#### City Council Study Session 3/13/17

# UTILITIES FIELD MOBILITY

Don McQuilliams, Utilities Operations Manager

## Challenge's

✓ Interacting with non-English speaking customers.



# Hello Hola Bonjour Hallo Ipuser Hallá

## Eliminating duplicative paper data collection.

## ✓ Providing real time information during events.



## Utilities Field Mobility Project

Identified as a proposal in the 2015/2016 budget.

Internal Goals:

- Providing the right information in the right form factor to staff.
- Driven by staff engagement at each step. Follows a One City/HPO approach to provide a solution that staff have ownership in.

External goals:

- ✓ Improving customer service by:
  - Providing real time information to our customers.
  - Improved customer interactions.
  - ✓ Avoiding return visits.
- ✓ Improving business process efficiencies by:
  - ✓ Minimizing duplication and reliance on paper resources.
  - ✓ Providing a more efficient means to access work orders.

## The Players

#### Core Team

Name	Dept./Title
Joe Harbour	Project Champion Utilities/Asst. Director O&M
LucyLin	
Lucy Liu	Utilities/Asst. Director RMCS
Don	Business Owner
McQuilliams	Utilities/Operations Manager
Bonnie Grant	ITD/TBS Manager
Roger Lewis	ITD/Project Manager
Brian Breeden	Transportation
Uma Singh	Utilities/Business Systems Manager

Project governance, oversight, key decision making, project promotion.

User adoptions was key! Identification of key stakeholders to ensure success.

#### **Project Team**

Name	Dept./Title
Don McQuilliams	Business Owner Utilities/Operations Manager
Roger Lewis	ITD/Project Manager
Jackie Goeman	Utilities/Admin. Supervisor
Tony Marcum	Utilities/Operations Manager
Keston Woodyatt	Utilities/Business Systems Analyst
Uma Singh	Utilities/Business Systems Manager
John Sizemore	Utilities/Water Quality
John Ellman	Utilities/Wastewater
Paul Dills	Utilities/Water
Chad Brown	Utilities/Storm & Surface Water
Matt Lebeau	Utilities/Maximo SME
Jeff Chandler	ITD/CTS
Lorna Derro	ITD/Business Analyst
Joe Lipker	ITD/Systems Analyst
Garrett Solberg	ITD/NSS

Software specifications & requirements, product development & testing, etc...

#### Understanding the needs

#### Device Deployment

✓ 65 iPad Pro's were deployed in September of 2016

Connectivity and security were important! IT helped to set up a 'tunnel' straight to the City servers.

#### ✓ Deployed in two phases

- First phase was to introduce the iPad to staff with out of the box applications.
  - GoMaps mobile map source for Utilities infrastructure
  - ✓ Outlook, Word, Excel, PowerPoint, OneDrive, OneNote
  - ✓ Apple Message and Facetime
  - ✓ Google Translate

Second phase was to introduce the Informer application.

Informer is a 3<sup>rd</sup> party application that works with Maximo using an easy to use UI for the mobile device.

## Google Translate

## Improves communications with our non-English speaking customers

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x固定管道。		
	for an hour to fix the pipe.	← Chinese (Traditional) for an hour to fix the pipe.

#### Go Maps

#### Developed by IT to provide a mobile solution to field maps to staff.



#### Apple Facetime & Messenger

## ✓ Quickly allows staff to communicate with live video capabilities to help solve problems faster.



Wed, Jan 18, 10:30 AM

<u>17720 SE 40th pl</u> 10 sandbags delivered for helping with private flooding issue. No structural flooding to my knowledge

16839 SE 62nd

CBs at top of hill not functioning and water going over a hillside. We are in route to investigate

#### 4726 SE 152nd pl

<u>Customer</u> worried about a slope that had slid in past and is not overgrown might be moving again we are in route to investigate

Newport villa is asking where we are at with investigation regarding Newport high school and they're added discharge after remodel. I forwarded to WQ due to maintenance is not involved in that.



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#### Storm Drainage Inspections

 Developed by IT to aid with improving efficiencies for NPDES inspections Citywide.



#### Desktop Maximo

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Utilities Work Order Tracking	P Bulletins: (0)	♠ Go To La Reports ♣ Start Conter ♣ Price	ofile XSign Out ?Help III.
Find: List Work Order Child Work Orders	Image: Select Action       Plans     Related Records     Actuals     Log		
Work Order Details		Work Classification	
Status: WAUDIT 1/28 Parent WO: >>  Asset: >>	se manhole cover 3/17 8:29 PM 38 SE 38th PI	Work Type: ECO     ECO       Symptom: HAZARD     HAZARD	badway condition mergency Call out azardous condition ustomer Request
Assignment Department: UTIL Q Division: OM Q Section: SURFACE Q Crew Lead: CRBROWN Q	External References      Project ID:     Claim ID:     Personal Injury?     Permit Number:	Illicit Dise	s(ESA): Ori
Assigned To: KNALL	Case ID:	Actual	PDES?
Scheduled Start: Scheduled Finish:	100 100	Actual Start: 1/28/17 7:15 PM Actual Finish: 1/28/17 8:15 PM	職 職
External Customer		Labor Defaults	Location Details   Internal C
Customer Name: Company / Organization: My Bellevue App		Default SWP:	Map Grid: M-12 Rep Maint. District: 3 Reported B

#### The 'Informer' application



#### Informer work order screen

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×			WO #651443			+
					48th St	WPORT
Summary	Customer	Actuals	Related	Specs	Other WO's	Docs
	651443 Work Order #					
	Customer reports in Description	regular discharge co	oming from PE		>	
	Patricia Lozier (hom Long Description	neowner) reported th	nat the water coming out o	of the pipe has been	flashy lately a >	
	Parent WO				>	

#### ASSET/REGULATORY

326844-PIPE END, INTO LAKE : 4731 LAKEHURST LN Asset	>
265528-4731 Lakehurst Ln Location	>
Best Mgmt Practices	>
HPA required?	
Illicit Discharge?	

DOE Called?

NPDES?

### So how are we doing...

# A Recent survey to staff indicates favorable results so far...

- ✓ 80% of staff indicate that they use the iPad greater than twice a week with 53% indicating they use it daily.
- ✓ 60% of staff surveyed indicate that the device meets their needs.
- ✓ 50% of staff surveyed indicate the software/applications meets their needs.
- ✓ 62% of those surveyed indicate having the device has reduced the number of trips back and forth during the day.

#### What's next

Process Improvements on the way! Staff have identified some improvements moving forward they would like to see.

- Interactive maps, increased search capabilities and customizable start screens for Informer.
  - ✓ Staff have been using Informer for 6 weeks
- Inspection applications connected to Maximo via Informer.
  - ✓ Storm drainage inspections
  - ✓ Hydrant surveys
  - ✓ Manhole surveys
- Access to shared drives and commonly used files.
  - ✓ SharePoint

#### Demonstrations

✓ Google Translate

The Storm Drainage Inspection Application

✓ Informer