IREG 9.14.16

All in with AGO

Mark Wheeler, Chief Geographic Information Officer City of Philadelphia, Office of Innovation and Technology

How Philly made AGO key part of GIS enterprise

Strategies and governance

Stakeholder engagement and support

Data publishing process

Philadelphia GIS

Departmental GIS teams:

10-12 GIS units across city government Data creation, analysis, mapping

GIS Services Group (GSG): Office of Information + Technology Enterprise platform stewards, data publishing, consulting + analysis

Philadelphia GIS by the numbers

- 365 Enterprise feature classes...
- 175 ...published as Open Data
- 670 GB Vector data tables
- 1.2 TB Imagery
- 385 ArcGIS desktop licenses
- 2.9 M Geocoding/requests month

GIS Enterprise 2014



Issue: Collaboration was Specialist-Locked

Departments



Share ideas and findings with executives

Dialog and collaborate with stakeholders

Public engagement were print-map centric



Issue: Public Data Sharing

Annual (manual) batch release to:



PENNSYLVANIA SPATIAL DATA ACCESS The Pennsylvania Geospatial Data Clearinghouse

Company that and the second se

 Ad hoc posting to GitHub by depts with no formal organizing policy or oversight.

Goals for Cloud GIS

Expand access to web mapping tools to <u>all</u> city staff to... ...Increase collaboration + communication on projects and policy issues among agencies, partners and public.

Reliable enterprise + open data publishing.

Enterprise data in the cloud – easy to find, easy to use.

Reduce potential points of failure at City's data center.



Established primary AGO organization for all of city gov – **PHLmaps.**

Used Active Directory for logins.

Governance: Custom Roles, Credit allowance, Separate Org for contractors, Customized training, data sharing policies.

Required training in order to publish maps/edit.

Established a publishing workflow and schedule for open data.

Rollout in 2015

Hired full time AGO administrator

Encouraged stakeholder buy-in via interdepartmental committees:

- GeoXchange Committee GIS unit and project managers
- GeoData Committee
- Operational GIS Staff Meetings

Multiple seminars held in summer 2015



GeoDb2 and You: Fundamentals of the City's GIS Enterprise

Resources + Communication

City GIS wiki – maps.phila.gov



City GIS Resources

Created by Robert Martin, last modified by Tom Swanson on Jun 19, 2016

You will find here helpful information about GIS related topics for City of Philadelphia staff. Any request to maps@phila.gov.

Disclaimer: The material contained in this wiki is for informational purposes only and is not to be share

News and Upcoming Events

- New Location for DOR Parcel Layers
- Esri has released 10.4.1 for Desktop and Server. It is available for download on the city's myesri.com site. We recommend using 10.2.1 until more tecting is done.

Data

- GeoDb2 Update Policy for Layers
- GeoDb2 Update Notificatio
- GeoDB2 Layer Review

City's ArcGIS Online Organizations

- AGO Governance
- · AGO Log-ins
- AGO Training
- Assistance
- Enterprise Authoritative Content
- ESRI Resources
- FAQs
- Issue Log
- · Publish Data to AGO
- Profile Set-up
- Homepages:
 - · PHILA (Vendors)
 - PHLmaps (Enterprise Content)
 - PHILLY (311)
 - PHILADELPHIA (Public Safety)
 - PHLwater (PWD)
- · AGO for non-citystaff

One AGO Org, sort of



PHLmaps Governance

Custom Roles: AdminII, Publisher, Editor. Otherwise Viewer only.

Training required to go beyond Viewer.

Profiles required – full name, dept, contact info.

Item descriptions required for all data.

Training is Self Serv



GSG Citywide Wiki / City GIS Resources

Created by Jen Johnson, last modified on Apr 11, 2016

GSG offers ArcGIS Online training in-person and online! If you'd like to go through the training on your own please complete the exercise review form. Thanks for your interest in ArcGIS Online, we look forward to the awesome work you will accomplish with your new City_Put

Documentation	What's This?				
Pre-Training Assessment	This is a brief form that lets us know why you are signing up and what your intentions are so that we can provid level.				
Training Packet	This training packet is for independent and instructor lead sessions. This is updated quarterly or as needed.				
Independent Completion Review	If you've completed training independently, let us know so that we can ensure that you have a basic understan also inform GSG that you have earned your City_Publisher role and allocated credits.				
End of Session Survey	Was this training helpful for you? This training is always evolving and your feedback is greatly valued. Thank Y				

Data Publishing



Data Publishing Notification

Copy and paste the following into the body of email to iThelp@phila.gov

Department Name:

Contact name:

Contact email:

Contact telephone:

Layer Name as it appears in Sde Viewer:

Action: Add, Replace, Delete, Move (choose only one, delete others)

If Replace, is there a schema change: Y or N

If schema change: Type the names of each field for which there has been a change followed by a comma and the type of change: deleted, name change or data type change. Follow with a second comma and type the new field name or data type.

Examples: OWNER, deleted / ADDR, name change, ADDRESS

If Move, what is the new dataset or account owner name:

Date to be Completed:



Data Publishing Updates

Progress is Tracked on <u>City GIS Wiki</u>

Date Scheduled	Layer Name		Pending Action				
	GIS_PLANNING.Neighborhoods		Archive, Delete (high number of users, multiple dependence	ies)			
	GIS_FPC.MAJOR_MULTIUSE_TRAILS		Archive, Delete, Layer being replaced by PCPC/FPC				
	GIS_FPC.PPR_BOUNDARIES		Archive, Delete (multiple dependencies)				
	GIS_ORPHAN.FPC_FAIRN Completed Updates						
	GIS_ORPHAN.RECREATIO	Date	Layer Name	Action			
	GIS_ORPHAN.EXEMPT_A	Completed					
		6/20/2016	GIS_ORPHAN.TRAILS_SIDEPATHS	Archive, Delete (multiple dependencies)			
		6/20/2016	GIS_HEALTH.HEALTH_DISTRICTS	Archive, Delete (multiple dependencies)			
		6/20/2016	GIS_PLANNING.DEMOGRAPHIC_BLOCKGROUPS	Archive, Delete, Replacement Layer, Notif	y Users		
		6/20/2016	GIS_PLANNING.DEMOGRAPHIC_CENSUSTRACTS	Archive, Delete, Replacement Layer, Notif	y Users		
		6/20/2016	GIS_FPC.PPR_TRAILS	Archive, Delete (high number of users)			
		6/18/2016	GIS_OPA.OPA_ACTIVE_ACCOUNTS	truncate/append. April Data			
		6/16/2016	GIS_FPC.PPR_Assets	Replaced with _rev layer (schema change	2)		

Data Publishing Schedule

Proposed Data Release Schedule

F=Friday M=Monday T=Tuesday



Enterprise vs Public Layers in PHL



Bridge Locations This laver identifies the Bridge Division of Feature Layer by Last Modified: June (0 rat



Traffic

Sub-districts

Surveys districts This layer identifies the City of Philadelphia Stre Feature Layer by m Last Modified: June 14, (0 rating

Traf Sub Op

This layer was develope and maintaining traffic

Feature Layer by m Last Modified: June 14,

Enterprise Only Group

Open Data Group



Building Footprints Planimetric Coverag structure outlines th Feature Layer by Last Modified: June (0 rat



Cases

A case is a recorded cited for one or mor Feature Layer by Last Modified: June (0 rat



VALVES

This point layer contain System. The Purpose of and via its attributes w maintained.

Feature Layer by m

Benny the Metadata Catalog

http://metadata.phila.gov/

powered by Knack.com

City of Philadelphia	City of Philadelphia Metadata Catalog						
			DATASETS	REPORTS	HELP		
Welcome to Benn	y the Metada	ta Catalog					
Here you'll find information interest to you.	regarding data sets c	ollected and maintained by agencies throughout the City of Philadelphia. Search, sort, and fi	lter by different categories an	d attributes to find i	nformation of		
Administrators: edit your me	etadata here .						
Datasets							
Datasets				the box lower strend	GEADCH		
Showing 1-25 of 639 add	filter export		25 per page	Page 1	of 26 《 》		
- Name	Department	Description	Source Path(s)	Total Versie	ons Overview		
311 Service Requests	Philly311	This api represents service requests submit via the 311 web and mobile applications. It does not include requests phoned in or entered manually by departments.		2	VIEW		
Abatements Paid (Partial)	Licenses and Inspections	Abatement work that has been paid for at Revenue and shared with L&I. These are only for bills that have a barcode at the bottom that Revenue can scan when processing payments. Revenue		0	VIEW		

Radical Metadata Policy





Storymaps, Collector and Ops Dashboard created by non-GIS staff

All city base maps and imagery in PHLmaps

560 staff with PHLmaps logins

124 staff trained since 2015

200 Enterprise layers in PHLmaps

10 layers updated daily via a script



Challenges

Initial login required to invite users into Groups or to share map links

Active directory (Enterprise login) doesn't federate from AGO to MyEsri or Marketplace apps – separate Org login needed

No sync between geodatabase and AGO

Cannot publish large or complex layers to AGO

Dashboards

Thank You

Mark.Wheeler@phila.gov maps@phila.gov www.phila.gov/map @PHLinnovation @wheelmrk



A Presentation to the Information Resources Exchange Group 100th Meeting John C. Allen > Faculty Assistant > The Center for Advanced Transportation Technology Laboratory September 14, 2016

Today's discussion

- > RITIS / VPP Suite overview
- > How RITIS helps (some tool highlights)
- > Agency use cases
- > Communication/collaboration
- > On the horizon
- > Q/A





What is RITIS?

The Regional Integrated Transportation Information System (RITIS) is a platform for:

- > Automated data fusion and dissemination
- An *enhanced, multi-faceted view* of the transportation network across geographic and agency boundaries
- Innovative visualizations and analytics that improve an agency's:
 - project planning
 - traffic operations
 - emergency preparedness
 - travel info
 - research and more



RITIS Fusion Platform Process Overview





- **1** A basic RITIS package includes all of these tools, features and functions
- 2 For even more capability, you can purchase these RITIS add-ons separately

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What is VPP Suite?



VPP Suite is a collection of data retrieval and visualization tools for creating graphics, maps and summaries *using archived probe speed, and other transportation data*, in support of agency planning, operations and research efforts.

Suite Tools



Region Explorer



Congestion Scan



Performance Charts



Bottleneck Ranking



Dashboard



Massive Data Downloader



Trend Map

11111

Performance Summaries



User Delay Cost Analysis





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Helps address agency's resource realities









Constrained Funding limits project/program delivery & timeliness

Attrition leads to loss of experience, knowledge and "connections"

Budget Cuts mean less staff with more work; reduction in training **Consultant Overreliance** is costly; impacts project control & in-house expertise



Why use RITIS? (cont'd.)

Addresses performance management challenges







Data Management of the tremendous amount of disparate, complex data is difficult **Tool Creation** is highly specialized, costly and time-consuming

Partner Coordination

locally & regionally is critical to effective performancebased systems

A Strategic Plan to guide agencies forward is *key* to continued success







User interface | simple, easy, powerful



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Incident Timeline

Interactive timelines quickly reveal how the incident is being managed while showing the relationships between responder notifications and:

- > Arrival times
- > Lane status (closures)
- > Dynamic Message Signs
- > CCTV
- > Traffic queues
- > Clearance times



Event Query Tool

> Use **EQT** for identifying hot-spot problem areas, project development, after action review

Incidents from NJDOT that started between June 1, 2016 and August 16, 2016



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Congestion Scan

> Stitch together selected roads to form a contiguous route summary of speeds, congestion, etc.



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Performance Charts

Speed for I-76, NJ-42, and US-322 between NJ-42/Black Horse Pike/Glassbo and Captain John A O'DONNELL Pkwy

Averaged by 1 hour in July 03, 2015, July 04, 2015, and July 05, 2015

Northbound





Multi-Road Congestion Scan Example Use Case





NPMRDS Analytics

> Use **NPMRDS Analytics** to meet MAP-21 requirements defined in the NPRM (Subparts E, F and G).

2015 MAP-21 Interstate System Travel Time Reliability for Maryland





states and urbanized areas/ interstate and non-interstate NHS



Annual Performance Map

Run

spatial/temporal queries for performance measures

Create

graphs/maps/tables for trends, target-setting and reporting



NPMRDS Analytics – use for helping to set targets

> LOTTR % in Maryland is Trending Downward Since 2013



Performance Summaries

Vehicle Probe Project Suite 🌠 🕍 📗 📈 🔝 🕰

Performance Summaries - Using INRIX data



Switch to ...

Welcome, John | Help | Screencasts | Logout

Trend Map



> Example use from the MATOC Severe Weather Coordination Working Group



Bottleneck Ranking

> BMC's Quarterly Congestion Analysis Report Using Bottleneck Ranking





Bottleneck Ranking (cont'd.)

> BMC's Quarterly Congestion Analysis Report Using Bottleneck Ranking (cont'd.)

Top 10 Bottlenecks in the Baltimore Region 4th Quarter 2015

By Impact Factor

Number of Occurrences x Average Duration in Minutes x Average Length This table indicates the top 10 congested corridors in the region.

	Location	Average Duration	Average max length (miles)	Occurrences	Number of Incidents/ Events	Impact Factor
4		21.24	0.00	446	4.64	407.075
1	I-95 N @ MD-100/EXIT 43	2 h 24 m	8.22	116	161	137,375
2	I-95 S @ MD-24/EXIT 77	2 h 20 m	9.25	91	219	117,860
3	MD-295 S @ MD-193	3 h 12 m	11.59	52	103	115,736
4	I-695 CCW @ EDMONDSON AVE/EXIT 14	2 h 16 m	7.27	116	219	114,616
5	I-695 CW @ I-795/EXIT 19	2 h 36 m	9.2	77	390	110,563
6	MD-295 S @ RIVERDALE RD	4 h 42 m	14.22	27	151	108,271
7	I-695 CW @ MD-41/PERRING PKWY/EXIT 30	1 h 53 m	5.48	169	163	104,728
8	MD-295 S @ I-495/I-95	4 h 6 m	12.18	32	135	95,880
9	MD-295 N @ MD-175	2 h 20 m	7.6	83	112	88,269
10	I-695 CCW @ MD-144/FREDERICK RD/EXIT 13	3 h 3 m	9.09	50	290	83,216

CW = Clockwise CCW = Counterclockwise



#1 Ranked Bottleneck in the Baltimore Region - 4th Quarter 2015



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ehicle Type Display											Hours o	of delay	\$0.32 y:			
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12/02/14 \$0K \$0.1P	INRIX Search in Maryland	5.6K	\$121	\$1.00	\$2.11	ŞON	\$13.5K	\$45.2K	\$02.4K	\$40.1K	Com	mercial	: 42,080	vph		
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2/13/14 N/A N/A	NPMRDS (Trucks and passenger vehicles)	v/A	N/A	N/A	\$2K	\$11.1K	\$9K	\$9.2K	\$8.1K	Per	vehicle: 36s	960 IIM /8	s		\$0.6K	\$50
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Hourly Totals \$1.6K \$1K	Commercial: 2016 - \$86.81	4.7K	\$36.9K	\$44.9K	\$89.4K	\$154.8K	\$309.3K	\$579.6K	\$742.6K	\$428.1K	\$68.2K	\$15.9K	\$9K	\$9.2K	\$4K	Grand
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Dashboard



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RITIS Usability Matrix

				RITIS	Basic						RITIS A	Add-ons		
Function	System Status & Decision Support	Evacuation Support	Traveler Information	Communi- cation	Planning & After Action Review	Personal Traffic Alerts	Training	Collaboration/ Virtual Meetings	Clarus	Virtual Weigh Station	Vehicle Probe Project Suite	Work Zone Performance Monitoring	Explore & Visualize Crashes	Treeversity
Planning	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	✓	✓		\checkmark	\checkmark	\checkmark	\checkmark
Operations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\checkmark	✓	✓	✓
Travel Info	✓	✓	✓	✓	✓	✓	✓	✓	✓		\checkmark	✓		
Research	✓	✓	✓		✓		✓	✓	✓	\checkmark	\checkmark	✓	✓	✓

Bottom line, RITIS basic and its add-ons greatly benefits Departments of Transportation, Metropolitan Planning Organizations, Universities and other organizations within your state.





MATOC Case Study



Using a Coordinated Regional Incident Management approach w/RITIS

for FY 2015 in the National Capital Region

North Bost Tunnet Torway	73 Incident occurrences in FY 2015 subject to CRIM /RITIS	\$16.42M Annual benefit* of using CRIM w/RITIS	Loudour Loudour County Vointgomery Vestington, DC Plince
	13:1 Benefit/Cost ratio	Without RITIS, MATOC reports that their operators would take 3-4 X <i>longer</i> to detect and monitor incidents across their region	City of Rats Charts City of R

Incidents above involved high-level interagency coordination originating from MATOC. Savings per incident derived from MATOC's 2010 Benefit-Cost White Paper * - savings are based on the cost of emissions, fuel and the value of time; e.g. productivity

Papal Visit to Philadelphia



Using RITIS Meeting for regional traffic management & agency coordination

during the World Meeting of Families 2015



PennDOT's Area Command called the use of RITIS Meeting "incredibly successful" and "invaluable" in managing this historic event

NJDOT Project Assessment Summary



Using VPP Suite for a Before / After Study of an Interchange Improvement

Woodland Park, NJ • Project completed March 3, 2008 (\$1.28M)



Estimated annual savings using VPP Suite for 25 similar congestion-related reports per year: **\$152,000 and 4,475 person-hours**

MWCOG Annual Travel Time Survey



Using VPP Suite for conducting an annual travel time survey of the Metropolitan Washington Region vs Floating Car Method



Other benefits to MWCOG include: 1) identify top bottlenecks; 2) develop other important performance indicators (PTI), and; 3) the tools allowed for the creation of a quarterly Congestion Report



I-95 Reconstruction in Philadelphia, PA



> DVRPC used VPP Suite to assist PennDOT in managing congestion due to construction

Reconstruction investment for 9 miles of I-95 (widening + interchange upgrades)



\$2B

Increase in peak travel times due to construction



Flex to SEPTA for additional rail cars to help relieve congestion







impact evaluation | mitigation refinement | funding justification | communication/coordination

Monitoring the I-40 Construction Project Wake County, NC

Row Labels



NCDOT used data from the Massive Data > Downloader to monitor area roadway travel times during this major construction project.



Used for daily travel time reporting



Shared with senior leadership, contractors, researchers, the media and others



Responses were overwhelmingly positive; State Traffic Engineer envisions using this for other projects

Speed Limit Length in Miles 0.73 0.59 0.71 0.53 16:00:00 16:05:00 16:10:00 16:15:00 16:20:00 16:25:00 16:30:00 16:35:00 16:40:00 16:45:00 16:50:00 16:55:00 17:00:00 17:05:00 17:10:00 17:15:00 17:20:00 17:25:00 17:30:00 17:35:00 17:40:00 17:45:00 17:50:00 17:55:00 18:00:00 18:05:00 18:10:00 18:15:00

Auto-generated speed data

Color-coded for ease of use

Travel Time Monitoring Report



impact evaluation | mitigation refinement | communication/coordination







Communication/Collaboration...



I-95 Corridor Coalition

>

>

>

>

>



VPP Suite User Group

This integrated, more comprehensive co-chair structure will:

- Leverage the co-chair's vision, leadership abilities and skillsets;
- Provide a more robust
 State/MPO/Authority perspective;
- Lead to better integration of Planning-Ops-Traveler Info needs & considerations;
- > Resulting in improved tools;
- That help to better define (and evaluate) agency-driven projects and programs.



Deploy Status Table

Summary Widgets Improvement breakdowns by category and timeframe

Deployment Detail "At-a-Glance" information for quick reference

(for more detail, see the "What's New" ribbon on the Suite homepage)

> Category Descriptions Key ——• Brief descriptions of improvement categories



Title Bar

Calendar Year and Quarter (ending quarter **highlighted**)

Header Bar

Column descriptions for the deploys:

- > Feature
- Tool(s) Affected >
- Color Indicator >
- Description >
- Deploy Date >
- Tables to be updated and distributed quarterly
- Q3 table in the works
- First release version; comments & suggestions always welcome



I-95 CC – Probe Data Analytics Forum

An open forum to:

- > Share ideas and best practices
- > Answer questions
- > Discuss issues with a larger audience
- > Promote your work

35

http://i95coalition.org/forum

Probe Data Analytics Forum Use cases, tutorials, discussions, and all things VPP Suite			Search 🔍 🗘
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☆ Board index < Forums < Agency Use Cases			
Agency Use Cases New Topic * Search this forum			10 topics • Page 1 of 1
TOPICS	REPLIES	VIEWS	LAST POST
VPP Suite Tool Use for SJTPO's CMP & Performance-based Planning (Bill Schiavi, SJTPO) by jallen35 » Fri Jul 29, 2016 4:19 pm	0	850	by jallen35 🖸 Fri Jul 29, 2016 4:19 pm
Traffic Impacts of the Metrorail Shutdown and Other Events (Wenjing Pu, MWCOG) by jallen35 » Wed Apr 27, 2016 3:08 pm	0	1002	by jallen35 D Wed Apr 27, 2016 3:08 pm
SCDOT Use of "BIG DATA" - Telling the Mobility Story (Dipak Patel, SCDOT) by jallen35 » Thu Mar 24, 2016 3:09 pm	0	1073	by jallen35 🖸 Thu Mar 24, 2016 3:09 pm
VPP Suite Data for Year-end Performance Measures and Snow Impact Analysis (Wenjing Pu, MWCOG) by jallen35 » Thu Mar 24, 2016 2:34 pm	0	899	by jallen35 🖸 Thu Mar 24, 2016 2:34 pm
Papal Visit Transportation Impacts in the Washington Region (Wenjing Pu, MWCOG) by jallen35 » Wed Feb 03, 2016 3:39 pm	0	1192	by jallen35 🖸 Wed Feb 03, 2016 3:39 pm
Papal Visit in Philadelphia, PA (John Allen, UMD CATT Lab) by jallen35 » Thu Nov 19, 2015 4:19 pm	0	1851	by jallen35 🗅 Thu Nov 19, 2015 4:19 pm
Maryland Mobility Reports (Kaveh Farokhi Sadabadi, Ph.D., UMD CATT Lab) by jallen35 » Tue Oct 27, 2015 3:33 pm	0	1344	by jallen35 D Tue Oct 27, 2015 3:33 pm
Fortify Travel Time Monitoring (Brad Robinson, PE, NCDOT) by jallen35 » Mon Oct 12, 2015 5:46 am	0	1478	by jallen35 🖸 Mon Oct 12, 2015 5:46 am
Amtrak Derailment in Philadelphia (Jesse Buerk, DVRPC) by jallen35 » Mon Oct 12, 2015 5:29 am	0	1256	by jallen35 D Mon Oct 12, 2015 5:29 am
Using Archived Operations Data to Support I-95 Reconstruction in Philadelphia (Jesse Buerk, DVRPC) U by jallen35 » Mon Oct 12, 2015 5:05 am	0	1243	by jallen35 🖟 Mon Oct 12, 2015 5:05 am

Display topics from previous: All Topics 🗸 Sort by Post time 🗸 Descending 🗸 Go

Probe Data Analytics Forum Press Release – BMC Labor Day Traffic



Home | Be Involved | Transportation Options | Want to know what Labor Day weekend traffic might be like? BMC provides data to help you plan your holiday travel.

Want to know what Labor Day weekend traffic might be like? BMC provides data to help you plan your holiday travel.

The Labor Day holiday weekend provides Marylanders one last chance to get out and have some end-of-the-summer fun, especially those looking to head to the Eastern Shore.

Last year, more than 354,000 vehicles crossed over the Chesapeake Bay Bridge during the Labor Day weekend. Lower gas prices in 2016 mean that there is a good chance that vehicle volume will increase, and more vehicles mean more traffic.

The Baltimore Metropolitan Council (BMC)'s congestion management process analyzes where and when traffic in the Baltimore region tends to pile up and for how long it will stay congested by looking at data from the National Performance Measures Research Data Set (NPMRDS) congestion scans. Looking at 2015 Labor Day weekend data, staff members can conclude that those traveling to the Eastern Shore will hit less traffic by leaving on Thursday, September 1, instead of Friday, September 2.

BMC provides the following animation from 2015 Labor Day weekend data - from Thursday, September 3, through Monday, September 7 - to show when traffic is heaviest. You can pan around and zoom in and out on the roads you plan on traveling to get an idea of what traffic may be like this holiday weekend. Each day's map refreshes to the same scale and location.



Traffic Conditions - Labor Day Monday - Return Trip

eptember 07, 201 6 AM 7 AM 8 AM 9 AN 10 AM 11 AM 12 PN 1 PM 2 PM 3 PM 4 PM 5 PM 6 PM 7 PM 8 PM 9 PM 10 PM 11 PI -648/FXIT ND D-3 BUS/NE.. In-R/FYIT 1-97/EXIT 21 50 WB D-2/JENNIE MD-648/BALL WHITEHALL R ... MD-B/EXIT 37 UNDEE AVE/ TATION LN/V... MD-456/DEL ... D-404/QUEE. The raw measured speed. 10 120 130 140 150





On the horizon...







Online Survey Results for Next-Gen Improvements

> Potential improvements as ranked by the VPP Suite User Group



Highest Ranked Potential Improvement - INRIX O-D Data

- MD SHA has purchased 4-months of trip Origin-destination data for exploration
- > The CATT Lab been playing with it for a few weeks now
- > Data "waypoints"
- > Lots of potential uses









INRIX O-D Data - Descriptive Statistics









Also in the works...

Volume & Turning Movements from Probe Data

 Define a practical and logistical framework for the delivery of probe-based volume and turning movement data, and how it will be formatted, transmitted, and integrated into applications

RITIS Working Group

- > Similar to the VPP Suite Working Group structure, goals
- > Two-year Strategic Implementation Plan
- > Construct discussed at yesterday's I-95 CC TSMO meeting



RITIS Training Opportunities



MATOC Staff offer free monthly webinars to transportation, public safety, and emergency management agencies interested in incorporating the RITIS platform into their operations.





Thanks!

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For more information, please contact:

John C. Allen, Faculty Assistant Center for Advanced Transportation Technology Laboratory jallen35@umd.edu | 215.666.3057 (c)

INTERNET OF THINGS PERSPECTIVES ON DATA SHARING FOR GEOGRAPHIC INFORMATION SYSTEM (GIS) APPLICATIONS IN URBAN SETTINGS

Asta Zelenkauskaite, PhD Drexel University

GIS AND IOT

GIS technologies for urban settings by

Analyzing parameters of mobility actors to

a) build new applications and

b) enhance analytics of geospatial environments

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Asta Zelenkauskaite

Assistant Professor, Department of Culture and Communication

College of Arts and Sciences



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SOCIAL MEDIA	
Contact:	
asta zelenkauskaite@drexel.edu	ı
215,895,2455	

Zelenkauskaite received her doctorate in Mass Communication from Indiana University, Bloomington, with two minor specializations in information science and linguistics. Her research focuses on the ways in which communication occurs through computer network environments as well as mobile telephony. She is interested in the changes that social media bring to mass media landscape by studying these phenomena from a multi-method approach to analyze changing understanding of content, audiences, and media companies. Most of her work bridges disciplinary boundaries methodologically and conceptually through her collaborative work with computer scientists and information science scholars.

More information about Zelenkauskaite

For news media inquiries, contact Emily Storz at els332@drexel.edu, 215.895.2705 (office) or 609.351.3592 (cell).

In the News

Jeff Gelles: Internet users want privacy, study finds

Dr. Asta Zelenkauskite, an assistant professor in the College of Arts and Sciences, was quoted in a *Philadelphia Inquirer* story on September 5 about Internet privacy.

Related Articles

No matching articles

Big Data Through Cross-Platform Interest-Based Interactivity

1.16

Asta Zelenkauskaite Drexel University Philadelphia, Pennsylvania, USA Email: az358@drexel.edu

IEEE Xplore

Abstract—Given the ubiquity of social media, we capitalized on interest-based relevance as a key component to enhance user experience. Interest-based relevance modeling was extracted from user interaction in a cross-platform social media Big Data repository. The goal of this study was twofold: first we addressed theoretical dilemmas of a cross-platform user experience; second, we implemented an android-based mobile application and designed a cloud architecture to account for theoretical parameters of Big Data User-centric approach and interactivity. To address cross-platform Big Data challenges, we relied on cloud computing to perform computationally intensive operations such as searching, data mining, and data processing at large scale.

Our use case was based on a cross-platform interest-based navigation and content filtering across multiple radio content streams. The streams consisted of tags from radio stations' programming and social media content through a discovery process. User interaction was geared to enable preferred topic filtering, flexibly shifting participation roles, notifications, and navigation Bruno Simões Fondazione Graphitech Trento, Trentino, Italy Email: bruno.simoes@graphitech.it

underexposed. Single-platform SNSs, even historical ones, varied technologically and scope-wise, ranging from user demographics, geographical attributes, or mere maintenance of pre-existing relationships. Since 2003 specialized social networking sites became mainstream, focusing on specific interests such as traveling, activism, religion, photosharing, music listening, and video sharing to mention a few [2].

Awer

evolved and broadened their scope over time. For exa access to Facebook is open to everyone, even if initia was restricted to college student networks.

Some of these limitations were addressed to over limited content access, platform interoperability issues lack of relevant content segmentation across multiple forms. Attempts to facilitate interest-based content access started to be modeled within a single platform. Son the techniques included "like" feature on Facebook; T

2012 Fourth International Conference on Intelligent Networking and Collaborative Systems

Interconnectedness of Complex Systems of Internet of Things through Social Network Analysis for Disaster Management

Asta Zelenkauskaite⁴, Nik Bessis^{2,3}, Stelios Sotiriadis², Eleana Asimakopoulou² ¹ Department of Telecommunications, Indiana University, Bloomington, United States of America ² Distributed and Intelligent Systems Research Group, University of Derby, Derby, United Kingdom ³ Department of Computer Science and Technology, University of Bedfordshire, Luton, United Kingdom ¹ lastaze² gramil.com, ² (n.bessis, s.sotiriadis)² derby.ac.uk, ² eleana asimakopoulou@googlemail.com

Abstract — This visionary paper presents the Internet of Things paradigm in terms of interdependent dynamic dimensions of objects and their properties. Civen that in its current state Internet of Things (107) has been viewed as a paradigm based on hierarchical distribution of objects, evaluation of the dynamic nature of the hierarchical structures faces challenges in its evaluation and analysis. Within this in mind, our focus is on the area of complex social networks and the dynamic social network construction within the context of IoT. This is by highlighting and addressing the tagging issues of the objects to the real-world domain such as in disaster management; these are in relation to their hierarchies and interrelation within the context of social network analysis. Specifically, we suggest to investigate and deepen the understood better by reacting to and with their environment in a more advanced and meaningful manner. It is also our vision that inter-connected smart objects could help the basis for an improved understanding of the environment as well as for an improved decision making in critical scenarios such as those evident in disaster management.

IoT has also been described as a paradigm that mainly integrates and enables several technologies and communication solutions including but not limited to tracking technologies, wired, wireless sensors, their networks, exchanged networked communication which in turn, lead to a shared next generation Internet (see more in [2]), what is also known as Future Internet. IoT has also been defined as "a world-wide network of interconnected objects



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bata access by media institutional logic and user-centric perspectives in the contexts of access from media institutional logic and user-centric perspectives in the contexts of digitalization and big data. The discussion includes technological affordances that can be geared toward users or that merely reinforce media companies' prominence. However, limitations of information architecture lie in its structure and the inability to facilitate navigation by users across multiple content streams. Media companies concentrate access around their own cross-platform content. Despite technological feasibility, media companies continue to choose cross-platform architecture that its structurally limiting to users. Cross-platform conceptual limits are discussed within the context of the broader socioeconomic landscape of mass media digitalization and big data.

Audience autonomy	big data	convergence	data architecture	digitalization
media logic	remediati	on social medi	a social response	lbility

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FOCUSING ON IOT INTERDEPENDECY: DATA AND ACTORS

Data types:

Current vs. historical data

Static vs. fluid data
ACTOR TYPES

Speed: Slow vs. fast actors in mobilities Size:

Presence/ephemerality:

Space type:

Individual/Entity:









NEW INTEGRATORY VISIONS



CROWDSOURCING

waze

VENTS SUPPORT BL

Get the best route, every day, with real-time help from other drivers.

Waze is the world's largest community-based traffic and navigation app. Join other drivers in your area who share realtime traffic and road info, saving everyone time and gas money on their daily commute.

WAZE, OUTSMARTING TRAFFIC, TOGETHER.

App Store





Imagine millions of drivers out on the roads, working together towards a common goal: to outsmart traffic and get everyone the best route to work and back, every day.

OPPORTUNITIES: DATA/NEED-DRIVEN APPLICATIONS

(Open) data app cross-overs:

Overlapping data // layered approach

Historical data.real time data// private entity data + user data

For users: E.g. Bike data: actual user driving frequency (by time summary)/real time/plus crime/accident data

E.g. Car parking: crime, availability map (real time) Special events data

PRECAUTIONS: ASSUMPTIONS

Assumption 1:

Data sharing/update from various sources

Assumption 2:

Analytical complexity

Assumption 3:

User mode flexibility

THANK YOU

az358@drexel.edu

Asta Zelenkauskaite



Code for Philly: Civic Engagement Through Tech and Data

Jacqueline Siotto codeforphilly.org @CodeForPhilly











Civic Hacking

"Civic hacking is people working together quickly and creatively to make their cities better for everyone."

- Jake Levitas, Code for America

Civic Hacking



Civic Hacking



Code for Philly Purpose: Community



Code for Philly Purpose: Solutions to Big Challenges

Philly Ward Leader Baseballl Cards







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School District of Philadelphia Budget

Estimated 2014 budget: • Total • Operating • Grant • Capital • Other Proposed 2015 budget: • Total • Operating • Grant • Capital • Other 0 0 0 0 0 0

District Operate

Note: Undistributed budgetary adjustments

Source: SDP Open Data

and gap closing reductions are distributed or the purposes of this

chart

strative Support



Created by Chris Alfano & Lauren Ancona | a Code for Philly project

OpenDataPhilly

Datasets Organizations

Your source for open data in the Philadelphia region

OpenDataPhilly is a catalog of open data in the Philadelphia region. In addition to being the official open data repository for the City, it includes data sets. from many organizations in the region.



About

Resources

Browse by Topic



Department of Records

Welcome to the

City of Philadelphia

SEARCH

Campaign Finance

Help

Support

Filing FAQs

Filing Guides

Filing Dates

Submitting a Report

Finance Database

Searching the Campaign

GO

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Campaign Finance Reports

Welcome to the Department of Records Campaign Finance Home Page. Here you can learn more about what a Campaign Finance Report is, what the filing requirements are, and who has to submit them. To learn about how to create and submit a report, read through the complete guide to filing a report.

Campaign Finance Filing Center

For information about the Filing Center, please contact the Records Department, room 156, City Hall, 215-686-2261.

What is a Campaign Finance Report?

Campaign Finance Reports are reports detailing contributions, receipts, expenditures, and debts for candidates, committees, or lobbyists. Candidates and their supporting committees also must include their office, district, county, and party. Each contribution, receipt, expenditure, and debt contains a name, address, date, amount, and description of the transaction. In addition, contributions over \$250 must contain employment information of the contributor. Finally, the totals of all contributions, receipts, expenditures, and debts must be calculated along with the beginning and ending account balance for the reporting cycle.

Why are Campaign Finance Reports Important?

Public and private entities use these reports to examine the source of political candidates' contributions, how campaigns are spending the money, and how many total funds are still available. Additionally, because there are strict laws on how much an individual, business, or committee can contribute to a candidate, the Philadelphia Board of Ethics uses these reports to make sure candidates, committees, lobbyists, and individuals are in compliance with the law.

QUICK LINKS

- <u>Campaign Finance Reports Printable</u>
 PDFs
- Ethics Board Regulation no. 1 Detailed Guidance
- Philadelphia Campaign Finance FAQs
- SmartClient Download
- SmartClient PowerPoint
- Open Online User Account







City	Welcome	(Note: This	report mu	Cam st be clear a	Common Dai Ind legit	onwealth of Penns gn Finan ole. It may be typ	aylvania CER ed or pri	eport inted in blue or b	black ink.)		Page 1 of 8	
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Finance Database	D. Total Expenditures (From Schedule III)					\$ 31,674,56						
	E: Ending Cash	E: Ending Cash Balance (Subtract Line D from Line C)				\$	\$ 64,670.31					
	F, Value of In-K	F. Value of In-Kind Contributions Received (From Schedule II)					\$ -					
	G. Unpaid Debts	s and Obligations (F	rom Schedul	e IV)				\$ -			-	

C

OpenDataPhilly	Datasets Organiza	ations Topics About Reso	ources <u>Q</u>					
/ Organizations / City of	of Philadelphia / Campaign Finance	Records						
ampaign Finance ecords	🍰 Dataset 🛛 🕌 Topics 🛛 Activity	Stream III Related						
rganization	Campaign Finance Records A searchable database of campaign finance records (expenditures, balances, party/individual contributions) for Philadelphia-related elections. Records are searchable by cycle, office, party, candidate name, contributor, name, and other parameters. Results are freely viewable and printable and some information is available as PDF records or as text files. Totuble downloading this Citly dataset? Email (thetoEconlla.gov) Data and Resources Imaging Finance Records Imaging Finance Records Imaging Finance Records Text Files & Bruken Imaging Explore Imaging Finance Records ZIP Imaging Finance Records Metadata Imaging Finance Records Metadata Imaging Finance Records Metadata							
ty of Philadelphia and learn ore about the City's effort to	Records Department							
ita is becoming a key part of	Additional Info							
induct_ read more	Field	Value						
	Area of Interest	City of Philadelphia						
cial	Department	Records Department						
Google+	Department Phone	215-686-2260	215-686-2260					
Twitter	Maintainer Link	http://www.phila.gov/reco paignFinance.html	http://www.phila.gov/records/campaignfinance/Cam paignFinance.html					
Facebook	0 Comments OpenDataPhilly		D Login -					
cense ther (City of Philadelphia)	Recommend E Share		Sort by Best					
	Start the discussion							

Code for Philly Purpose: Government Transparency



Code for Philly Purpose: Civic Engagement

Tord as easy for 40 Tablets as particular and again sets the the set of (non-set) 4. House the set of the set of the data readers?

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How to Work With Us: Ideas & Data Sets



How to Work With Us: **Projects**



How to Work With Us: Hackathons

Code for Philly: City as a Service Hackathon

Hackathon Kickoff Weekend

Friday 9/23: Project-Brainstorming Session and Kickoff Party Saturday 9/24: Project Design and Development; Team Hacking Sunday 9/25: Bonus! An Optional Day of Extra Hacking

Hackathon Project Demos

Tuesday 10/25: Project Presentations

Thank You!

Jacqueline Siotto jsiotto@codeforphilly.org



codeforphilly.org @CodeForPhilly hello@codeforphilly.org



Bill Zebrowski

Chief Information Officer SEPTA

Innovati

State of Technology – Where we are now

Website – septa.org

SEPTA

- Mobile Site m.septa.org
- Mobile Apps Apple and Android
- Schedule and **NEAR** real-time API's available to public
 - Polling at best is 3-5 minutes for Buses and Regional Rail
 - ➢ No real-time available for other modes (ie. MFL, BSS)
 - Minimal Trip Planning capabilities
- Data we provide today is from older systems that were never designed for delivering real-time data to the public

State of Technology – Moving Forward

- New Real-Time initiative to increase polling of all vehicles in use by SEPTA:
 - Surface Transportation (Buses, MFL, BSS, Trolleys)
 - MSL & BSS
 - Regional Rail including Amtrak Territories
- Better digital tools for our customers that accent the availability of new real-time data
 - > Additional mobile and web services through 3rd party
 - Trip Planner
 - Enhanced mobile apps/website and mobile site



SEPTA Key

SEPTA

- ➢Open Payment System
- Early Adopter's launch July 2016 Surface Transportation
- More services coming in the Fall and Winter
- Key will provide data capabilities we've never had before
- > Our intent is to share the data just like we do today



Thank You

PARKADELPHIA

Mapping street parking regulations in Philadelphia
OpenDataPhilly

Your source for open data in the **Philadelphia region**

OpenDataPhilly is a catalog of open data in the Philadelphia region. In addition to being the official open data repository for the City, it includes data sets from many organizations in the region.

Search data

Q

Datasets Organizations Topics About



Q

Get started by searching from 262 datasets that cover all dimensions of Philadelphia, from city council districts to park locations.

§ 12-2703 Designation of Permit Parking Districts.

(1) The Council may by Ordinance designate permit parking districts when it determines that residents of the proposed permit parking district are adversely affected by entry into the area and curbside parking by non-residents in motor vehicles and/or by parking regulations in effect which are designed to control use of curbside parking but work a hardship on area residents, after taking into consideration the following:

(a) The difficulty or inability experienced by residents of the proposed permit parking district in obtaining curbside parking reasonably accessible to their residences;

(b) The likelihood of alleviating by use of a permit parking system designated pursuant to this Chapter, the problem of lack of available curbside parking for residents of the permit parking district;

(c) The desire of the residents of the proposed permit parking district for the institution of a permit parking system and the willingness of those residents to bear the costs incidental to the issuance of parking permits and administration of a permit parking system authorized by this Chapter;

(d) The access to the area by means of transportation other than private vehicles;

(e) The availability of off-street parking facilities; and

HISTORY

This law was first passed changed since.

CROSS REFE

§ 12-2709 Use of Resider Temporary Parking Perm

TRUST, BUT

If you're reading this for a should double-check its a Code of Philadelphia web

Keyboard Guide

STAY UPDAT

> phillycode.org/12-2703/









=

PHILLY

ADVERTISE FIND WORK EVENTS ABOUT TOPICS **DIRECTORY** BETA

Here's a map of Philly's residential permit parking zones

6 Workshop School students, NFTE grad included in White House Maker Faire

The map is part of a bigger project for designer Lauren Ancona. "The greater project is going to be mapping all of the street parking in the city in terms of the information on the actual signs that are so confusing," she said.

By Max Ufberg / CONTRIBUTOR





Jun. 20, 2014 1:21 pm

 \rightarrow Jobs: Open Source Software Engineer, Events Coordinator, more

in Share 5 Tweet 30 8+1 0









ONE TAP TO RIDE

Uber uses your phone's GPS to detect your location and connects you with the nearest available driver. Get picked up anywhere - even if you don't know the exact address.

				·		
Return this completed form with copies of the follo All documents must be at current residence within	REPLACEMENT \$10 (If permit is lost, stolen, or damage accident or when license plate is changed for any reasc					
 VEHICLE REGISTRATION CARD PROOF OF RESIDENCE (I.E., LEASE OR UT) PROOF OF VEHICLE INSURANCE CHECK OR MONEY ORDER PAYABLE TO "F 	If your rear win here. We will e PLATE NO.	dshield is tinte enclose a refle STATE	ed or louvered, p ctive dot with ye VEH. MAK	olease che our permit. <u>E</u> V		
NAME					PHONE	
ADDRESS				OFFICIAL	USEONLY	
CITY CITY CHECK BOX IF CORRECTIONS ARE	STATE	ZIP	DISTRICT # EXPIRES PERMIT # AMOUNT \$		_ CASH _ DATE PA _ ACCT _ CLEF	CKM ID .# K

ASLGHT GAP

DO NOT SEPARATE THIS FORM



3rd Vehicle Permit \$75 🔲 4th or more Vehicle Permits \$100 each



VIOLATIONS



Street Address	Operator	Spaces	Distance	Compare	Average Price
		0.07			010

What was available:

...garages.







rodal

NT : PHILAD	ELPHIA, PA	FI	ELD	METER		INVENTORY								PAGE
*****	*******	*********	**	*****		*****	***	****	*****	***	*****	*****	***	****
METER				-			MO-		#NAME?	S	#NAME?	URS	#NAME?	IMIT-
NUMBER	STREET	BLOCK/LIMIT				MANUFACT	DEL	RATE	FROM	то	FROM	TO	HR	MIN
12F029	N 5	101	E		12	METRIC	P&D	1.25	SUN	SAT	0800A	0800P	4	1 12
12F030	N 4	200	W		12	METRIC	P&D	2	MON	SAT	0800A	0630P	2	2 12
12F031	RACE	300	S		12	METRIC	P&D	2	MON	SAT	0800A	0630P	3	3 12
12F032	RACE	300	S		12	METRIC	P&D	2	MON	SAT	0800A	0630P	3	3 12
12F033	N 3	200	W		12	METRIC	P&D	2	MON	FRI	0930A	0400P	2	2 12
12F033	N 3	200	W		12	METRIC	P&D	2	SAT	SAT	0800A	0630P	1	12
12F034	N 3	200	W		12	METRIC	P&D	2	MON	FRI	0930A	0400P	2	2 12
12F034	N 3	200	W		12	METRIC	P&D	2	SAT	SAT	0800A	0630P	1	12
12F035	N 3	201	E		12	METRIC	P&D	2	MON	SAT	0800A	0630P	2	2 12
12F036	N 3	201	E		12	METRIC	P&D	1.5	MON	SAT	0800A	0630P	2	2 12
12F037	RACE	200	S		12	METRIC	P&D	2	MON	SAT	0800A	0630P	3	3 12
12F038	RACE	200	S	11	12	METRIC	P&D	2	MON	SAT	0800A	0630P	3	3 12
12F039	RACE	200	S		12	METRIC	P&D	2	MON	SAT	0800A	0630P	3	3 12
12F040	RACE	401	N		12	METRIC	P&D	2	MON	SAT	0800A	0800P	3	3 11
12F042	RACE	1300	S	41C		METRIC	P&D	2	SUN	SAT	0800A	0400P	2	2
								2	SUN	SAT	0400P	1000P	3	3
12F043		1300	S	41C		METRIC	P&D	2	SUN	SAT	0800A	0400P	2	2
								2	SUN	SAT	0400P	1000P	3	3
12F044	RACE	1300	S	41C		METRIC	P&D	2	SUN	SAT	0800A	0400P	2	2
								2	SUN	SAT	0400P	1000P	3	3
1229001	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	E C
1229002	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	E.
1229003	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	Ĺ
1229004	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	Ĺ
1229005	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	E
1229006	N 13	200	w		12	D-E	80	2	MON	SAT	0800A	0800P	1	L
1229007	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	L I
1229008	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	
1229009	N 13	200	W		12	D-E	80	2	MON	SAT	0800A	0800P	1	[
1229015	SUMMER	1201	N		12	D-E	80	2	MON	SAT	0800A	0800P	1	



		NEIG	HBORHOO	DD LOTS			and the second sec
Current Neighborhood Lots	Capacity	PPA Staffed	PPA Meter	Enterprise Car Share	Zip Car Share	Leased	Neighbort Reside Current Par Neighborhood
			District	1			
1401-15 S. 9th Street	26	-	1.2	2			
914 Carpenter St.	54					9th Street Bus Assn.	1401-15 S. 9th
1012-26 E. Passyunk	71	RPP Permit Parking					914 Carpenter S
719-35 Christian St.	33			2	1		
738-48 S. 7th St.	22		-				1012-26 E. Pas
1339 S. 12th St.	39			2	1		
1300-04 Frankford	13			1	1		x
1804-36 E. Clearfield St.	143	Permit Parking			1		35 Christia
Hancock & Somerset	60		1		1		x
			District	2			
2132 S. 63rd St.	80		1			1.1.1	x
1345 S. 28th St.	32						x
1628 E. Passyunk Ave.	46	RPP #23	Pay & Display Meter	1	Í		
N			District	3			
4716-23 Baltimore	43			3	2		x
4076 Lancaster Ave.	137				2		x
			District	4			
4712 Umbria St.	33				-		x
5923-31 Market St.	90			2	1		x
4418 Manayunk Ave.	38			1	1		X

Synopsis of PPA Facilities

Page 14

As of August, 2013

Second

SE AVE SPRING GARDEN ST Capacity Lots 26 Street WILLOW STI ST 54 st. 5 N 4TH syunk 71 VINE ST n St. 33 N 8TH ST ARCH ST Chinatown Independence National Historic DELPHIA MARKET ST SANSOM ST CHESTNOT ST WALNUT ST 5 1St

releasing PDF prisoners





p St

parkadelphia.com

- Stupid-simple architecture:
 - Material Design Light
 - Mapbox-gl-js
 - Static frontend app hosted on Github pages
 - Cloudflare free tier in front



parkadelphia.com

Layers:

- Metered street parking
- Residential Permit Districts
- Surface Lots (metered)
- Motorcycle/Scooter Meters
- Center City Parking Meters
- PPA Garages
- Valet Permit Zones
- Snow Emergency Routes

Future:

Handicapped Spots





parkadelphia.com

- Measuring use
 - Actions are captured with Lon, Lat
 - Stored in Google Analytics
 - Pulled from API & stored in **S**3
 - Last rolling 30 days available for download, more soon











parkade phia.com





Transit 8+1 168

Home

Overview

- ▶ GTFS
- ▶ GTFS-realtime

Tools

Community

Google Transit

GTFS and GTFS-realtime

Making public transit data universally accessible.

Learn more about GTFS

The General Transit Feed Specification (GTFS) can be used to share static public transit data.



Learn more about GTFS-realtime

The GTFS-realtime specification is an extension to GTFS that can be used to share real-time public transit data.

developers.google.com/transit

laurenancona / open-parking-data-spec

Drafting a spec for releasing open parking data in a common form

3 1 commit		P 1 branch	9
ព	₽ branch: master -	open-parking-data-spec / +	
Initia	l commit		
🥱 la	aurenancona authored 2	days ago	
EL	ICENSE	Initial commit	
BR	EADME.md	Initial commit	

I README.md

open-parking-data-spec

Drafting a spec for releasing open parking data in a common

O Unwatch -

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	2 days ago	
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		Settings
		HTTPS clone URL
		https://github.com
n format. [DRAF]	F-contributions welcome]	You can clone with HTT



PARKADELPHIA.COM

Philippines National Road Safety Dashboard

Tyler Gllcrest tgilcrest@azavea.com





Certified



bcorporation.net

Triple Bottom Line

- Civic/Social impact
- Donate share of profits
- Summer of Maps

Research-driven

- 10% Research Program
- Academic Collaborations
- Open Source
- Open Data



- 92% of road crashes occur in low-, middle-income countries
- Crashes cost the Philippines nearly 3% of its GDP
- Data recorded manually across more than 1,000 Local Government Units

By the Numbers

Decentralized Institutions

Challenges



Institutions

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Decentralized Institutions Unreliable Network

Challenges





၀ ၀ ၀ ၀ ၀ ၀





Decentralized Institutions Unreliable Network No Standardized Database

Challenges

DRIVER		NEXT :
VEHICLE		
/ نوع المركبة Vehicle type	Car	*
Make	Ford	
Model	Taurus	
Plate number	1234 ADS	
Chassis number	172849	
Engine number	17363yq	
Insurance details		
Maneuver	U-turn	



The Solution

Event Place & Time

Related Content



Database Schema

Vehicle

Vehicles	
DAMAGE Select List	
Collapse	
SELECT LIST TITLE	Field C
Damage	Ontion
DISPLAY TYPE	Option
checkbox	4 Front

Front		Delete	Move dow	n	
Rear		Delete	Move up	Move down	5
Left Side]	Delete	Move up	Move down	
Right Side		Delete	Move up	Move down	
Roof		Delete	Move up		
dd Option value	Delete La	st Option val	ue Delete	All	

Schema Editor

DRIVER		NEXT	q
RECORD BASI	C INFORMATION		0
Occurred	May 24, 2016 9	9:39:40 AM	
Weather	Clear day	*	G
Light	Dawn		C
24.66449	6, 46.716641		D
		NEXT	E) D
			ره انو
			يق Si Ci
			No de Ci

DRIVER	NE	хт	:
شدة الحادث / Crash Severity	Fatal / مميت		
/ سبب الحادث Crash Cause	vehicle def عطل المركبة		
/ نوع الحادث Crash Type	Head on / تصادم وجهاّ لوجه		
Arabic - تفاصیل Description	L		-
English Description			_
اتارە / Street lights	Unlit / غير مضاءه		
/ حالة الطريق Surface condition	Dry / جاف		
نوع مسطح Road / الطريق Surface type	Concrete		-
BACK		NEX	Г

	NEXT
Car	٠
Ford	
Taurus	
1234 ADS	
172849	
17363yq	
U-turn	7
	Car Ford Taurus 1234 ADS 172849 17363yq U-turn

Android App



Uploading Records



Web Dashboard



Map View


Filtering & Searching

jbranigan@azavea.com :



Blackspots

Cost aggregation settings

COST PREFIX	COST SUFFIX	RELATED CONTENT TYPE	FIELD
P	None	Incident Details	Severity \$
FATAL			
9100000			
INJURY			
2210000			
PROPERTY			₱2 210 000
130000			
		Save Cancel	Total economic loss and societal harm: Last 90 days

Societal Cost

Active Filters		
Date Range: Mar 16, 2016 - Jun 14	, 2016	
* To modify these filters, cancel and make	adjustments on the page	
DRGANIZE REPORT BY (ROWS)	ORGANIZE REPORT BY (COLUMN	S)
Day of Week	Crash Severity / شدة الحادث	Ť
GEOGRAPHIC AGGREGATION (PAGES -	OPTIONAL)	
Provinces / محافظات		

Custom Reports

Mar 16, 2016 - Jun 14, 2016

Crash Severity / شدة الحادث Makkah by Day of Week and / مكة المكرمة Incidents for / حوادث

DAY OF WEEK	/ FATAL	/ INJURY	PROPERTY / تلفيات	TOTAL
Monday	0	51	14	66
Tueday	0	40	10	50
Wednesday	1	45	8	54
Thursday	0	56	15	71
Friday	1	58	19	78
Saturday	1	46	18	65
Sunday	2	50	18	70

Mar 16, 2016 - Jun 14, 2016

Crash Severity / أدة الحادث Jizan by Day of Week and / جيزان Incidents for / حوادث

DAY OF WEEK	FATAL میت	INJURY إعسابه	PROPERTY / تلفیات	TOTAL
Monday	0	9	2	11
Tueday	0	12	1	13
Wednesday	0	13	5	18
Thursday	0	11	2	13
Friday	0	9	6	15
Saturday	0	15	5	20
Sunday	0	16	3	19

Custom Reports

```
"results": [
   "active": true,
   "description": "Historical incident data",
   "plural_label": "Incidents",
   "label": "Incident",
   "modified": "2016-03-28T20:53:03.279107Z",
   "created": "2016-03-28T20:53:03.279082Z",
   "current_schema": "fada1575-4f61-4575-bc8d-
8b260ef93c31",
   "uuid": "0e222fc7-fee3-454e-a2c8-3eda5b9ef922"
 "previous": null,
 "next": null,
 "count": 1
```

RESTful API

- Crime mapping tool for the national police
- Working on institutional buy-in
- Searching for other interested departments / applications
- Implementing in Saudi Arabia

Next Steps



Thank You