

The Economic and Fiscal Benefits of Walkable and Bike-able City and Town Centers

October 30, 2015



Unless otherwise noted, graphics produced by the University of Maryland Department of Urban Studies and Planning.

CLEVELAND

Slide 8:

Photo Credits, accessed 10/2015

Rock and Roll Hall of Fame:

"Rock-and-roll-hall-of-fame-sunset" by Derek Jensen (Tysto) - Own work. Licensed under Public Domain via Commons - <https://commons.wikimedia.org/wiki/File:Rock-and-roll-hall-of-fame-sunset.jpg#/media/File:Rock-and-roll-hall-of-fame-sunset.jpg>

Upper right. University Hospitals of Cleveland. World Wide Web page <http://www.yelp.com/biz/university-hospitals-of-cleveland-cleveland-2>.

Lower right. Untitled photo by Mathew Collins. In Walter Hook, Stephanie Lotshaw and Annie Weinstock (undated). More Development for Your Transit Dollar. An Analysis of 21 American Transit Corridors. Institute for Transportation and Development Policy. https://www.itdp.org/wp-content/uploads/2013/11/More-Development-For-Your-Transit-Dollar_ITDP.pdf.

9:

Map, accessed 10/2015

Cleveland City Planning Commission. Bikeway Master Plan: Euclid Avenue Bike Lanes. World Wide Web page <http://planning.city.cleveland.oh.us/bike/euclid.html>

10:

Michael Crowley. "The Cleveland HealthLine: Transforming an Historic Corridor." Case Study: Cleveland, Ohio. Institute for Sustainable Communities. World Wide Web page

http://sustainablecommunitiesleadershipacademy.org/resource_files/documents/the-cleveland-healthline.pdf Accessed 9/2015.

Photo credit, accessed 10/2015

By Mariordo (Mario Roberto Duran Ortiz) (Own work) [CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0>), via Wikimedia Commons

11 – 13:

Sources: The Greater Regional Transit Administration. RTA HealthLine. World Wide Web page

<http://www.rtahealthline.com/healthline-what-is.asp>. Accessed 9/2015

Hellendrug, Jason. “HealthLine Drives Growth in Cleveland,” Urban Land, July 13, 2012, World Wide Web page

<http://urbanland.uli.org/economy-markets-trends/healthline-drives-growth-in-cleveland/>

Greater Cleveland Regional Transit Administration, HealthLine Information, World Wide Web page

<http://www.riderta.com/healthline/about>, Accessed 9/2015.

Partnership for Sustainable Communities, Transit as Transformation: The Euclid Corridor in Cleveland. World Wide Web page

<http://www.sustainablecommunities.gov/sites/sustainablecommunities.gov/files/docs/cleveland-euclid-corridor.pdf>.

Downtown Revitalization Institute. Complete Streets: Working Together to Design Great Places. June 21, 2012, World Wide Web

page <http://ctmainstreet.org/wp-content/uploads/2012/07/8-Euclid-Corridor-Rev.pdf>, accessed 9/2015.

Walter Hook, Stephanie Lotshaw and Annie Weinstock (undated), More Development for Your Transit Dollar: An Analysis of 21

American Transit Corridors. Institute for Transportation and Development Policy. World Wide Web page

https://www.itdp.org/wp-content/uploads/2013/11/More-Development-For-Your-Transit-Dollar_ITDP.pdf.

Photo credit slide 11: accessed 10/2015

https://www.google.com/search?q=Artwork+along+the+HealthLine+corridor+in+Cleveland&biw=1230&bih=611&source=lnms&tbm=isch&sa=X&ved=0CAcQ_AUoAmoVChMIqLKDj_6oyAIVhjg-Ch3F5AyL&dpr=1.05#tbm=isch&q=Pavement+along+the+HealthLine+corridor+in+Cleveland&imgcr=UByZNYA6m4vTmM%3A

Photo credit slide 12: accessed 10/2015

Lower left photo by Victoria Perk. Upper right and center photos from Michael J. Shipper, P.E. Greater Cleveland Regional Transit

Authority. Undated. World Wide Web page

[http://www.dot.state.oh.us/Divisions/Planning/Conference/Documents/Presentations/Wednesday-July-16/4-](http://www.dot.state.oh.us/Divisions/Planning/Conference/Documents/Presentations/Wednesday-July-16/4-A/Schipper_Session4A.pdf)

[A/Schipper_Session4A.pdf](http://www.dot.state.oh.us/Divisions/Planning/Conference/Documents/Presentations/Wednesday-July-16/4-A/Schipper_Session4A.pdf)

Lower right. Cleveland RTA. Rail-volution: Designing with your Community. October 29, 2008. World Wide Web page

http://railvolution.org/rv2008_pdfs/rv2008_207c.pdf Accessed 10/2015.

Photo credit slide 13: accessed 10/2015

Lower left photo from https://en.wikipedia.org/wiki/Bus_rapid_transit Lower center photo and right photo by Victoria Perk.

14:

Photo credits: accessed 10/2015

Slide 14. Far left and upper right. LAND Studio. Euclid Corridor Transportation Project. At [http://www.land-](http://www.land-studio.org/project/euclid-corridor-transportation-project)

[studio.org/project/euclid-corridor-transportation-project](http://www.land-studio.org/project/euclid-corridor-transportation-project)

Lower right. “Granite Spheres”. Photo by Barry Holden. Interactive Poetry Walk. Cleveland, Ohio. Public Art Archive. World

Wide Web page <http://www.publicartarchive.org/node/60415>.

15:

Photo credits: accessed 10/2015

Left. “Things Change”, at http://www.fta.dot.gov/documents/FTA_Report_No._0034.pdf, p. 60.

Right: Rail-volution: Designing with your Community. October 29, 2008. World Wide Web page http://railvolution.org/rv2008_pdfs/rv2008_207c.pdf

16:

Photo credits: accessed 10/2015

Left: Sign language from http://www.fta.dot.gov/documents/FTA_Report_No._0034.pdf Tree grate from <http://www.rtahealthline.com/project-overview-public-art.asp>, p. 60.

17:

Walter Hook, Stephanie Lotshaw and Annie Weinstock (undated), More Development for Your Transit Dollar: An Analysis of 21 American Transit Corridors. Institute for Transportation and Development Policy, World Wide Web page https://www.itdp.org/wp-content/uploads/2013/11/More-Development-For-Your-Transit-Dollar_ITDP.pdf.

Photo credits: accessed 10/2015

Lower left side. World Wide Web page <http://www.rtahealthline.com/project-overview-public-art.asp>

Lower right photo: Victoria Perk.

18.

Photo Credits: accessed 10/2015

Top left. District signs. Jennifer Flynn and Menna Yassin. 2012. National Bus Rapid Transit Institute; Center for Urban Transportation Research; and University of South Florida. FTA Research. Community-Oriented BRT: Urban Design, Amenities, and Placemaking. FTA Report No. 0034. http://www.fta.dot.gov/documents/FTA_Report_No._0034.pdf, p. 61.

Lower left, center, and lower right pictures. Rail-volution: Designing with your Community. October 29, 2008. World Wide Web page http://railvolution.org/rv2008_pdfs/rv2008_207c.pdf

19.

Bicycle counts calculated from data provided by Melissa Thompson, P.E., Northeast Ohio Area Coordinating Agency.

Photo Credits; accessed 10/2015

Top left. District signs. Jennifer Flynn and Menna Yassin. 2012. National Bus Rapid Transit Institute; Center for Urban Transportation Research; and University of South Florida. FTA Research. Community-Oriented BRT: Urban Design, Amenities, and Placemaking. FTA Report No. 0034. http://www.fta.dot.gov/documents/FTA_Report_No._0034.pdf, p. 61.

Lower left, center, and lower right pictures. Rail-volution: Designing with your Community. October 29, 2008. World Wide Web page http://railvolution.org/rv2008_pdfs/rv2008_207c.pdf.

20.

Photo Credits: accessed 10/2015

Left. Cool History of Cleveland: A New Look on the Old City. World Wide Web page

<https://coolhistoryofcleveland.wordpress.com/tag/euclid-avenue/> .

Right. Downtown Cleveland. World Wide Web page <http://datab.us/i/Downtown%20Cleveland>

21.

Greater Cleveland Regional Transit Administration, HealthLine Information, World Wide Web page

<http://www.riderta.com/healthline/about>. Accessed 9/2015.

Photo credits: Accessed 10/2015

Upper right: Cleveland State University. World Wide Web page <http://colleges.usnews.rankingsandreviews.com/best-colleges/cleveland-state-university-3032>

Lower right: Cleveland Clinic. Virtual Tours. World Wide Web page <https://my.clevelandclinic.org/about-cleveland-clinic/overview/virtual-tours>

22.

Greater Cleveland Regional Transit Administration (see note for Slide 21). Also from Candi Clouse, Ziona Austrian, Kathryn Hexter, Serineh Baboornian and Joe, Andre, Living Cities Integration Initiative: Cleveland, Ohio and Great University Circle Community Wealth Initiative, Year Two Programs and Projects Report, Maxine Goodman Leyin College of Urban Affairs, May 2013, World Wide Web page

http://cua6.urban.csuohio.edu/publications/center/center_for_economic_development/LC_Programs_Projects_Report_Year2_final.pdf

Data on economic impacts of Healthline from World Wide Web page [http://www.rtahealthline.com/project-overview.asp\(undated\)](http://www.rtahealthline.com/project-overview.asp(undated)). Euclid Corridor Transportation Project. RTA HealthLine Fact Sheet. Accessed Sept. 26.

Photo credit: accessed 10/2015. Victoria Perk.

23.

Walkability scores from Joe Baur, “Walk this Way: Cle’s most pedestrian friendly neighborhoods.” Freshwater. May 16, 2013, World Wide Web page <http://www.freshwatercleveland.com/features/walkthisway051613.aspx>, Accessed October 2015.

Photo Credits: accessed 10/2015:

Left: City of Cleveland. Cleveland Complete and Green Street, Typologies Plan. 8/20/13. World Wide Web page

http://www.city.cleveland.oh.us/sites/default/files/forms_publications/ClevelandCGSTypologiesPlan2013.pdf?id=3364

Right: “Features: walk this way: cle’s most pedestrian friendly neighborhoods.” Freshwater. May 10, 2013. World Wide Web page

<http://www.freshwatercleveland.com/features/walkthisway051613.aspx>

24.

Photo Credits: accessed 10/2015:

Both photos by Bob Perkoski. From “Features: walk this way: cle’s most pedestrian friendly neighborhoods.” Freshwater. May 10, 2013.

World Wide Web page <http://www.freshwatercleveland.com/features/walkthisway051613.aspx>

BRONX:

27: Photo Credits, accessed 10/2015:

Fordham University, Fordham,:

http://www.fordham.edu/info/21453/rose_hill_campus

Botanic garden, Bronx:

By LeoTar (Own work) [CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0>)], via Wikimedia Commons

Zoo, Bronx:

By Stavenn (Own work) [GFDL (<http://www.gnu.org/copyleft/fdl.html>), CC-BY-SA-3.0 (<http://creativecommons.org/licenses/by-sa/3.0/>) or CC BY-SA 2.5-2.0-1.0 (<http://creativecommons.org/licenses/by-sa/2.5-2.0-1.0>)], via Wikimedia Commons

29:

Source: The Economic Benefits of Sustainable Streets, NYC DOT

Photo Credit: New York City Department of Transportation, Transit, Development Community Outreach Coordinator
+selectbusservice, 10/2015

30:

Source: Select Bus Service Report, NYC DOT & MTA NYC Transit, p.10

Photo Credit: New York City Department of Transportation, Transit, Development Community Outreach Coordinator
+selectbusservice

Report available at: <http://www.nyc.gov/html/brt/downloads/pdf/brt-routes-fullreport.pdf>

31 & 32:

Source: FTA research report 2012, Select Bus Service, NYC DOT & MTA NYC Transit, p.10

Photo Credit: New York City Department of Transportation, Transit, Development Community Outreach Coordinator
+selectbusservice, 10/2015

33:

Source: Select Bus Service, NYC DOT & MTA NYC Transit, p.13

Table 1: FTA Report No. 0009 Federal Transit Administration, Peer-to-Peer Information Exchange on Bus Rapid Transit (BRT) and Bus Priority Best Practices, US DOT FTA, May 2012, p.45

34 & 35:

Graphs: NY_2012-10-measuring-the-street & NYC DOT's The Economic Benefits of Sustainable Streets, P.36

Report available at: <http://www.nyc.gov/html/dot/downloads/pdf/dot-economic-benefits-of-sustainable-streets.pdf>

36:

Source: FTA research report 2012, p.45

Property Value Study: University of Maryland, with all properties along 5 block corridor section. Values from
<http://nycprop.nyc.gov/nycproperty/nynav/jsp/selectbbl.jsp>

Photo Source: Select Bus Service, NYC DOT & MTA NYC Transit, 10/2015

37:

Saved time: Source: <http://www.nyc.gov/html/brt/html/routes/pelham.shtml>

Higher Satisfaction Rate: Source: FTA research report 2012, p.45

Photo Credit: NYC DOT, selectbusservice, 2015

38:

Sources & Photo Credit: Select Bus Service, Bx41 on Webster Avenue Progress Report, NYC DOT & MTA NYC Transit, 2015

REDMOND:

42. Photo credits, accessed 10/2015

Skyline of Redmond, Washington. https://en.wikipedia.org/wiki/Redmond,_Washington

Microsoft headquarters. <http://nokiarevolution.com/microsoft-to-revamp-its-redmond-headquarters/>

City of Redmond Department of Parks and Recreation

43:

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

44:

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

45:

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

46:

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

47:

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

48:

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

49.

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

50.

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

51.

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

52.

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

53.

Source: City of Redmond Department of Parks and Recreation, 10/2015

Photo credit: City of Redmond Department of Parks and Recreation, 10/2015

ORLANDO:

56:

Photo Credits:

Walt Disney: By Jrobertiko (Denis Adriana Macias) [CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0>) or GFDL (<http://www.gnu.org/copyleft/fdl.html>)], via Wikimedia Commons

Museum of Art: "Orlando FL Museum of Art01" by Ebyabe - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:Orlando_FL_Museum_of_Art01.jpg#/media/File:Orlando_FL_Museum_of_Art01.jpg

UCF: Daniel Brent Ruyter, university-of-central-florida-1, July 4, 2014, from flickr.

58-67:

Note: Unless otherwise noted, information and data on slides 58 to 67 are from “Edgewater Drive Before and After Re-striping Results,” City of Orlando Transportation Planning Bureau. Nov. 1, 2002. World Wide Web page

<http://www.smartgrowthamerica.org/documents/cs/impl/fl-orlando-edgewater.pdf>

Photo Credits:

Left: <http://www.cityoforlando.net/mayor/2015/03/edgewater-drive-highlighted-as-national-model-for-complete-streets>

Right: City of Orlando, FL.

59:

Photo Credits: Empty Bike lane: World Wide Web page <http://www.cityoforlando.net/mayor/2015/03/edgewater-drive-highlighted-as-national-model-for-complete-streets/>

Right photo: City of Orlando, FL

63:

Photo Credit: City of Orlando. In Project for Public Places *Edgewater Drive: Improving Safety and Supporting a Main Street*. <http://www.pps.org/reference/rightsizing-edgewater-drive-in-orlando-florida-for-safety-gains-and-to-promote-alternative-transportation>. Article author: Seth Ullman.

64:

Photo Credit: Google 2015 Street View. 10/2015.

65:

Photo Credit: Google 2015 Street View 10/2015

66:

Photo Credit. Google 2015 Street View 10/2015.

68:

Photo Credit: City of Orlando 10/2015

LANCASTER:

72:

Photo credits: City of Lancaster Department of Economic Development, 10/2015

74:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

75:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: MyTravelPhotos.net, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

76:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

77:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

78:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

79:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

80:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

81:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

82:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

83:

Source: City of Lancaster Department of Economic Development, 10/2015

Photo credit: City of Lancaster Department of Economic Development, 10/2015

GRANDVIEW:

All pictures accessed 10/2015

87:

Truman Farm House:

from <https://en.wikipedia.org/wiki/File:Trumanfarm.JPG#filelinks>

2006-04-19 20:13 [Nationalparks 2560 x 1920 x \(936712 bytes\) Truman farm \(part of \[\[Harry S. Truman National Historic Site\]\]\). I took this myself.](#)

Longview lake

https://commons.wikimedia.org/wiki/File:Longview_Lake_MO_4.JPG

Accredation: Oct. 13, 2012, Author: unknown employee of Army Corps of Engineers, U.S Army Corps of Engineers website.

<http://www.nwk.usace.army.mil/Media/Images.aspx?mgqs=3Longview&page=1&styp=0>

Grandview Community Center: City of Grandview

88:

Phasing Plan: Slide 5: 2004 Main Street Revitalization Plan

90:

Source: p.4-6, City of Grandview, Transportation Improvements, March 3, 2014

Funding: source: p.4-6, City of Grandview, Transportation Improvements, March 3, 2014

Photo Credit: City of Grandview, 10/2015

91:

Source: City of Grandview, BHC Rhodes (Project Designer), OHH (Landscape Architect)

Photo Credit: City of Grandview, Dennis A. Randolph, 2015

92:

Source: City of Grandview, BHC Rhodes (Project Designer), OHH (Landscape Architect)

Photo Credit: City of Grandview, Dennis A. Randolph, 2015

93 & 94:

Photo Credit: City of Grandview, Dennis A. Randolph, 2015

95- 100:

Graphs: City of Grandview Finance Department, 2015

101& 102:

Source: City of Grandview

Photo Credit: City of Grandview, Dennis A. Randolph, 2013

103:

Source: City of Grandview Public Works

Photo Credit: Presentation: Grandview Main Street Revitalization, March 6, 2014, City of Grandview, BHC Rhodes, Slide 34 Main Street Bridge Design

WEST JEFFERSON, MO

Note: information in slides 109 to 116 are from two sources. One is Smart Growth America. 2015. *Safer Streets, Stronger Economies: Complete Street Project Outcomes from Across the Country*. World wide Web page <http://www.smartgrowthamerica.org/documents/safer-streets-stronger-economies.pdf> April. The other is Dean Ledbeeter's presentation in a webinar released in May 2015 and found at <http://www.smartgrowthamerica.org/2015/03/26/get-the-recap-safer-streets-stronger-economies-webinar-and-discussion/>

107:

Photo Credit: Mount Jefferson: By Ken Thomas (KenThomas.us (personal website of photographer)) [Public domain], via Wikimedia Commons

Art District: World Wide Web page <http://visitwestjefferson.org/photo-gallery/> Accessed: 10/2015

109:

Photo Credit: Photo Credit: Downtown photo by Kim Hadley, from World Wide Web page <http://visitwestjefferson.org/photo-gallery>

110:

Photo Credits: Martin Seelig, Courtesy Town of West Jefferson, NC.

111:

Photo Credits: Town of West Jefferson, NC.

112:

Photo Credits: Martin Seelig, Courtesy Town of West Jefferson, NC

113:

Photo Credits: Town of West Jefferson, NC

114:

Photo Credit: Photo Credit: Town of West Jefferson, North Carolina Photo Gallery. World Wide Web page <http://visitwestjefferson.org/photo-gallery>

115:

Photo Credit: Photo Credit: Town of West Jefferson, North Carolina Photo Gallery. World Wide Web page <http://visitwestjefferson.org/photo-gallery>

116:

Photo Credits: Upper right: Town of West Jefferson, NC.

Bottom right: Photo Credit: Photo Credit: Town of West Jefferson, North Carolina Photo Gallery. World Wide Web page <http://visitwestjefferson.org/photo-gallery>

117:

Photo Credit: Town of West Jefferson, North Carolina Photo Gallery. World Wide Web page <http://visitwestjefferson.org/photo-gallery>