

Appendix D

Some Examples of Deliverables

Example from Cuyahoga County Data on Broadband Distribution

	Cuyahoga County, Ohio	
Estimate Total:	532,752	
With an Internet subscription	391,791	
Dial-up alone	1,633	0.3%
Fixed broadband		66.2%
DSL:	67,065	12.6%
Cable modem	214,523	40.3%
Fiber-optic	25,048	4.7%
Satellite Internet service:	8,803	17%
Two or more fixed broadband types or other	37,335	7.0%
No fixed broadband at home		33.8%
Mobile broadband alone or with dial-up	37,384	7.0%
Internet access without a subscription	23,091	4.3%
No Internet access at home	117,870	22.1%

This would be sums across the Williamson county's population

Table 2**K2801: PRESENCE OF A COMPUTER AND TYPE OF INTERNET SUBSCRIPTION IN HOUSEHOLD (Universe: Households)***NOTE: "Broadband Internet subscription" includes mobile subscriptions; "with computer" includes mobile devices.*

City	Households with computer						Households with computer						No home broadband Internet (inc. no computer)
	Households	Total	Dial-up subscription	Broadband Internet subscription	No Internet subscription	No computer	Total	Dial-up subscription	Broadband Internet subscription	No Internet subscription	No computer		
Cleveland city	167,667	128,175	500	103,228	24,447	39,492	76.4%	0.3%	61.6%	14.6%	23.6%	38.4%	
Euclid city	22,783	16,927	34	14,730	2,163	5,856	74.3%	0.1%	64.7%	9.5%	25.7%	35.3%	
Parma Heights city	8,881	6,875	79	5,702	1,094	2,006	77.4%	0.9%	64.2%	12.3%	22.6%	35.8%	
Maple Heights city	9,121	7,694	51	6,543	1,100	1,427	84.4%	0.6%	71.7%	12.1%	15.6%	28.3%	
North Royalton city	13,200	11,109	0	9,873	1,236	2,091	84.2%	0.0%	74.8%	9.4%	15.8%	25.2%	
Garfield Heights city	11,203	9,058	39	8,428	591	2,145	80.9%	0.3%	75.2%	5.3%	19.1%	24.8%	
South Euclid city	8,842	7,241	32	6,889	320	1,601	81.9%	0.4%	77.9%	3.6%	18.1%	22.1%	
Parma city	32,577	28,492	138	25,771	2,583	4,085	87.5%	0.4%	79.1%	7.9%	12.5%	20.9%	
Lakewood city	24,109	21,054	0	19,200	1,854	3,055	87.3%	0.0%	79.6%	7.7%	12.7%	20.4%	
Cleveland Heights city	19,814	17,791	75	15,822	1,894	2,023	89.8%	0.4%	79.9%	9.6%	10.2%	20.1%	
North Olmsted city	13,012	11,355	0	10,473	882	1,657	87.3%	0.0%	80.5%	6.8%	12.7%	19.5%	
Rocky River city	8,760	7,718	0	7,295	423	1,042	88.1%	0.0%	83.3%	4.8%	11.9%	16.7%	
Strongsville city	17,634	15,855	83	14,875	897	1,779	89.9%	0.5%	84.4%	5.1%	10.1%	15.6%	
Shaker Heights city	10,710	9,963	0	9,120	843	747	93.0%	0.0%	85.2%	7.9%	7.0%	14.8%	
Westlake city	13,418	12,525	0	11,550	975	893	93.3%	0.0%	86.1%	7.3%	6.7%	13.9%	
Salon city	8,527	7,788	27	7,420	341	739	91.3%	0.3%	87.0%	4.0%	8.7%	13.0%	

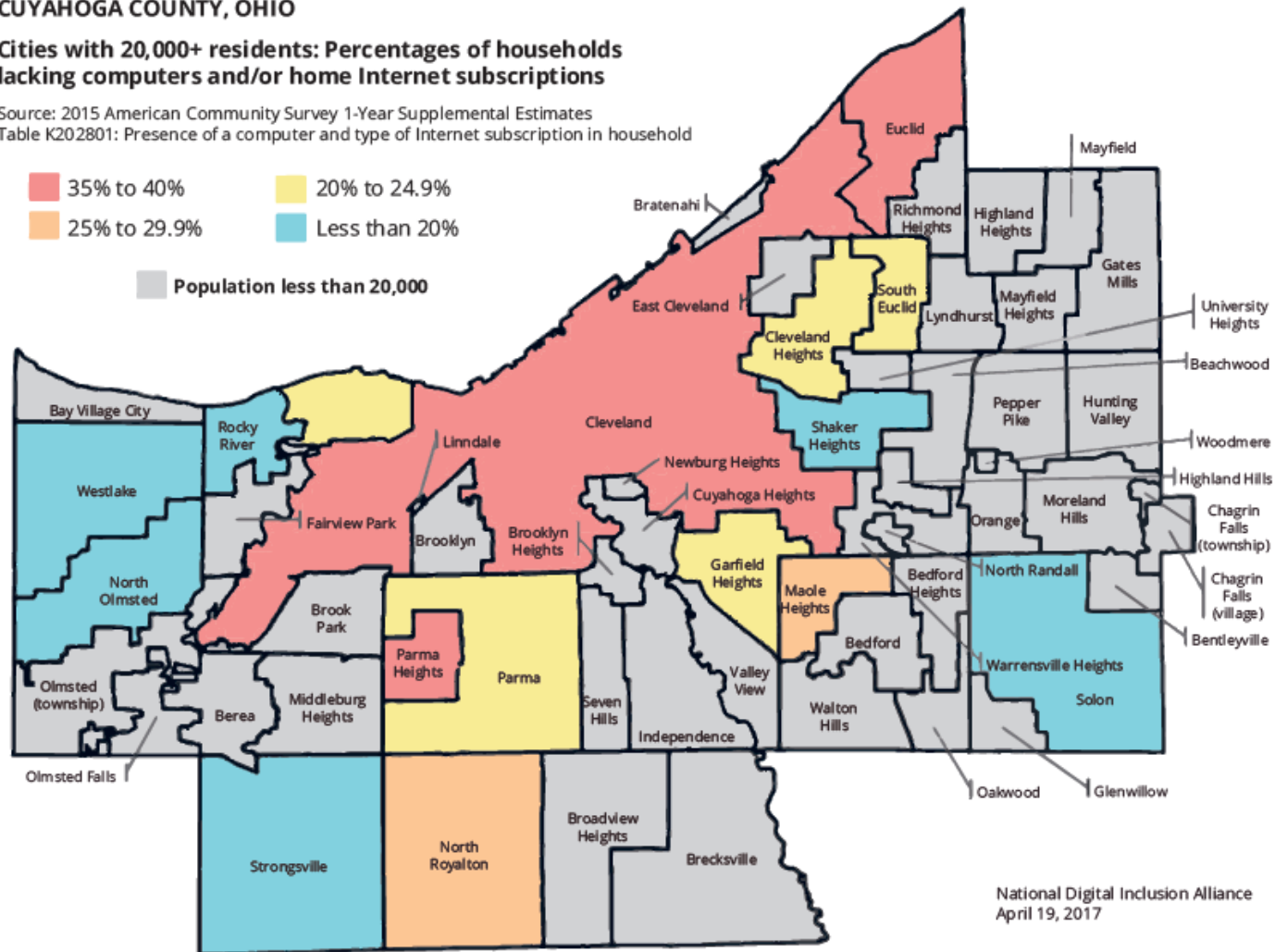
For Williamson County, this would be our major 7 cities, then extra-territorial jurisdictions and rural areas.

Map 1

CUYAHOGA COUNTY, OHIO

Cities with 20,000+ residents: Percentages of households lacking computers and/or home Internet subscriptions

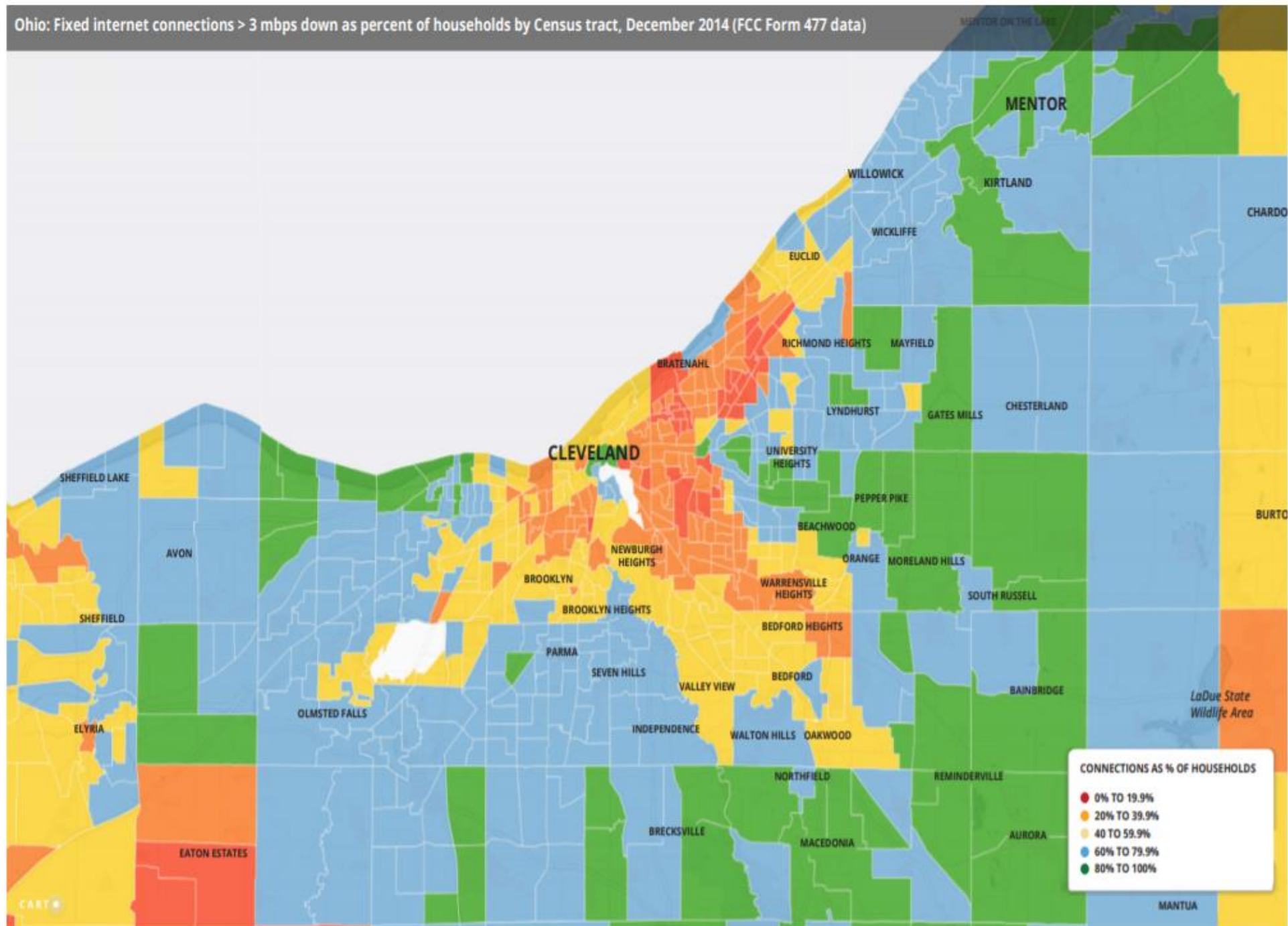
Source: 2015 American Community Survey 1-Year Supplemental Estimates
Table K202801: Presence of a computer and type of Internet subscription in household



National Digital Inclusion Alliance
April 19, 2017

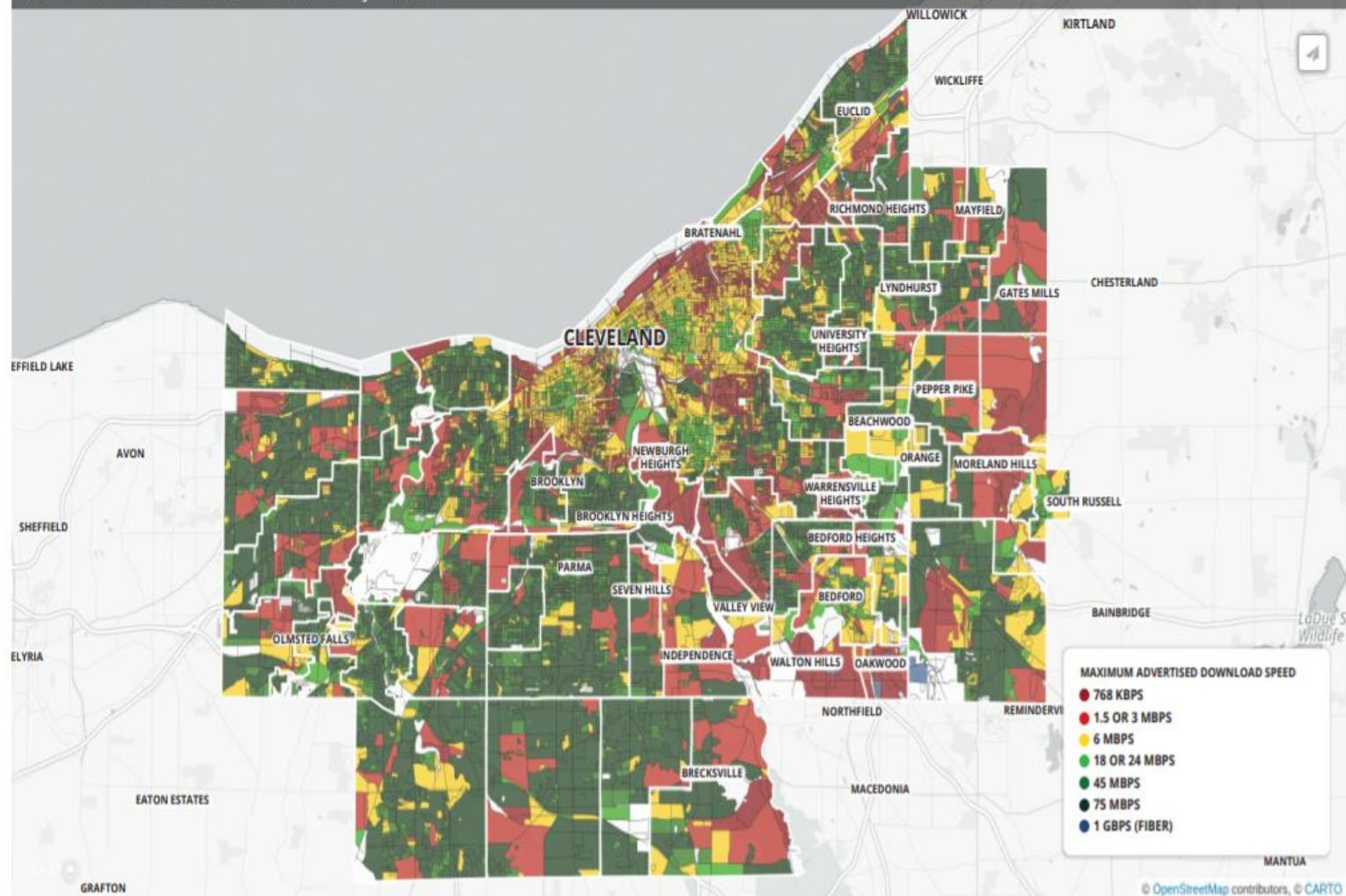
For Wilco, we'd perhaps start at all 7 cities, then reasonable rural and extra-jurisdictional territories around the cities.

Ohio: Fixed internet connections > 3 mbps down as percent of households by Census tract, December 2014 (FCC Form 477 data)



Cuyahoga County Census blocks: AT&T maximum advertised fixed Internet download speeds, June 2016

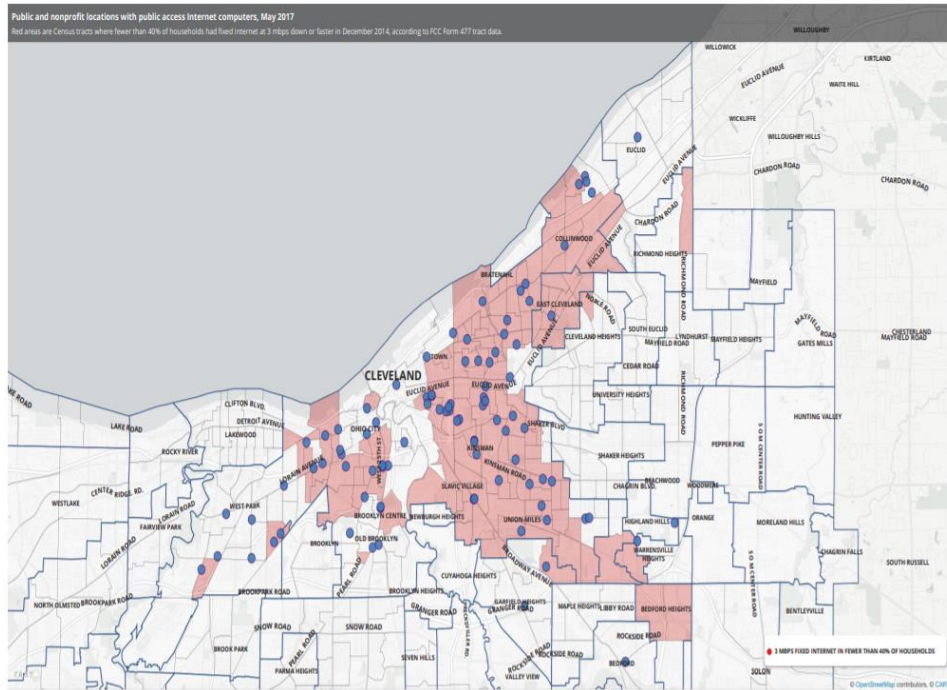
Source: FCC Form 477 Census block data for June 2016



Map current measured/extrapolated speeds in this way in Williamson County (this is older data)

Would be wonderful to have this data by Vendor

Noting locations of public access points for broadband



Homes missing connectivity



Table 2: Public and nonprofit locations with public Wi-Fi access

NAME	LOCATION	AFFILIATION	PUBLIC Wi-Fi	
			INSIDE ONLY	OUTSIDE
Brooklyn Center Plaza (CYC Center)	3730 Pearl Rd., Cleveland	ASC3		Shopping plaza
Old Brooklyn Connected	Cleveland Ward 13 (220 access points)	City of Cleveland		Neighborhood
Public Square	Public Square, Cleveland	City of Cleveland		Downtown park
Tri-C Metro Campus	2900 Community College Ave., Cleveland	Tri-C		Campus
Addison Branch CPL	6901 Superior Ave., Cleveland	Cleveland Public Library	Library	
Brooklyn Branch CPL	3706 Pearl Rd., Cleveland	Cleveland Public Library	Library	
Carnegie West Branch CPL	1900 Fulton Rd., Cleveland	Cleveland Public Library	Library	
Cleveland City Hall	601 Lakeside Ave., Cleveland	City of Cleveland	Public building	
Collinwood Branch CPL	856 East 152nd St., Cleveland	Cleveland Public Library	Library	
East 131st Street Branch CPL	3830 East 131st St., Cleveland	Cleveland Public Library	Library	
East Cleveland Public Library	14101 Euclid Ave., East Cleveland	East Cleveland Public Library	Library	
Eastman Branch CPL	11602 Lorain Ave., Cleveland	Cleveland Public Library	Library	
Estabrook Recreation Center	4125 Fulton, Cleveland	Cleve Div of Recreation	Rec center	
Euclid Public Library	631 East 222nd St., Euclid	Euclid Public Library	Library	
Fairfax Connection (PNC Bank)	8220 Carnegie Ave., Cleveland	Independent	CTC	
Fleet Branch CPL	7224 Broadway Ave., Cleveland	Cleveland Public Library	Library	
Fulton Branch CPL	3545 Fulton Rd., Cleveland	Cleveland Public Library	Library	
Garden Valley Branch CPL	7201 Kinsman Rd., Cleveland	Cleveland Public Library	Library	
Garfield Heights Branch CCPL	5409 Turney Rd., Garfield Heights	Cuyahoga County Public Library	Library	
Glenville Branch CPL	11900 St. Clair Ave., Cleveland	Cleveland Public Library	Library	
Glenville Recreation Center	680 East 113th, Cleveland	Cleve Div of Recreation	Rec center	
Harvard-Lee Branch CPL	16918 Harvard Ave., Cleveland	Cleveland Public Library	Library	
Hough Branch CPL	1566 Crawford Rd., Cleveland	Cleveland Public Library	Library	
Jefferson Branch CPL	850 Jefferson Ave., Cleveland	Cleveland Public Library	Library	
Langston Hughes Branch CPL	10200 Superior Ave., Cleveland	Cleveland Public Library	Library	
Lorain Branch CPL	8216 Lorain Ave., Cleveland	Cleveland Public Library	Library	
Main Library – Tech Central	325-525 Superior Ave., Cleveland	Cleveland Public Library	Library	
Maple Heights Branch CCPL	5225 Library Lane, Maple Heights	Cuyahoga County Public Library	Library	
Martin L. King, Jr. Branch CPL	1962 Stokes Blvd., Cleveland	Cleveland Public Library	Library	
Memorial-Nottingham Branch CPL	17109 Lake Shore Blvd., Cleveland	Cleveland Public Library	Library	
Mt. Pleasant Branch CPL	14000 Kinsman Rd., Cleveland	Cleveland Public Library	Library	
Ohio Library for the Blind & Physically Disabled	17121 Lake Shore Blvd., Cleveland	Cleveland Public Library	Library	