Agenda

WEDNESDAY, December 14, 2016
1:00pm – 3:00pm

Welcome, News & Updates, Barney Krucoff, Chief Data Officer, Office of the Chief Technology Officer

- Data Policy
- BI Tool Consolidation
- New updated datasets since last meeting
- Other topics

OCA's Data Team, Dartanion Williams, Director of Data Operations (OCA)

The Lab @ DC, David Yokum, Director (EOM)

Snow Dashboard, MeghanMarie Fowler-Finn (DPW) & John Thomas (DDOT)

Survey Results and Discussion, Alex Santos (OCTO) – *Tabled until next meeting in Feb 2017*

Email List & Slack Channel, Julie Kanzler (OCTO) – *Tabled until next meeting in Feb 2017*

Data Inventory Tool, Mario Field & Eva Stern (OCTO) – *Tabled until next meeting in Feb 2017*

News and Updates

- Data Policy
  - Mayor's supports policy asked OCA to perform a final review.
  - Will be Mayor's (does not preclude future regulation or legislation).
  - Likely effective before 12/31/2016
  - Sunlight foundation now supports the policy. Changes since last meeting that made that their support possible:
    - Expanded, definition of **"data,"** but limited responsibility of agencies to accounting for "**Enterprise Datasets**" which is more limited.
    - Added, "**open by default**," meaning the existence of "Enterprise Datasets" will be publicly acknowledged, and further, if enterprise datasets are not shared, an explanation for restricting access will be publicly provided.

Data Policy Continued…

Enterprise dataset refers to a dataset that directly supports the mission of one or more public bodies. Typically, enterprise datasets are stored in named information technology systems. For example, the District's general ledger is a dataset hosted in the "System of Accounts and Records (SOAR)." Typically, such named systems and the datasets they contain are accessible to multiple workforce members. Any named system may hold one or more enterprise datasets. Enterprise datasets expressly include records of:

- determinations;
- measurements;
- transactions;
- sensor data;
- geographic data; and
- existing indexes for collections of narrative documents, videos, and recordings, image files, such as designs, diagrams, drawings, photographs, scans or hard-copy records.

Enterprise datasets also exist in small systems and spreadsheets. Any dataset, even a spreadsheet, is an enterprise dataset if it currently is maintained and

- is (or has been) used in decision making, or documents a public body's performance, determinations, transactions, or assets; and
- is not largely duplicative of a dataset within an inventoried named system.

Data postings last 6 weeks

- Arborist Zone
- Bank
- Bus Stop
- Camera Enforcement
- Charter School
- Embassy
- Gas Station
- Grocery Store
- Hotel
- Hospital
- Incarceration Data
- Leaf Boundary
- Library
- Notary Public
- Pharmacy
- Public School
- Purchasing Card
- Shopping Center
- Tap It Free Water Site
- Taxicab Trip
- Trail
- Village Boundary

Business Intelligence Tool Consolidation, Michael Bentivegna

Product selection criteria

- *Consideration of **what software DC users already know** and use. Use being more important than ownership but both matter. Market share momentum is as important as historic buys.*
  - *User survey and industry surveys*
- *The ability to **centrally administer an enterprise system** that empowers agencies users to get their work done via a **self-service first model**.*
- *The ability to license and enroll new users, no matter the agency, to **minimize purchasing transitions and costs**.*
- *The **cost of upgrading hardware and software** to raise existing systems to meet **OCTO enterprise standards** including public display of interactive dashboards and reports to the public via the Internet.*
- **Projected ongoing software maintenance and labor cost** associated with such an enterprise system
- **Performance and capability of the platform**.
- **Feasibility of transitioning users** from other platforms.

We did not look for the best product. To be frugal, we looked for the best fit among products DC already owned.

Gartner, Magic Quadrant for BI, February 2016

What DC Already Owns and uses

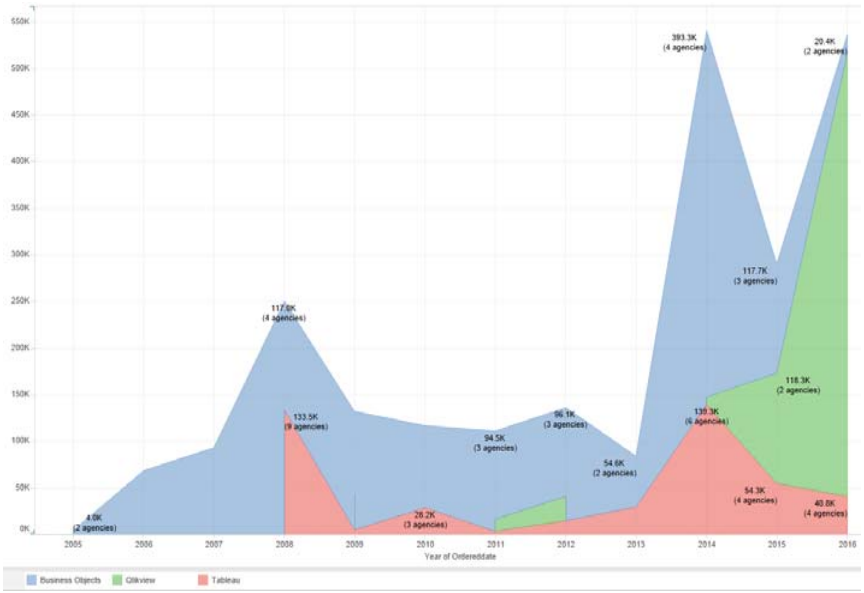
Total spending and breadth of spending (2005 – June 2016)

Bi Platform	# Agencies	Agencies	Amount	OCTO alone
Business Objects	8	DMV, OCFO, DBH, DOC, DCRA, CFSA, DFS, DDS	$1,236,069	$698,185
Qlik (Qlikview and Qlik Sense)	3	OSSE, DBH, DDOT, (DMV*)	$678,392	$447,122
Tableau	17	DHS, OSSE, EOM-OCA, DOH, DCPS, DOES, DCRA, CFSA, DYRS, MPD, OCFO, DDOT, DCPL, DHCD, OCME, OCP, DCTC	$448,614	$468,138
Microstrategy	1	OCTO	$1,030,055	$1,030,055
Grand Total			$2,363,077	$2,643,500

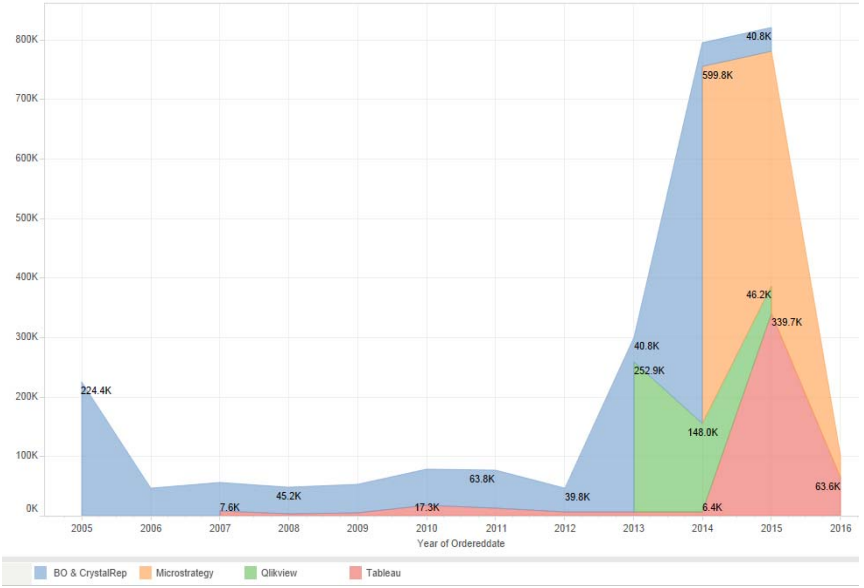
What DC Already Owns and uses

Spending overtime (momentum)

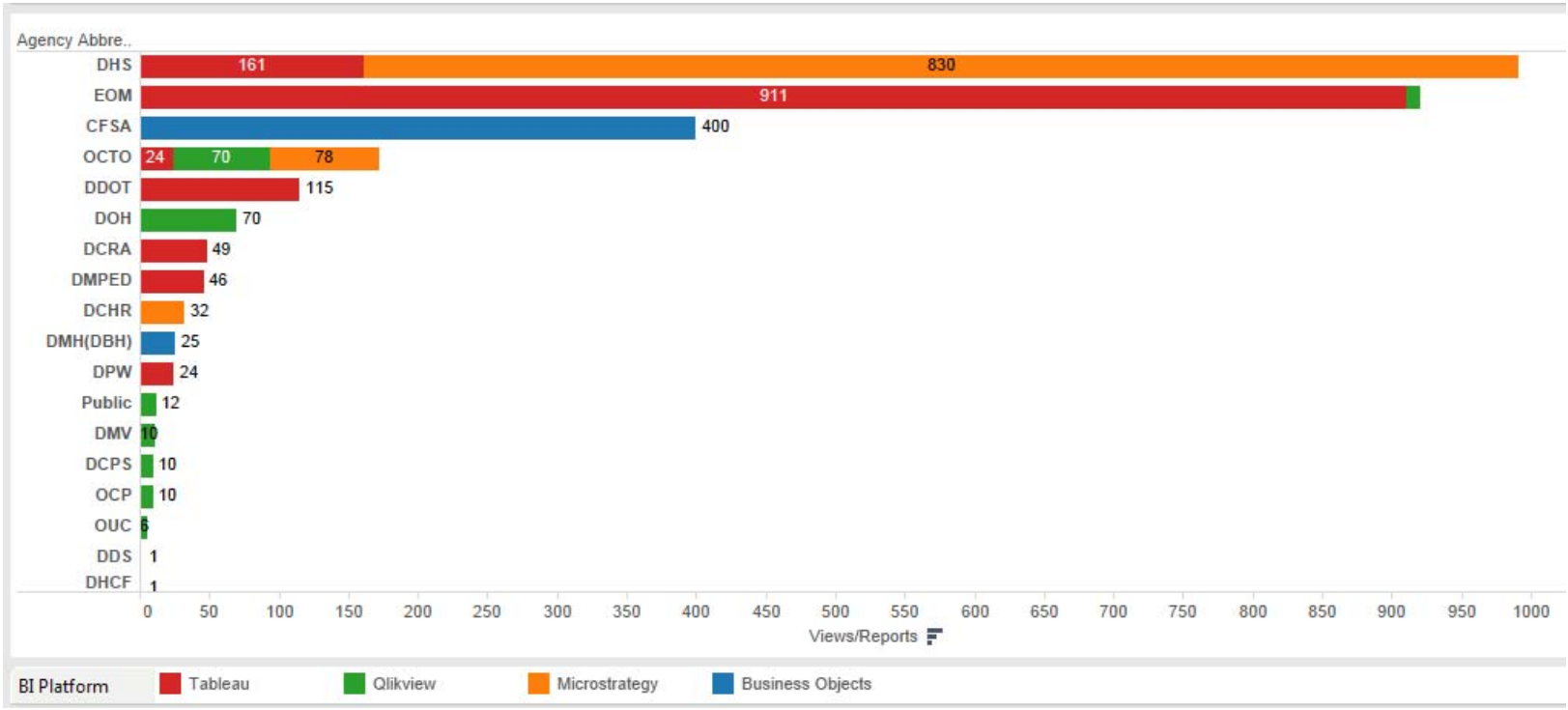
Agency Spending Overtime



OCTO Spending Overtime



Existing Reports



Reports/views developed for/by agencies and hosted on OCTO BI platforms as of August, 2016

Gartner's rating on critical capabilities for BI platforms 03/10/2016

Critical Capability	Micro-Strategy	Tableau	Business Objects	QlikSense
Self-Service Data Preparation	2.00	2.50	3.00	3.00
Embedded Advanced Analytics	3.00	1.50	2.00	1.50
Interactive Visual Exploration	3.00	4.00	3.50	3.50
Analytic Dashboards	3.50	3.00	3.50	3.50
Ease of Use	3.00	3.50	3.00	3.00
Self-Contained ETL and Data Storage	4.00	3.00	2.00	4.50
Security and User Administration	4.50	4.00	3.00	3.50
BI Platform Administration	4.50	3.50	4.50	3.50
Governance and Metadata Manageme..	3.50	2.00	2.50	2.00
Embed Analytic Content	3.00	3.00	2.50	4.00
Data Source Connectivity	4.00	4.00	2.50	2.50
Collaboration and Social BI	1.50	1.50	1.50	1.50
Publish Analytic Content	3.50	2.00	3.00	2.00
Cloud BI	4.00	2.50	2.00	1.50
Mobile Exploration and Authoring	4.00	3.00	3.00	2.00
Average Rating	3.40	2.87	2.77	2.77

BI Consolidation Status

- **Tableau –** Enterprise purchase with OCP. Includes 24 more cores of server for total of 32 cores. Server will have internal facing and public facing options. 100 more desktops for total of 200 desktops. Option to expand desktop licensing in future fiscal years.
- **Microstrategy –** Desktop version will be free to DC agencies. Distribution method being developed by OCTO.

Office of City Administrator Data Team

Dartanion Williams

Director of Data Operations, OCA

The Lab @ DC

David Yokum, Director (OCA)

Mayor Muriel Bowser

City Administrator Rashad M. Young

OFFICE OF PERFORMANCE MANAGEMENT

December 14, 2016

Mission

The Office of Performance Management (OPM) uses **data,** strategic planning and innovation to continuously improve the programs and services DC government delivers.

OPM collaborates with the Mayor, City Administrator and DC government agencies to develop tools and capacity to create a rigorous performance management framework that lets all stakeholders measure and monitor progress and hold DC government accountable.

Strategic Areas

Strategic Planning and Performance

- Refine and implement a DC-wide integrated performance plan and strategic planning process that can lead to accountability and continuous improvement.

Accessibility and Use of Rich Data

- With OCTO, create and maintain a framework that allows for the collection and use of rich data to review progress, inform solutions, and provide transparency to the public.

Process and/or Service Improvement

- Provide additional capacity to agencies to address priority issues by analyzing problems and helping to develop and implement innovative solutions.

Training and Capacity Building

- Foster the culture and practice of robust performance management in all DC agencies through the use of training and capacity building to bolster planning, data collection, review and analysis.

Evidence and Evaluation

- Bring evidence from academic research into solutions to improve programs and services and where evidence isn't available, conduct evaluations to inform solutions.

What Can OPM Help With?

- Strategic plans
- Performance measurement framework
- Surveys
- Data analytics
- Design of low-cost interventions, based on behavioral science (e.g. form improvement)
- Evaluations (from A-Z, including low-cost randomized controlled trials)
- *And so much more!*

Office of Performance Management Staff

Jenny Reed, Chief Performance Officer

- **Brandon Daniels,** PhD, Performance Analyst
- **Lia Katz,** Applied Research Analyst
- **Jacob Wong,** Applied Research Analyst
- **Dartanion Williams,** Director of Data Operations
- **The Lab @ DC**
  - **David Yokum,** Director
  - **Donald Braman,** Senior Social Scientist
  - **Rachel Breslin,** Senior Operations Analyst
  - **Chrysanthi Hatzimasoura,** Senior Social Scientist
  - **Ryan Moore,** Senior Social Scientist
  - **Sam Quinney,** Applied Research Analyst

How Can We Help You?

- Connecting
- Consultation
- Jump starting analytics projects
- Information sharing
- Generating ideas
- ***What else?***

Evidence & Evaluation

- A diverse scientific team, networked with experts at agencies and outside research entities (e.g. universities).
- How much does a policy or program work?
- How might we draw on existing evidence and theory to design improved interventions?

Snow Dashboard

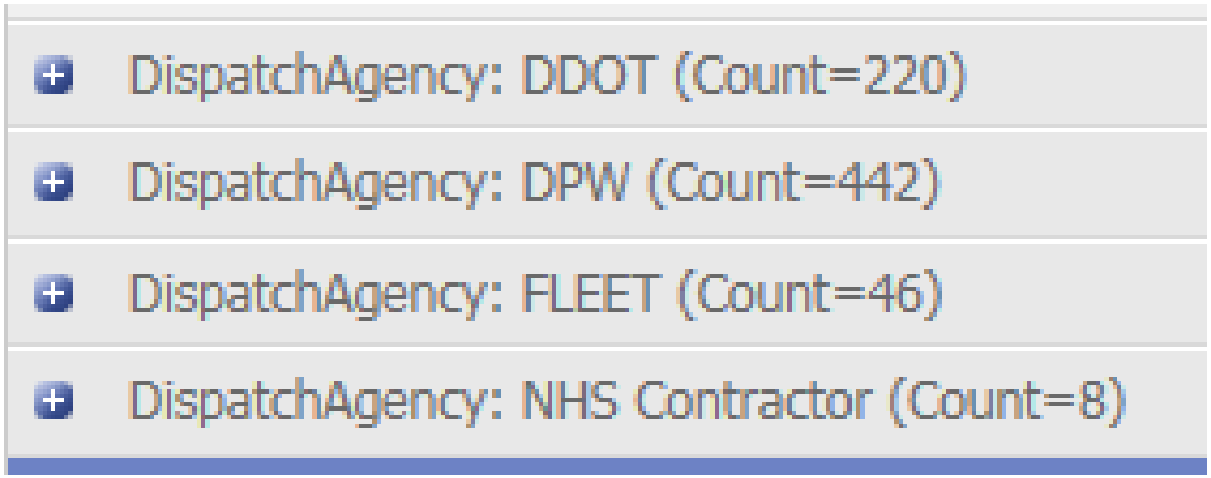
MeghanMarie Fowler-Finn (DPW) &
John Thomas (DDOT)

DC Snow Dashboard Collaboration

BACKGROUND

Previous Reporting

Time and Attendance



The data was limited to simple counts with no comparison to total Staff for the event. Also lacked type of employee that was missing.

This does not help us understand how fluid the staffing level is and where we may be in need.

Previous Reporting

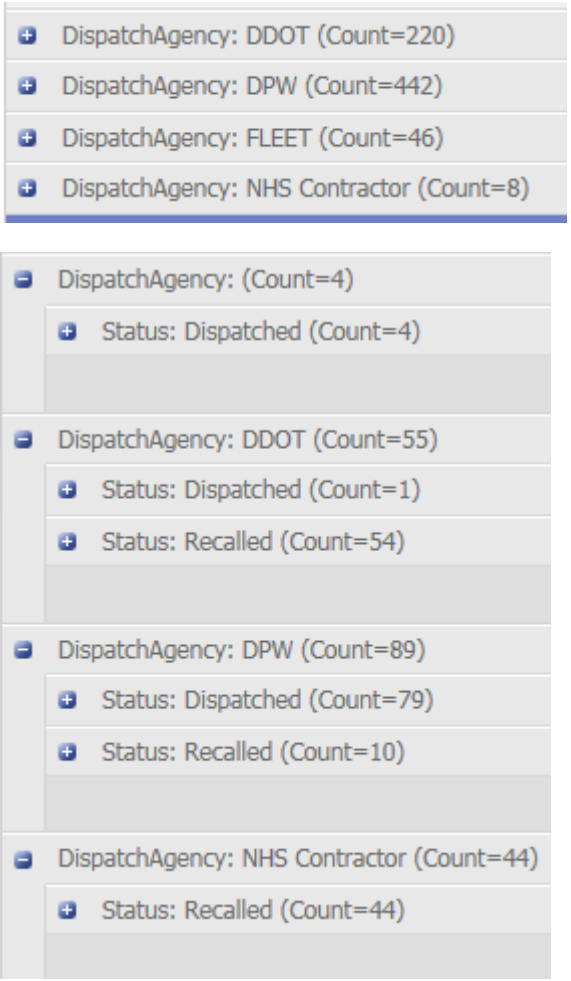
Snow AVL System

1	HP-1	100.00%		8	HP-65	96.97%
1	HP-2	96.71%		8	HP-66	100.00%
1	HP-3	96.59%		8	HP-67	100.00%
1	HP-4	96.67%		8	HP-68	100.00%
1	LP-101	98.77%		8	HP-69	100.00%
1	LP-102	92.39%		8	LP-706	90.00%
1	LP-103	95.74%		8	LP-801	98.65%
1	LP-104	83.75%		8	LP-802	83.33%
1	LP-105	87.37%		8	LP-803	80.91%
1	LP-106	70.83%		8	LP-804	88.79%
1	LP-107	97.20%		8	LP-805	89.41%
1	LP-201	1		Average Completion Overall =		93%
Average Completion Overall =		93%		9	HP-31	100.00%
2	HP-3	100.00%		9	HP-32	100.00%
2	HP-4	100.00%		9	HP-33	100.00%
2	HP-5	100.00%		9	HP-34	98.57%
2	HP-6	100.00%		9	HP-35	100.00%
2	HP-7	93.55%		9	HP-36	96.15%
2	HP-8	100.00%		9	HP-37	100.00%
2	LP-105	100.00%		9	LP-105	50.00%
2	LP-201	87.41%		9	LP-203	66.67%
2	LP-202	94.35%		9	LP-901	95.59%
2	LP-203	93.02%		9	LP-902	80.56%
2	LP-204	96.55%		9	LP-903	89.41%
2	LP-205	75.00%		9	LP-904	96.30%
2	LP-301	100.00%		9	LP-905	98.11%
Average Completion Overall =		95%		9	LP-906	98.71%

Data was entered by hand and from reports from the field staff. The data was not reliable, not very timely and lacked QAQC.

Previous Reporting

Dispatched Vehicles



The data lacked description for users outside the agencies.

The reference to quantities and count are not clear for the end user.

The data is static and does not provide the chance to drill down if needed.

Abrasives Used

Previous Reporting

Vehicles Problems/Issues

- Problem: CHARGING SYSTEM (Count=2)
  - Veh Type: [6 WHEEL DUMP W/PLOW] (Count=2)
- Problem: ENGINE/CHECK ENGINE (Count=1)
  - Veh Type: [6 WHEEL DUMP W/PLOW] (Count=1)
- Problem: POWER STEERING (Count=1)
  - Veh Type: [6 WHEEL DUMP W/PLOW] (Count=1)
- Problem: SERVICE FOR SNOW (Count=1)
  - Veh Type: [CREW CAB DUMP W/LIGHT PLOW] (Count=1)

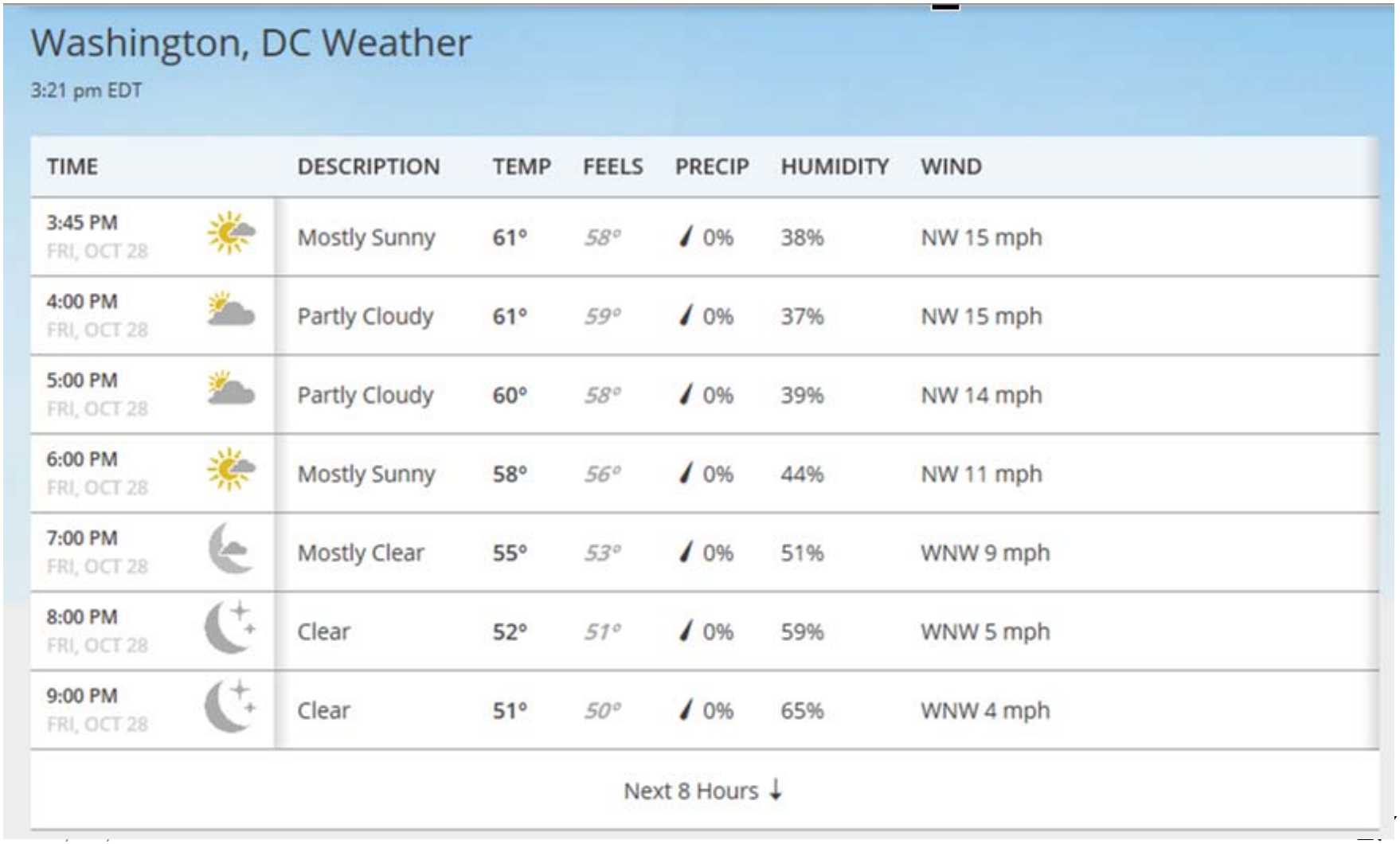
The report lumps issues together and does not provide specific asset numbers for the end user to act on.

Also does not show time for how long assets have been sitting.

Again we have basic data for a fluid operation that needs data that is live and layered.

Previous Reporting

Everyone has access to weather now so this is not useful data in a four hour report..



Washington, DC Weather

3:21 pm EDT

TIME	DESCRIPTION	TEMP	FEELS	PRECIP	HUMIDITY	WIND
3:45 PM FRI, OCT 28	Mostly Sunny	61°	58°	0%	38%	NW 15 mph
4:00 PM FRI, OCT 28	Partly Cloudy	61°	59°	0%	37%	NW 15 mph
5:00 PM FRI, OCT 28	Partly Cloudy	60°	58°	0%	39%	NW 14 mph
6:00 PM FRI, OCT 28	Mostly Sunny	58°	56°	0%	44%	NW 11 mph
7:00 PM FRI, OCT 28	Mostly Clear	55°	53°	0%	51%	WNW 9 mph
8:00 PM FRI, OCT 28	Clear	52°	51°	0%	59%	WNW 5 mph
9:00 PM FRI, OCT 28	Clear	51°	50°	0%	65%	WNW 4 mph

Next 8 Hours ↓

KICKING OFF

Why Collaborate?

- Many people want information on Snow Event with different needs and different questions
- Wanted to reduce the time spent on fulfilling requests by other groups during the event.
- Trying to create a place where information can be available at any time so the event can be more fluid
- Also provide some level of QAQC against the plan and the effort by providing greater insight and detail into the data

Overall Strategy

- Two agencies, with two point people, who wanted to improve the process - no point in doing it without mutual buy-in
- No need to create two different products for the same data, shared reporting processes
- Shared data systems and reporting systems
- Less work for both of us,
- More people to bounce ideas off off
- Collaboration and learning between agencies

DASHBOARD VIEWS

The New DashBoards Benefits

- We now have dynamic data that is changing as it happens during the event.
- We can act on changes immediately or watch trends over a period of time then act as needed.
- The end user can also see the changes and drill down as needed without taking time from the operational effort.
- Also can show or demonstrate change over time which should mean that the field team is working

StormTrak

10/28/2016 10:00:00 AM

Minute of Start	Minute of End	Mobilization Type	Accumulation	
October 28, 2016 5:00 AM	October 29, 2016 2:00 AM	Standby	0.0 in.	DRILL / DRY RUN

Total Cost	Vehicle Cost	Abrasive Cost	Food Coupon Cost	Attendance Cost	Regular Time Cost	Overtime Cost	Overtime Hours
$259,365	$71,347	$27,023	$0	$168,234	148,448.9101	$19,785	595 hours

Overtime

Agency	Overtime Hours	Avg. Overtime Cost per hour	
Grand Total			$19,785
CPRWTRUCK	2 hrs	$20/hr	$40
DDOT	244 hrs	$36/hr	$8,890
DPW	349 hrs	$31/hr	$10,855
NHS	0 hrs	$20/hr	$0

Total Participating Employees

DDOT	DPW	FLEET	NHS Contractor	Current Staffing Level
21.5% *(215)*	49.0% *(490)*	4.6% *(46)*	0.8% *(8)*	75.6% *(756)*

Click on any category to see the employee details for that group.

Employees at Work

	DDOT	DPW	FLEET	NHS Contractor	Grand Total
Grand Total	214	449	46	8	714
Admin Support	5	38	1		44
Bobcat Operator		2			2
Commander		1			1
Contract Plow Driver		1			1
Data Entry / Admin Support	15	54	3	1	73
Dome Captain	1				1
Eng. Equip. Opr	6	1			7
Equipment Support		5	1		6
Field Master		1			1
Field Supervisor		2			2
Fleet/Vehicle Asst	6				6
Fleet/Vehicle Lead	1				1
Hvy Plow Driver	59	128			186
Hvy Plow Supvr	3	1			4
IT Support		6			6

FASTER - Fleet

Fleet Snow Data

Status of Snow Vehicles (non-rental)

		Vehicle In Shop	Vehicle Not In Shop	Grand Total
		52	175	227
DDOT	DDOT Heavy	13	35	48
	DDOT Light	12	28	40
DPW	DPW Heavy	16	64	80
	DPW Light	11	48	59

		Vehicle Not In Shop
		77.1%
DDOT	DDOT Heavy	72.9%
	DDOT Light	70.0%
DPW	DPW Heavy	80.0%
	DPW Light	81.4%

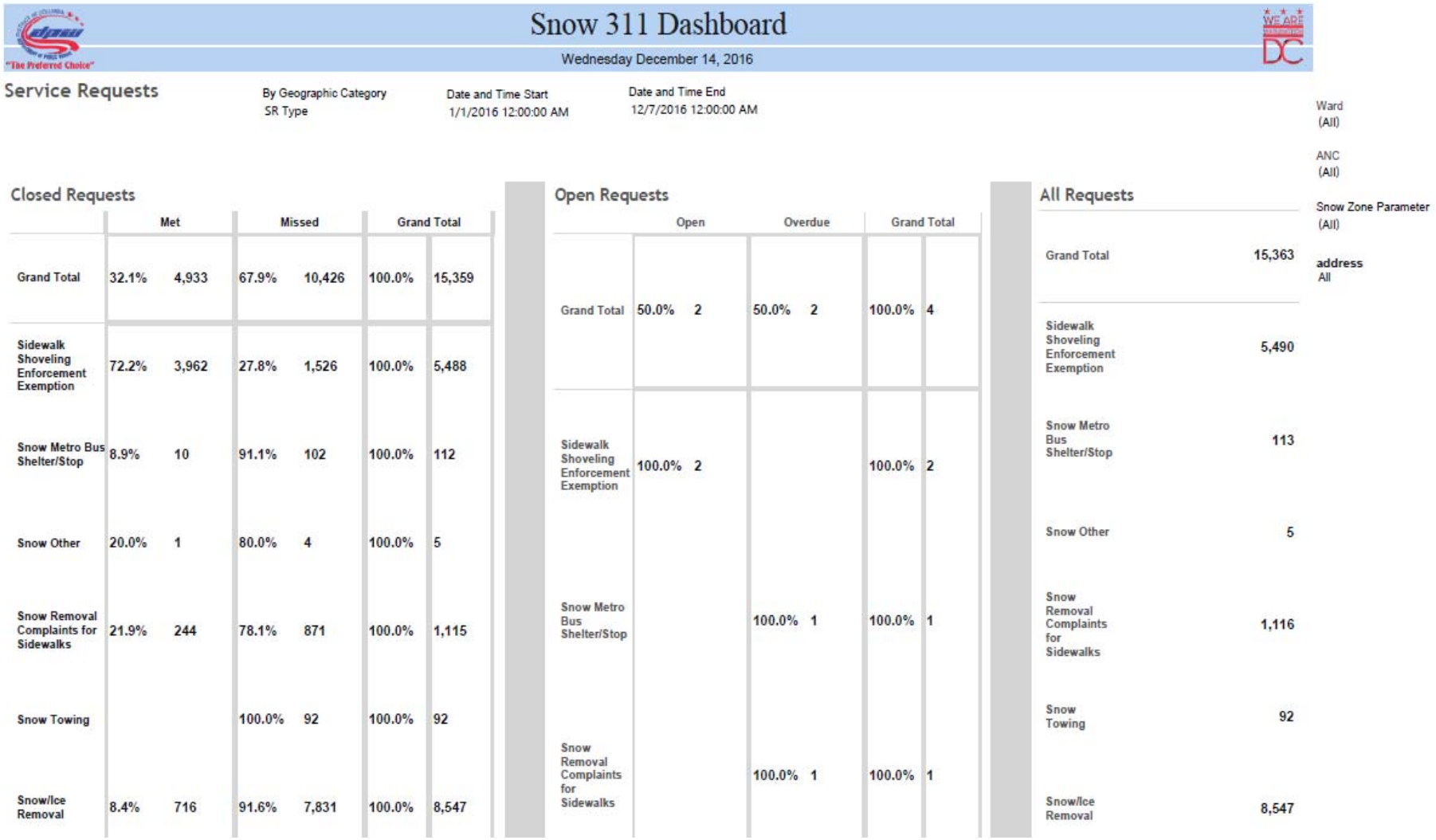
Status of Snow Vehicles at the Shop - click on a # (except column or row totals) to see specific status information

		WO OPEN	FINISHED	WORK IS DONE	Grand Total
Grand Total		43	7	3	52
DDOT	DDOT Heavy	11	1	1	13
	DDOT Light	9	3		12
DPW	DPW Heavy	14	1	1	16
	DPW Light	9	2	1	11

Rental Vehicles

		184
DDOT Rental	Heavy Plow	15
	Light Plow	2
	Loader/Backhoe	4
	Pickup	24
	Other	2
FMA Rental	Heavy Plow	18
	Loader/Backhoe	10
	Pickup	22
	Other	11
SWMA Rental	Heavy Plow	29
	Loader/Backhoe	13
	Pickup	30
	Other	4

311 Service Requests



Snow 311 Dashboard

Wednesday December 14, 2016

Service Requests

By Geographic Category
SR Type

Date and Time Start
1/1/2016 12:00:00 AM

Date and Time End
12/7/2016 12:00:00 AM

Ward
(All)

ANC
(All)

Snow Zone Parameter
(All)

address
All

Closed Requests

	Met		Missed		Grand Total	
Grand Total	32.1%	4,933	67.9%	10,426	100.0%	15,359
Sidewalk Shoveling Enforcement Exemption	72.2%	3,962	27.8%	1,526	100.0%	5,488
Snow Metro Bus Shelter/Stop	8.9%	10	91.1%	102	100.0%	112
Snow Other	20.0%	1	80.0%	4	100.0%	5
Snow Removal Complaints for Sidewalks	21.9%	244	78.1%	871	100.0%	1,115
Snow Towing			100.0%	92	100.0%	92
Snow/Ice Removal	8.4%	716	91.6%	7,831	100.0%	8,547

Open Requests

	Open		Overdue		Grand Total	
Grand Total	50.0%	2	50.0%	2	100.0%	4
Sidewalk Shoveling Enforcement Exemption	100.0%	2			100.0%	2
Snow Metro Bus Shelter/Stop			100.0%	1	100.0%	1
Snow Removal Complaints for Sidewalks			100.0%	1	100.0%	1

All Requests

Grand Total	15,363
Sidewalk Shoveling Enforcement Exemption	5,490
Snow Metro Bus Shelter/Stop	113
Snow Other	5
Snow Removal Complaints for Sidewalks	1,116
Snow Towing	92
Snow/Ice Removal	8,547

311 Service Requests

Snow 311 Dashboard

Wednesday December 14, 2016

Service Requests

Date and Time Start
1/1/2016 12:00:00 AM

Date and Time End
12/7/2016 12:00:00 AM

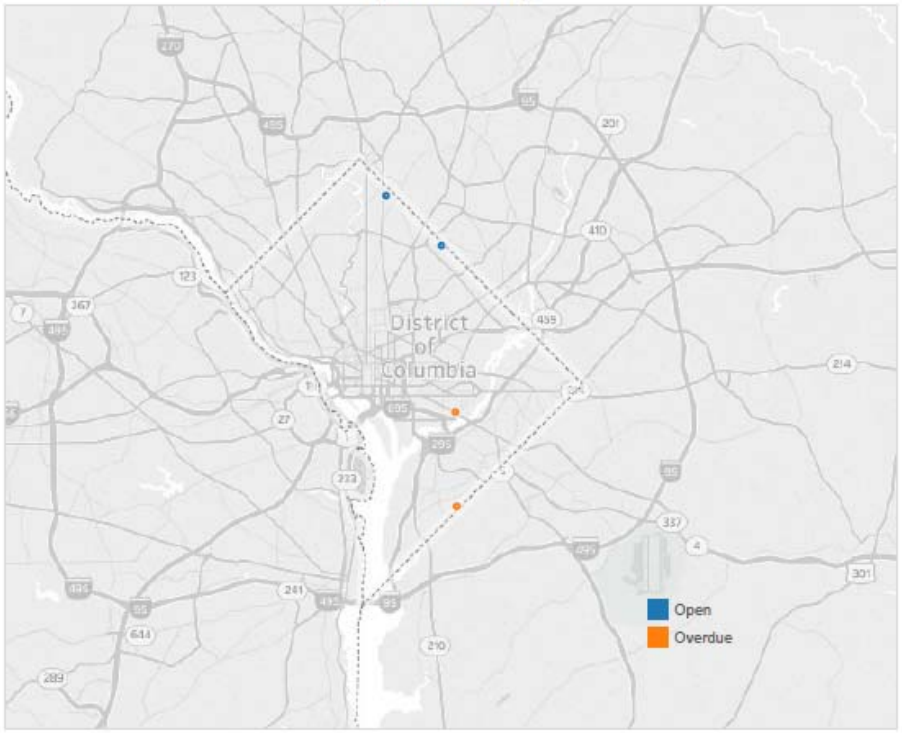
Ward
(All)

ANC
(All)

Address
All

Snow Zone
(All)

Open Ticket Map



Hot List

Multiple open service requests for the same service at the same location

Email List & Slack Channel

Julie Kanzler (OCTO)

Open Discussion

Next Meeting
1:00 to 3:00
February 14, 2016
OCTO
200 I Street SE