capacity by 23 spaces at the Delawanda Park and Ride, and relocate the existing Hilliard-Rome Road area park and ride (located on Trabue Road east of Hilliard-Rome Road) to a more visible and convenient location closer to Hilliard-Rome Road near the I-70 interchange.

In order to conduct high quality day-to-day operations, and in an effort to provide convenient transit services to central Ohio commuters, COTA owns and operates several facilities throughout the region. In addition to park and rides and transit centers, examples include COTA's administrative offices and bus storage and vehicle maintenance facilities located on McKinley Avenue

and Fields Avenue respectively. Constructed in the early 1980's, each facility faces various maintenance, repair, and upgrade needs necessary to maintain a safe and secure work environment. Examples include repair or replacement of deteriorating concrete floor areas, replacement of hydraulic bus lifts and lighting fixtures, rehabilitation of restroom areas, major renovations to the heating, ventilating, and air conditioning units, etc. Over the next five years, COTA has programmed $9,056,000 for facility improvements.

11.5.4 Express Buses on Freeway Shoulders

ODOT, MORPC, and COTA have teamed together in order to test the use of operating COTA buses on freeway shoulders in central Ohio. In November 2006, a pilot program was launched along I-70, east of downtown Columbus. In brief, buses are allowed on the shoulders only when speeds in the freeway lanes dip below 35 miles per hour, which usually occurs during peak-period commute times.

To date, the program has operated with great success, eliciting positive response from customers in regard to perceived travel time savings between downtown Columbus and COTA's Reynoldsburg Park and Ride (located on Brice Road near I-70). Upon completion of the one-year pilot, plans call for this program to be expanded to other freeway corridors serving various express routes.

I-70 on the east side of Columbus was chosen as the initial test corridor due to previous freeway shoulder infrastructure improvements made during ODOT's I-70 East freeway reconstruction project, conducted during 2000-2001. Requirements such as minimum pavement depth and shoulder width necessary to safely operate buses on the shoulders were put in place along I-70 during the reconstruction project. Other corridors, however, have various stretches of freeway shoulders that do not meet minimum program safety requirements. COTA has programmed $2 million into the TIP in order to expand this program to additional freeway corridors (e.g., I-70 west of downtown, I-71 north and south of downtown, etc.). The funds will be used to implement important infrastructure needs such as upgraded pavement depths to support operation of buses on the shoulders, expanded shoulder lane widths, reinforced drainage grates, etc., and to purchase and install "Bus Only" freeway shoulder signage along the freeways.

11.5.5 Real Estate and Other Strategic Investments

COTA, with the assistance of MORPC, has studied projections for future population and employment growth in the central Ohio area, and their corresponding impacts on traffic congestion and overall quality of life. In particular, MORPC projects by 2030 the central Ohio area can expect to see a:

- 35 percent increase in population;
- 48 percent increase in employment; and
- 46 percent increase in highway traffic congestion.

Based on MORPC 2030 projections, Franklin County alone will grow in population to 1,287,469, representing a 20 percent increase from 2000. Research data suggests heavy congestion levels will increase significantly over the next 25 years, indicating a need for future investment in transportation alternatives.

Providing future transportation capacity in the region will require investing in resources that make transit more convenient, reliable, and responsive. These investments could include:

- Strategic acquisition of rights-of-way (ROWs) to plan for alternative transit options in high-demand travel corridors;
- Planning for high-capacity transit options in congested travel corridors, including fixed-guideway options, and
- Procurement of potential sites for new multi-use transit centers and intermodal transit hubs.

Fixed-guideway alternatives are modes of transit that are reserved solely for a specific type of mass transit vehicle. Because fixed guideways are utilized by transit vehicles only, they allow for the quick and timely transport of people to and from key urban centers. Primary examples of fixed-guideway transit can be divided into Commuter Rail (CR), light rail transit (LRT) and bus rapid transit (BRT) alternatives. Please refer to Section 4 for additional information regarding fixed-guideway alternatives.

COTA has programmed $12 million in the TIP for strategic investment planning and acquisitions that provide transportation options in the most congested traveled corridors of the region.

11.5.6 Intelligent Transportation Systems (ITS)

ITS is high-tech applications designed to make bus travel easier and more convenient, reduce traffic congestion, provide timely and comprehensive transit information, improve on-time performance, and facilitate integration of COTA's operations into a regional transportation network. Example components of COTA's ITS plans include:

- Passenger information systems that provide real-time bus arrival/ departure information;

- Signal priority systems that adjust traffic signal timing to expedite bus service; and
- "Smart Card" fare collection systems which speed up passenger boarding, and provide opportunities for riders to renew bus passes remotely, using the Internet.

By December 2005, COTA had implemented the following ITS components of the plan:

- Automatic vehicle location,
- Onboard automated stop announcements,
- Automatic passenger counters, and
- Safety and security systems.

During the 2007-2011 SRTP period, including federal CM/AQ, Section 5209 and 5309, and local dollars, COTA has identified $7,084,884 for various ITS project components. As a result of prior service cutbacks and budget deficits, COTA deferred new ITS projects until additional local funding could be obtained without negatively affecting COTA's service levels. Following the passage of Issue 7, COTA is positioned to move forward with the ITS program. To maximize the benefits of upgraded ITS technologies, COTA will submit to FTA and FHWA the updated ITS plan (see Section 9 for additional ITS plan information). COTA will continue to vigorously pursue all available federal grant funding sources to complete implementation of the updated ITS plan.

11.5.7 Bus Stop Shelters & Transit Enhancements

COTA's Capital Improvement Plan includes improvements to various passenger amenities such as installation and replacement of bus stop signs, shelters, information displays, trash cans, etc. Investments in these amenities are designed to provide convenient, comfortable, and safe passenger waiting areas for customers. To meet this goal, COTA has programmed $1,267,000 for transit enhancements during the 2007-2011 time period.

11.6 Financial Summary

Table 11-1 (page 11-10), is a financial summary of the system, which displays COTA's projected annual fixed-route service levels, sources of revenue, operating expenses, net capital outlays and resulting cash balances.

Over the past five years, COTA experienced significant reductions in state and federal capital and operating assistance as well as stagnant sales tax receipts. Beginning in 2001, service reductions were implemented to stem the tide of resulting budget deficits. This five-year plan (2007-2011), represents a

restoration and expansion of services in accordance with the LRTP, funded largely by the additional 0.25 percent sales tax levy passed in November of 2006.

COTA's Board of Trustees and management staff will continue to work vigorously to provide affordable, cost effective public transit services to the citizens of Central Ohio.

TABLE 11-1
FINANCIAL SUMMARY

CENTRAL OHIO TRANSIT AUTHORITY
SRTP 2007-2011

	Projected 2007	Projected 2008	Projected 2009	Projected 2010	Projected 2011
Beginning service hours	623,932	652,945	713,016	773,265	833,580
Change in hours	29,013	60,071	60,250	60,315	60,018
Ending service hours	652,945	713,016	773,265	833,580	893,598
Revenue Passengers	14,470,928	15,281,885	15,728,529	16,909,506	17,719,746
Beginning Cash Balance	$ 16,891,963	$ 15,210,870	$ 30,448,777	$ 48,560,200	$ 52,554,346
SOURCES					
Total Sales and Use Tax	$ 46,701,731	$ 83,362,590	$ 97,176,962	$ 99,120,502	$ 101,102,912
Passenger Revenues	$ 12,693,898	$ 13,405,269	$ 15,038,802	$ 16,167,990	$ 16,942,700
Federal Asst.(JARC, 5307)	$ 10,568,153	$ -	$ -	$ -	$ -
State Assistance (E&D)	$ 766,195	$ 793,012	$ 820,768	$ 849,495	$ 879,227
Fuel Tax Refund (State)	$ 641,895	$ 700,949	$ 760,179	$ 819,473	$ 878,476
Investment Income	$ 895,495	$ 1,240,427	$ 2,322,046	$ 3,661,120	$ 3,931,697
Lease Income	$ 443,841	$ 454,430	$ 468,614	$ 483,953	$ 494,193
Other (Miscellaneous)	$ 351,251	$ 134,631	$ 138,833	$ 143,378	$ 146,412
TOTAL SOURCES	$ 73,062,459	$ 100,091,310	$ 116,726,204	$ 121,245,911	$ 124,375,616
USES					
Operating Labor	$ 23,927,420	$ 26,132,556	$ 29,144,979	$ 31,795,528	$ 34,527,080
Adminstrative Labor	$ 9,477,398	$ 9,927,469	$ 10,396,101	$ 10,883,707	$ 11,389,943
Benefits	$ 14,257,419	$ 16,239,923	$ 18,554,117	$ 21,160,131	$ 23,813,392
Services	$ 4,865,577	$ 5,140,644	$ 5,464,042	$ 5,810,706	$ 6,105,718
Paratransit	$ 4,671,108	$ 4,946,037	$ 5,273,527	$ 5,630,714	$ 5,946,933
Fuel	$ 5,586,863	$ 6,152,777	$ 6,939,594	$ 7,780,117	$ 8,673,897
Other Materials and Supplies	$ 4,703,240	$ 5,149,407	$ 5,652,405	$ 6,189,922	$ 6,682,317
Utilities	$ 1,346,179	$ 1,358,306	$ 1,404,796	$ 1,425,009	$ 1,366,392
Casualty & Liability Costs	$ 300,972	$ 335,842	$ 374,703	$ 416,195	$ 454,968
Other	$ 1,638,752	$ 1,690,289	$ 1,755,799	$ 1,826,401	$ 1,878,511
TOTAL USES	$ 70,774,928	$ 77,073,251	$ 84,960,064	$ 92,918,431	$ 100,839,151
NET (OPERATIONS)	$ 2,287,531	$ 23,018,059	$ 31,766,141	$ 28,327,480	$ 23,536,465
Capital	($3,968,624)	($7,780,153)	($13,654,718)	($24,333,334)	($12,101,535)
Ending Cash Balance- in Current Dollars	$ 15,210,870	$ 30,448,777	$ 48,560,200	$ 52,554,346	$ 63,989,275

TABLE 11-2
SYSTEM CAPITAL PROGRAM

CENTRAL OHIO TRANSIT AUTHORITY
System Capital Program
SRTP 2007-2011

	Fiscal Year #	2007	2008	2009	2010	2011
SOURCES						
State Funding		1,200,000	1,790,453	2,190,048	2,588,135	2,159,055
Federal Funding		9,414,497	17,707,369	17,128,882	16,585,135	18,571,587
TOTAL SOURCES		10,614,497	19,497,822	19,318,930	19,173,270	20,730,643
USES						
Fixed-Route Diesel Buses		10,518,121	13,432,877	13,944,313	14,479,318	15,040,348
Non-revenue Support Vehicles		178,000	496,600	413,171	485,941	335,749
Paratransit Facility		300,000	985,470	4,625,571	12,436,854	2,770,899
Refurbished Bus Program		300,000	312,000	-	-	-
Express Buses on Shoulder Program		-	500,000	500,000	500,000	500,000
Park & Rides		-	994,240	5,105,152	7,264,059	5,463,378
ITS		-	3,200,000	1,084,993	1,116,241	1,148,166
Computer Hardware \ Software		245,000	646,764	664,744	683,889	703,448
Facility Improvements		1,056,000	2,000,000	2,000,000	2,000,000	2,000,000
Shop / Other Equipment		575,000	594,743	611,277	628,882	646,868
Strategic Investments- Property		-	3,000,000	3,000,000	3,000,000	3,000,000
Paratransit Vehicles		1,144,000	865,280	774,426	661,420	973,322
Bus Stop, Shelters, Signage, and Other Transit Enhancements		267,000	250,000	250,000	250,000	250,000
TOTAL USES		14,583,121	27,277,975	32,973,647	43,506,603	32,832,178
Local Captital Requirement		(3,968,624)	(7,780,153)	(13,654,718)	(24,333,334)	(12,101,535)

12.0 CONCLUSIONS OF THE SHORT RANGE TRANSIT PLAN

The 2007 SRTP documents the status of the COTA system in 2007 and projects revenues, operating expenses, service levels, patronage and equipment requirements through 2011.

Following the completion of COTA's LRTP and subsequent passage of Issue 7 in November 2006, service expansion is a high priority for this SRTP. The five-year capital plan calls not only for a significant investment in new buses which are needed to expand fixed-route and mobility services, but also new facility, equipment, and other infrastructure improvements designed to support COTA's long term commitment to improving transit services in the central Ohio area.

COTA has budgeted funds to operate 652,945 fixed-route regular service hours in 2007. For 2008-2011, COTA will add approximately 60,000 annualized hours of service per year, resulting in a 43.2 percent increase in service hours by 2011. In total, COTA fixed-route service hours will increase from 623,932 to 893,598 between 2007 and 2011. Additionally, beginning in 2008, COTA's mobility service program, Project Mainstream, is estimated to grow 5.8 percent from 2007 service levels. COTA's Sedan Voucher Service program will be expanded to provide better service at a lower cost to persons with special transit needs in the community. By 2011, COTA's mobility service's budget is estimated to increase approximately 29 percent from 2006 mobility services expenditures.

Although Issue 7 was approved, collection of the combined sales tax will not begin until January 2008. The 2007-2011 service plan priorities will focus on relieving overcrowding problems on existing routes, extending service hours of operation in order to provide later service in the evenings on weekdays, Saturdays, and Sundays, and add new and expanded routes in order to provide greater transit service throughout the community. As a result, COTA's projected operating expenses are projected to increase from $70,774,928 in 2007 to $100,839,151 in 2011.

Several major capital projects have been programmed for the 2007-2011 SRTP, including, but not limited to, seven new park and rides, a new paratransit maintenance and storage facility, freeway shoulder improvements which will allow for geographic expansion of the "Express Buses on Freeway Shoulders" program, and strategic real estate investments designed to make transit more convenient, reliable, and responsive to the community's public transportation needs.

It should be noted that that future revenue and expense projections are based on the latest economic data available at this time. Uncertainties exist in the economy that can alter the current level of projections and timing of expansion plans in a positive or negative manner. COTA is confident that appropriate levels

of finance are in place to support the SRTP expansion plans, however, periodic adjustments to the plan may be required to respond to changing conditions and new information.

COTA is very thankful to the central Ohio community for supporting Issue 7, and for the desire to see public transit play a more important role in meeting the region's transportation needs. The greater Columbus area has experienced dramatic growth around the I-270 Outerbelt in recent years. This growth is projected to continue in areas such as Polaris, Easton, Rickenbacker, and downtown Columbus. COTA's LRTP proposes a set of innovative service improvements which address this growth, and helps to ensure that workers can access these new job opportunities. COTA's Board of Trustees and management staff will continue to work vigorously to provide affordable, cost effective public transit services to the citizens of Central Ohio.

APPENDIX A

EXISTING PASSENGER SHELTER LOCATIONS

SHELTER SITES FOR THE CENTRAL OHIO TRANSIT AUTHORITY AS OF MARCH, 2007

NORTH & NORTHWEST

HUNTINGTON PARK DRIVE 7450 /N
CROSSWOODS PARK & RIDE N/N
E. CAMPUS VIEW & VANTAGE DR.
DOUBLETREE & CHECKREIN S/F
WILSON BRIDGE & WORTH SQ. W/F
N. HIGH AND LARRIMER AVE. S/F
N. HIGH & W. NORTH ST. S/F
NEIL & EIGHT AVE S/N
NEIL & FOURTH AVE S/N
NEIL & GOODALE S/N
BUTTLES & HIGH W/F
BUTTLES & NEIL E/N
N. HIGH & BROADMEADOWS S/N
N. HIGH & FENWAY S/F
N. HIGH & GRACELAND S/F
N. HIGH & OPP JEFFREY PL. S/F
N. HIGH & W ROYAL FOREST S/N
N. HIGH & SHEFFIELD S/N
N. HIGH & HENDERSON RD. S/N
N. HIGH & W. COOKE RD. S/N
N. HIGH AT BLENHEIM LOOP S/N
N. HIGH & W N. BROADWAY S/F
N. HIGH & OPP CHATHAM S/N
W/N BROADWAY & N. HIGH E/N
N. HIGH & E.N. BROADWAY N/F
N. HIGH & NORTHWOOD S/F
N. HIGH & SCHREYER PL. N/N
N. HIGH & ARCADIA S/F
N. HIGH & FRITZ-HENRY BLVD. N/F
N. HIGH & BLIND SCHOOL N/N
N. HIGH & DOMINION BLVD. S/N
MORSE RD. & RATHBONE S/N
N. HIGH & 4TH AVE. S/F
N. HIGH & I ST AVE. N/F
W. FIFTH & N. HIGH E/N
CLEVELAND & MT. VERNON N/B
CLEVELAND & MT. VERNON S/B
DENNISON & THIRD S/N
910 DUBLIN RD. N/N (WATER DEPT.)
N. HIGH & HUDSON S/B
N. HIGH & HUDSON N/B
HUDSON & N. HIGH W/N
N. HIGH & 15TH S/F
N. HIGH & OPP CHITTENDEN S/N
N. HIGH & 9TH N/N
N. HIGH & KING S/N
N. HIGH & CLARK S/F
N. HIGH & 6TH N/F
W. 5TH & PERRY E/N
W. 5TH & EDGEHILL E/N
NORTHWEST & 5TH S/N
NORTHWEST & CHAMBERS SE/F

NORTH & NORTHWEST (continued)

W. 5TH & GRANDVIEW E/N

W. 5TH & WESTWOOD E/N

NORTHWEST & LANE S/F

DUBLIN PARK & RIDE W/F

250 W. DODRIDGE W/F

OLENTANGY (SVC RD) & HARLEY DR.

S/N W/N BROADWAY & N. HIGH W/F

N. HIGH & NORTHRIDGE N/N

N. HIGH & LAKEVIEW S/F

N. HIGH & ACR. CRESTVIEW S/N

2050 KENNY RD. N/N

ARCADIA & H. HIGH ST. E/F

KENNY & WEYBRIDGE S/N

KENNY & OPP FOLKSTONE S/B

KENNY & 2050 (BWC REHAB CENTER)

REED & HENDERSON S/F

HILLIARD PARK & RIDE S/N

REED & DREW N/N

3RD & PENNSYLVANIA E/N

OLENTANGY & BETHEL PARK & RIDE N/F

REED ENTRANCE SEARS HARDWARE (OPP 4910) S/F

KINGSDALE CENTER S/F

WOODY HAYES & KENNY E/F

N. HIGH ACR. OLENTANGY ST. S/N

GRIGGS DAM PARK & RIDE (RIVERSIDE & NOTTINGHAM) S/N

BUTTLES & HIGH (E/B)

N. HIGH & FRAMBES S/N

N HIGH & E 2ND N/F

N HIGH & 2ND (FIREPROOF) N/F

GODOWN RD & BETHEL RD S/F

NORTHEAST

NORTHERN LIGHTS S/B
KARL & NORTHLAND N/F
5TH & CASSADY W/N
5TH & ALTON AVENUE E/N
5TH & RARIG AVENUE W/N
DSW STOP #1
DSW STOP #2
DSW STOP #3
DSW STOP #4
5TH & HIGH E/N
SAWYER BLVD & SAWYER TOWERS E/N
CALDWELL PL & OPP 989 N/S (CHESWICK).
CLEVELAND & 11TH S/N
CLEVELAND & 5TH S/F
11 TH & DAUGHERTY W/N
CLEVELAND & 15TH S/N
17TH & CLEVELAND W/F
ST. STEPHEN COMMUNITY HOUSE E/N
CLEVELAND & 19TH N/F
CLEVELAND & 24TH S/B
CLEVELAND & GENESSEE S/N
CLEVELAND & HUDSON S/F
CLEVELAND & WEBER S/N
McGUFFEY & HUDSON S/N
McGUFFEY & WEBER S/N
CLEVELAND & OAKLAND PARK S/N
INNIS & SCHOTTENSTEINS E/F
CLEVELAND & FERRIS S/F
CLEVELAND & MORSE S/F
CLEVELAND & RT. 161 S/F
BUENOS AIRES & RT. 161 S/N
STATE & SCHROCK S/N
WESTERVILLE PARK & RIDE W/N
RT. 161 & FOREST HILLS W/N
RT. 161 & PONDEROSA W/F
NORTHTOWNE & NORTHCLIFF S/F
WALFORD & BELCHER
CLEVELAND & LAURELWOOD S/F
CLEVELAND & COMMUNITY PARK S/F
KARL & NORTHRIDGE S/N
MAIZE & MOON
MAIZE & MORSE S/F
MORSE & ALMONT W/F
INDIANOLA & TORRENCE S/F
INDIANOLA & JEFFREY PL N/N
INDIANOLA & OPP JEFFREY PL S/F
INDIANOLA & COOKE S/N
INDIANOLA & OAKLAND PARK S/N
E.N. BROADWAY & INDIANOLA W/F
SUMMIT & 17TH S/N
SUMMIT & MAYNARD S/F
SUMMIT & 5TH S/F
SUMMIT & I ST S/N
4TH & 19TH N/N
ROCKY FORK & HAMILTON E/F
LONG RIFLE & LITTLE TURTLE WAY W/N
KARL & 161 (GRANVILLE CENTRE) S/N
AGLER & LINVIEW E/N
CASSADY & OPP 10TH S/F (LUTHERAN)
CASSADY & CASSADY PLACE NE/F
AGLER ROAD AT NCOC 3443 E/N
GATEWOOD & AGLER S/N
MORSE RD. & SANDY LANE RD. E/N

NORTHEAST (continued)

MORSE RD. & SANDY LANE RD. W/F

MORSE RD. & KARL RD. E/F

MORSE RD. & KARL RD. W/F

MORSE RD. & MAIZE RD. E/F

MORSE RD. & KINGSHILL DR. W/N

INDIANOLA & SCHREYER PL. S/F

STYGLER & AGLER (GAHANNA P&R) S/N

TAMARACK & PINETREE S/F

TAMARACK & MORSE S/F

KARL & RT. 161 S/F

AIRPORT GROUND TRANSPORTATION SECTION (HIGH-CAPACITY) NE/N

JOYCE & BLAKE S/N

BRENTNELL & OPP ORIOLE S/N

BRENTNELL & WOODWARD S/F

CLEVELAND & MOUNT VERNON S/B

CLEVELAND & MOUNT VERNON N/F

CASSADY AVE& CASSADY PL N/F

DELAVAN & BAR HARBOR W/F

INTERNATIONAL GATEWAY & SAWYER W/F

MOCK OPPPPOSITE 2400 ARLINGTON PK E/N

WESTERVILLE / VALUE CITY WAY E/N

E 7TH AVE & STELZER RD E/F

ALLEGHENY & OPP 3208 EB (E OF VIRGINIA LEE W)

GREENWAY AVE & WOODLAND LOOP W/N

AGLER ROAD OPPOSITE NCOC 3443 W/F

EAST

E. BROAD & 20TH W/F
E. BROAD & NELSON W/F
E. BROAD & OHIO (EB)
E. BROAD & OHIO (WB)
E. BROAD & PARKWOOD W/F (E High)
E. BROAD & WINNER W/N
OAK & OHIO W/F
E. BROAD & HOFFMAN E/F
E. BROAD & HAMILTON PARK AVE E/N
E. BROAD & BROADLEIGH W/N
FAIRWAY & BROAD S/F
HAMILTON & BROADHURST S/N
HAMILTON & SHAKER SQ. N/F
E. BROAD & FAIRWAY W/N
E. BROAD & HAMILTON RD. W/F
E. BROAD & OPP ROBINWOOD W/F
E. BROAD & MAPLEWOOD W/F
E. BROAD & BEECHTREE E/N
E. BROAD & BEECHTREE W/N
E. BROAD & WEYANT W/N
E. BROAD & HAMPTON W/N
E. BROAD AT ENTRANCE former KAHIKI REST. E/F
E. BROAD & JAMES W/N
JAMES & RUHL S/N
RUHL & GOULD W/N
E. BROAD & CASSINGHAM W/F
E. BROAD & DREXEL W/F
E. BROAD & TAYLOR W/N
MAIN & WEYANT W/F
MAIN & NELSON E/F
MAIN & ROBINWOOD W/N
MAIN & OPP ROBINWOOD E/F
MAIN & DREXEL W/N
MAIN & HOLTZMAN W/N
HOLTZMAN & MAIN N/F
MAIN & KELTON W/N
MAIN & WILSON AVE. W/N
MAIN & CHAMPION W/N
MAIN & GRANT E/F
MAIN & OPP KENWICK W/N
MAIN & JAMES W/N
JAMES & MAIN S/N
JAMES & MAIN N/F
JAMES & E. BROAD S/F
MAIN & BEECHWOOD W/N
MAIN & YEARLING W/N
MT. VERNON & ST. CLAIR W/N
MT. VERNON & OPP GARFIELD E/N
MT. VERNON & OPP MIAMI (MT VERNON PLAZA) W/F
MT. VERNON & 20TH E/N
MT. VERNON & CHAMPION W/F
ATCHESON & 20TH E/N
S. HAMILTON RD. & MAIN S/N
LONG & TAYLOR W/F
SUNBURY & MARYLAND S/N
MAIN & ALUM CREEK E/F
E. BROAD & 17TH W/F
E. BROAD & GOVERNORS W/F
E. BROAD & OPP FAIRWAY W/F
E BROAD & SCHOFIELD (FORMERLY OPP SANTA MARIA) W/N

EAST (continued)

E MAIN & OPP ALLEN E/N

NELSON & MARYLAND S/N

E. BROAD & FRANKLIN PARK W (E/N)

E BROAD & JAMES E/B

E BROAD & OPP BEECHWOOD (TOWN & COUNTRY) W/N

MOUNT VERNON & CHAMPION E/N

SOUTHEAST

CARLYLE & MAIN S/N

MAIN & WAGGONER W/F

MAIN & BRIARCLIFF W/N

MAIN & ROSEHILL W/F

MAIN & ROSEMORE W/F (former Long John Silver)

MAIN & COUNTRY CLUB W/F

MAIN & FOUNTAIN LANE W/F

MAIN & HAMILTON W/N

MAIN & OPP SHADY LANE W/F

REYNOLDSBURG PARK & RIDE S/N

CONSUMER SQUARE EAST W/N

SCARBOROUGH BLVD. & ALSHIRE (SCAR. MALL) E/F

LIVINGSTON & McNAUGHTEN W/F

LIVINGSTON & LONSDALE W/N

LIVINGSTON & NOE BIXBY W/F

LIVINGSTON & HAMILTON W/N

LIVINGSTON & WESTPHAL W/F

HAMILTON & KINGSLAND AVE. N/F

HAMILTON & LIVINGSTON S/F
HAMILTON & LIVINGSTON N/F

LIVINGSTON & YEARLING W/N

LIVINGSTON & opp COURTRIGHT W/F

LIVINGSTON & RAND W/F

LIVINGSTON & BARNETT P & R W/N

LIVINGSTON & HAMPTON W/N

LIVINGSTON & ZETTLER E/N

LIVINGSTON & JAMES E/F

LIVINGSTON & MONTROSE W/F

LIVINGSTON & COLLEGE W/N

LIVINGSTON & FAIRWOOD W/N

LIVINGSTON & MILLER AVE. W/F

LIVINGSTON & ALUM CREEK W/F

LIVINGSTON & CHAMPION W/F

LIVINGSTON & ANN W/F

LIVINGSTON & ANN E/F

LIVINGSTON & SEYMOUR W/N

LIVINGSTON & PARSONS W/F

LIVINGSTON & PARSONS E/N

LIVINGSTON & GRANT W/N

WHITTIER & OHIO W/N

WHITTIER & LOCKBOURNE W/N

FREBIS & ALUM CREEK W/F

WINSLOW & ALUM CREEK DR. NE/N

BERWICK PARK & RIDE N/N

HAMILTON & DUNDEE S/N

HAMILTON & EASTLAND DR. N/N

EASTLAND 2 & HAMILTON RD. N/N

STUDER LOOP W/F

LOCKBOURNE & MOLER N/F

KOEBEL & FAIRWOOD W/F

FAIRWOOD & WATKINS N/N

GROVEPORT & CHILLICOTHE SE/N

FREBIS & FAIRWOOD E/N

WHITTIER LOOP W/N

LIVINGSTON & JAMES W/N

ALUM CREEK & DEVRY (ALUM INDUSTRIAL) N/N

ALUM CREEK DR OPP 1025 N/N

(DEPT OF CPORRECTIONS) N/N

ALUM CREEK & OPP FRANKLIN COUNTY

(600' S OF FREBIS) N/B

COURTRIGHT & KIMBERLY DR W N/F

COURTRIGHT & PETZINGER N/N

SOUTHEAST (continued)

PARSONS & GROVEPORT N/N

HAMILTON & GROVES N/F

ALUM CREEK & OPP MARYHAVEN 1791 N/F

LIVINGSTON & KELTON W/F

MACSWAY & KIMBERLY PARKWAY E/F

LOCKBOURNE RD. & MARION RD. N/F

SOUTH & WEST

WESTWOOD PARK & RIDE W/N

STURBRIDGE & BEACON HILL N/N

MURRAY HILL RD. & BROAD (BIG BEAR, S/N)

W. BROAD & OLD VILLAGE E/N

W. BROAD IN FRONT OF WESTLAND E/F

W. BROAD & GEORGESVILLE E/N

INDUST. MILE & NATIONWIDE BLVD.W/N

INDUST. MILE & SULLIVANT AVE. S/N

WESTPORT & FRANSHIRE, N/N

SULLIVANT & ATLANTA DR. E/N

SULLIVANT (ENT. TO MEIJER) E/F

W. BROAD & GM GATE #1

W. BROAD & WILSON RD. E/F

W. BROAD & BROADLAWN E/N

W. BROAD & SOUTHAMPTON E/F

W. BROAD & HAGUE E/N

W. BROAD & BURGESS E/F

W. BROAD & WHEATLAND E/N

W. BROAD & WHITETHORNE E/N

W. BROAD & STEVENS E/N

W. BROAD & CENTRAL E/F

W. BROAD & CENTRAL W/F

W. BROAD & STARLING W/F

W. BROAD & STARLING E/F

W. BROAD & WASHINGTON BLVD. E/N

W. BROAD & DAVIS E/N

W.BROAD & DAVIS W/F

EAKIN & WEDGEWOOD E/N

SULLIVANT & DERRER RD. E/N

TOWN & DAVIS W/F

SULLIVANT & HILLTONIA E/N

SULLIVANT & CRESCENT E/F

W. MOUND & HIGHLAND E/N

W. MOUND & WREXHAM E/F

W. MOUND & LARCOMB E/N

W. MOUND AT LIFE CARE ALLIANCE (E/B)

W. MOUND & HARRISBURG PK E/F

W. MOUND ACROSS GLENWOOD E/N

W. MOUND & MT. CALVARY E/N

RICH & MCDOWELL E/N

S. HIGH & SYCAMORE N/F

S. HIGH & WHITTIER N/F

S. HIGH & MITHOFF N/N

S. HIGH & WILLIAMS N/F

S. HIGH & SOUTHWOOD N/F

PARSONS & THURMAN S/N

PARSON & THURMAN NN

PARSONS & COLUMBUS N/N

PARSONS & WILLIAMS N/F

GREAT SOUTHERN PARK & RIDE F/N

GROVE CITY PARK & RIDE S/N

COLUMBUS & LEITHART W/F

RICHARD & ADDISON N/F

GANTZ & FRANK S/F

HARRISBURG PIKE

SULLIVANT & HOLLY HILL E/F

W BROAD & S FRONT E/N

DOWNTOWN HIGH STREET SHELTERS

The shelters are located at the following locations.

Northbound:

(1) High at Fulton St.
(1) High at Main St.
(2) High at Rich St.
(2) High at Gay St.
(2) High at Lafayette St.
(1) High at Chestnut St.

Southbound:

(1) High at Chestnut St.
(1) High at Lafayette St.
(2) High at Long St.
(2) High at Lynn St.
(1) High at Walnut St.
(1) High at Cherry St.
(1) High at Mound St.
(1) High at Chapel

Note: In most cases bus stops are located mid-block at vacated east/west streets along High Street (e.g., Lynn Street).

OTHER DOWNTOWN SHELTERS

SPRING & MARCONI W/N (HIGH CAPICITY)
W. BROAD & FRONT ST. E/N
W. BROAD & MARCONI W/N (HIGH CAPICITY)
TOWN & LESTER W/F
RICH & 5TH ST. W/N
E. LONG & FOURTH E/N
W. LONG & N. HIGH E/N

APPENDIX B

PASSENGER AND OPERATIONS STATISTICS

TOTAL ANNUAL FIXED-ROUTE PASSENGER AND OPERATION STATISTICS

Year	Passengers	Total Hours	Miles
1974	13,887,122*	559,565*	6,806,365*
1975	13,893,944*	599,619*	7,542,495*
1976 (S)	14,237,118*	609,150*	7,598,775*
1977	14,527,593*	614,488	7,843,071
1978 (S)	18,477,775	609,245	7,665,788
1979	19,681,204	620,029	7,805,151
1980	19,994,928	615,293	7,539,367
1981	21,251,742	694,404	8,411,585
1982 (S)	22,936,000	683,036	8,748,425
1983	23,779,353	735,115	9,603,572
1984	26,217,876	763,728	10,162,610
1985	26,700,334	822,289	10,857,371
1986 (S)	24,043,816	759,035	10,282,175
1987 (S)	17,510,515	704,854	9,649,526
1988	20,456,535	752,986	10,423,949
1989	17,346,747	650,420	9,046,173
1990	18,338,024	664,337	9,076,179
1991	17,538,350	673,586	9,549,994
1992	18,068,524	685,413	9,488,639
1993	16,606,796	665,702	9,186,608
1994	18,023,895	681,421	9,493,744
1995	17,532,795	688,191	9,524,653
1996	17,553,264	697,136	9,699,757
1997	17,762,583	701,934	9,663,430
1998	18,326,115	727,710	10,192,042
1999	18,790,187	793,260	10,857,075
2000	18,742,704	806,190	11,071,394
2001	18,388,361	838,841	11,733,569
2002	16,193,336	776,011	10,841,703
2003	15,626,090	747,313	10,436,614
2004	14,543,928	702,807	9,901,688
2005	14,625,379	692,438	9,791,598
2006**	14,841,320	623,987	7,030,117

* Represents Revenue Totals
**2006 statistics are unaudited.
Passengers are based on National Transit Database APC sampling, not fare survey or GFI Farebox Reports.
(S) - Strikes occurred during these years:
1976 - 7 days; 1978 – 11 days; 1982 - 17 days; 1986 – 26 days; 1987 – 41 days

2006 NTD FIXED-ROUTE OPERATING STATISTICS

(unaudited)

NTD Internet Reporting

NTD ID: 6016 Agency Name: Central Ohio Transit Authority Report: RY 2006 Working Data
Form Name: Service Non-Rail (S-10) Mode: MB Service: DO

Unaudited

Add Form Note

Line	a	b	c	d		e	f	g	h
Maximum Service Vehicles									
01 Vehicles operated in annual maximum service (VOMS)	196								
02 Vehicles available for annual maximum service	234								
Periods of Service	Average Weekday	Average Saturday	Average Sunday	Annual Total	Auto Calculate Annual Total	AM Peak	Midday	PM Peak	Other
03 Time service begins	0434	0501	0641			0630	0930	1500	
04 Time service ends	0208	0206	0206			0930	1500	1800	
Service Supplied									
06 Vehicles in operation	195	72	54			186	126	195	0
11 Total actual vehicle miles	29,465	14,207	8,248	8,996,661	8,709,506				
12 Total actual vehicle revenue miles	23,457	12,650	7,021	7,260,679	7,030,117				
13 Total scheduled vehicle revenue miles	23,445	12,643	7,017	7,257,031	7,026,469				
14 Total actual vehicle hours	2,070	1,052	599	623,967	613,825				
15 Total actual vehicle revenue hours	1,865	1,002	562	566,343	558,972				
16 Charter service hours				0					
17 School bus hours				0					
Service Consumed									
18 Unlinked passenger trips (UPT)	50,649	24,438	11,961	14,841,320	14,841,321				
20 Passenger miles (PM)	204,113	93,162	47,791	59,508,735	59,508,785				
Service Operated (Days)	Weekdays	Saturdays	Sundays	Annual Total					
21 Days schedule operated	254	52	59	365					
22 Days not operated due to strikes	0	0	0	0					
23 Days not operated due to officially declared emergencies	0	0	0	0					
Directional Route Miles	Total								
24 Exclusive right-of-way (ROW)	0								
25 Controlled access right-of-way (ROW)	0								
26 Mixed traffic right-of-way (ROW)	889								
27 Total	889.0								

(UNAUDITED)

INSERT 2006 NTD PARATRANSIT OPERATING STATISTICS HERE

APPENDIX C

FIXED-ROUTE SERVICE EXPANSION BY QUADRANT

C. FIXED-ROUTE SERVICE EXPANSION

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
1	Cleveland Ave	Local	Existing	Weekday	√	√		
1	Cleveland Ave	Local	Existing	Saturday	√			
1	Cleveland Ave	Local	Existing	Sunday	√			
2	N High St	Local	Existing	Weekday	√	√		
2	N High St	Local	Existing	Saturday	√	√		
2	N High St	Local	Existing	Sunday	√			
4	Indianola Ave	Local	Existing	Weekday	√	√		
4	Indianola Ave	Local	Existing	Saturday	√			
4	Indianola Ave	Local	Existing	Sunday	√			
6	Mt Vernon Ave	Local	Existing	Weekday	√	√	√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Saturday	√		√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Sunday	√		√	Extend service to the new VA Hospital on James Rd
8	Hamilton Ave	Local	Existing	Weekday	√	√		
8	Hamilton Ave	Local	Existing	Saturday	√	√		
8	Hamilton Ave	Local	Existing	Sunday	√	√		

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
9	Leonard/Brentnell	Local	Existing	Weekday	√	√	√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way
9	Leonard/Brentnell	Local	Existing	Saturday	√		√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way
9	Leonard/Brentnell	Local	Existing	Sunday	√		√	Discontinue service to Granville Centre & extend service to Easton from via SR-3, Innis Rd, Sunbury Rd, Easton Way
10	E Broad St	Local	Existing	Weekday	√	√	√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Saturday	√		√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Sunday	√		√	Extend service east along Broad St to the Licking Co. line
11	St Clair Ave	Local	Existing	Weekday	√	√		
11	St Clair Ave	Local	Existing	Saturday	√			
11	St Clair Ave	Local	Existing	Sunday	√			
16	E Long St	Local	Existing	Weekday	√	√		
16	E Long St	Local	Existing	Saturday	√	√		
16	E Long St	Local	Existing	Sunday	√			
21	OSU/Easton Express	Local	**New**	Weekday	√	√	√	Add Friday evening service between OSU and Easton
21	OSU/Easton Express	Local	**New**	Weekday	√	√	√	Add Saturday evening service between OSU and Easton

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
29	Polaris Pkwy	Express	Existing	Weekday	√	√	√	Add a park and ride and commute trips to/from downtown Columbus via Polaris Pkwy and I-71
33	North Central	Express	Existing	Weekday	√	√		
34	Karl Rd	Express	Existing	Weekday	√	√		
35	Tamarack	Express	Existing	Weekday			√	Modify alignment to use Schrock Rd between Sharonwoods & Skyway rather than HillandDale & Justice
36	Annehurst	Express	Existing	Weekday	√	√		
38	Northeast	Express	Existing	Weekday	√	√		
39	New Albany	Express	Existing	Weekday	√	√	√	Discontinue Sunbury Loop & improve peak service levels from two trips to four trips
40X	Sunbury Road	Express	**New**	Weekday			√	Add park & ride and service from Sunbury/SR161 via I-270/I-670 to/from downtown Columbus
41	Gahanna	Express	Existing	Weekday	√	√		
43	East Broad	Express	Existing	Weekday	√	√		
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		
83	Oakland/Weber	Crosstown	Existing	Weekday		√	√	Extend service to Main & Cemetery in Hilliard via Fishinger and Cemetery
83	Oakland/Weber	Crosstown	Existing	Saturday		√	√	Extend service to Hilliard Park and Ride via Fishinger, Cemetery, Leap, and Parkway Lane

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
87	Agler/Cassady	Crosstown	Existing	Weekday	√	√		
87	Agler/Cassady	Crosstown	Existing	Saturday				
89	Hamilton Road	Crosstown	Existing	Weekday	√		√	Extend service north to Gahanna and Easton
89	Hamilton Road	Crosstown	Existing	Saturday	√		√	Extend service north to Gahanna and Easton
89	Hamilton Road	Crosstown	Existing	Sunday	√		√	Extend service north to Gahanna and Easton
92	James/Stelzer	Crosstown	Existing	Weekday	√		√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Saturday			√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Sunday			√	Modify service into the new VA hospital on James Rd.
93	Polaris Crosstown	Crosstown	**New**	Weekday				Add service between Westerville Park & Ride, Polaris & Crosswoods Park & Ride via Main St, State St, Ave, Polaris Pkwy, Old 3-C, Lazelle Rd, High Street, Campus View Blvd.
94	SR 161 Crosstown	Crosstown	**New**	Weekday				Add service from SR 161/Cleveland to Dublin Hospital/Innovation Park Areas

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
95	Morse/Henderson	Crosstown	Existing	Weekday	√	√	√	Extend service to Tuttle Mall and discontinue Reed Rd service, then extend service to Cosgray/Britton Pkwy during peak periods
95	Morse/Henderson	Crosstown	Existing	Saturday	√	√	√	Extend service to Tuttle Mall, discontinue service on Reed
95	Morse/Henderson	Crosstown	**New**	Sunday				Add service between Easton & Tuttle Mall
96	East Fifth Avenue	Crosstown	Existing	Weekday	√	√	√	Extend service to Mt. Carmel East Hospital

C.2 Southeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
1	Livingston Ave	Local	Existing	Weekday	√	√		
1	Livingston Ave	Local	Existing	Saturday	√			
1	Livingston Ave	Local	Existing	Sunday	√			
2	E Main St	Local	Existing	Weekday	√	√		
2	E Main St	Local	Existing	Saturday	√	√		
2	E Main St	Local	Existing	Sunday	√			
4	Parsons Ave	Local	Existing	Weekday	√	√		
4	Parsons Ave	Local	Existing	Saturday	√			
4	Parsons Ave	Local	Existing	Sunday	√			
7	Whittier St	Local	Existing	Weekday	√			
7	Whittier St	Local	Existing	Saturday	√	√		
7	Whittier St	Local	Existing	Sunday	√			
8	Frebis Ave	Local	Existing	Weekday	√	√		
8	Frebis Ave	Local	Existing	Saturday	√	√		
8	Frebis Ave	Local	Existing	Sunday	√			
10	E Broad St	Local	Existing	Weekday	√	√	√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Saturday	√			
10	E Broad St	Local	Existing	Sunday	√			

C.2 Southeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
11	Oak/Bryden	Local	Existing	Weekday	√	√	√	Extend service from Alum Creek & Winslow Drive further south on Alum Creek Dr to new 911 Center
11	Oak/Bryden	Local	Existing	Saturday	√			
11	Oak/Bryden	Local	Existing	Sunday	√			
16	S High St	Local	Existing	Weekday	√	√		
16	S High St	Local	Existing	Saturday	√	√		
16	S High St	Local	Existing	Sunday	√			
43	East Broad	Express	Existing	Weekday	√	√		
44	North Reynoldsburg	Express	Existing	Weekday	√	√	√	Add park & ride at 256 & I-70.
49	Southeast	Express	Existing	Weekday	√	√		
49X	US 33 Express	Express	**New**	Weekday			√	Add new park & ride at Gender & US 33 and new route via US-33/I-70 or SR-104/High Street to/from downtown Columbus
50	South Columbus	Express	**New**	Weekday			√	Add new park & ride at US23/Rathmell Rd and new service via S. High St, I-270, and I-71 to/from downtown Columbus
51	ODOT/ODPS	Express	Existing	Weekday	√	√		
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		

C.2 Southeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
85	Brice/Gender	Crosstown	New	Weekday			√	Add service between Canal Winchester & E Broad/Fairway via Waterloo, Gender, Brice, Main, McNaughten, Broad.
87	Agler/Cassady	Crosstown	Existing	Weekday	√	√		
89	Hamilton Road	Crosstown	Existing	Weekday			√	Extend service north to Gahanna and Easton
89	Hamilton Road	Crosstown	Existing	Saturday			√	Extend service north to Gahanna and Easton, extend service to Blacklick Estates
92	James/Stelzer	Crosstown	Existing	Weekday	√		√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Saturday			√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Sunday			√	Modify service into the new VA hospital on James Rd.

C.3 Southwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
3	W Mound St	Local	Existing	Weekday	√	√	√	Extend from Georgesville & Industrial Mile to Hall & Galloway Rd via Georgesville & Hall Rds
3	W Mound St	Local	Existing	Saturday	√			
3	W Mound St	Local	Existing	Sunday	√			
6	Sullivant Ave	Local	Existing	Weekday	√	√	√	Extend to W Broad St & Galloway Rd via Sullivant Ave and Galloway Rd
6	Sullivant Ave	Local	Existing	Saturday	√			
6	Sullivant Ave	Local	Existing	Sunday	√			
10	W Broad St	Local	Existing	Weekday	√	√	√	Discontinue S. Murray Hill Loop in conjunction with extension of the #6 Sullivant to Galloway Rd
10	W Broad St	Local	Existing	Saturday	√			
10	W Broad St	Local	Existing	Sunday	√			
15	Grove City	Local	Existing	Weekday	√	√	√	Extend service further east from I-71 on Stringtown Rd growing retail complex
15	Grove City	Local	Existing	Saturday		√		
16	S High St	Local	Existing	Weekday	√	√		
16	S High St	Local	Existing	Saturday	√	√		
16	S High St	Local	Existing	Sunday	√			

C.3 Southwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
17	Greenlawn/Gantz	Local	**New**	Weekday			√	Add service from Grove City Park & Ride via Stringtown Rd, Gantz Rd, Southpark Pl, Hardy Parkway, Brown Rd, Stimmel Rd, Harmon Ave, Greenlawn Ave, Greenfield Dr, Griggs Rd, Harmon Ave, Souder Ave, Thomas Lane, Davis Ave, Rich & Town Streets to/from downtown Columbus.
51	ODOT/ODPS	Express	Existing	Weekday	√	√		
53	Lincoln Village	Express	Existing	Weekday		√		
97	Georgesville/Phillipi	Crosstown	**New**	Weekday			√	Add service between Georgesville Square and Fisher Rd along Georgesville Road.
100	Hilliard-Rome Rd./Avery Rd.	Crosstown	**New**	Weekday				Add service between Westwoods P&R and Avery Rd/Perimeter Loop area from W Broad St via Hilliard-Rome Rd, Avery Rd to new Dublin Hospital

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
2	N High St	Local	Existing	Weekday	√	√		
2	N High St	Local	Existing	Saturday	√	√		
2	N High St	Local	Existing	Sunday	√			
3	Northwest Blvd	Local	Existing	Weekday	√	√	√	Extend from Kingsdale to Sawmill & Summit View via Fishinger, Reed, Henderson & Sawmill
3	Northwest Blvd	Local	Existing	Saturday	√	√		
3	Northwest Blvd	Local	**New**	Sunday	√			
5	W Fifth Ave	Local	Existing	Weekday	√		√	Extend service to Hilliard-Rome Rd
5	W Fifth Ave	Local	Existing	Saturday	√			
5	W Fifth Ave	Local	Existing	Sunday	√			
7	Neil Ave	Local	Existing	Weekday	√			
7	Neil Ave	Local	Existing	Saturday	√	√		
7	Neil Ave	Local	Existing	Sunday	√			
10	W Broad St	Local	Existing	Weekday	√	√	√	Discontinue S. Murray Hill Loop in conjunction with extension of the #6 Sullivant to Galloway Rd
10	W Broad St	Local	Existing	Saturday	√			
10	W Broad St	Local	Existing	Sunday	√			
18	Kenny Rd	Local	Existing	Weekday	√	√		

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
18	Kenny Rd	Local	Existing	Saturday	√			
18	Kenny Rd	Local	Existing	Sunday	√			
19	Grandview/Marble Cliff	Local	Existing	Weekday	√	√		
30	Smoky Row	Express	Existing	Weekday	√	√		
55	Avery/Perimeter	Express	**New**	Weekday			√	Add park & ride and new service via Avery, SR 161, I-270, I-70, I-670 to/from downtown Columbus
55X	Dublin/OSU	Express	**New**	Weekday	√	√	√	Add new direct service between Dublin and OSU. Location in Dublin to be determined
56	Tuttle	Express	Existing	Weekday	√	√		
57	Hilliard	Express	Existing	Weekday	√	√	√	Realign downtown to use I-70 rather than Broad St., Investigate moving park & ride location closer to Hilliard/Rome & Renner intersection
58	Dublin	Express	Existing	Weekday		√		
59	Sawmill	Express	**New**	Weekday			√	Add park & ride and service via Sawmill Rd, I-270, SR 315, I-670 to/from Downtown Columbus
60	Arlington	Express	Existing	Weekday	√	√		

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
67	East Hilliard	Express	Existing	Weekday	√	√		
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		
83	Oakland/Weber	Crosstown	Existing	Weekday		√	√	Extend service to Main & Cemetery in Hilliard via Fishinger and Cemetery
83	Oakland/Weber	Crosstown	Existing	Saturday		√	√	Extend service to Hilliard Park and Ride via Fishinger, Cemetery, Leap, and Parkway Lane
84	OSU/Arlington	Crosstown	Existing	Weekday			√	Modify alignment to travel Lane Ave, Redding Rd, Ridgecliff to Tremont.
93	Polaris Crosstown	Crosstown	**New**	Weekday			√	Add service between Westerville Park & Ride, Polaris & Crosswoods Park & Ride via Main St, State St, Ave, Polaris Pkwy, Old 3-C, Lazelle Rd, High Street, Campus View Blvd.
94	SR 161 Crosstown	Crosstown	**New**	Weekday				Add service from SR 161/Cleveland to Dublin Hospital/Innovation Park Areas
95	Morse/Henderson	Crosstown	Existing	Weekday	√	√		
96	East Fifth Avenue	Crosstown	Existing	Weekday	√			

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
97	Georgesville/Phillipi	Crosstown	New	Weekday				Add service between Georgesville Square and Fisher Rd along Georgesville Road. Expand to Norton Road and to Westpointe Plaza via Georgesville, Fisher, Hilliard-Rome Rd.
100	Hilliard-Rome Rd./Avery Rd.	Crosstown	New	Weekday				Add service between Westwoods P&R and Avery Rd/Perimeter Loop area from W Broad St via Hilliard-Rome Rd, Avery Rd to new Dublin Hospital

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
1	Cleveland Ave	Local	Existing	Weekday	√	√		
1	Cleveland Ave	Local	Existing	Saturday	√			
1	Cleveland Ave	Local	Existing	Sunday	√			
1	Livingston Ave	Local	Existing	Weekday	√	√		
1	Livingston Ave	Local	Existing	Saturday	√			
1	Livingston Ave	Local	Existing	Sunday	√			
2	N High St	Local	Existing	Weekday	√	√		
2	N High St	Local	Existing	Saturday	√	√		
2	N High St	Local	Existing	Sunday	√			
3	W Mound St	Local	Existing	Weekday	√	√	√	Extend from Georgesville & Industrial Mile to Hall & Galloway Rd via Georgesville & Hall Rds

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
3	W Mound St	Local	Existing	Saturday	√			
3	W Mound St	Local	Existing	Sunday	√			
4	Indianola Ave	Local	Existing	Weekday	√	√		
4	Indianola Ave	Local	Existing	Saturday	√			
4	Indianola Ave	Local	Existing	Sunday	√			
4	Parsons Ave	Local	Existing	Weekday	√	√		
4	Parsons Ave	Local	Existing	Saturday	√			
4	Parsons Ave	Local	Existing	Sunday	√			
5	W Fifth Ave	Local	Existing	Weekday	√	√		Extend service to Hilliard-Rome Rd
5	W Fifth Ave	Local	Existing	Saturday	√			
5	W Fifth Ave	Local	Existing	Sunday	√			
6	Mt Vernon Ave	Local	Existing	Weekday		√	√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Saturday	√		√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Sunday	√		√	Extend service to the new VA Hospital on James Rd
6	Sullivant Ave	Local	Existing	Weekday	√	√	√	Extend to W Broad St & Galloway Rd via Sullivant Ave and Galloway Rd
6	Sullivant Ave	Local	Existing	Saturday	√			

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
6	Sullivant Ave	Local	Existing	Sunday	√			
7	Neil Ave	Local	Existing	Weekday	√			
7	Neil Ave	Local	Existing	Saturday	√	√		
7	Neil Ave	Local	Existing	Sunday	√			
7	Whittier St	Local	Existing	Weekday	√			
7	Whittier St	Local	Existing	Saturday	√	√		
7	Whittier St	Local	Existing	Sunday	√			
8	Frebis Ave	Local	Existing	Weekday	√	√		
8	Frebis Ave	Local	Existing	Saturday	√	√		
8	Frebis Ave	Local	Existing	Sunday	√			
8	Hamilton Ave	Local	Existing	Weekday	√	√		
8	Hamilton Ave	Local	Existing	Saturday	√			
8	Hamilton Ave	Local	Existing	Sunday	√			
9	Leonard/Brentnell	Local	Existing	Weekday	√	√	√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
9	Leonard/Brentnell	Local	Existing	Saturday	√		√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way
9	Leonard/Brentnell	Local	Existing	Sunday	√			
10	E Broad St	Local	Existing	Weekday	√	√	√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Saturday	√			
10	E Broad St	Local	Existing	Sunday	√			
10	W Broad St	Local	Existing	Weekday	√	√	√	Discontinue S. Murray Hill Loop in conjunction with extension of the #6 Sullivant to Galloway Rd
10	W Broad St	Local	Existing	Saturday	√			
10	W Broad St	Local	Existing	Sunday	√			
11	Oak/Bryden	Local	Existing	Weekday	√	√	√	Extend service from Alum Creek & Winslow Drive further south on Alum Creek Dr to new 911 Center
11	Oak/Bryden	Local	Existing	Saturday	√			
11	Oak/Bryden	Local	Existing	Sunday	√			
11	St Clair Ave	Local	Existing	Weekday	√	√		
11	St Clair Ave	Local	Existing	Saturday	√			
11	St Clair Ave	Local	Existing	Sunday	√			
16	E Long St	Local	Existing	Weekday	√	√		
16	E Long St	Local	Existing	Saturday	√	√		

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
16	E Long St	Local	Existing	Sunday	√			
16	S High St	Local	Existing	Weekday	√	√		
16	S High St	Local	Existing	Saturday	√	√		
16	S High St	Local	Existing	Sunday	√			
17	Greenlawn/Gantz	Local	**New**	Weekday		√	√	Add service from Grove City Park & Ride via Stringtown Rd, Gantz Rd, Southpark Pl, Hardy Parkway, Brown Rd, Stimmel Rd, Harmon Ave, Greenlawn Ave, Greenfield Dr, Griggs Rd, Harmon Ave, Souder Ave, Thomas Lane, Davis Ave, Rich & Town Streets to/from downtown Columbus.
18	Kenny Rd	Local	Existing	Weekday	√	√		
18	Kenny Rd	Local	Existing	Saturday	√			
18	Kenny Rd	Local	Existing	Sunday	√			
21	OSU/Easton Express	Local	**New**	Weekday	√	√	√	Add Friday evening service between OSU and Easton
21	OSU/Easton Express	Local	**New**	Saturday	√	√	√	Add Saturday evening service between OSU and Easton
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		
83	Oakland/Weber	Crosstown	Existing	Weekday		√	√	Extend service to Main & Cemetery in Hilliard via Fishinger and Cemetery
96	East Fifth Avenue	Crosstown	Existing	Weekday	√			

C. FIXED-ROUTE SERVICE EXPANSION

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
1	Cleveland Ave	Local	Existing	Weekday	√	√		
1	Cleveland Ave	Local	Existing	Saturday	√			
1	Cleveland Ave	Local	Existing	Sunday	√			
2	N High St	Local	Existing	Weekday	√	√		
2	N High St	Local	Existing	Saturday	√	√		
2	N High St	Local	Existing	Sunday	√			
4	Indianola Ave	Local	Existing	Weekday	√	√		
4	Indianola Ave	Local	Existing	Saturday	√			
4	Indianola Ave	Local	Existing	Sunday	√			
6	Mt Vernon Ave	Local	Existing	Weekday	√	√	√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Saturday	√		√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Sunday	√		√	Extend service to the new VA Hospital on James Rd
8	Hamilton Ave	Local	Existing	Weekday	√	√		
8	Hamilton Ave	Local	Existing	Saturday	√	√		
8	Hamilton Ave	Local	Existing	Sunday	√	√		

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
9	Leonard/Brentnell	Local	Existing	Weekday	√	√	√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way
9	Leonard/Brentnell	Local	Existing	Saturday	√		√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way
9	Leonard/Brentnell	Local	Existing	Sunday	√		√	Discontinue service to Granville Centre & extend service to Easton from via SR-3, Innis Rd, Sunbury Rd, Easton Way
10	E Broad St	Local	Existing	Weekday	√	√	√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Saturday	√		√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Sunday	√		√	Extend service east along Broad St to the Licking Co. line
11	St Clair Ave	Local	Existing	Weekday	√	√		
11	St Clair Ave	Local	Existing	Saturday	√			
11	St Clair Ave	Local	Existing	Sunday	√			
16	E Long St	Local	Existing	Weekday	√	√		
16	E Long St	Local	Existing	Saturday	√	√		
16	E Long St	Local	Existing	Sunday	√			
21	OSU/Easton Express	Local	New	Weekday	√	√	√	Add Friday evening service between OSU and Easton
21	OSU/Easton Express	Local	New	Weekday	√	√	√	Add Saturday evening service between OSU and Easton

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
29	Polaris Pkwy	Express	Existing	Weekday	√	√	√	Add a park and ride and commute trips to/from downtown Columbus via Polaris Pkwy and I-71
33	North Central	Express	Existing	Weekday	√	√		
34	Karl Rd	Express	Existing	Weekday	√	√		
35	Tamarack	Express	Existing	Weekday			√	Modify alignment to use Schrock Rd between Sharonwoods & Skyway rather than HillandDale & Justice
36	Annehurst	Express	Existing	Weekday	√	√		
38	Northeast	Express	Existing	Weekday	√	√		
39	New Albany	Express	Existing	Weekday	√	√	√	Discontinue Sunbury Loop & improve peak service levels from two trips to four trips
40X	Sunbury Road	Express	**New**	Weekday			√	Add park & ride and service from Sunbury/SR161 via I-270/I-670 to/from downtown Columbus
41	Gahanna	Express	Existing	Weekday	√	√		
43	East Broad	Express	Existing	Weekday	√	√		
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		
83	Oakland/Weber	Crosstown	Existing	Weekday		√	√	Extend service to Main & Cemetery in Hilliard via Fishinger and Cemetery
83	Oakland/Weber	Crosstown	Existing	Saturday		√	√	Extend service to Hilliard Park and Ride via Fishinger, Cemetery, Leap, and Parkway Lane

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
87	Agler/Cassady	Crosstown	Existing	Weekday	√	√		
87	Agler/Cassady	Crosstown	Existing	Saturday				
89	Hamilton Road	Crosstown	Existing	Weekday	√		√	Extend service north to Gahanna and Easton
89	Hamilton Road	Crosstown	Existing	Saturday	√		√	Extend service north to Gahanna and Easton
89	Hamilton Road	Crosstown	Existing	Sunday	√		√	Extend service north to Gahanna and Easton
92	James/Stelzer	Crosstown	Existing	Weekday	√		√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Saturday			√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Sunday			√	Modify service into the new VA hospital on James Rd.
93	Polaris Crosstown	Crosstown	**New**	Weekday				Add service between Westerville Park & Ride, Polaris & Crosswoods Park & Ride via Main St, State St, Ave, Polaris Pkwy, Old 3-C, Lazelle Rd, High Street, Campus View Blvd.
94	SR 161 Crosstown	Crosstown	**New**	Weekday				Add service from SR 161/Cleveland to Dublin Hospital/Innovation Park Areas

C.1 Northeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
95	Morse/Henderson	Crosstown	Existing	Weekday	√	√	√	Extend service to Tuttle Mall and discontinue Reed Rd service, then extend service to Cosgray/Britton Pkwy during peak periods
95	Morse/Henderson	Crosstown	Existing	Saturday	√	√	√	Extend service to Tuttle Mall, discontinue service on Reed
95	Morse/Henderson	Crosstown	**New**	Sunday				Add service between Easton & Tuttle Mall
96	East Fifth Avenue	Crosstown	Existing	Weekday	√	√	√	Extend service to Mt. Carmel East Hospital

C.2 Southeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
1	Livingston Ave	Local	Existing	Weekday	√	√		
1	Livingston Ave	Local	Existing	Saturday	√			
1	Livingston Ave	Local	Existing	Sunday	√			
2	E Main St	Local	Existing	Weekday	√	√		
2	E Main St	Local	Existing	Saturday	√	√		
2	E Main St	Local	Existing	Sunday	√			
4	Parsons Ave	Local	Existing	Weekday	√	√		
4	Parsons Ave	Local	Existing	Saturday	√			
4	Parsons Ave	Local	Existing	Sunday	√			
7	Whittier St	Local	Existing	Weekday	√			
7	Whittier St	Local	Existing	Saturday	√	√		
7	Whittier St	Local	Existing	Sunday	√			
8	Frebis Ave	Local	Existing	Weekday	√	√		
8	Frebis Ave	Local	Existing	Saturday	√	√		
8	Frebis Ave	Local	Existing	Sunday	√			
10	E Broad St	Local	Existing	Weekday	√	√	√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Saturday	√			
10	E Broad St	Local	Existing	Sunday	√			

C.2 Southeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
11	Oak/Bryden	Local	Existing	Weekday	√	√	√	Extend service from Alum Creek & Winslow Drive further south on Alum Creek Dr to new 911 Center
11	Oak/Bryden	Local	Existing	Saturday	√			
11	Oak/Bryden	Local	Existing	Sunday	√			
16	S High St	Local	Existing	Weekday	√	√		
16	S High St	Local	Existing	Saturday	√	√		
16	S High St	Local	Existing	Sunday	√			
43	East Broad	Express	Existing	Weekday	√	√		
44	North Reynoldsburg	Express	Existing	Weekday	√	√	√	Add park & ride at 256 & I-70.
49	Southeast	Express	Existing	Weekday	√	√		
49X	US 33 Express	Express	**New**	Weekday			√	Add new park & ride at Gender & US 33 and new route via US-33/I-70 or SR-104/High Street to/from downtown Columbus
50	South Columbus	Express	**New**	Weekday			√	Add new park & ride at US23/Rathmell Rd and new service via S. High St, I-270, and I-71 to/from downtown Columbus
51	ODOT/ODPS	Express	Existing	Weekday	√	√		
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		

C.2 Southeast Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
85	Brice/Gender	Crosstown	New	Weekday			√	Add service between Canal Winchester & E Broad/Fairway via Waterloo, Gender, Brice, Main, McNaughten, Broad.
87	Agler/Cassady	Crosstown	Existing	Weekday	√	√		
89	Hamilton Road	Crosstown	Existing	Weekday			√	Extend service north to Gahanna and Easton
89	Hamilton Road	Crosstown	Existing	Saturday			√	Extend service north to Gahanna and Easton, extend service to Blacklick Estates
92	James/Stelzer	Crosstown	Existing	Weekday	√		√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Saturday			√	Modify service into the new VA hospital on James Rd.
92	James/Stelzer	Crosstown	Existing	Sunday			√	Modify service into the new VA hospital on James Rd.

C.3 Southwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
3	W Mound St	Local	Existing	Weekday	√	√	√	Extend from Georgesville & Industrial Mile to Hall & Galloway Rd via Georgesville & Hall Rds
3	W Mound St	Local	Existing	Saturday	√			
3	W Mound St	Local	Existing	Sunday	√			
6	Sullivant Ave	Local	Existing	Weekday	√	√	√	Extend to W Broad St & Galloway Rd via Sullivant Ave and Galloway Rd
6	Sullivant Ave	Local	Existing	Saturday	√			
6	Sullivant Ave	Local	Existing	Sunday	√			
10	W Broad St	Local	Existing	Weekday	√	√	√	Discontinue S. Murray Hill Loop in conjunction with extension of the #6 Sullivant to Galloway Rd
10	W Broad St	Local	Existing	Saturday	√			
10	W Broad St	Local	Existing	Sunday	√			
15	Grove City	Local	Existing	Weekday	√	√	√	Extend service further east from I-71 on Stringtown Rd growing retail complex
15	Grove City	Local	Existing	Saturday		√		
16	S High St	Local	Existing	Weekday	√	√		
16	S High St	Local	Existing	Saturday	√	√		
16	S High St	Local	Existing	Sunday	√			

C.3 Southwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
17	Greenlawn/Gantz	Local	**New**	Weekday			√	Add service from Grove City Park & Ride via Stringtown Rd, Gantz Rd, Southpark Pl, Hardy Parkway, Brown Rd, Stimmel Rd, Harmon Ave, Greenlawn Ave, Greenfield Dr, Griggs Rd, Harmon Ave, Souder Ave, Thomas Lane, Davis Ave, Rich & Town Streets to/from downtown Columbus.
51	ODOT/ODPS	Express	Existing	Weekday	√	√		
53	Lincoln Village	Express	Existing	Weekday		√		
97	Georgesville/Phillipi	Crosstown	**New**	Weekday			√	Add service between Georgesville Square and Fisher Rd along Georgesville Road.
100	Hilliard-Rome Rd./Avery Rd.	Crosstown	**New**	Weekday				Add service between Westwoods P&R and Avery Rd/Perimeter Loop area from W Broad St via Hilliard-Rome Rd, Avery Rd to new Dublin Hospital

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
2	N High St	Local	Existing	Weekday	√	√		
2	N High St	Local	Existing	Saturday	√	√		
2	N High St	Local	Existing	Sunday	√			
3	Northwest Blvd	Local	Existing	Weekday	√	√	√	Extend from Kingsdale to Sawmill & Summit View via Fishinger, Reed, Henderson & Sawmill
3	Northwest Blvd	Local	Existing	Saturday	√	√		
3	Northwest Blvd	Local	New	Sunday	√			
5	W Fifth Ave	Local	Existing	Weekday	√		√	Extend service to Hilliard-Rome Rd
5	W Fifth Ave	Local	Existing	Saturday	√			
5	W Fifth Ave	Local	Existing	Sunday	√			
7	Neil Ave	Local	Existing	Weekday	√			
7	Neil Ave	Local	Existing	Saturday	√	√		
7	Neil Ave	Local	Existing	Sunday	√			
10	W Broad St	Local	Existing	Weekday	√	√	√	Discontinue S. Murray Hill Loop in conjunction with extension of the #6 Sullivant to Galloway Rd
10	W Broad St	Local	Existing	Saturday	√			
10	W Broad St	Local	Existing	Sunday	√			
18	Kenny Rd	Local	Existing	Weekday	√	√		

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
18	Kenny Rd	Local	Existing	Saturday	√			
18	Kenny Rd	Local	Existing	Sunday	√			
19	Grandview/Marble Cliff	Local	Existing	Weekday	√	√		
30	Smoky Row	Express	Existing	Weekday	√	√		
55	Avery/Perimeter	Express	**New**	Weekday			√	Add park & ride and new service via Avery, SR 161, I-270, I-70, I-670 to/from downtown Columbus
55X	Dublin/OSU	Express	**New**	Weekday	√	√	√	Add new direct service between Dublin and OSU. Location in Dublin to be determined
56	Tuttle	Express	Existing	Weekday	√	√		
57	Hilliard	Express	Existing	Weekday	√	√	√	Realign downtown to use I-70 rather than Broad St., Investigate moving park & ride location closer to Hilliard/Rome & Renner intersection
58	Dublin	Express	Existing	Weekday		√		
59	Sawmill	Express	**New**	Weekday			√	Add park & ride and service via Sawmill Rd, I-270, SR 315, I-670 to/from Downtown Columbus
60	Arlington	Express	Existing	Weekday	√	√		

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
67	East Hilliard	Express	Existing	Weekday	√	√		
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		
83	Oakland/Weber	Crosstown	Existing	Weekday		√	√	Extend service to Main & Cemetery in Hilliard via Fishinger and Cemetery
83	Oakland/Weber	Crosstown	Existing	Saturday		√	√	Extend service to Hilliard Park and Ride via Fishinger, Cemetery, Leap, and Parkway Lane
84	OSU/Arlington	Crosstown	Existing	Weekday			√	Modify alignment to travel Lane Ave, Redding Rd, Ridgecliff to Tremont.
93	Polaris Crosstown	Crosstown	**New**	Weekday			√	Add service between Westerville Park & Ride, Polaris & Crosswoods Park & Ride via Main St, State St, Ave, Polaris Pkwy, Old 3-C, Lazelle Rd, High Street, Campus View Blvd.
94	SR 161 Crosstown	Crosstown	**New**	Weekday				Add service from SR 161/Cleveland to Dublin Hospital/Innovation Park Areas
95	Morse/Henderson	Crosstown	Existing	Weekday	√	√		
96	East Fifth Avenue	Crosstown	Existing	Weekday	√			

C.4 Northwest Quadrant

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
97	Georgesville/Phillipi	Crosstown	New	Weekday				Add service between Georgesville Square and Fisher Rd along Georgesville Road. Expand to Norton Road and to Westpointe Plaza via Georgesville, Fisher, Hilliard-Rome Rd.
100	Hilliard-Rome Rd./Avery Rd.	Crosstown	New	Weekday				Add service between Westwoods P&R and Avery Rd/Perimeter Loop area from W Broad St via Hilliard-Rome Rd, Avery Rd to new Dublin Hospital

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
1	Cleveland Ave	Local	Existing	Weekday	√	√		
1	Cleveland Ave	Local	Existing	Saturday	√			
1	Cleveland Ave	Local	Existing	Sunday	√			
1	Livingston Ave	Local	Existing	Weekday	√	√		
1	Livingston Ave	Local	Existing	Saturday	√			
1	Livingston Ave	Local	Existing	Sunday	√			
2	N High St	Local	Existing	Weekday	√	√		
2	N High St	Local	Existing	Saturday	√	√		
2	N High St	Local	Existing	Sunday	√			
3	W Mound St	Local	Existing	Weekday	√	√	√	Extend from Georgesville & Industrial Mile to Hall & Galloway Rd via Georgesville & Hall Rds

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
3	W Mound St	Local	Existing	Saturday	√			
3	W Mound St	Local	Existing	Sunday	√			
4	Indianola Ave	Local	Existing	Weekday	√	√		
4	Indianola Ave	Local	Existing	Saturday	√			
4	Indianola Ave	Local	Existing	Sunday	√			
4	Parsons Ave	Local	Existing	Weekday	√	√		
4	Parsons Ave	Local	Existing	Saturday	√			
4	Parsons Ave	Local	Existing	Sunday	√			
5	W Fifth Ave	Local	Existing	Weekday	√	√		Extend service to Hilliard-Rome Rd
5	W Fifth Ave	Local	Existing	Saturday	√			
5	W Fifth Ave	Local	Existing	Sunday	√			
6	Mt Vernon Ave	Local	Existing	Weekday		√	√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Saturday	√		√	Extend service to the new VA Hospital on James Rd
6	Mt Vernon Ave	Local	Existing	Sunday	√		√	Extend service to the new VA Hospital on James Rd
6	Sullivant Ave	Local	Existing	Weekday	√	√	√	Extend to W Broad St & Galloway Rd via Sullivant Ave and Galloway Rd
6	Sullivant Ave	Local	Existing	Saturday	√			

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
6	Sullivant Ave	Local	Existing	Sunday	√			
7	Neil Ave	Local	Existing	Weekday	√			
7	Neil Ave	Local	Existing	Saturday	√	√		
7	Neil Ave	Local	Existing	Sunday	√			
7	Whittier St	Local	Existing	Weekday	√			
7	Whittier St	Local	Existing	Saturday	√	√		
7	Whittier St	Local	Existing	Sunday	√			
8	Frebis Ave	Local	Existing	Weekday	√	√		
8	Frebis Ave	Local	Existing	Saturday	√	√		
8	Frebis Ave	Local	Existing	Sunday	√			
8	Hamilton Ave	Local	Existing	Weekday	√	√		
8	Hamilton Ave	Local	Existing	Saturday	√			
8	Hamilton Ave	Local	Existing	Sunday	√			
9	Leonard/Brentnell	Local	Existing	Weekday	√	√	√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
9	Leonard/Brentnell	Local	Existing	Saturday	√		√	Discontinue service to Northern Lights & extend service to Easton via SR-3, Innis Rd, Sunbury Rd, Easton Way
9	Leonard/Brentnell	Local	Existing	Sunday	√			
10	E Broad St	Local	Existing	Weekday	√	√	√	Extend service east along Broad St to the Licking Co. line
10	E Broad St	Local	Existing	Saturday	√			
10	E Broad St	Local	Existing	Sunday	√			
10	W Broad St	Local	Existing	Weekday	√	√	√	Discontinue S. Murray Hill Loop in conjunction with extension of the #6 Sullivant to Galloway Rd
10	W Broad St	Local	Existing	Saturday	√			
10	W Broad St	Local	Existing	Sunday	√			
11	Oak/Bryden	Local	Existing	Weekday	√	√	√	Extend service from Alum Creek & Winslow Drive further south on Alum Creek Dr to new 911 Center
11	Oak/Bryden	Local	Existing	Saturday	√			
11	Oak/Bryden	Local	Existing	Sunday	√			
11	St Clair Ave	Local	Existing	Weekday	√	√		
11	St Clair Ave	Local	Existing	Saturday	√			
11	St Clair Ave	Local	Existing	Sunday	√			
16	E Long St	Local	Existing	Weekday	√	√		
16	E Long St	Local	Existing	Saturday	√	√		

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
16	E Long St	Local	Existing	Sunday	√			
16	S High St	Local	Existing	Weekday	√	√		
16	S High St	Local	Existing	Saturday	√	√		
16	S High St	Local	Existing	Sunday	√			
17	Greenlawn/Gantz	Local	**New**	Weekday		√	√	Add service from Grove City Park & Ride via Stringtown Rd, Gantz Rd, Southpark Pl, Hardy Parkway, Brown Rd, Stimmel Rd, Harmon Ave, Greenlawn Ave, Greenfield Dr, Griggs Rd, Harmon Ave, Souder Ave, Thomas Lane, Davis Ave, Rich & Town Streets to/from downtown Columbus.
18	Kenny Rd	Local	Existing	Weekday	√	√		
18	Kenny Rd	Local	Existing	Saturday	√			
18	Kenny Rd	Local	Existing	Sunday	√			
21	OSU/Easton Express	Local	**New**	Weekday	√	√	√	Add Friday evening service between OSU and Easton
21	OSU/Easton Express	Local	**New**	Saturday	√	√	√	Add Saturday evening service between OSU and Easton
81	Hudson/Ohio	Crosstown	Existing	Weekday		√		

C.5 Central City

Line #	Line Name	Line Type	Existing /New	Service	Extended Hours of Operation	Improved Frequency	Modified Alignment	Alignment Modification
81	Hudson/Ohio	Crosstown	Existing	Saturday		√		
83	Oakland/Weber	Crosstown	Existing	Weekday		√	√	Extend service to Main & Cemetery in Hilliard via Fishinger and Cemetery
96	East Fifth Avenue	Crosstown	Existing	Weekday	√			