This spreadsheet contains the Regional Data Center's roadmap developed at the March 2017 Property and Housing Data User Group Meeting. It includes updates from the January 2018 meeting, too

On this spreadsheet, you'll find separate tabs for tools, user guide entries, an idea wall, data wish list, and activities being planned by the Regional Data Center. We also included results from a card sorting activity we held at the event.

We welcome you to add your ideas to our lists. We'll also use these lists to enable you to track our progress

Let us know if you have questions or comments at wprdc@pitt.edu

The meeting presentation can be found at   https://docs.google.com/presentation/d/1_AtPuyZDmu48Y3O2bLkczMqYril8mNyF1MocSjvLRZQ/edit?usp=sharing

Here are ideas generated as part of the pass-around activity from the January 2018 meeting

Enhancing affordability and expanding opportunity

Look at where rents are rising, and try to retain affordability
Keep a list of property in legal limbo after receiving no bids in a tax sale
Track evictions and potential evictions
Track where subsidies are expiring
Build an "Equity Atlas" for the Pittsburgh region
What kind of tech/data needs to be funded to expand opportunity?
When looking at opportunity, consider: transit access/frequency, neighborhood assets, food access, employment access/growth, capital investments, political donations, environmental issues (stormwater).
Use HUD's "Communities of Opportunity" data

Addressing Blight and Vacancy
Monitor maintenance of vacant property
Track utility shut-offs, evictions, and indicators of abandonment
Track LIHEAP/CAP low income energy assistance applications
Track property owners with code violations across multiple corporate entities and make sure this information is accessible across magisterial district courts
Track properties that cycle through treasurer's and sheriff's sale
Put vacant properties into the hands of people in need of affordable housing - possibly through a tool to help with housing search process.
Develop a predictive model of blight and vacancy
Look at permit data and other signs of investment
Use data for land banking
Track Low Income Tax Credits, New Markets Tax Credit, Federal/State Awards
Look at crime data

Preventing Displacement
Capture qualitative stories from current tenants
Monitor real estate development (gentrification), including building permits, rents, and sales prices
Track affordable housing expiration dates
Monitor foreclosure and eviction activity - look at property owner/manager behavior
Workforce development - what type of training is needed & how can employers plug-in
Monitor housing units at risk of losing subsidy/income restriction
Know who wants to stay and who wants to move
Look at formerly incarcerated
Assess resident case management needs re. Housing
Connect a property owner to home repair services before owner sells/abandons home due to maintenance cost

Analyzing Community Conditions/Planning
Track quality of life complaints in relation to resident stability to demonstrate value of homeownership
Monitor over-occupancy
Monitor vacant property maintenance, utility shutoffs
Code violations by property owner
More-easily decipher property use and condition in the assessment data
Better-understand likelihood of needing human services
Link property data to data on socioeconomic status in the American Community Survey
Explore municipal/school property tax delinquency outside the City
Technical assistance to data users - help them find and make sense of data on their own.
Provide library of comprehensive plans and zoning maps/ordinances
Explore transit access
Create catalog or list of who in the community has completed a recent property condition survey

Improve Health, Safety, and the Environment
Look at health department violations to identify repeat offenders and enforce compliance with codes to improve tenants lives
Look at data related to asthma prevalence (air quality, carpeting, traffic congestion, etc)
Explore housing age especially in multi-unit property
Connect data on women receiving prenatal care to housing data and lead education/remediation services
Comprehensive data on sidewalk conditions needed
Vacancy data
Look at County criminal justice data - new task force
Look at properties with lead water lines and also where lead abatements have occurred.
Look at data on chronic disease
Explore traffic crash and congestion
Stormwater runoff risk
Proximity to greenspace
Look at medically-underserved communities
Explore school district rankings and report cards

Other

Connections to other databases - transit, code enforcement, permits, health, etc.
PA land records - County deeds and mortgages (with owner names)
Crash course in pushing out automated data feeds and maps
City budget to top contracts
Crowd-sourced stories to accompany data (maps with annotations)
Incorporate public transit routes
Show parcels by rent levels in relation to transit (stops, frequency, lines)
Easily see physical survey data with updated property and other data
Magistrate appearances for code violations (LLC, Corporations, etc)
Rental registry data

On this sheet, you can view a listing of our property and housing data wish-list.

Our goal is to support regional priorities around land recycling, affordable housing, housing stability, cross-municipal data sharing, and the P4 Performance measures.

We have added columns to show how our wish list aligns with these goals.

Feel free to nominate datasets below our initial list, or use the "Dataset Request" feature on the open data portal   https://data.wprdc.org/datarequest

Dataset Name	Description	Source	Notes	Land recycling	Affordable housing	Housing Stability	P4 Performance Measures	Municipal Collaboration	Other	Status	Status Update Date
Area Median Income		U.S. HUD			1		1				3/15/17
Building permits		City of Pittsburgh	Working on better format for this data.	1						Awaiting approval to publish	3/15/17
Building permits		Non-City Municipality		1				1		Baldwin Borough is our 1st non-City municipal pilot test for permit, code violation, and tax delinquency data	3/15/17
Certified Redevelopment Area		City of Pittsburgh (Planning Commission)		1							3/15/17
Condemned Property		City of Pittsburgh (PLI)		1			1				3/15/17
Demolition Permits	Demolition permits	City, other municipality									3/15/17
Demolition (municipally-funded)	Properties that the local government demolishes (directly or through contract) as a result of neglect or emergency situation. Permits may not be obtained.	City, other municipality									3/15/17
Emergency Calls for Service (911)		Allegheny County	This data can support nuisance property ordinances. We would need to aggregate to publish as open data to protect privacy.	1						Will work with Allegheny County and Pittsburgh Foundation eviction partners to request.	3/15/17
Eviction Filings		PA Courts				1					3/15/17
Fire locations	Location of structure fires	Municipal / County Fire Marshal	City data now available Aug. 2017	1							3/15/17
Green infrastructure investments		Municipal, authority, nonprofit	GTECH's Lots to Love tool captures many of these.				1				3/15/17
Homeowners' Emergency Mortgage Assistance Program / ACT 91 applications/loans		PHFA	May only be able to obtain zip code statistics		1						3/15/17
Housing Choice Voucher use	Tract level counts of voucher users	HUD/Housing Authorities	DHS says ask authorities - McKeesport may not have data.		1						3/15/17
Market Value Analysis	Tract-level MVA designations	Allegheny County (Economic Development)	Analysis not yet complete	1	1						3/15/17
Market Value Analysis		Urban Redevelopment Authority of Pittsburgh	Now live as open data Aug. 2017	1	1		1				3/15/17
Mortgage foreclosure Act 91 notices		PA Housing Finance Agency	May be able to obtain zip code statistics	1		1					3/15/17
Mortgage foreclosure filings		PA Courts Approval Required - Allegheny County Court Records the custodian	Now live as open data 9/7/17							Requested from County Courts	6/19/17
Priority Neighborhood (for Redevelopment)							1				3/15/17
Project-based subsidized housing	Low Income Housing Tax Credit, Section 8 Project, etc.	Various	We will coordinate efforts with the City's Urban Redevelopment Authority and County Department of Human Services. All are compiling lists of subsidized housing. We'll add specific data targets to this roadmap after coordinating with the URA and DHS.		1						3/15/17
Property Condition Survey	Locally-collected survey data		There is a project coming together now including the Regional Data Center, GTECH, Jackson Clark Partners, and Loveland Technologies. The project will standardize property survey instruments, provide data collection technology, and support to orgs. collecting and using this data.	1			1				3/15/17
Property tax abatements	Local Economic Revitalization Tax Act District (LERTA)	City of Pittsburgh		1	1						3/15/17
Property Tax Delinquency		City of Pittsburgh + school	Now available as open data Aug. 2017	1						Undergoing final review	3/15/17
Property Tax Delinquency		Allegheny County (Treasurer)	Requires County Treasurer approval	1							3/15/17
Property Tax Delinquency		Baldwin Borough	Intend to publish annually	1						Waiting for 2016 results	3/15/17
Property unfit for human habitation	data quality improvements	Allegheny County (Health)				1					3/15/17
Public Housing Authority Properties		Public Housing Authorities			1						3/15/17
Publicly-owned parcels	Municipal, County, Authority	Various		1							3/15/17
Recognized Community Organizations		City of Pittsburgh (Planning)					1				3/15/17
Sheriff Sales		Allegheny County (Sheriff)	Format standardized and improved Feb. 2017. County intends to add Parcel ID later in 2017	1						Awaiting inclusion of parcel ID to data	3/15/17
Tax Increment Finance Districts				1							3/15/17
Tax liens - municipal, school, county, water/sewer		Allegheny County	Will update monthly. Now available as open data	1						Published, 2016-17 updates in process	4/1/17
Treasurers/Tax Sale		City of Pittsburgh	Now available as open data Aug. 2017	1							3/15/17
Utility disconnections/Winter survey		Gas/electric companies	The PA Public Utilities Commission requires utilities to report each property receiving a shutoff in the calendar year each December as part of the Winter Survey program	1			1			May not be available as open data	3/15/17
DHS housing providers			DHS pulls together data from multiple sources and makes phone calls to get a sense of available units and wait times. Can we automate this list?		1						5/14/17
HUD TRACCS data		HUD	Property owners submit invoices to hud through TRACCS system. Can be a source for occupancy and vacancy - look at publisher's guide for traccs. Jane Miller at HUD can help		1					DHS wish list	5/14/17
Days on market and price changes		West Penn Multi-list	market health indicators	1	1					DHS wish list	5/14/17
Feel free to add your wish list items here...											
Dataset Name	Description	Source	Notes								

At the March 2017 user group meeting, the Regional Data Center unveiled the property and housing data user guide https://tools.wprdc.org/guides/property/

User guides are designed to provide context and guidance for data users.

Our plan is to add several new entries each month, and we will use this spreadsheet to keep you informed on our progress

We have included a list of topics in our roadmap below, and welcome your additions.

We also encourage you to share general feedback on the guide (email us at wprdc@pitt.edu).

Note - assessment and 311 detailed user guides are complete and available on the open data portal.

Topic	Target publication month	Status		
Property transactions	March, 2017	Complete		
Homeownership	March, 2017	Complete (DASH)		
Housing age	March, 2017	Complete (DASH)		
Tax liens	March, 2017	in progress - Late (we're sorry!)		
Property Ownership	TBD	Sunny		
Property characteristics/condition	TBD			
Land Use	TBD	Sunny		
Vacant Land/buildings	TBD			
Tax Delinquency	TBD			
Mortgage Foreclosure	TBD			
Evictions	TBD			
Zoning and planning	TBD			
Property valuations/assessed value	TBD			
Special Tax Districts/abatements	TBD			
Sheriff sales	TBD			
Tax abatements	TBD			
Master addresses/parcels	TBD			
Affordable housing	TBD			
Development and investment (including permits)	TBD			
Environmental hazards (lead, asbestos, etc)	TBD			
Add your suggested topics below				
Health and Human Environment Inspections(wprdc-county's health)				
Foreclosures, tax liens, and evictions				
Tax liens				
Tax Delinquency				
Mortgage Foreclosure				
Sheriff Sales				
Evictions				

	911			

At the meeting, we shared a sneak preview of several tools currently under development.

We will provide status updates here.

Tool	Description	URL	Developer	ETA	Notes	Current Status	Status Date Updated
Parcels n'at parcel information extractor 2.0	This tool allows a user to develop a custom extract from assessment data and other feeds. Several different data formats are supported.	http://tools.wprdc.org/parcels-n-at/	Regional Data Center	Beta launched 3/16/17		Live in beta form	3/17/17
Parcel Dashboard	The parcel dashboard will integrate many different data feeds for one property. By clicking or searching on a property, you can see lots of data in one place, including assessment, tax liens, code violations, sales history, etc.	http://tools.wprdc.org/property-dashboard/	Regional Data Center	Beta Launched 3/23/17		Live in beta form	3/23/17
Property survey tool	We are working with GTECH, Loveland Technologies, and other partners to make hand-held tools available for conducting physical surveys in neighborhoods. We will also be pilot-testing training materials and data collection methods.		Regional Data Center	Spring 2017		Tied-in with learning circle activity/class	3/17/17
Parcel map data explorer (many layers)	We are designing a dynamic property map to fill the gap left by the death of the Pittsburgh Neighborhood and Community Information System map. See the "Card Sorting" tab for a list of features being contemplated for inclusion in the mapping tool.		Regional Data Center	Spring 2017		We're integrating this feature with the property dashboard	4/13/17
City Finance map	At the user group meeting, the City I&P staff also gave a demonstration of their own parcel map. Users will be able to view parcel data and open a popup window to access parcel data. The tool is being developed for the Department of Finance, and will be publicly accessible.		City of Pittsburgh	Spring, 2017			3/17/17

Property Map Card Sorting Exercise

The Regional Data Center is planning to build an interactive parcel map. A card sorting activity was prepared for the meeting.

Participants were asked to work in groups of 3-4 people and prioritize features into one of three groups based on their importance..

Features were written on note cards and participants were asked to assign one of three grades to each card.

Features graded "A" were viewed as essential. Features graded "B" were nice to have. Features graded "C" were viewed as not as important

To develop an average score, A's were given 3 points, B's 2 points, and C's 1 point. Scores were averaged across the seven groups and given an overall grade, as seen here.

Features	Group A	Group B	Group C	Group D	Group E	Group F	Group G	Score	Importance of Feature
Users can download data for a targeted area	A+	A	A	A	A	A	A	3.00	A
Query the Data	A	A	A	A	B	A	A	2.86	A
Users can Turn Layers on/off	A/B	A	A	A	A	A	A	2.86	A
Pop-up data window when property is clicked	A	A	A	B	A	B	A	2.71	A
User can add geographies together	A/B	A	A	B	B	A	B	2.43	B
User can save map and come back later	B	B	B	A	B	A	A	2.43	B
Print-Friendly Layout (pdf) w/ Legend and Custom Title	A/B	B	B	B	A	B	B	2.14	B
User can share a version of the map with others	C	A	B	A	B	C	A	2.14	B
Cat at fax machine progress bar	C	B	A	A	C	A	C	2.00	B
Open Map in Carto	A/B	B	A	C	C	C	B	1.71	C
User can specify drawing order	C	C	A	C	C	A	C	1.57	C
User can specify how layers are drawn		B	B	C	C	B	B	1.57	C
User suggested features	Grade								
Query near set of properties	A								
Show municipal borders	B								
download in multiple formats									
Layer showing clear title	B								
ADA Section 508 Colorblindness Friendly palete	A								
Add more features you'd like to see below....									

Regional Data Center Activities

Here are user group and other activities we are thinking about. We'll let you know when we are able to schedule these events.

We also encourage you to share your ideas below.

Activity	Description	Links	Notes/Status Update	Date updated
Learning Circle	The Carnegie Library has held a successful test of learning circles. In this model, participants come together and work with one another to learn a particular skill. We think this could be a great fit for data users to learn how to make maps, or those seeking to use property survey data among other things. See more at the link in the column to the right.	http://www.carnegielibrary.org/event/data-gathering-cleaning-visualization-four-week-learning-circle/2017-01-25/		
Road show	We'll open up our calendar to come and meet with you starting this spring. We'll send an email with more details once we're ready. Our visit will allow us to test tools as they're being developed, and help you with training, applied research, and technical assistance		Kickoff in May, 2017	4/14/17
Data day	We're planning another Data Day with the Carnegie Library (tentative date Oct. 21). Like Data Day last year, we'll ask data users to organize and lead 5 minute table activities in the main library. A great opportunity to share your work with others.			
Municipal outreach	Once we learn from our pilot publishing efforts with Baldwin Borough, we'll reach out to more potential municipal data publishers.			
Technical Assistance	We plan to work directly with City and County land banking efforts. in addition to making more data available, we also hope to help organizers incorporate data into their business processes.			
User testing party	Feedback is critical to our work. As we and our partners develop more tools for data users, we would like to test them with users. It would be nice to hold an event where many of us can come together and learn how to make our products even better.			
Training	We're planning to offer more Data 101 data literacy classes in 2017, and would like to know what other training you would like to attend			
Add your ideas here				

At the March 2017 meeting, we held a problem scoping activity where we asked attendees to list outcomes they'd like to see as a result of using data or technology

Here's a list of what was shared with us. Please add any other outcome ideas below the list generated at the meeting.

Outcomes for using data shared at the meeting
One-stop shop for data
link income with property data to identify home repair assistance candidates
View rental prices in real-time
Track lead levels in soil incl. before/after demolition
find areas suitable and available for urban agriculture, including (city) buildings for indoor agriculture
Make it easy for people to find available sideyard property to buy
Automated uploads of property transfers with owner names
Make maps to show board of commissioners
Connect property owners with support services, incentives, & grant programs - lead abatement, green infrastructure, home repair, etc.
Look at how property values change with completion of green infrastructure
Predictive model for code violations
Targeted identification of resident & community needs for vacant land transformation projects
Track redevelopment initiatives
Understand wherre potential tangled titles are
Find where speculators are holding vacant lots
Look at length of resident and monthly income to assess gentrification
minority owned businesses
Predictive model for code violations
Monetize value of sustainable investments (green infrastructure, etc.)
Raise awareness of the cost of blight
Connect property owners to suportive services and tax breaks
Optimize / increase efficiency of efforts to address blight.
Use data to understand how development impacts communities
Help improve residential stability for people vulnerable to displacement
Prioritize demolition and property redevelopment activity
Provide transparency for land banking efforts
Prevent mortgage foreclosures
Assist small businesses using data - make them more competitive
Improve community safety
Improve communiy health
Increase awareness of equity issues
Common application for housing - suggested by DHS - every property uses their own intake application
Property lookup featuring real-time housing info- available units, wait list, etc.

Add to the list below