



## Pedestrian Accessibility on Fixed Route Service (PAFRS)

### Final Summary



December 2014

## EASTGATE REGIONAL COUNCIL OF GOVERNMENTS

*Serving Northeast Ohio since 1973*

The Eastgate Regional Council of Governments is a multipurpose Regional Council of Governments for Ashtabula, Mahoning and Trumbull Counties, as established by Section 167.01 of the Ohio Revised Code. Eastgate is the agency designated or recognized to perform the following functions:

- Serve as the Metropolitan Planning Organization (MPO) in Mahoning and Trumbull Counties, with responsibility for the comprehensive, coordinated and continuous planning for highways, public transit and other transportation modes as defined in Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) legislation.
- Perform continuous water quality planning functions in cooperation with Ohio and U.S. EPA.
- Provide planning to meet air quality requirements under MAP-21 and the Clean Air Act Amendments of 1990.
- Administration of the Economic Development District Program.
- Administration of the Local Development District of the Appalachian Regional Commission.
- Administration of the State Capital Improvement Program for the District 6 Public Works Integrating Committee.
- Administer the area clearinghouse function, which includes providing local government with the opportunity to review a wide variety of local or state applications for federal funds.
- Administration of the regional Rideshare Program for Ashtabula, Mahoning and Trumbull Counties.
- Conduct demographic, economic and land use research.
- At General Policy Board direction, provide planning assistance to local governments that comprise the Eastgate planning area.
- Administration of the Clean Ohio Conservation & Revitalization Funds.

### GENERAL POLICY BOARD (2014)

Chairman - Commissioner Dan Claypool, Ashtabula County

1<sup>st</sup> Vice Chairman – Joseph Warino, City of Canfield

2<sup>nd</sup> Vice Chairman – Mark Hess, City of Niles

Brian Anderson, Ashtabula County

Mayor Eric Augustein, Village of Beloit

Jerry Brockway, Ashtabula County

Nancy Brundage, Citizens Advisory Board

Peggy Carlo, Ashtabula County Commissioner

Mayor Thomas Christlieb, Village of West Farmington

Mayor John Darko, City of Hubbard

David Ditzler, Mahoning County Commissioner

James Ferraro, Director, Western Reserve Transit Authority

Mayor Douglas Franklin, City of Warren

Frank Fuda, Trumbull County Commissioner

Pat Ginnetti, Mahoning County Engineer

Fred Hanley, Hubbard Township

Paul E. Heltzel, Trumbull County Commissioner

Mayor Arno Hill, Village of Lordstown

Glenn Holmes, Mayor, Village of McDonald

Mayor Ralph Infante, Jr., City of Niles

Mayor James Iudiciani, Village of Lowellville

Mayor William Jones, Village of Washingtonville

Mayor Harry Kale, Village of New Middletown

Mayor Bernie Kosar, Sr., City of Canfield

Paul Makosky, City of Warren

Mayor John McNally, City of Youngstown

Mayor James Melfi, City of Girard

William Miller, Director, Trumbull County Planning Comm.

Mayor Curt Moll, City of Cortland

Joe Moroski, Ashtabula County Commissioner

Mayor J. Michael Pinkerton, Village of Sebring

Daniel Polivka, Trumbull County Commissioner

Kurt Prinic, OEPA NE District Chief

Carol Rimedio-Righetti, Mahoning County Commissioner

Mayor Timothy Sicafuse, Village of Poland

Randy Smith, Trumbull County Engineer

Mayor Dave Spencer, Village of Craig Beach

Mayor Terry Stocker, City of Struthers

Anthony Traficanti, Mahoning County Commissioner

Tony Urankar, District Deputy Director, ODOT District 4

Mayor William Van Such, City of Campbell

Mayor Lyle A. Waddell, City of Newton Falls

Heflin Willingham, Citizens Advisory Board Representative

### TECHNICAL ADVISORY COMMITTEE (2014)

Chairman- Rob Donham Vice Chairman- Gary Shaffer

### CITIZENS ADVISORY BOARD (2014)

Chairman- Gerald Hurayt Vice Chairman- James J. Pirko

# Pedestrian Accessibility on Fixed Route Service (PAFRS)



Prepared by:  
Eastgate Regional Council of Governments  
City Center One Building  
100 E. Federal Street, Suite 1000  
Youngstown, Ohio 44503

This report was financed by the Federal Highway Administration, the Federal Transit Administration, the Ohio Department of Transportation and the Eastgate Regional Council of Governments. The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policy of the Department of Transportation. This report does not constitute a standard, specification, or regulation.

# **Pedestrian Accessibility on Fixed Route Service (PAFRS) Summary**

## Background

A pedestrian survey of sidewalks, crosswalks and ADA ramps was conducted by Eastgate in 2011. Eastgate updated and expanded this data in December 2014 by using aerial photography, GIS and local knowledge. This data was used as the basis for an analysis of pedestrian accessibility to transit services. An interactive web map was produced which can assist our members in identifying gaps for pedestrian access within a community. Identifying gaps in a transportation network correlate with future funding grants to promote sustainable healthy communities through walkable, accessible, and bikeable communities.

Eastgate recognizes the importance of multi-model connectivity to different modes of transportation; therefore we decided to analyze pedestrian access to existing Fixed Route and Special Service Transportation (SST) transit services in Mahoning and Trumbull Counties.

The SST service is a complementary paratransit service that is available to individuals who have registered as ADA eligible and/or senior citizens 65 years and older. The SST service area is a 3/4 mile boundary around a fixed route service line. The 3/4 of a mile distance around a bus route is considered a walkable distance, so our analysis evaluated whether pedestrians (and particularly pedestrians with disabilities) can easily navigate to a particular bus route.

## Web Maps

To help make this determination, Eastgate created two web maps. The first map is for public use and shows the locations of bus routes, the availability of sidewalks (whether there are sidewalks on one, two or no sides of the road), car-free paths (known as pedestrian and bike paths), ADA ramps and crosswalks. This can help the public select their bus routes and their walking travel path. This map can help local officials identify gaps and program future funding for sidewalks, ADA ramps, and striping crosswalks.

The map layers can be toggled on and off, giving users the ability to see the connectivity of only the bus routes they are interested in. Several basemaps are available and show a combination of street layers, topography and aerial photography. The aerial photography is particularly helpful in seeing exactly where sidewalks and crosswalks are located. The web map includes a sketch tool which can be used to draw a preferred walking path. The screen can also be printed as a PDF map.

The second map is for Eastgate and WRTA use and is identical to the first, with the inclusion of WRTA service boundaries and 3/4 of a mile buffers for each route. This will help in evaluating whether a SST rider lives within a walkable radius of a particular bus route.

The link to the public interactive web mapping is located on Eastgate's homepage.

## Statistics

Statistics were generated on the availability of sidewalks, crosswalks and ADA ramps by bus route.

Table 1 identifies how many linear miles of roadway within 3/4 mile of each bus route have sidewalks. Table 2 identifies how many intersections within 3/4 mile of each bus route have ADA ramps or crosswalks.

## Pedestrian access

Pedestrian access to fixed route was analyzed for sixteen routes and the 3/4mile boundary for the SST service. While pedestrian have access to all sixteen routes, some areas within the 3/4 mile boundary reveal urban and suburban housing densities without sidewalks.

The PAFRS summary data can be interpreted in different ways. For the purpose of analyzing pedestrian access to transit, our focus will be concentrated on the pedestrian gaps in this transportation network. These connectivity gaps to walkable communities developed over time because of housing and development trends.

The data contained in Table 1 show routes that have no sidewalks, sidewalks on one side of the road, sidewalks on two sides of the road, and areas that contain a pedestrian and bike path.

Within the SST area as a whole, the analysis shows that 559 linear miles around transit do not have sidewalks. Sidewalks are available on 108 miles of roadway on one side of the road, and 516 miles of sidewalks are located on two sides of the road. The data analysis indicated that 1 mile of pedestrian and bike path was located on the 36-Glenwood route that travels by Millcreek MetroParks.

The second set of tables represent the number of intersections with ADA ramps (with visible truncated domes) and crosswalks on the fixed route service and the 3/4 mile boundary. Currently, there are 4503 intersections that do not have ADA ramps and crosswalks around transit. There are 307 intersections that have ramps only, and 436 intersections that have ramps and crosswalks.

## Disclaimer

It is important to note that because the PAFRS analysis was conducted using 2013 aerial photography the values are estimations. Due to imagery resolution of the aerial photography, only relatively new and intact truncated domes could be seen and used to identify the ADA ramps. As a result of this, curb cuts without truncated domes were not counted as part of the analysis. When analyzing crosswalks, only crosswalks that were clearly painted were included in the calculations. In addition, highways were excluded from the analysis.

# Pedestrian Accessibility to WRTA Fixed Route and Special Service Transportation (SST)

## Table 1

Miles of Sidewalks within 0.75mi of WRTA Fixed Routes																
Route	31 - Elm		31 - Oak		32 - Mosier		32 - Wilson		33 - Buckeye Struthers		33 - Struthers Buckeye		33 - Fifth		34 - Steel	
	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%
No sidewalks	30	28%	49	34%	43	36%	34	28%	60	28%	62	29%	34	31%	36	30%
Sidewalks on 1 Side	14	13%	22	15%	17	14%	18	15%	29	14%	29	14%	13	11%	15	13%
Sidewalks on 2 Sides	65	60%	75	51%	58	49%	67	57%	123	58%	123	58%	64	58%	67	57%
Car Free Paths	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>109</b>	<b>100%</b>	<b>146</b>	<b>100%</b>	<b>118</b>	<b>100%</b>	<b>119</b>	<b>100%</b>	<b>213</b>	<b>100%</b>	<b>214</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>118</b>	<b>100%</b>

  

Route	35 - Cornersburg		35 - South		36 - Glenwood		36 - McGuffey		38 - Belmont		38 - Market		39 - Warren		40 - Austintown	
	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%	Mi	%
No sidewalks	92	45%	63	31%	70	33%	56	44%	48	38%	44	24%	124	38%	51	35%
Sidewalks on 1 Side	19	9%	26	13%	21	10%	13	10%	14	12%	23	12%	29	9%	16	11%
Sidewalks on 2 Sides	92	45%	114	56%	119	56%	58	45%	62	50%	119	64%	173	53%	77	53%
Car Free Paths	0	0%	0	0%	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>203</b>	<b>100%</b>	<b>202</b>	<b>100%</b>	<b>211</b>	<b>100%</b>	<b>127</b>	<b>100%</b>	<b>125</b>	<b>100%</b>	<b>186</b>	<b>100%</b>	<b>326</b>	<b>100%</b>	<b>144</b>	<b>100%</b>

## Table 2

Number of Intersections with ADA Ramps (with Truncated Domes) and Crosswalks within 0.75mi of WRTA Fixed Routes																
Route	31 - Elm		31 - Oak		32 - Mosier		32 - Wilson		33 - Buckeye Struthers		33 - Struthers Buckeye		33 - Fifth		34 - Steel	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
No ADA Ramps/Crosswalks	407	78%	542	78%	473	79%	446	78%	792	81%	802	81%	423	78%	414	74%
Ramps Only	40	8%	80	12%	50	8%	63	11%	82	8%	82	8%	46	8%	79	14%
Ramps and Crosswalks	72	14%	72	10%	74	12%	66	11%	104	11%	104	11%	76	14%	64	11%
<b>Total</b>	<b>519</b>	<b>100%</b>	<b>694</b>	<b>100%</b>	<b>597</b>	<b>100%</b>	<b>575</b>	<b>100%</b>	<b>978</b>	<b>100%</b>	<b>988</b>	<b>100%</b>	<b>545</b>	<b>100%</b>	<b>557</b>	<b>100%</b>

  

Route	35 - Cornersburg		35 - South		36 - Glenwood		36 - McGuffey		38 - Belmont		38 - Market		39 - Warren		40 - Austintown	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
No ADA Ramps/Crosswalks	748	84%	704	78%	687	78%	511	85%	472	79%	635	76%	1410	82%	473	73%
ADA Ramps Only	82	9%	54	6%	79	9%	34	6%	49	8%	65	8%	110	6%	85	13%
ADA Ramps and Crosswalks	64	7%	143	16%	118	13%	56	9%	75	13%	132	16%	194	11%	88	14%
<b>Total</b>	<b>894</b>	<b>100%</b>	<b>901</b>	<b>100%</b>	<b>884</b>	<b>100%</b>	<b>601</b>	<b>100%</b>	<b>596</b>	<b>100%</b>	<b>832</b>	<b>100%</b>	<b>1714</b>	<b>100%</b>	<b>646</b>	<b>100%</b>

\*These values are estimations. Due to aerial image resolution, only well painted crosswalks and relatively new truncated domes could be seen. Highways were excluded from the calculations. Values have been rounded to the nearest whole number.

# **FIXED ROUTE SYSTEM**

 FIXED BUS ROUTE

- 31-Oak
- 31-Elm (Logan)
- 32-Mosier
- 32-Wilson
- 33-Fifth
- 33-Buckeye Struthers
- 33-Struthers Buckeye
- 34-Steel
- 35-South
- 35-Cornersburg
- 36-McGuffey
- 36-Glenwood
- 37-Albert
- 38-Market
- 38-Belmont
- 39-Warren Express
- 40-Austintown
- 55-Austintown Loop

 WRTA SST AREA



0 1.5 3 4.5 6 Miles

Source: Transit Development Program  
May 2013

