

Home Mortgage Lending Activities of Banks in Hartford

Nhat Pham '18 and James Jeter, [Hartford Community Loan Fund](#)
[Trinity College DataViz Seminar](#) Spring 2017

Hartford Community Loan Fund



**HARTFORD
COMMUNITY
LOAN FUND**

Who are we:

a **Community Development Financial Institution** (CDFI), certified by the US Treasury Department

What do we do:

The mission of HCLF is to provide and promote just and affordable financial services that benefit the low-wealth residents of Hartford.

What is a CDFI?

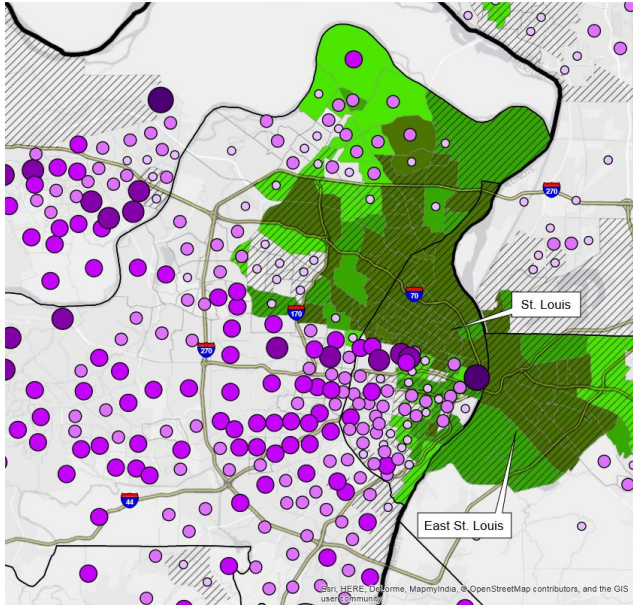
- ◆ **A CDFI** provides financial products and services in underserved communities. CDFIs also work to impact systems and policies that impact the economic well-being of marginalized communities.

- ◆ **Where do CDFIs get their money?**

From socially minded investors and banks. Since 1977, banks have been required by the Community Reinvestment Act (CRA) to invest in communities where they also take deposits. Many banks choose to meet this obligation by lending to CDFIs who in turn make loans in low and moderate income communities.

Vision: To assess patterns of bank lending in Hartford's neighborhoods and determine what banks are effective at investing in Hartford's low income neighborhoods and which are not.

Home Purchase Mortgage Lending in the St. Louis MSA

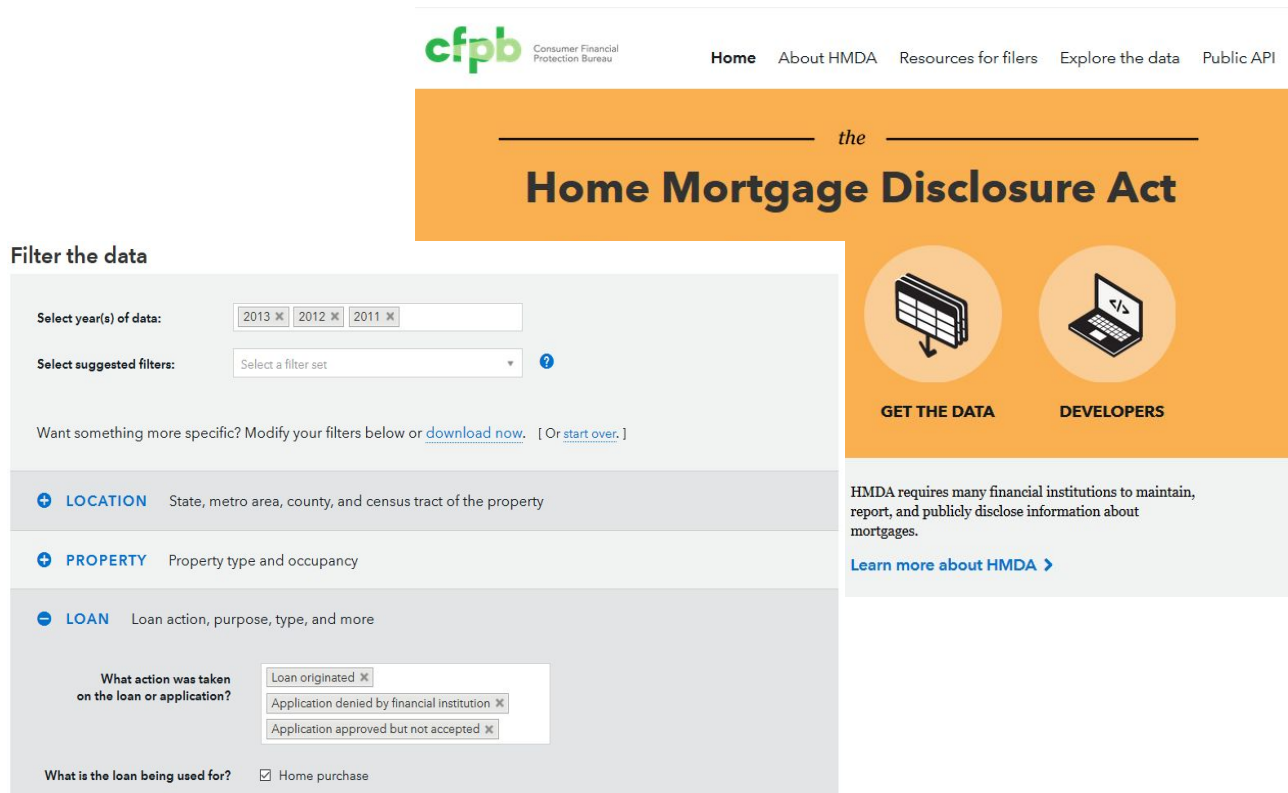


In St. Louis and in other cities, a group of CDFIs and other community stakeholders have examined publicly available bank lending data to assess whether or not area banks are effectively meeting their CRA obligation to provide credit in low and moderate income neighborhoods. Their analysis has shown several banks have ‘redlined’ low income neighborhoods and communities of color like the northside of St. Louis and predominantly African-American towns like Ferguson.

Process: Converting Public Data into a Digital Map

Step 1:

Filter 2011-15
HMDA record
data for
Hartford Metro
Area on
[Consumer
Financial
Protection
Bureau](#)
(CFPB)



The screenshot displays the CFPB's Home Mortgage Disclosure Act (HMDA) data filter interface. At the top, the CFPB logo and navigation links (Home, About HMDA, Resources for filers, Explore the data, Public API) are visible. Below the header, a large orange banner reads "the Home Mortgage Disclosure Act". To the right of the banner are two circular icons: one with a calendar and a download arrow labeled "GET THE DATA", and another with a laptop and code symbols labeled "DEVELOPERS". Below the banner, a section titled "Filter the data" contains several filter options. The "Select year(s) of data:" section has buttons for 2013, 2012, and 2011. The "Select suggested filters:" section has a dropdown menu labeled "Select a filter set" and a help icon. Below this, a link says "Want something more specific? Modify your filters below or [download now.](#) [Or [start over.](#)]". The filter categories are: LOCATION (State, metro area, county, and census tract of the property), PROPERTY (Property type and occupancy), and LOAN (Loan action, purpose, type, and more). The LOAN section is expanded, showing a dropdown for "What action was taken on the loan or application?" with options: "Loan originated", "Application denied by financial institution", and "Application approved but not accepted". At the bottom, there is a checkbox for "What is the loan being used for?" with the option "Home purchase" selected.

cfpb Consumer Financial Protection Bureau

Home About HMDA Resources for filers Explore the data Public API

the

Home Mortgage Disclosure Act

GET THE DATA DEVELOPERS

HMDA requires many financial institutions to maintain, report, and publicly disclose information about mortgages.

[Learn more about HMDA >](#)

Filter the data

Select year(s) of data: 2013 2012 2011

Select suggested filters: Select a filter set ?

Want something more specific? Modify your filters below or [download now.](#) [Or [start over.](#)]

+ LOCATION State, metro area, county, and census tract of the property

+ PROPERTY Property type and occupancy

- LOAN Loan action, purpose, type, and more

What action was taken on the loan or application?

Loan originated Application denied by financial institution Application approved but not accepted

What is the loan being used for? ☒ Home purchase

Process: Converting Public Data into a Digital Map

→ Over 54,000 rows of data;

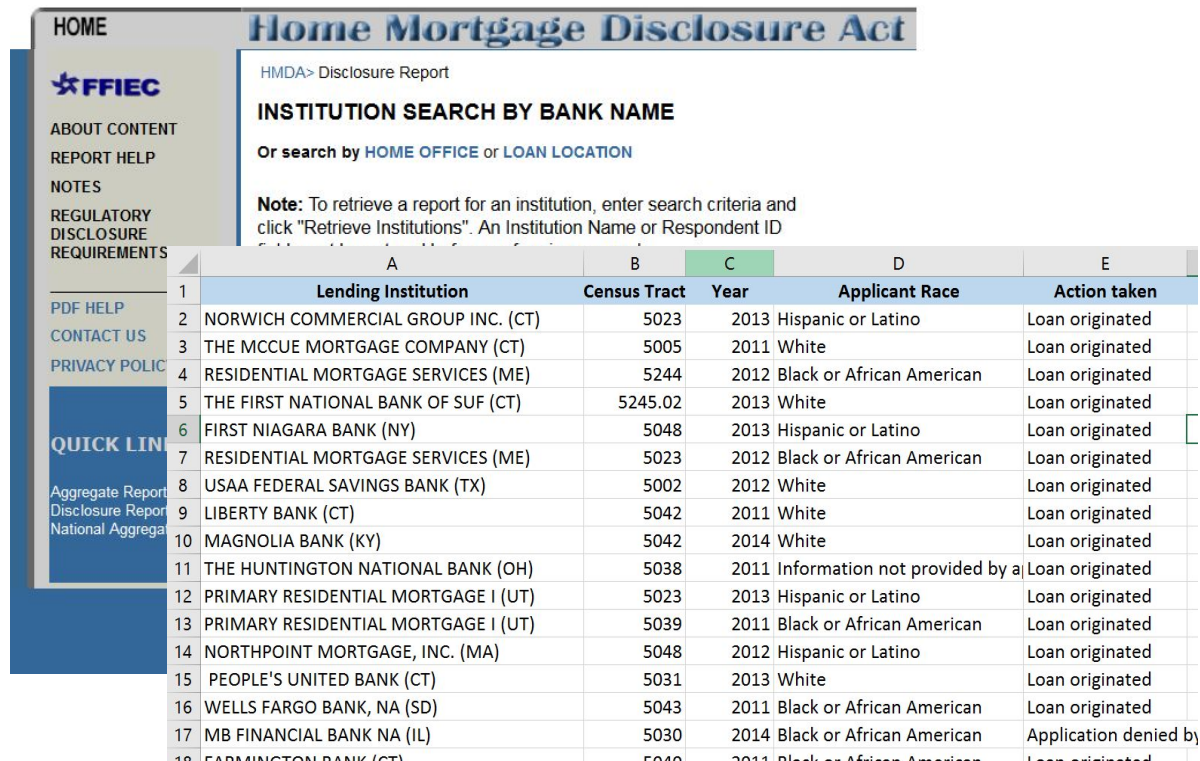
Each gives information about a loan application in a census tract

tract	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AA													
tract	to	rc	sp	pop	minority	number	loan	a	hud	m	i	p	s	tate	n	k	a	sequen	response	purchase	property	preappr	owner	rmsd	loan	y	loan	y	lien	s	hoepa	edit	x	denial	denial	county	co	app	co	app	co	app	co	app	co	census	as	of	applies	applicant	age
02	162.14		3214	6.22	1051	1103	263	877500	39	Connect	CT							221	00-3324	Commere	One-to-f	Not appli	Owner-o	Hartford,	FHA-ins.	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		5202		2011		0	Male	
03	85.33		3523	53.62	1064	1357	184	877500	56	Connect	CT							756883	451965	Loan w/a	One-to-f	Preappr	Owner-o	Hartford,	FHA-ins.	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4968		2012		0	Male	
04	159.63		7718	9.5	2619	2884	318	877500	90	Connect	CT							842	1E+09	Affiliate r	One-to-f	Preappr	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		5204		2012		0	Male	
05	87.79		4394	12.61	137	1574	155	877500	50	Connect	CT							123	80	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(Female					White	Hispanic	5143		2011		0	Female		
06	106.82		3530	14.56	1337	1381	132	865000	73	Connect	CT							878874	451965	Ginnie M	One-to-f	Preappr	Owner-o	Hartford,	FHA-ins.	Home pu	Secured	Not a HOEPA loan								Hartford	(Female					White	Not Hspis	5110		2011		0	Male		
07	102.42		7074	6.66	2043	2557	193	865000	31	Connect	CT							390	00-3324	Commere	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(Male					White	Not Hspis	4058		2011		0	Female		
08	111.54		8249	24.34	2113	2215	147	877700	81	Connect	CT							202737	146672	Fannie M	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HO Quality edit failure only								Hartford	(No co-applicant					No co-ap	No co-ap		4903		2012		0	Male	
09	71.51		2210	13.08	504	769	150	877700	85	Connect	CT							3582	8E+09	Ginnie M	One-to-f	Not appli	Owner-o	Hartford,	FHA-ins.	Home pu	Secured	Not a HOEPA loan								Hartford	(Female					White	Not Hspis	4807		2012		0	Male		
10	150.56		6496	3.39	2135	2335	160	865000	113	Connect	CT							162	80	Fannie M	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4681		2011		0	Female	
11	113.74		3423	3.36	1139	1236	326	865000	78	Connect	CT							163	30245	Fannie M	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HO Quality edit failure only								Tolland C	Female					White	Not Hspis	5382		2011		0	Male		
12	109.57		3473	15.95	1324	1419	175	865000	70	Connect	CT							339	00-3324	Commere	One-to-f	Not appli	Owner-o	Hartford,	FHA-ins.	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4681		2011		0	Female	
13	135.13		9318	6.91	3002	3088	110	877700	76	Connect	CT							2E+06	451965	Loan w/a	One-to-f	Preappr	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Tolland C	No co-applicant					No co-ap	No co-ap		5311		2012		0	Information no	
14	124.09		5166	4.78	1819	1952	252	855000	61	Connect	CT							5769	01-0464	Commere	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Tolland C	No co-applicant					No co-ap	No co-ap		5382		2013		0	Female	
15	102.29		2166	10.8	758	843	346	865000	110	Connect	CT							196	80	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4874		2011		0	Male	
16	128.19		5739	4.36	1807	1956	125	865000	62	Connect	CT							1082	80	Fannie M	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Tolland C	No co-applicant					No co-ap	No co-ap		5331		2011		0	Female	
17	57.65		4728	55.33	661	1448	151	865000	48	Connect	CT							481	00-3324	Commere	One-to-f	Not appli	Owner-o	Hartford,	FHA-ins.	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		5106		2011		0	Female	
18	111.54		8249	24.34	2113	2215	178	877700	72	Connect	CT							203544	480228	Freddie F	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4903		2012		0	Female	
19	113.88		5942	10.16	1657	2157	240	877700	70	Connect	CT							12845	8E-0860	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Middlesex	Information not provided by applicant in mail, Inter					White	Not Hspis	5703		2012		0	Information no		
20	132.59		6716	12.16	1733	1789	183	865000	85	Connect	CT							231	80	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(Female					No co-ap	No co-ap		4903		2011		0	Male	
21	151.53		5662	3.54	1768	1809	160	865000	89	Connect	CT							188	58193	Life insur	One-to-f	Preappr	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HO Quality edit failure only								Hartford	(No co-applicant					No co-ap	No co-ap		5201		2011		0	Female	
22	96.34		3954	11.91	1361	1218	50	865000	40	Connect	CT							681	00-3324	Commere	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Middlesex	Female					White	Not Hspis	5701		2011		0	Female		
23	106		3416	13.88	1240	1555	186	877700	54	Connect	CT							531993	451965	Loan w/a	One-to-f	Preappr	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		5152		2012		0	Female	
24	135.17		4400	36.64	1319	1550	171	865000	59	Connect	CT							13	2109	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4715		2013		0	Female	
25	150.56		6496	3.39	2135	2335	240	865000	47	Connect	CT							284	80	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(Female					No co-ap	No co-ap		4681		2011		0	Female	
26	65.09		6903	47.14	1536	2170	87	865000	39	Connect	CT							18208	Other typ	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(No co-applicant					No co-ap	No co-ap		4167		2011		0	Male		
27	70.55		3300	51.36	527	617	108	865000	86	Connect	CT							26	80	Loan w/a	One-to-f	Not appli	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(Female					Black or / Not Hspis	5105		2011		0	Male			
28	198.93		4340	10.34	1352	1465	228	877700	108	Connect	CT							1E+06	451965	Eonnie M	One-to-f	Preappr	Owner-o	Hartford,	Conventi	Home pu	Secured	Not a HOEPA loan								Hartford	(Male					White	Not Hspis	4977		2012		0	Female		

Process: Converting Public Data into a Digital Map

Step 2:

Clean, extract data for Hartford City and look up institution name by respondent ID on [Federal Financial Institutions Examination Council](#) (FFIEC)



HOME

Home Mortgage Disclosure Act

HMDA> Disclosure Report

INSTITUTION SEARCH BY BANK NAME

Or search by [HOME OFFICE](#) or [LOAN LOCATION](#)

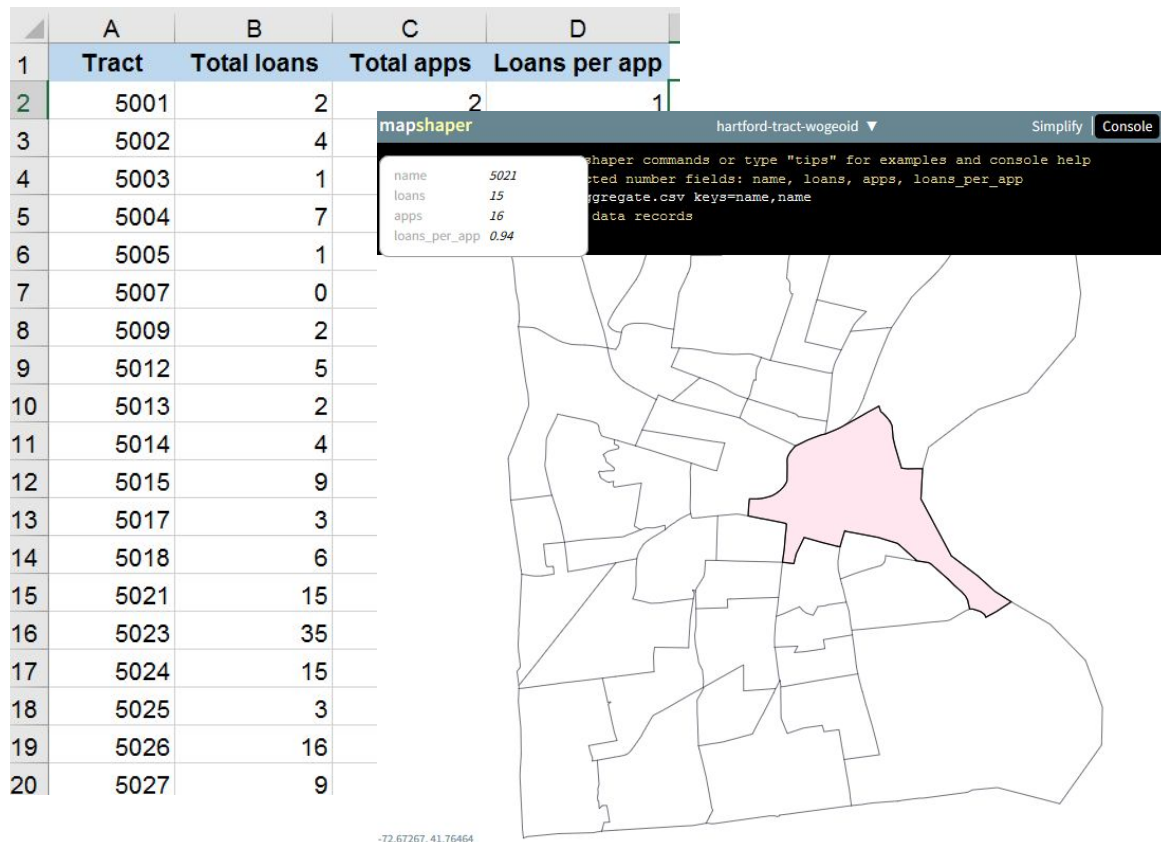
Note: To retrieve a report for an institution, enter search criteria and click "Retrieve Institutions". An Institution Name or Respondent ID

	A	B	C	D	E
	Lending Institution	Census Tract	Year	Applicant Race	Action taken
1	NORWICH COMMERCIAL GROUP INC. (CT)	5023	2013	Hispanic or Latino	Loan originated
2	THE MCCUE MORTGAGE COMPANY (CT)	5005	2011	White	Loan originated
3	RESIDENTIAL MORTGAGE SERVICES (ME)	5244	2012	Black or African American	Loan originated
4	THE FIRST NATIONAL BANK OF SUF (CT)	5245.02	2013	White	Loan originated
5	FIRST NIAGARA BANK (NY)	5048	2013	Hispanic or Latino	Loan originated
6	RESIDENTIAL MORTGAGE SERVICES (ME)	5023	2012	Black or African American	Loan originated
7	USAA FEDERAL SAVINGS BANK (TX)	5002	2012	White	Loan originated
8	LIBERTY BANK (CT)	5042	2011	White	Loan originated
9	MAGNOLIA BANK (KY)	5042	2014	White	Loan originated
10	THE HUNTINGTON NATIONAL BANK (OH)	5038	2011	Information not provided by a	Loan originated
11	PRIMARY RESIDENTIAL MORTGAGE I (UT)	5023	2013	Hispanic or Latino	Loan originated
12	PRIMARY RESIDENTIAL MORTGAGE I (UT)	5039	2011	Black or African American	Loan originated
13	NORTHPOINT MORTGAGE, INC. (MA)	5048	2012	Hispanic or Latino	Loan originated
14	PEOPLE'S UNITED BANK (CT)	5031	2013	White	Loan originated
15	WELLS FARGO BANK, NA (SD)	5043	2011	Black or African American	Loan originated
16	MB FINANCIAL BANK NA (IL)	5030	2014	Black or African American	Application denied by
17	FARMINGTON BANK (CT)	5040	2011	Black or African American	Loan originated

Process: Converting Public Data into a Digital Map

Step 3:

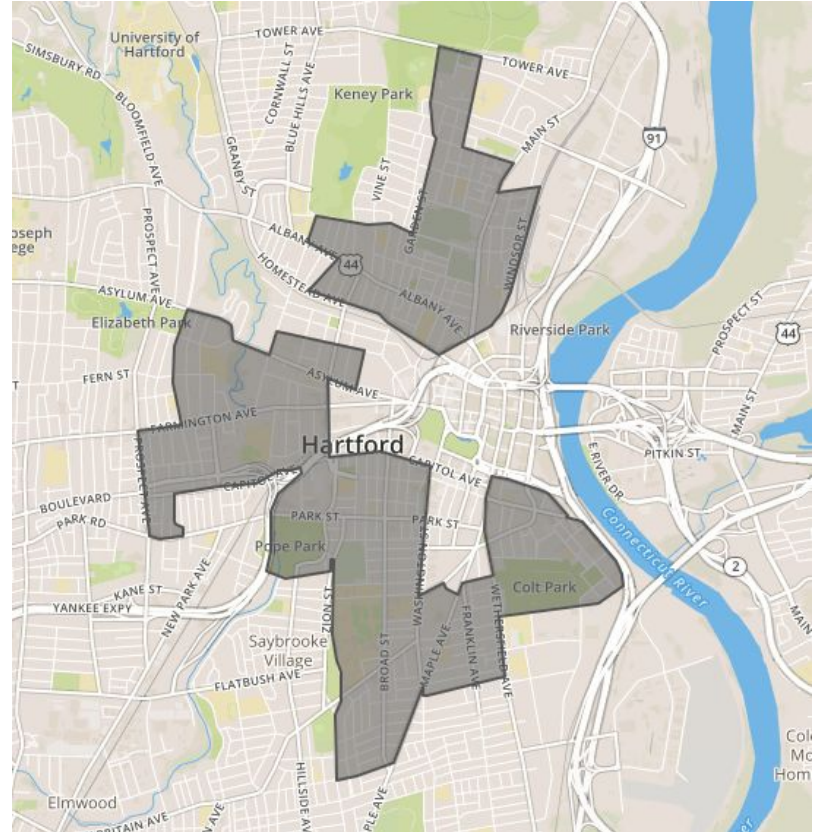
Normalize data
and spatially join
to census tracts
as polygon layers
with [Mapshaper](#)



Process: Converting Public Data into a Digital Map

Step 4:

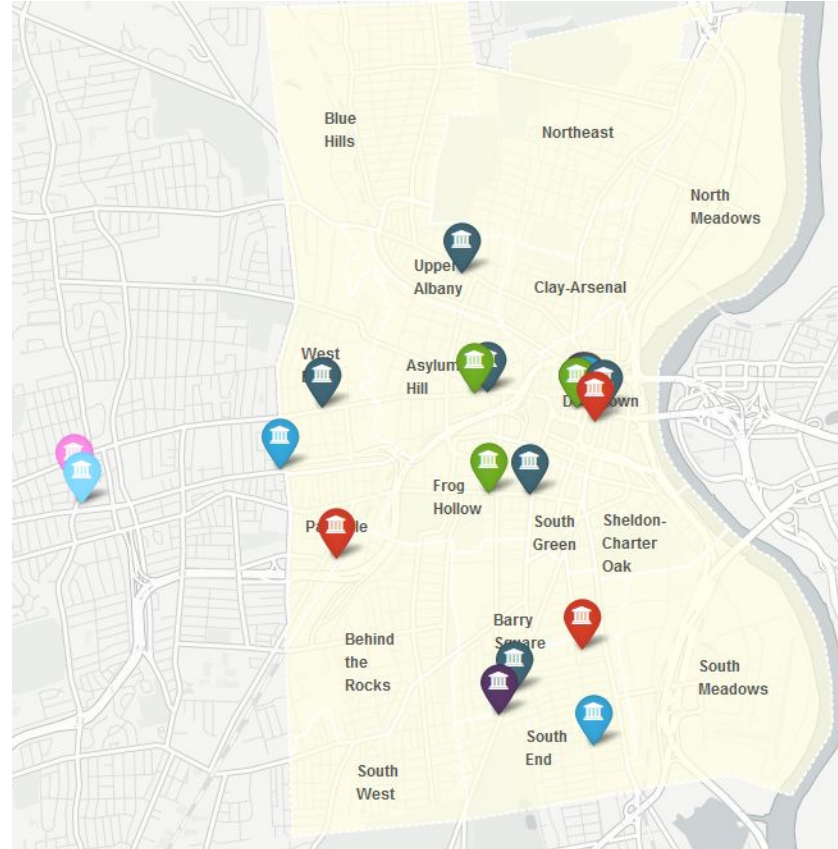
Create a polygon map layer in [Geojson.io](https://geojson.io) for Racial/Ethnic Concentrated Area of Poverty (R/ECAP)



Process: Converting Public Data into a Digital Map

Step 5:

Geocode bank
branches
locations as point
markers on the
Leaflet map with
GoogleSheet

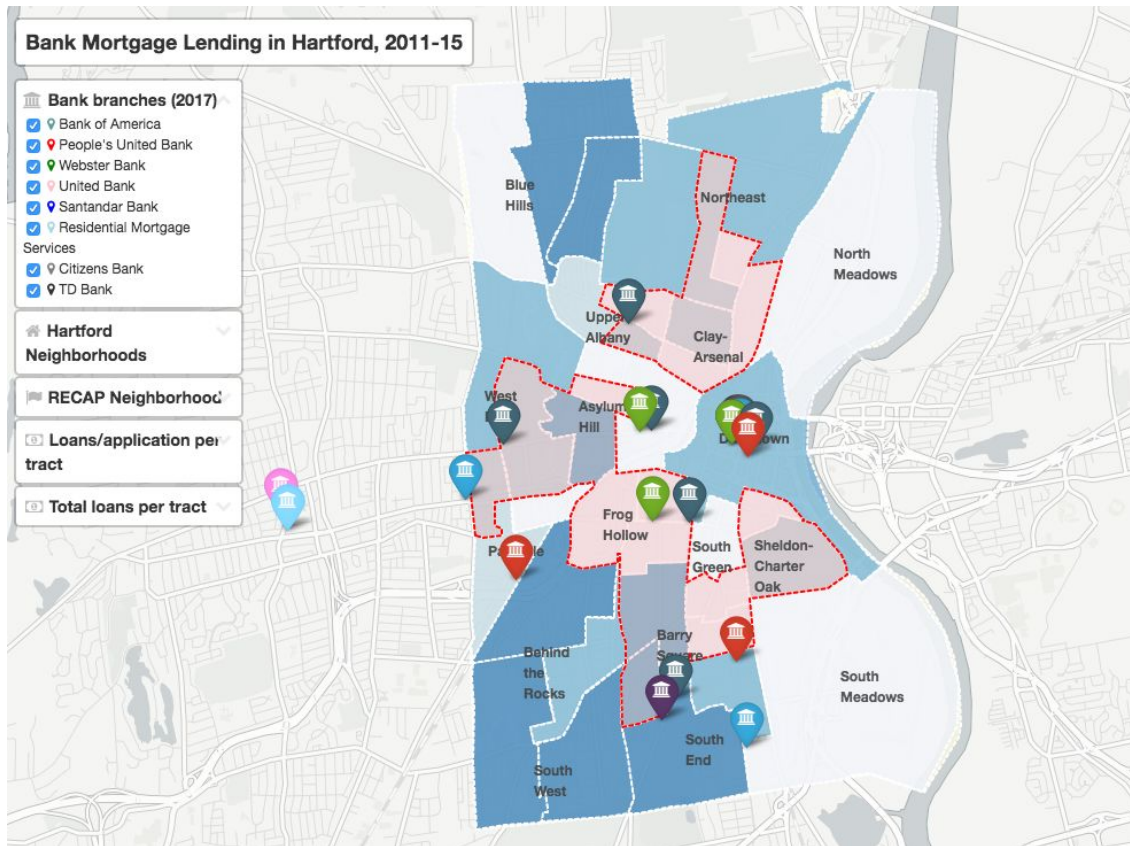


Process: Converting Public Data into a Digital Map

Step 6:

Add all map layers in the map template

[Explore the Map](#)



Reflections and Future Work

- ❖ Data collection, cleaning and normalization
- ❖ Working out different ways to tell the story
- ❖ Learn more about banking industry and not-for-profit financial services

- ❖ Create other data visualization (charts) to show which banks are performing better than others among low income minority
- ❖ Broaden the scope of the project to the Hartford MSA, develop econometric model to analyze and compare current bank lending patterns to historical redlining maps of the Hartford area.