

Mobile Technologies in Emergency Preparedness and Risk Mitigation



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This morning...

- Background
- Challenges
- Solution
- Demo
- Q & A



- “Ensure a responsive and high performing workforce”
- Make data available in the field with or without network connectivity
- Leverage data from multiple departments in one location
- Provide simple tools to enhance process



Challenges

- Need to deploy an affordable portable device
- Limited network connectivity – deadspots throughout City
- Large volume of data
- Various departments involved in managing data
- Needs to be simple to use



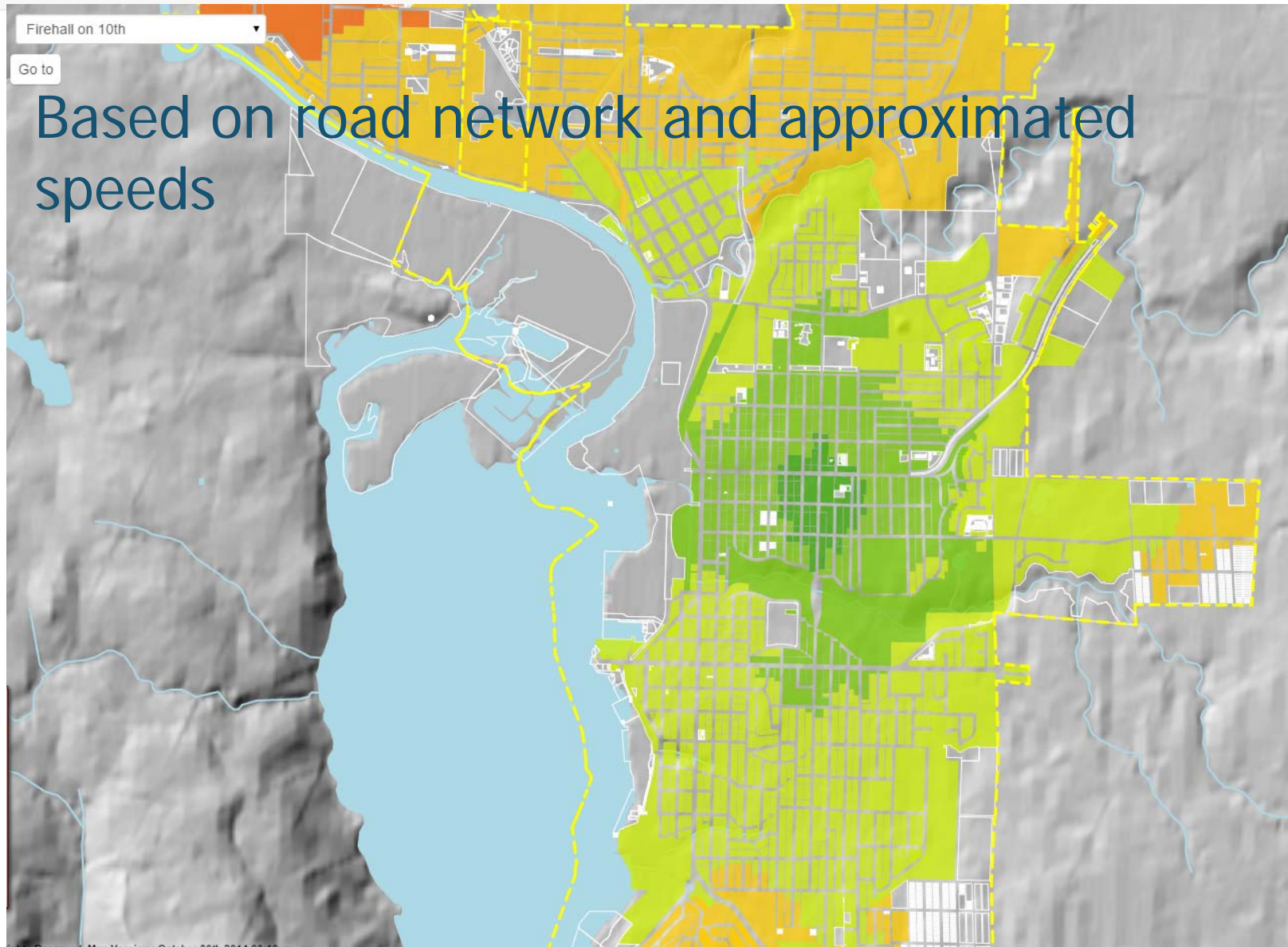


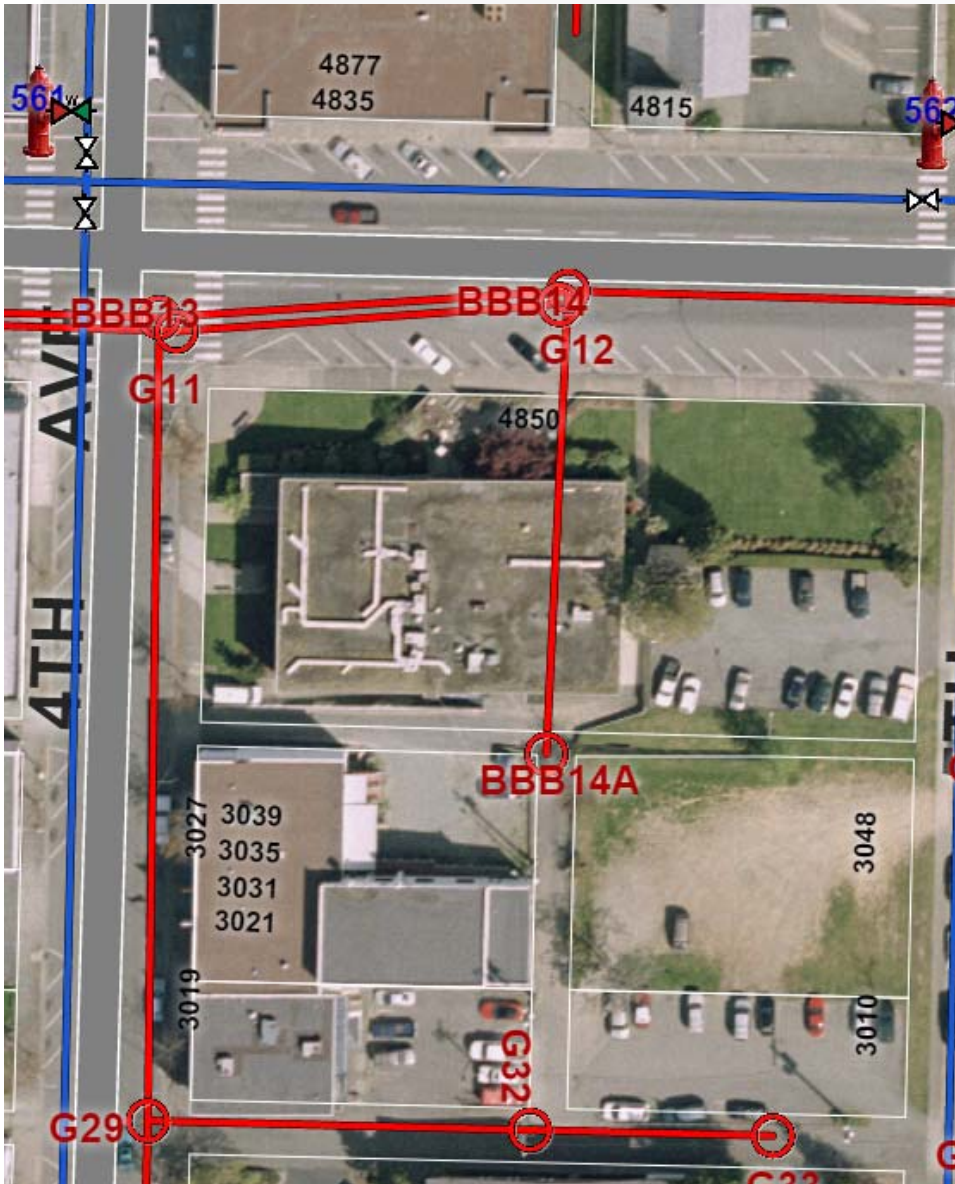
- Solution Components
 - Data aggregation/integration leveraging FME
 - HTML5 based application delivered on i-Pad but available in browser
 - Digital Markups for passing info back to Engineering Department
 - On-board data



Driving Times

- Based on road network and approximated speeds





NOTIFICATION / LEAK / BREAK REPORT
ENGINEERING DEPARTMENT

OPERATIONS DIVISION

1. WATER
2. SANITARY SEWER
3. STORM SEWER

NOTIFICATION

① LOCATION ADDRESS: *City Hall*
4850 Argyle St

② DATE & TIME REPORTED: YEAR MONTH DAY TIME
2000 11 09 8:30

COMMENTS: *broken w/line.*

REPORTED BY: *City Works*
dispatch (Frank)

INSPECTIONS

NOTIFICATION OF PROJECT TO W.C.B.

③ DAY: *9* ④ TIME: *8:45 AM* TROUBLEMAN: *Schut Harrison* LEAK LOCATION, FINDINGS, ACTION: *Leak on connection to City Hall ahead of shut-off + meter.* INITIALS:

⑤ SHUT OFF TIME: BY WHOM: *HARRIGAN* COMMENTS:

REPAIR CREW

⑥ CREW CHIEF: *HARRIGAN* ⑦ DAY: *09* TIME: *9:00 AM* ⑧ DISTANCE: *1.52 m* ⑨ FROST DEPTH: m ⑩ STATIC PRESS: kpa ⑪ WATER TEMP: °C ⑫ AIR TEMP: °C

⑬ PIPE MATERIAL:
1. COPPER
2. PVC
3. GALV.
4. STEEL
5. A.C.
6. D.I.
7. CONC. *CAST IRON*
8. OTHER SPECIFY:

⑭ PIPE SIZE:
1. 13mm
2. 20mm
3. 50mm
4. 100mm (4")
5. 150mm
6. 200mm
7. 250mm
8. OTHER SPECIFY:

⑮ LEAK DATA:
1. CONTRACTION
2. 0-2mm
3. 2-4mm
4. 4-6mm
5. 6-9mm

⑯ PROBABLE LEAK CAUSE:
1. UTILITY CROSSING
2. OVER 2. UNDER
3. LARGE ROCK
4. HEAVY TRAFFIC
5. EARTH SETTLEMENT
6. WEAK PIPE
7. DAMAGED DURING CONST. *backward tree roots*
8. OTHER *under man* SPECIFY:

⑰ REPAIR MATERIALS:
1-4" repair clamp

⑱ PIPE COATING:
1. NONE
2. COAL TAR
3. YELLOW JACKET
4. POLY SLEEVE
5. EPOXY
6. OTHER SPECIFY:

⑲ PIPE CONDITION:
1. GOOD
2. FAIR
3. POOR
4. DEFORME

⑳ JOINT TYPE:
1. BELL & SPH
2. FLANGED
3. OTHER SPECIFY:

㉑ PIPE JOINT MATER.
1. GRAVEL
2. SAND
3. SILT
4. CLAY
5. ROCK
6. OTHER *leak, roots* SPECIFY:

㉒ SOIL RESISTIVE:
1. NONE
2. POOR
3. OTHER SPECIFY:

㉓ EXISTING CORROSION PROTECT:
1. YES
2. NO

㉔ DETAILED LEAK LOCATION:
See back

⑳ NOV 9/2000 repairing leak on 4" C.I. connection to City Hall. *backward tree roots, cast iron*

ACKFILL COMPL. DAY TIME: *09 11:15*
MIN TURN ON DAY TIME: *09 10:00*

PIPE SAMPLE ㉕ DYE TEST:
1. YES
2. NO

FOREMAN'S SIGNATURE: _____

LOCATION SKETCH, ADDITIONAL COMMENTS, & INSURANCE CLAIMS (IF ANY) TO BE SHOWN ON REVERSE SIDE OF FORM.

① FITTING LEAK:
1. REPAIR CLAMP
2. SERVICE SADDLE
3. MAIN STOP
4. CURB STOP
5. GASKET BLOW OUT

MCTAVISH RD ▾
Go
Direction Overlay
Form Data

Inspector Name: _____

Contract Number: **2**

Record Drawing Number: **02-PP04**

Customer Number: **101**

Customer Name: **Bradshaw, Theresa**

Legal Description: **53114 RR 143**

Service Type: **Single Dwelling**

Inspection Comments:

Date: _____

County: **County of Minburn**

Main Diameter: **350 mm**

Side of Road from Main: **Same**

Service Size: _____

Meter Model #: _____

Meter Size: _____

Flow Restrictor (GPM): _____

- View/update data in field

Hydrant

Edit

HydrantType:	Fire Hydrant
Metered:	0
ServicedBy:	DNS
STREET_NUM1:	1680
HANDLE:	220FDD
HydrantModel:	TC-20P
HydrantNum:	64
HydrantNumber:	H64
PumperPorts:	Storz
KPA:	496
HydrantID:	W-HY-04-0168
Ownership:	North Saanich
PSI:	72
OBJECTID:	1
geodb_oid:	1
STREET_NAME:	MCTAVISH RD
HydrantPurpose:	Fire Control
DescriptiveLocation:	McTavish Rd/

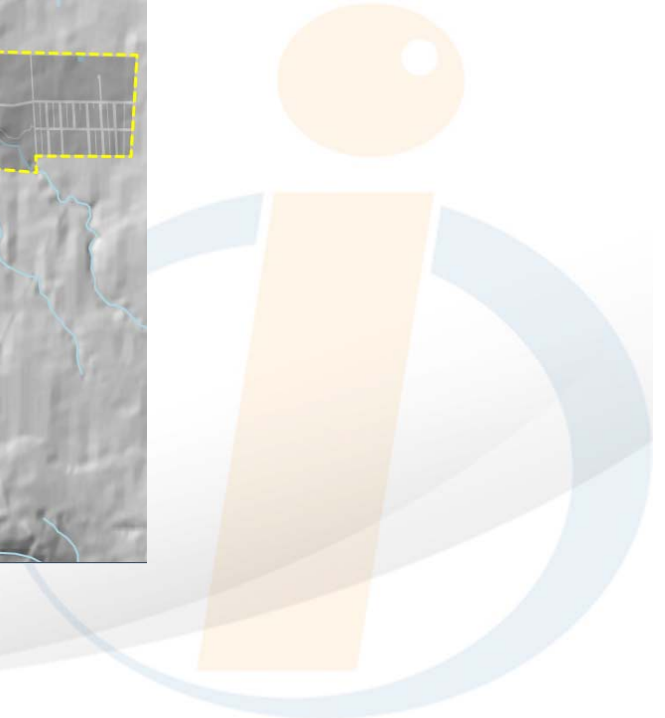
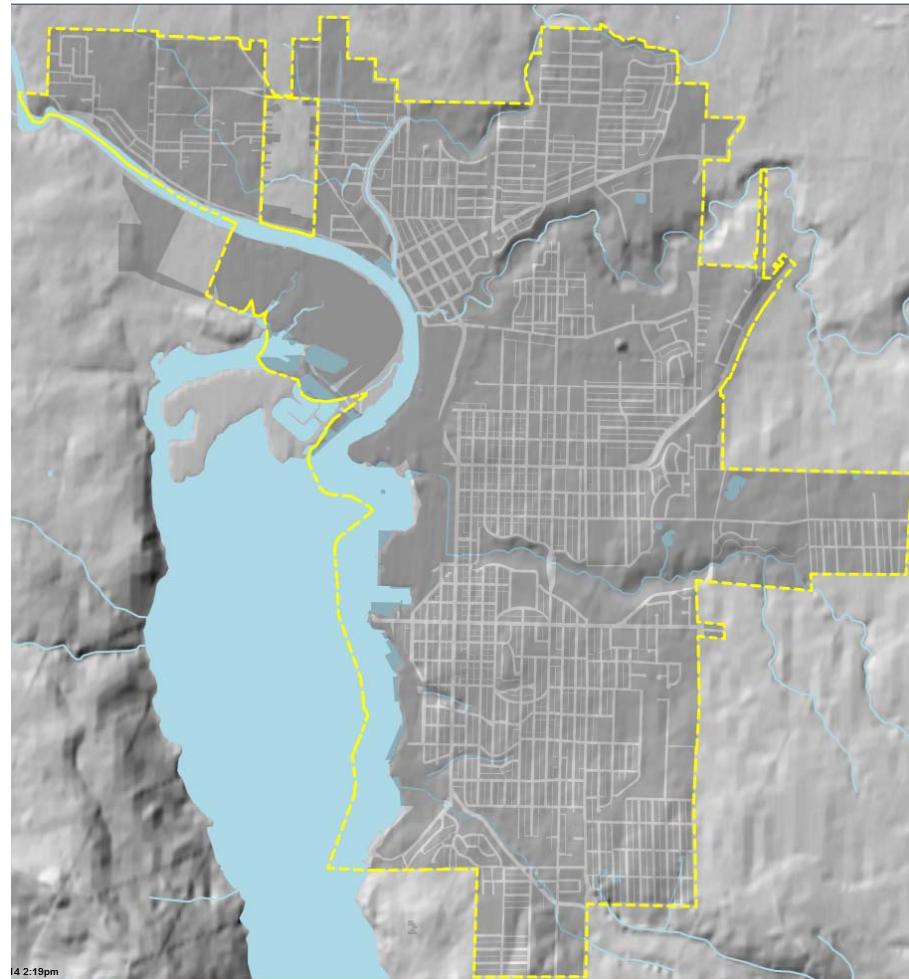
Missing catch basins

LEAK CAUSE:

COMMI

JOINT LEAK

Demo



Thanks!

- Jonathon McIntyre – jmcintyre@i-opentech.com

