

REGIONAL PUBLIC TRANSPORTATION PLAN for the LEHIGH VALLEY

PREPARED FOR:

**LEHIGH AND NORTHAMPTON
TRANSPORTATION AUTHORITY**
SUBMITTED BY:

PREPARED BY:

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June 2008

EXISTING TRANSIT SERVICES

The Lehigh and Northampton Transportation Authority (LANTA) is a municipal authority created by the counties of Lehigh and Northampton in 1972 under the laws of the Commonwealth of Pennsylvania, in compliance with the Pennsylvania Municipal Authorities Act of 1945, as amended. LANTA assumed responsibility for the transit system formerly owned and operated by Lehigh Valley Transit Company, a private, for-profit entity that, in 1970, petitioned the Pennsylvania Utilities Commission (PUC) to permit the cessation of services. A bi-county, municipal authority, LANTA supplements passenger fares and other revenues with county, state and federal funding to support operating and capital expenses.

LANTA operates Metro, a scheduled, fixed-route bus system serving various communities throughout the Lehigh Valley. While the bus system is for the most part,

concentrated in and around the cities of Allentown, Bethlehem and Easton, Metro provides access to and from more than 30 municipalities within the LANTA service area. LANTA also provides for Metro Plus, a door-to-door, shared-ride service for customers that are unable to navigate the fixed-route system or require specialized transportation. This service, more commonly referred to as demand-responsive or paratransit, is contracted to Easton Coach Company that operates the service for LANTA.

Although not part of this description, it should be noted that LANTA is retained by Carbon County to manage its public transportation system, Carbon County Community Transit (CCTS). LANTA in turn, has contracted for the operation of the fixed-route (i.e., Lynx) and demand-responsive service with Easton Coach Company.

This chapter presents a description of the existing LANTA system. The primary focus of the following sections is on Metro, the scheduled, fixed-route bus service operated throughout Lehigh and Northampton Counties. The paratransit service operated under the Metro Plus "brand" is also briefly summarized.

System Overview

The Metro system consists of 34 bus routes that are concentrated in Allentown, Bethlehem and Easton and the communities adjacent to the urban core areas. Among these routes are "special" fixed-route services that include the SILVERLINE EXPRESS and "The 400 Routes". The SILVERLINE EXPRESS is a limited-stop service operating between the Allentown Transit Center (ATC) and Easton primarily via Route 22. "The 400 Routes" are open to the public but focus on providing student transportation to and from the Dieruff and Allen High Schools and the South Mountain and Harrison Morton Middle Schools. There is a total of seven routings in the series. Also, although the Starlight Evening Service is classified as a single route, there are seven distinct bus lines (i.e., Starlight 1 through 7) operated as shown in Table 1. Generally, the bus lines operating in the urbanized sections of the LANTA service area and in

Existing Transit Services
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particular, the cities of Allentown, Bethlehem and Easton are identified with a letter (e.g., A, B) prefix while those primarily operating to/from suburban areas are numbered (e.g., 1, 2). LANTA also operates the Night Owl Service and the SILVERLINE EXPRESS.

LANTA has established "Metro Transit Centers" throughout the service area. These Transit Centers are sites of major bus passenger activity where transferring among routes is facilitated by a timed transfer or "pulsed" schedule practice on many bus lines. With this operating scheme, two or more routes arrive and subsequently, depart a point after a time allowance for passengers to make bus connections in order to complete their trips. Not surprisingly, major transit centers are in Allentown (ATC), Bethlehem (Broad & Guetter Sts.) and Easton (Center Square). Other centers have been established at major shopping/retail facilities most notably the Lehigh Valley and Palmer Park Malls. Metro riders can also access longer distance intrastate and interstate transportation services provided by Bieber Tourways, Trans-Bridge Bus Lines and others.

Another element of the Metro system is that many bus lines are through-routed for some or all of the operating day. Buses arrive inbound in the core urban areas (e.g., Transit Centers) as one bus line and depart outbound as another. This allows for scheduling efficiencies as cycle times can be better matched with one another and in some instances, eliminates the necessity of riders having to transfer. Also, a number of Metro lines operate via unidirectional loops for at least a portion of their alignment. While a trip in one direction may be longer (i.e., riding "outbound" to return "inbound"), the loop allows for greater transit coverage while conserving resources.

Fixed-Route Service Description - The following section present a brief narrative of the Metro bus routes and services listed in Table 1.

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Route A Village West-Hanover Ave. - This bus route operates hourly between Crest Plaza (after serving Pennsylvania Street) to Bethlehem (i.e., Broad Street Metro Transit Center) via the Allentown Transit Center. Combined with through-routed buses from the Easton-Allentown line, 30-minute service is afforded riders between ATC and Bethlehem. Transit trip generators on or proximate to the route include Crest Plaza, Winchester Plaza, Roma Corporate Center, Village West, Jewish Community Center, Lehigh Valley and St. Luke's Hospitals, Allen High School, the Trans-Bridge Bus Terminal and Allentown State Hospital. Service is operated weekdays and Saturdays.

Route B East Hills/Freemanburg Ave. - Fountain Hill - This bus line operates from St Luke's Hospital serving the Fountain Hill section of Bethlehem to two eastern terminals, Bethlehem Square and the Lehigh Valley Industrial Park (LVIP) VI and the Route 33 Park & Ride. Three midday trips are extended to directly serve Bartholomew House en route to the Bethlehem Metro Transit Center and St.

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Table 1

LANTA Fixed Route Network

- A Village West-Hanover Ave.
- B East Hills/Freemansburg Ave.-
Fountain Hill
- C Easton-Bethlehem via NCC
- D Northampton-Emmaus

- E Easton-Allentown
- F Westgate-South Bethlehem
- G Union Blvd.-Susquehanna St.
- H Dorney Park-Fullerton Ave.
- J Boroline-Crest Plaza

K L.V. Hospital (I-78)-Presidential
Village
L Lehigh Valley Mall-Parkway
Shopping Center
N Palmer Park Mall-Line/Berwick St.
P Stones Crossing-Berwick/Line St.
R Harlen House-West Easton
S Slate Belt-Bethlehem
V Riverside Drive
W Allentown-Slatington
Starlight 1 LV Mall-Allentown Loop
Starlight 2 LV Mall-Susquehanna St.
Starlight 3 Allentown-Easton
Starlight 4 Whitehall-Northampton Loop
Starlight 5 Allentown-Emmaus
Starlight 6 Palmer Park Mall-South Side
Easton
Starlight 7 Dorney Park-Allentown
1 East-Catasauqua
2 Fogelsville
3 Trexlertown
4 Stabler Center
5 Forks/Palmer Industrial Parks
6 The Rover
7 The Whirlybird
The "400" Routes
Night Owl Service
SILVERLINE EXPRESS

Pennsylvania & Ott Sts./Allentown Transit Center
Bethlehem Square/LehighValley Industrial Park VI

Easton Center Square
26th St. & Cherryville Rd.

Forks Plaza, College Hill/ Easton Center Square
LVIP I/Lehigh Valley Mall (Whitehall)
Guetter & Broad Sts.
Cedarbrook/Cedar View/Allentown Transit Center
South Mall (Allentown)
Lehigh Valley Hospital (Allentown)

Whitehall Mall

Stones Crossing & Wm. Penn Hwy.
25th St. Shopping Center/Palmer Park Mall (Easton)
Shiloh Manor (Nesquehoning St.)
Garibaldi & North, Roseto
Salisbury Work Center
Allentown Transit Center
Whitehall Mall

Allentown Transit Center/Whitehall Mall

Allentown Transit Center

Lehigh Valley Mall

Allentown Transit Center

25th St. Shopping Center/Center Square

Allentown Transit Center

Lehigh Valley Airport

Allentown Transit Center

Allentown Transit Center

Allentown Transit Center

Easton Center Square

Palmer Park Mall

Lehigh Valley Mall

Various

Allentown Transit Center

Allentown Transit Center/Lehigh Valley Mall/

Palmer Park Mall

Guetter & Broad Sts. (Bethlehem)

St. Luke's Hospital (Ostrum St. Bethlehem)

Guetter & Broad Sts.

Chestnut St. & Cedar Crest Blvd., Emmaus/Main & Race
Sts. (Macungie)

Allentown Transit Center

I-78 Park & Ride/Creekside Shopping Center, Hellertown

Lynnfield Terrace (Lynn & Argus Sts., Bethlehem)

Lehigh Valley Mall

Roma Office Center/Cedar Crest Plaza (Allentown)

Lehigh Valley Mall/Presidential Village

Parkway Shopping Center (Jefferson & Lehigh Sts.,
Allentown)

Packer & Line Sts., Easton

Packer & Line Sts.

Grandview Terrace (3rd St. & Grandview)

Guetter & Broad Sts./Palmer Park Mall

Guetter & Broad Sts

Walnutport (Kmart)

Jefferson & Wyoming Sts./Whitehall Mall

Guetter & Broad Sts.

Easton Center Square/C-Town

Main & 21st Sts. (Northampton)/Coplay/Lehigh Valley Mall

Cedar Crest

C-Town/Northampton Crossing

Lehigh Valley Hospital (I-78)

Main & Church Sts. (Egypt)

Fogelville Nursery/Nestle Way

Trexler Mall

Stabler Center (Lehigh Valley College)

MCS Palmer

Northampton Crossing

Whitehall Shopping Center

Various

Lehigh Valley Hospital (I-78)

Lehigh Valley Mall/LVIP IV/3rd & Northampton Sts.
(Easton)

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Luke's Hospital. Throughout the day, service is operated hourly from the outer terminals towards the Bethlehem Metro Transit Center. As a result, 30-minute service is afforded riders traveling towards St. Luke's Hospital and the Lynn Street turnaround. Other generators along the line include Lehigh University, Bethlehem City Hall, Liberty High School, Bethlehem Bus Terminal, and Stefko Boulevard Shopping Center. Service operates daily.

Route C Easton-Bethlehem via NCC - This bus route links the Bethlehem Metro Transit Center with that at Center Square in Easton. Service is provided hourly on this weekday only line. In addition to the Metro Transit Centers at its terminal points, this bus route serves Liberty High School, Northampton Community College, the Route 33 Park & Ride, LVIP VI, the LANTA/Metro facility, Easton Hospital and the Northampton County Government Center.

Route D Northampton-Emmaus - This line operates between Cherry Square in Northampton and Emmaus via the ATC. On weekdays, service operates every 30 minutes. During peak period and midday trips are extended beyond Emmaus to Macungie. Two midday trips originate at the Cedar Crest Professional Park and operate via the Lehigh Valley Hospital Center (I-78) en route to Northampton. This route also serves South Mall, Queen City Industrial Park, the Parkway Shopping Center and the Lehigh Valley and Whitehall Malls. Service operates daily.

Route E Easton-Allentown - This bus route links the ATC with the College Hill section of Easton via Bethlehem. Two eastbound trips in the late afternoon end at the Easton Metro Transit Center at Center Square. Service operates hourly daily. Other sites served by this line include Moravian College, Liberty High School, Northampton Community College, LANTA/Metro facility, Easton Hospital, Lafayette College and Forks Plaza.

Route F Westgate-South Bethlehem - This line operates two distinct service

patterns. One is from the Creekside Shopping Center in Hellertown (hourly) and the other from the I-78 Park & Ride (hourly) and the Bethlehem Metro Transit Center. From the Metro Transit Center, buses continue north to terminal points at either LVIP I or Lehigh Valley Mall. In the common segment between 4th & Taylor Streets and Westgate Mall a 30- minute headway is provided. Selected Northbound trips are extended via 2nd Avenue and Spring Street to Bodder House. Service is available daily. Other transit trip generators served include the Gateway Professional Center, Lehigh Valley Airport, LVIP III, Martin Tower, Lehigh Valley Hospital (Muhlenberg) and Valley Plaza.

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Route G Union Blvd./Susquehanna Street - This bus route links the Lynnfield Section of Bethlehem with the downtown Metro Transit Center via Allentown. On weekdays, service operates on headways of 30-minutes during peak periods and hourly off-peak. Service operates seven days per week. In addition to the ATC and Bethlehem Metro Transit Center on Broad Street, this route also serves Agere, Bethlehem Works, Cumberland Gardens, Dieruff High School, KidsPeace, Kmart, Lehigh Shopping Center, Lehigh University, Sacred Heart Hospital and Westbrook Park. Also, St Luke's Hospital (Bethlehem) is within a reasonable walk.

Route H Dorney Park/Fullerton Ave. - During rush hours, this line operates primarily between the ATC and LVIP I & III via Lehigh Valley Airport. During midday as well as weekends, buses operate between Cedarbrook/Cedar View/Cedar Crest and Lehigh Valley Mall. Other trip generators located along the line include Dorney Park/Wild Water Kingdom, Cedar Point, Veterans Clinic, St. Luke's Hospital, Sacred Heart Hospital, Agere, Allentown Business Park and the US Postal Facility. Route H operates daily.

Route J Boroline-Crest Plaza - This bus routes operates between South Mall and the Roma Corporate Center. One round-trip is extended during both the morning and afternoon peak periods to Greenwalds. Peak period service operates every 30 minutes with an hourly midday frequency. Other generators served by the line include Mack World Headquarters, Good Shepherd Home, Lehigh Valley Hospital, Gross Towers, B'nai B'rith House and Cedar Crest Plaza. Service is provided daily.

Route K Lehigh Valley Hospital-Presidential Village - This bus line links

Presidential Village with the Lehigh Valley Hospital Center (I-78) and Cedar Crest Professional Park. All trips operate via the ATC. Hourly service is operates on weekdays and Saturdays. In addition to the terminal noted above, other generators along the route include Union Terrace School, Spring Ridge Apartments, Olympic Gardens and the Lehigh Valley and Whitehall Malls.

Route L Lehigh Valley Mall-Parkway Shopping Center - This route operates between the Parkway Shopping Center and Whitehall & Lehigh Valley Malls. Other significant intermediate points served include St. Luke's Hospital, Lehigh Valley Hospital Center and Gross Towers. Service operates hourly, seven days per week.

Route N Palmer Park Mall-Line St./Berwick St. - This bus line originates in the south side of Easton operating on Line and Berwick Streets to the Metro Transit Center at Easton Square. From Center Square the line continues to Stones Crossing. On Sundays, the route is truncated at Northampton Crossing. Other trip generators along the line include C-Town, Easton Hospital, the 25th St. Shopping

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Grandview Terrace. Three round-trips are operated two hours apart on weekdays and Saturdays.

Route S Slate Belt-Bethlehem - This route operates between the Metro Transit Center on Broad Street in Bethlehem and Roseto. Weekday peak period service operates hourly. During the midday and on Saturdays, trips operate at two-hour intervals. Places served along the route include Bethlehem Catholic High School, LVIP IV, Gracedale, Bodder House, Northampton Crossings, Palmer Park Mall, Palmer Industrial Park, Windgap Plaza and Bangor Plaza.

Route V Riverside Drive - This bus line operates between the Salisbury Work Center on Riverside Drive and the Bethlehem Metro Transit Center (Broad & Guetter Sts.) With the exception of a single midday trip, this route operates only during rush hours on weekdays and Saturdays. The route links the Riverside Drive and South Bethlehem areas with the variety of transit connections available at the transit center.

Route W Allentown-Slatington - This route operates between the ATC and the Kmart store in Walnutport. There are five round-trips operated on weekdays with

a additional trips short-turned at Lehigh Carbon Community College. Other trip generators on or nearby the route include Lehigh Valley Hospital and Phoebe Terrace Apartments. On Saturdays, one morning and one afternoon trip are operated.

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Metro Transit Center at Center Square. The line serves primarily the same generators as Route P. The primarily difference in their alignments is that when traveling east/west, the "N" is on Northampton Street while route P operates on Freemansburg Avenue. Service operates hourly on weekdays and Saturdays.

Route R Harlen House-West Easton - This bus line operates from the south side of Easton (Shiloh Manor) to the west side (Ridge & Spring Sts.) via Center Square. The route also serves the 25 St. Shopping Center, Palmer Park Mall and Center, Palmer Park Mall, William Penn Plaza and the LANTA/Metro Offices. A 60-minute headway is provided on all operating days.

Route P Stones Crossing-Berwick St./Line St. - This route operates between the 25 St. Shopping Center & Palmer Park Mall and the south side of Easton via the

The following seven bus routes represent the majority of Metro service operated after 6 PM. The "Starlight" lines, numbered 1 through 7, operate hourly to meet the transportation needs of local residents. Combined these lines provide relatively extensive coverage primarily along the more heavily utilized segments of several of the Metro "regular" routes. To maximize efficiencies, certain of the Starlight routes are interlined and/or through-routed. A variety of timed-transfer opportunities exist at the various Metro Transit Centers. All Starlight routes operate weekdays and Saturdays.

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Crossings and Palmer Park Mall are also served by this line. The 8:00 PM trip from Center Square operates to Forks Plaza and returns a half-hour later.

Starlight 7 Dorney Park-Allentown - Originating from the ATC, this line operates to an outer terminal at the Lehigh Valley Hospital on I-78. Trips depart hourly from 6:50 PM to 9:50 PM. The round-trip takes about 50 minutes. Other intermediate points served by the route include St. Luke's Hospital, Veterans Clinic, Cedar Point Shopping Center and Dorney Park & Wildwater Kingdom.

Starlight 1 Lehigh Valley Mall-Allentown Loop - As the route name implies this line operates as a loop connecting the ATC with the Lehigh Valley and Whitehall Malls as well as Lehigh Valley Hospital. Service departs the ATC hourly

between 6:15 PM and 9:15 PM and the last trip to the ATC departs Whitehall Mall at 10:35 PM.

Starlight 2 Lehigh Valley Mall-Susquehanna Street - This route operates between the Metro Transit Center in Bethlehem (i.e., Broad & Guetter Sts.) and Whitehall Mall via the ATC. Trips depart the ATC for Bethlehem hourly from 6:25 PM through 10:25 PM. The last departure from Whitehall Mall is at 10:05 PM to the ATC with the last trip from Bethlehem leaving at 11:15 PM. Other transit destination served by this line are St. Luke's Hospital and Cumberland Gardens.

Starlight 3 Allentown-Easton - This bus line links Allentown (ATC) with the Metro Transit Centers in Bethlehem and Easton as well as the south side of Easton (i.e., C-Town). Hourly service is operated eastbound from the ATC between 6:40 PM and 9:40 PM. The last westbound trip departs Center Square at 9:30 PM.

Starlight 4 Whitehall-Northampton Loop - This route connects the Lehigh Valley and Whitehall Malls in a counter-clockwise loop serving the communities of Catasauqua, Northampton, Clementon, Stiles, Coplay and Hokendauqua while traversing its alignment. Buses also serve the Whitehall Shopping Center and MacArthur Towne Center. Four trips are operated beginning with the first departure from Lehigh Valley Mall at 6:35 PM.

Starlight 5 Allentown-Emmaus - This line links the ATC with South Mall and Cedar Crest. Trips leave the ATC hourly between 6:40 PM and 9:40 PM. Return trips depart Cedar Crest and Chestnut 30 minutes later. The last trip from ATC terminates at Cedar Crest.

Starlight 6 Palmer Square-South Side Easton - This bus route operates between the Metro Transit in Center Square (Easton) and two "outer" terminals; C-Town/south side Easton and the 25 Street Shopping Center. Northampton

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As noted previously, there is a series of routes that for the most part, operate in the suburban areas of the Lehigh Valley. These routes link numerous residential communities with a variety of trip attractors/generators including shopping centers and malls, industrial parks and hospitals. A brief description of these lines follows.

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Route 1 East Catasauqua-Egypt - This bus line links Egypt with Lehigh Valley

Industrial Park III and LVIP I via Lehigh Valley Airport. On weekdays, service is provided hourly while on Saturdays, buses operate at two-hour intervals. This route also provides access to the Whitehall and Lehigh Valley Malls.

Route 2 Fogelsville - This bus line operates between the ATC and Fogelsville. On weekdays during the morning peak period, several closely spaced trips operate to different "outer" terminal points including Lehigh West Industrial Park, Nestle Way, Hickory and Iron Run. Service to Fogelsville generally departs ATC hourly except for a few hours in the midday when three trips depart between 10:10 AM and 1:50 PM. The route also serves Cedar View Apartments, Commerce Plaza, Holiday Inn (West), Kmart Plaza and William Penn Business Center. On Saturdays, eight round-trips are operated.

Route 3 Trexlertown - This bus route operates between the ATC and Alburtis. Two round-trips are operated during both the morning and afternoon peak hours. Inbound trips in the morning and outbound trips in the afternoon operate via Ancient Oak. This weekday only service also operates to Cedar Point Shopping Center, Trexler Mall and Dorney Park/Wildwater Kingdom.

Route 4 Stabler Center (Lehigh Valley College) - This route operates from the ATC to the Stabler Center. A total of five one-way trips are operated - three from the ATC and two departing Lehigh Valley College/Stabler Center. This service operates weekdays only.

Route 5 Forks/Palmer Industrial Parks - This service operates between the Metro Transit Center in Easton (i.e., Center Square) and MCS Palmer. Two one-way trips are operated during the morning (outbound) and afternoon (inbound) peak periods on weekdays only, serving a number of employers along the route's alignment.

Route 6 The Rover - This bus route links Northampton Crossings with Palmer Park Mall via Nazareth Road. Weekday and Saturday service is operated on a 30-minute headway throughout the day.

Route 7 WhirlyBird - This bus route links several major shopping and/or employment centers while "looping" between Lehigh Valley Mall and Whitehall Shopping Center also serving Whitehall Mall, MacArthur Towne Center and

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Whitehall Square. On weekdays and Saturdays, buses operate every 30 minutes. On Sundays, service operates hourly.

The "400" Routes - There are seven unique routings operated in this line group. These lines are open to the public but focus on serving the Dieruff High School, Allen High School, and the South Mountain and Harrison Morton Middle Schools.

Night Owl - This service was implemented by LANTA to provide a level of public transportation previously unavailable to second shift workers. From the ATC, the Night Owl links the Lehigh Valley Hospital (17th Street), St. Luke's Hospital, Cedar Point, Dorney Park & Wildwater Kingdom, Cedarbrook and the Lehigh Valley Hospital facility on I-78. The riders are primarily residents of center city Allentown. A unique aspect of this service is that that on any of the three homebound (i.e., towards center city and the ATC) trips, buses will deviate up to six blocks from the main route to discharge riders as close as possible to their front doors.

SILVERLINE EXPRESS - This line provides service every 30 minutes between the ATC and Lehigh Valley Mall/LVIP IV on weekdays and Saturdays. Sunday service operates hourly. This line is interlined/through-routed with the WhirlyBird providing connections to Whitehall Mall, Whitehall Shopping Center MacArthur Towne Center and Whitehall Square.

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Frequency of Service - The frequency of service or how often buses operate on a particular route was reviewed for each Metro bus line. As indicated in Table 2, the peak period frequencies of the routes are generally every 30 or 60 minutes. On most lines hourly service is provided during the midday. With few exceptions, Saturday service operates similar to the midday on weekdays. There are ten bus lines that operate on Sundays at frequencies ranging from 60 to 90 minutes.

It should be noted that the frequencies presented in Table 2 represent "trunk" headways and could represent more than a single route. For example, Route A (Village West-Hanover Avenue) operates hourly. The segment between the ATC and Broad & Guetter Sts. in Bethlehem (i.e., Hanover Avenue, W. Broad St.) is also traversed by Route E en route to Easton each hour. When combined, this results in 30-minute service along the portion of the alignment where both lines operate. Also, no frequency of service is associated with the "400" Routes since they are school trippers that typically operate a single trip to the school in the morning and a return trip in the afternoon.

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Table 2 **Frequency of Service (Headway in Minutes)**

A Village West-Hanover Ave.

- B East Hills/Freemansburg Ave.-Fountain Hill
- C Easton-Bethlehem via NCC
- D Northampton-Emmaus
- E Easton-Allentown
- F Westgate-South Bethlehem
- G Union Blvd.-Susquehanna St.
- H Dorney Park-Fullerton Ave.
- J Boroline-Crest Plaza
- K Lehigh Valley Hospital (I-78)-Presidential Village
- L Lehigh Valley Mall-Parkway Shopping Center
- N Palmer Park Mall-Line/Berwick St.
- P Stones Crossing-Berwick/Line St.
- R Harlen House-West Easton
- S Slate Belt-Bethlehem
- V Riverside Drive
- W Allentown-Slatington
- Starlight 1 LV Mall-Allentown Loop
- Starlight 2 LV Mall-Susquehanna St.
- Starlight 3 Allentown-Easton
- Starlight 4 Whitehall-Northampton Loop
- Starlight 5 Allentown-Emmaus

30

30/60

60

30

60

30

30

30

30/60

60

-

60

60

-

120

30

60

-

-

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30

30/60

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60

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60

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60

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60

120

120

1 trip

2 trips

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30/60

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30/60

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45/90

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60

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60

60

120

120

5 trips

2 trips

60

60

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60

60

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90

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60

60

60

60

60

90

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Table 2 (Cont'd)
Frequency of Service (Headway in Minutes)

Starlight 6 Palmer Park Mall-South Side Easton

Starlight 7 Dorney Park-Allentown

1 East-Catasauqua

2 Fogelsville

3 Trexlertown

4 Stabler Center

5 Forks/Palmer Industrial Parks

6 The Rover

7 The Whirlybird

The "400" Routes

Night Owl Service

SILVERLINE EXPRESS

-

-

60

60/75

2 trips

1 trip

2 trips

30

60

N/A

-

60

-

-

60

55/80

-

2 trips

-

30

30

N/A

-

30

-

-

60

60

2 trips

1 trip

2 trips

30

30

N/A

-

30

90

60

-

-

-

-

-

-

-

-

60

-

90

60

120

60/120

-
-
-
30
30
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-
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60
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-
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Span of Service - Table 3 indicates the span of service for each Metro bus route. As shown in the tabulation, nearly all weekday service begins during the 5:00 AM and 6:00 AM hours. On weekdays, most routes end their operating day by about 7:00 PM, shortly after Starlight services begin. Saturday service tends to begin about an hour later than weekdays. Sunday service generally starts in the latter part of the 9:00 AM hour with all lines in service by 10:30 AM. Nearly all routes that operate on Sundays end during the 6:00 PM hour.

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B East Hills/Freemansburg Ave.-Fountain Hill
 C Easton-Bethlehem via NCC
 D Northampton-Emmaus
 E Easton-Allentown
 F Westgate-South Bethlehem
 G Union Blvd.-Susquehanna St.
 H Dorney Park-Fullerton Ave.
 J Boroline-Crest Plaza
 K Lehigh Valley Hospital (I-78)-Presidential Village
 L Lehigh Valley Mall-Parkway Shopping Center
 N Palmer Park Mall-Line/Berwick St.
 P Stones Crossing-Berwick/Line St.
 R Harlen House-West Easton
 S Slate Belt-Bethlehem
 V Riverside Drive
 W Allentown-Slatington
 Starlight 1 LV Mall-Allentown Loop
 Starlight 2 LV Mall-Susquehanna St.
 Starlight 3 Allentown-Easton
 Starlight 4 Whitehall-Northampton Loop
 Starlight 5 Allentown-Emmaus
 Starlight 6 Palmer Park Mall-South Side Easton
 Starlight 7 Dorney Park-Allentown
 1 East-Catasauqua
 2 Fogelsville
 3 Trexlertown
 4 Stabler Center
 5 Forks/Palmer Industrial Parks
 6 The Rover
 7 The Whirlybird
 The "400" Routes
 Night Owl Service
 SILVERLINE EXPRESS

Table 3

Span of Service

5:35 AM
 5:25 AM
 5:50 AM
 5:40 AM
 5:30 AM

5:20 AM

5:15 AM

5:40 AM

5:30 AM

5:45 AM

8:55 AM

5:45 AM

5:40 AM

9:15 AM

6:25 AM

5:15 AM

6:10 AM

6:15 PM

6:50 PM

6:40 PM

6:35 PM

6:40 PM

6:30 PM

6:50 PM

5:50 AM

6:00 AM

6:10 AM

7:20 AM

6:15 AM

6:35 AM

6:30 AM

N/A

10:15 PM

6:20 AM

5:35 AM

6:05 AM

-

6:10 AM

5:45 AM

5:50 AM

5:45 AM

6:10 AM

6:00 AM

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9:30 AM

6:45 AM

6:10 AM

9:15 AM

7:20 AM

6:15 AM

8:10 AM

6:15 PM

6:50 PM

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7:05 AM

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6:35 AM

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7:00 PM

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3:05 PM

6:25 PM

5:45 PM

6:00 PM

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11:15 PM

10:40 PM

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10:00 PM

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6:25 PM

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6:05 PM

6:30 PM

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3:30 PM
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6:15 PM
3:05 PM
7:05 PM
7:00 PM
7:00 PM
11:15 PM
11:50 PM
11:15 PM
10:40 PM
10:10 PM
10:00 PM
10:40 PM
6:30 PM
6:25 PM
6:10 PM
5:25 PM
5:15 PM
6:05 PM
6:30 PM
N/A
12:00 AM
6:40 PM

for unlimited rides during the day of purchase. Exceptions are noted for the Whirlybird and Rover lines which have a fare of \$0.50. There are also a variety of "FareSaver" Tickets which afford discounts for frequent riders. Children age five and under travel free when accompanied by a fare-paying adult. People with mobility impairments are issued a special ID card with which they can purchase a Day Pass for \$1.00. Otherwise, a person presenting their Medicare Card as ID may ride Metro for one-half fare except between 7:00 and 8:00 AM and 4:30 and 5:30 PM on weekdays.

1 Ride Fare

Day Pass

Whirlybird Express/The Rover

Children Age 5 and Under

LANTA/Metro Fixed-Route Bus System Fare Structure

Transfers

Senior Citizens (Age 65 and older)

FareSaver 10 ride ticket

FareSaver 40 ride ticket

FareSaver 31 day pass

\$2.00

\$2.50

\$0.50

No Charge when accompanied by a fare-paying adult.

\$0.25

Free with appropriate ID.

\$13.00

\$50.00

\$45.00

Metro Transit System Description

This section describes Metro and the assets that are utilized to provide public transportation services throughout the LANTA service area.

Transit Administration - LANTA as noted previously, is a municipal authority created by the counties of Lehigh and Northampton in 1972 under the laws of the Commonwealth of Pennsylvania, in compliance with the Pennsylvania Municipal Authorities Act of 1945, as amended. A bi-county, municipal authority, LANTA supplements passenger fares and other revenues with county, state and federal funding to support operating and capital expenses.
Existing Transit Services

New Flyer

Gillig

Gillig

30' Diesel

35' Diesel

35' Diesel

40' Diesel

35' Diesel

40' Diesel

35' Diesel

40' Diesel

40' Diesel

35' Diesel

40' Diesel

35' Diesel

40' Diesel

26

32

31

39

31

39

31

39

39

31

39

31

39

1989

1989

1998

1998

2001

2001

2002

2002

2003

2004

2004

2006

2006

Average Age of Current Bus Fleet: 6.5 Years

* Reserve vehicles

1

2

15

5

10

10

5

5

10

5

5

Administrative and Maintenance Facility - LANTA's main operational facility is located at 1060 Lehigh Street in Allentown. A total of 64 buses are housed at this site. The facility accommodates the Metro bus operations including administrative offices, vehicle maintenance, as well as for vehicle servicing and storage. The facility was originally constructed in 1907 and had its last major renovation nearly 20 years ago. There is a satellite facility located at 3610 Nicholas Street, in Easton about 20 miles northeast of the main facility. This facility was built in 1977 but was remodeled and expanded in 2007. There are 17 buses stored at this site. There are drive-thru bus washers at both facilities. Both facilities are operated at capacity.

The location of the LANTA main operational facility is well suited to its fixed-route service area. The facility is proximate to many of the trip origins that buses "pull-out" to in order to begin revenue service. The Easton satellite facility "covers" what would be longer-distance pull-outs for bus lines initially operating in the east/north east portions of the service area. Combined, this allows the agency to minimize its Adeadhead≡ time and mileage.

Passenger Amenities - Through a contract, LANTA has installed 80 passenger waiting
Existing Transit Services
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Center Square in Easton and at the Lehigh Valley and Palmer Park Malls.

Public Information - LANTA=s public information program contains the elements necessary to inform the public of the services offered and how to use them. Route timetables are distributed on buses and are displayed at many activity centers throughout the service area. The web site (www.lantabus.com) contains a great deal of information pertaining to the range of public transportation services offered by LANTA and others including Carbon County Community Transit, private bus carriers and New Jersey Transit. Viewable and printable schedules as well as a system map are available as is complete fare information. There is also the ability to leave a message at LANTA for a subsequent return call or email. Information regarding current "Service Status" is posted. The web site also provides for subscribing to one of three mailing lists to receive information and service updates for Metro, Metro Plus and Carbon County Community Transit. Further, LANTA provides telephone information services and a series of telephone numbers for specific departments within the agency. shelters at locations throughout the service area. Most of the shelters are equipped with benches, and typically are positioned to provide protection from the elements. The timetables for the bus route or routes serving the shelters are displayed at each site. As noted in a prior section, LANTA has established several "Metro Transit Centers" where riders can easily transfer among several routes serving the particular location. Metro Transit Centers are located in Allentown (the ATC at 6 & Linden Streets), in Bethlehem (on Guetter Street just north of Broad Street),
Fixed Route System Performance and Efficiency Trends

In order to determine operating and ridership trends during the past five years, relevant

statistics were compiled for fiscal years (FY) 2003 through 2007.

Fixed Route System Operating Statistics - As shown in Table 4, the overall "size" of the fixed-route system has been relatively unchanged during the past five years although some intermediate year variations are noted. Between 2003 and 2007, vehicle miles and vehicle hours increased by 2.2 and 1.4 percent, respectively. The number of vehicles necessary to meet peak service requirements has increased from 61 to 63 during the analysis period. As the statistics described above indicate, the fixed-route system has remained stable in terms of hours and miles of service provided although service in this review period peaked-out in FY 2006.

In contrast to the quantity of service provided, the number of passenger trips made on Metro buses has changed substantially during the review period. The number of passengers has increased from 4.2 million in 2003 to more than 5.2 million in 2007. This represents an overall increase of nearly 23 percent or about 5.7 percent on an annual basis.

Existing Transit Services

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Table 4
Fixed Route System Operating Statistics and Ridership Trends by Fiscal Year

Vehicle Miles	2,573.4	2,790.4	2,825.1	2,837.6	2,630.6	2.2
0.5						
Vehicle Hours	197.7	207.1	208.7	209.6	200.4	1.4
0.3						
Peak Vehicles	61	65	65	68	63	3.3
0.8						
Passenger Trips	4,281.1	4,256.3	4,401.4			

5,100.9
5,262.4
22.9
5.7

The net result of the Metro system remaining relatively unchanged in terms of service operated combined with the substantial growth in passenger trips has not surprisingly, resulted in favorable trends in passenger productivity (Table 5). Regardless of the measure used, there are significant (i.e., 17 percent or more) increases in productivity during the five-year analysis period. The greatest increase (i.e., more than 21 percent) is observed on the basis of passengers per vehicle hour. This value has improved by an average annual rate of more than five percent.

Table 5
Fixed Route System Productivity Trends

1.6

Passengers per
Vehicle Mile

Passengers per
Vehicle Hour

Passengers per
Peak Vehicle

1.7
1.5
1.8
2.0
17.6
4.4
21.7
20.6
21.1
24.3
26.3
21.2
5.3
70.2
65.5
67.7
75.0
83.5
18.9
4.7

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Financial Trends - As shown in Table 6, the costs attributable to the fixed-route system have increased by about 30 percent during the past five years. The largest component of this overall increase has been for vehicle operations which between 2003 and 2007 increased by more than 48 percent. This category includes all costs for driver wages and fringe benefits, which are typically the single largest expenditure at transit systems. This category also includes fuel costs. In FY 2003, fuel costs were about 4.6 percent of total operating costs. Between FY 2003 and FY 2007, fuel costs increased by over 214 percent resulting in fuel costs now being more than 11 percent of total LANTA operating costs. The cost of maintaining the fleet during the review period has increased by nearly 31 percent or about 7.7 percent annually.

Conversely, the cost of administering the LANTA/Metro fixed-route network has decreased considerably. During the past five years, administration expenditures have been reduced more than 30 percent. This performance is particularly commendable in light of increased ridership levels overall, implementation of new and modified services and the subsequent need to provide a greater level of service monitoring and adjustment to assess the impact of service changes.

Operating revenue for the bus system from rider fares and other sources has increased by an average annual rate of 5.1 percent. Revenue from passenger fares has increased during each year of the analysis period even though there was only one fare increase, April 2007. The lower increase in revenue coupled with the larger increase in operating costs results in a lower proportion of costs covered by fares.

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Table 6

Fixed Route System Financial Trends by Fiscal Year

7,283.7

2,212.9

2,205.2

11,701.8

8,330.4

2,461.4

2,457.7

13,249.5

8,840.9

2,421.0

2,562.6

13,824.5

9,251.5

3,015.6

1,259.2

13,526.3

Operations

Maintenance

Administration

TOTAL

10,809.5

2,896.0

1,542.0

15,247.5

48.4

30.9

(30.1)

30.3

12.1

7.7

(7.5)

7.6

2,464.6

1,430.6

3,895.2

2,610.9

1,624.0

4,234.9

2,730.4

1,730.1

4,460.5
2,917.7

1,672.8

4,590.5
Regular Fares

Other Revenue

TOTAL
3,168.7

1,520.2

4,688.9
28.6

6.3

20.4
7.1

1.6

5.1

32.0

9,014.6
32.3

9,364.0
33.9

8,935.8
Cost Recovery (%)

Investment
33.3

7,806.6
30.8

10,558.6
(7.6)

35.3
(1.9)

8.8

676.2

2,820.9

4,309.5

7,806.6
705.7

3,208.6

5,100.3

9,014.6

589.6

2,806.3

5,968.1

9,364.0

528.0

2,313.9

6,093.9

8,935.8

737.5

2,852.3

6,968.8

10,558.6

Local

State

Federal

TOTAL

9.1

1.1

61.7

35.3

2.3

0.3

15.4

8.8

However, LANTA covered 30.8 percent of its costs during FY 2007 which is better than many similar sized systems throughout the US.

The impact of expenditures outpacing revenue is clearly evident by the overall increase in the financial investment. During the past five years, the investment has grown at an average annual rate of 8.8 percent. While this increase may seem significant, the Consumer Price Index (CPI) nationwide increased about 3.2 percent annually during the same period as reported by the US Department of Labor. It should also be noted that the nationwide average noted above is typically a few percentage points lower than that for areas in the northeast portion of the country. Taking these items into consideration along with the ongoing surge in the costs associated for fuel (over 214 percent increase from FY 2003 to FY 2007) as well as large cost increases for

health care and spare parts, the overall performance of LANTA in terms of keeping expenditures at a reasonable level is favorable.

Total operating assistance provided to LANTA increased by 35.3 percent between 2003 and 2007. This includes a considerable increase in the amount of Federal assistance of about 15 percent annually. It should be noted that some manipulation of the operating assistance data received from the Commonwealth of PA were performed to separate and compile the amounts from the variety of "special" accounts, Senior Citizen Grant Program and tax sources. Operating assistance from "Local" sources has increased modestly - about 2.3 percent annually.

Financial Performance Trends - Table 7 presents the LANTA/Metro bus system financial performance results measured on the basis of per vehicle mile, vehicle hour, peak vehicle and passenger. While revenue has increased on the basis of units of service (i.e., miles, hours and peak vehicles), costs have increased at a greater rate. This results in an investment that needs to be "covered" by operating assistance as noted previously.

While analysis indicates "double-digit" revenue growth regardless of unit of service index, revenue per passenger has decreased slightly (\$0.01) during the analysis period. To a great extent, this reflects the LANTA fare structure which affords multiple discounted-fare options including a "Day" pass and a conscious effort to keep fares relatively low for the riding public, particularly the transit-dependent and student populations.

Metro Plus

LANTA also provides a comprehensive and highly coordinated shared-ride, paratransit program, known as LANTA/Metro Plus. This door-to-door transportation service is available to persons in the service area that are unable to "navigate" the fixed-route bus system. For the most part, these individuals are not able to utilize the regular bus service because of physical or cognitive limitations which impact their mobility. Trips on the Metro Plus system are provided to these individuals under one of the following programs:

☐
☐

Shared Ride - This element of Metro Plus is for senior citizens age 65 or older. Passengers pay 15 percent of the actual fare while the remainder is funded by the Pennsylvania Lottery.

Medical Assistance Transportation Program - The MATP provides transportation to a comprehensive list of health care services that are "covered" by Medical Assistance. This program is through the Department of Public Welfare. In addition to doctor's appointments, covered trips include those made to facilities for diagnostic testing and obtain prescribed medication or necessary medical supplies.

Table 7
Fixed Route System Unit Financial Performance Trends
(All Amounts in Dollars)

Revenue

Cost

Investment

1.51

4.55

3.04

1.52

4.75

3.23

1.58

4.89

3.31

1.62

4.77

3.15

1.78

5.80

4.02

17.8

27.5

32.2

4.5

6.9

8.1

19.70

59.19

39.49

20.45

63.98

43.53

21.37

66.24

44.87

21.90

64.53

42.63

23.40

76.09

52.69

Revenue

Cost

Investment

18.8

28.5

33.4

4.7

7.1

8.4

63.86

191.83

127.97

65.15

203.84

138.69

68.62

212.69

144.07

67.51

198.92

131.41

74.43

242.02

167.59

Revenue

Cost

Investment

16.6

26.2

21.0

4.1

6.5

7.7

0.99

3.11

2.12

1.01

3.14

2.13

0.90

2.65

1.75

Revenue

Cost

Investment

0.90

2.73

1.83

0.89

2.90

2.01

(1.1)

6.2

9.8

(0.3)

1.6

2.5

E
E

Americans with Disabilities Program - This component of Metro Plus service is designed to meet the requirements of the American with Disabilities Act of 1990. The federal legislation requires paratransit service along a "band" or corridor $\frac{3}{4}$ of

a mile from the fixed-route bus system for individuals that cannot access the regular route bus service. Fares for this service cannot be more than twice that of the fixed-route bus fare.

Agency on Aging Programs - Metro Plus provides service to both the Lehigh and Northampton Counties Area Agencies on Aging.

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It should be recognized that persons are eligible to utilize the shared-ride program if there is no LANTA/Metro services nearby or if they are disabled. The fare for trips not sponsored through a participating agency or program is \$17.80. During FY 2007, more than 445,000 trips were made on Metro Plus.

LANTA contracts for all Metro Plus service to be operated by a private carrier. LANTA is currently nearing completion of the second year of a five-year contract with Easton Coach Company, which operates the Metro Plus service. LANTA owns and leases its paratransit vehicles at no cost to the carrier. This operator provides wheelchair lift-equipped demand response service throughout the service area and maintains and stores the vehicles at their own facility. The fleet used for this service includes 111 vehicles as described below:

Metro Plus Fleet Inventory

12

12

12

12

12

12

12

2

2

2

2

2

2

2000

2001

2002

2003

2004

2005

2007

Ford

Ford

Ford

Ford

Ford

Ford

Chevrolet

Average Age of Fleet = 4.7 Years

3

18

20

20

20

20

10

111

The average age of the fleet is 4.7 years which is approaching the 5 year useful economic life generally associated with smaller vehicles. The 41 vehicles built from 2000 to 2002 exceed this 5-year life and another 20 will be five years old during 2008.

Chapter Summary

This chapter provides an inventory of the current fixed-route transit services provided by

LANTA in Lehigh and Northampton Counties. The equipment used to operate service as well as the facilities are described. A transit trend analysis shows that ridership on the current fixed routes has increased considerably during the last five years. However, with increases in the cost of providing service outpacing growth in passenger revenue, the amount of costs that are covered by farebox revenue decreased slightly. Conversely, passenger productivity has increased for

Existing Transit Services

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each of the indices used to measure performance. During this period, the average fare paid by each passenger has remained stable. The concluding element is a brief description of the components of the Metro Plus service operated by a private carrier under contract to LANTA.

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