MapWoW! for Resilient Asset Management

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Natural Disasters: 2007-2017

… how can we use technology to reduce this?

Dominica aftermath Hurricane Maria, 2017

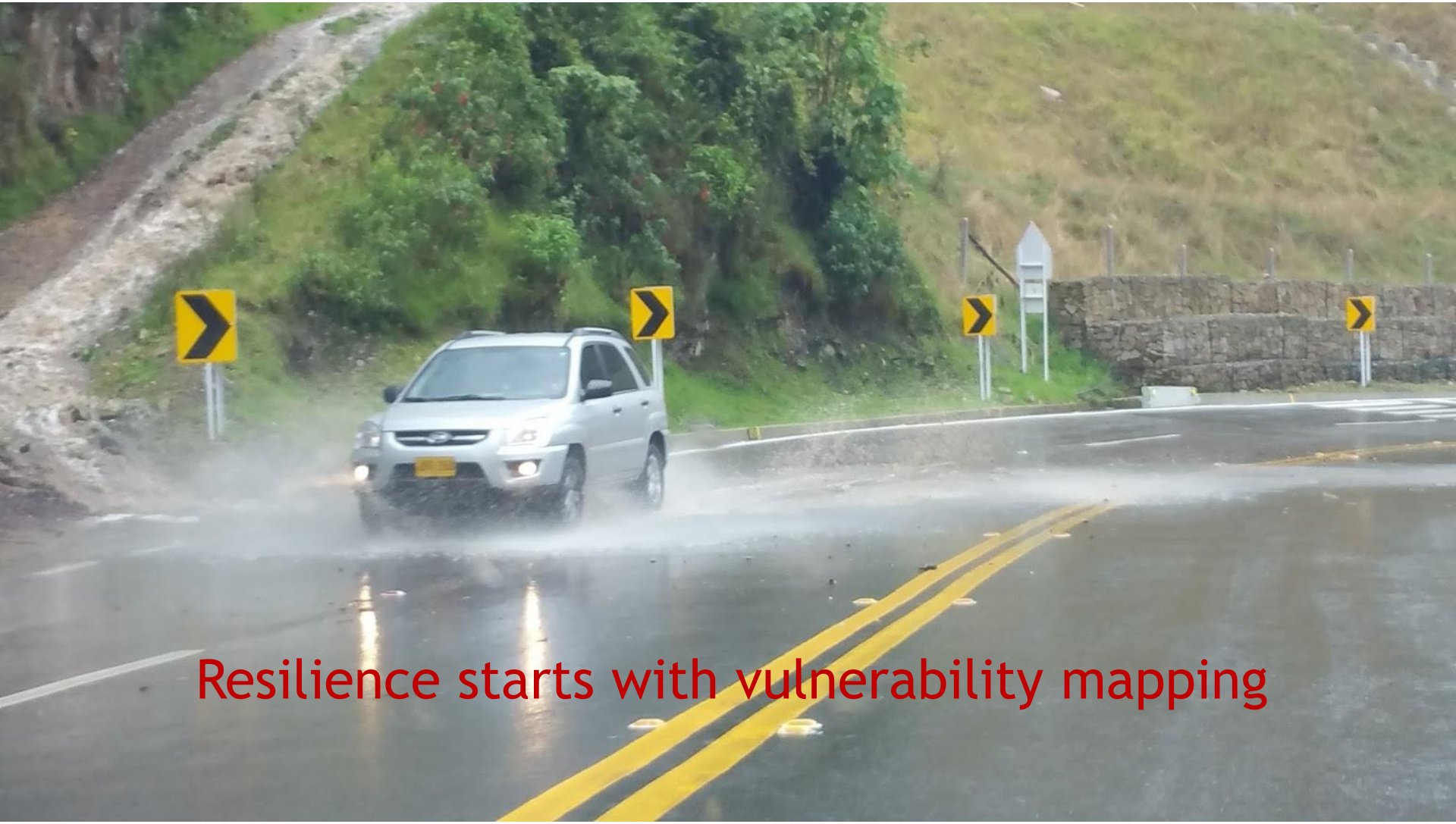
Dominica aftermath Hurricane Maria, 2017

- https://www.youtube.com/watch?v=Hkn1jYP0Nmg

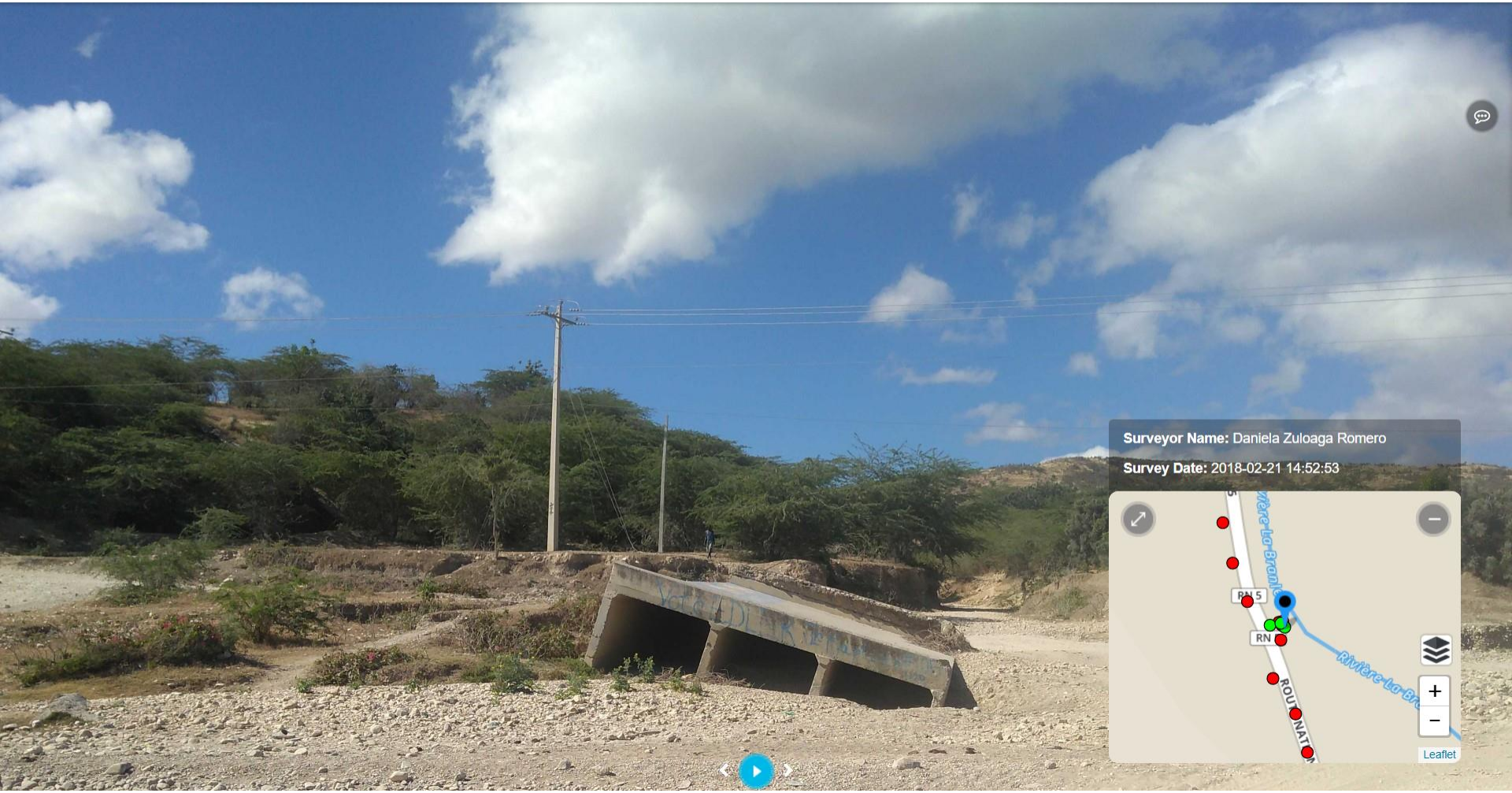
Houston aftermath Hurricane Harvey, 2017

Vulnerability of assets are not readily available

… MapWoW! provides comprehensive view of the assets


Resilience starts with vulnerability mapping

Haiti - Road Asset Vulnerability Monitoring for Climate Resilience


Surveyor Name: Daniela Zuloaga Romero
Survey Date: 2018-02-21 14:52:53
RN
Leaflet

No easy way to understand:

- Potential damage and disruption before an event
- Actual damage, loss and disruption after the event
- Insurance claim/ reconstruction costs

According to Insurance Information Institute, 16 insurers failed after Hurricane Andrew in 1992

25 Years Later: How Flori

Secure | https://www.insurancejournal.com/news/southeast/2017/08/24/462204.htm

Andrew's Impact on the Industry

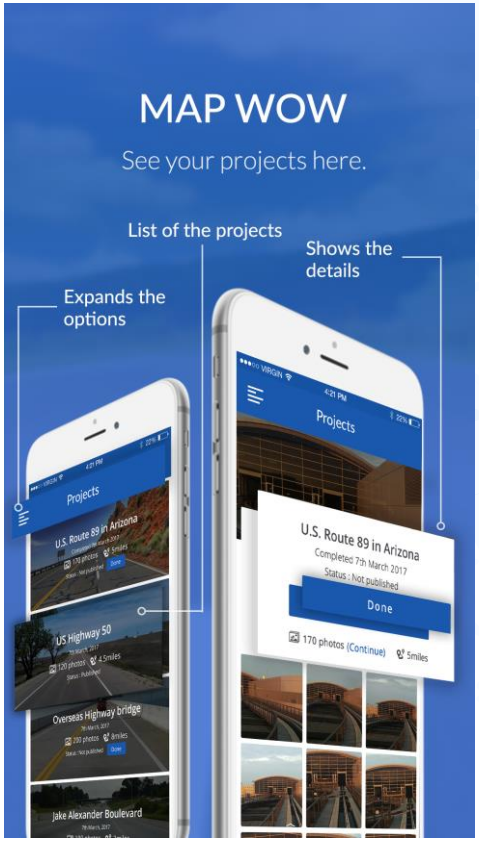
Not all citizens and businesses got back on their feet after Hurrica
category 5 storm was the costliest disaster in U.S. history when it
then Louisiana with overall damage at the time of $15.5 billion, ac
Insurance Information Institute (I.I.I).

And when all was said and done, the industry was not prepared to
claims. Andrew was responsible for the failure of at least 16 insure
and 1993, I.I.I reports.

://www.reuters.com/article/us-berkshire-buffett-insurance/buffett-says-berkshire-can-handle-400-billion-mega-catastr

"Concurrently, much - indeed, perhaps most - of the p/c world would be out of business," he wrote, referring to property and casualty insurers.

MapWoW!



MapWoW! is mobile data collection solution that can help to collect georeferenced photos of the assets, emerging events and emergencies.

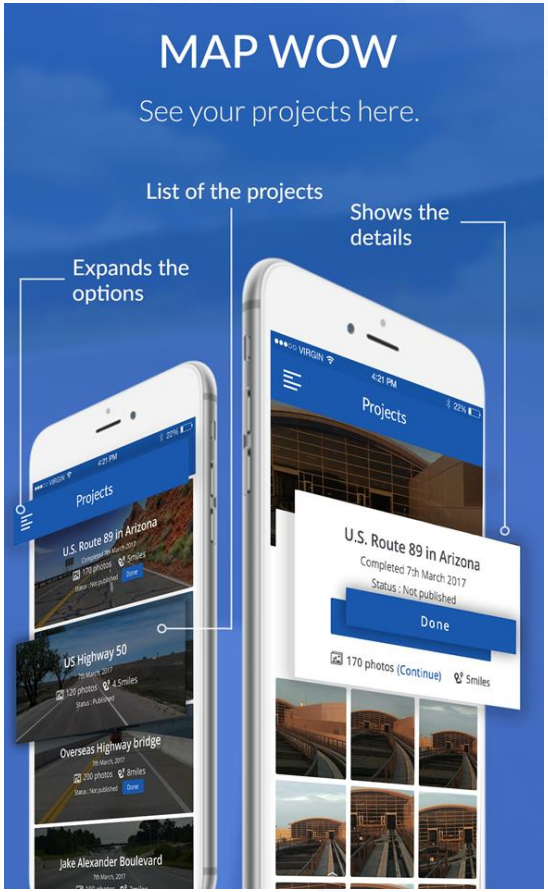
The data collected from MapWoW! readily integrates with existing the GIS platform where it can add value to monitor assets, rapidly changing situation and take decisions about these emerging situations.

1. Mobile App

2. Visualization and GIS integration

3. Project and user administration
   (complete backend system)

Mobile app

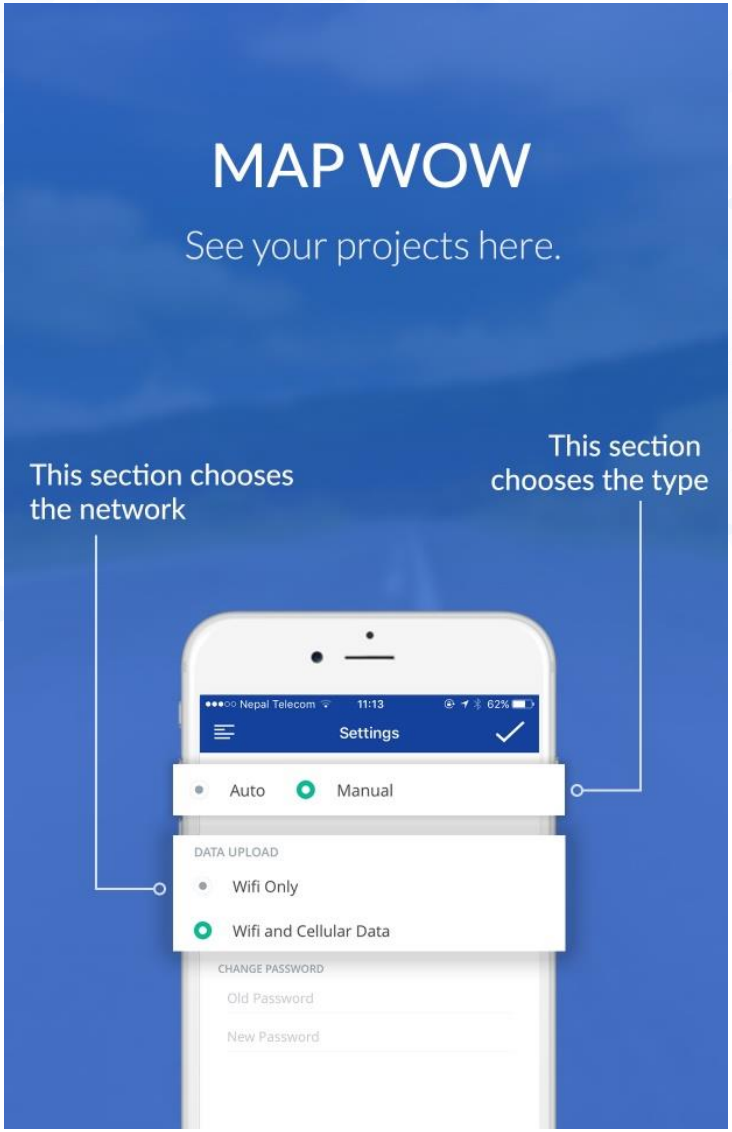


Available both for Android and iOS

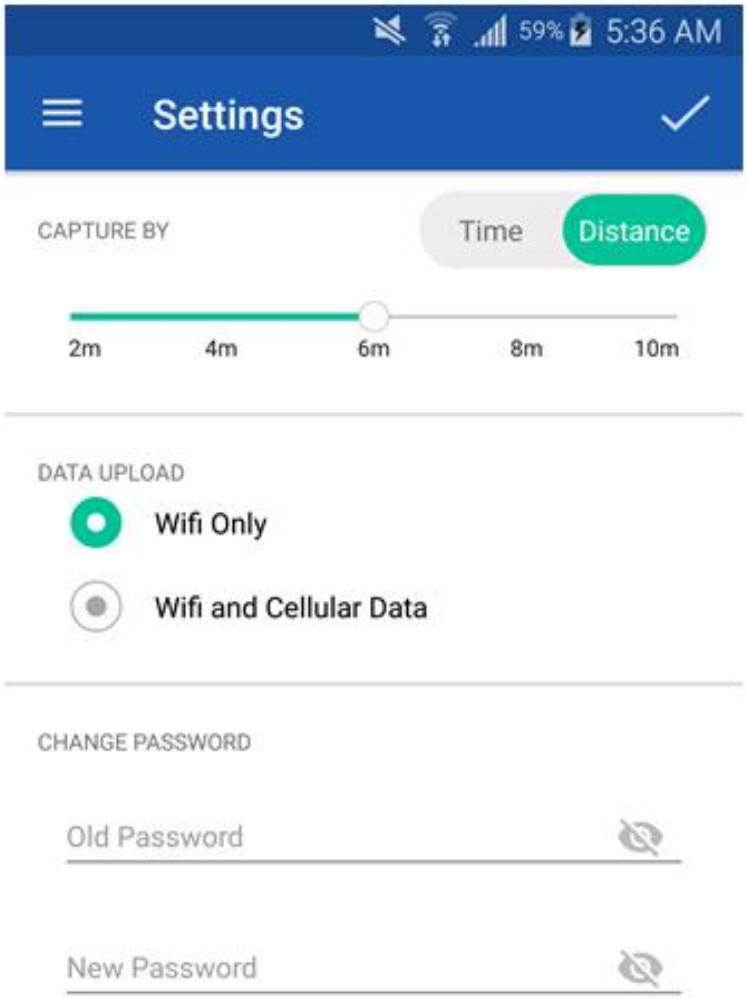
Downloadable at Google Play Store

MapWoW!

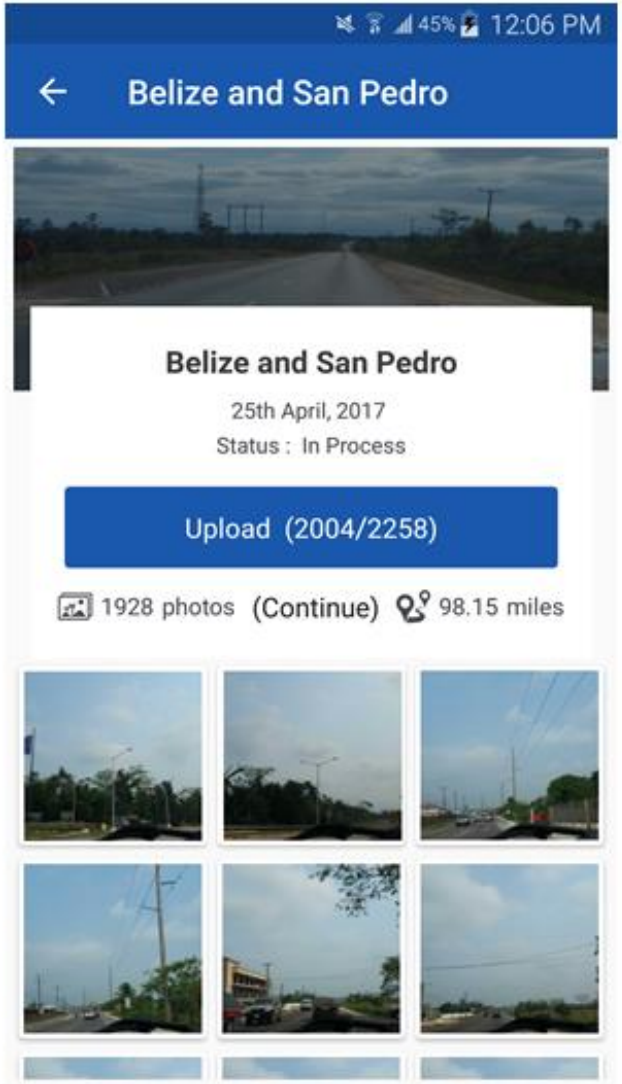
Mobile app


MAP WOW
See your projects here.
This section chooses the network
This section chooses the type
Nepal Telecom
11:13
62%
Settings
Auto
Manual
DATA UPLOAD
Wifi Only
Wifi and Cellular Data
CHANGE PASSWORD
Old Password
New Password

Mobile app

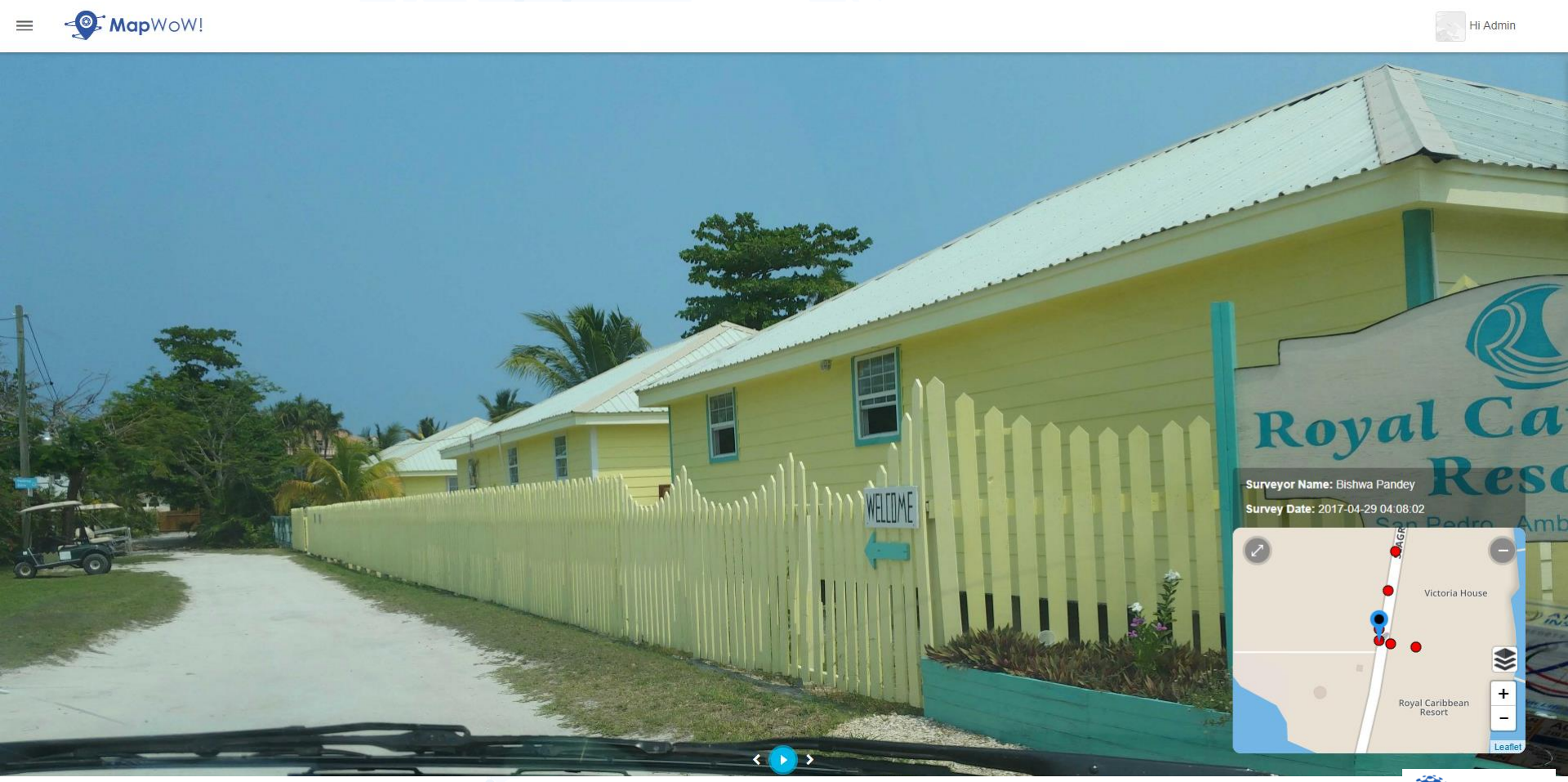

59% 5:36 AM
Settings
CAPTURE BY
Time
Distance
2m
4m
6m
8m
10m
DATA UPLOAD
Wifi Only
Wifi and Cellular Data
CHANGE PASSWORD
Old Password
New Password

Mobile app


45% 12:06 PM
Belize and San Pedro
Belize and San Pedro
25th April, 2017
Status : In Process
Upload (2004/2258)
1928 photos (Continue) 98.15 miles

App working on moving vehicle

Data taken from the moving car



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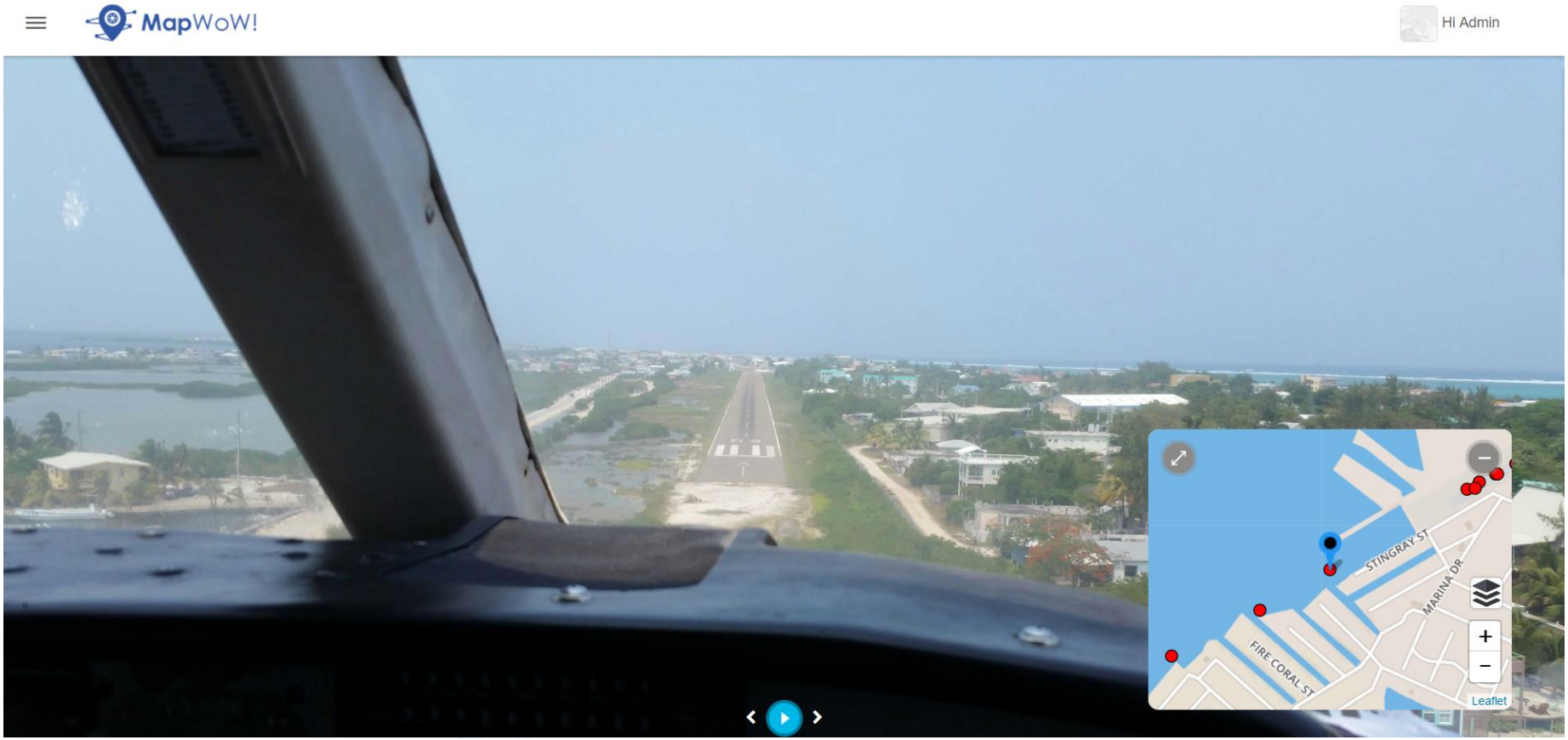
Data taken from the boat

Data collection from a small aircraft



Data acquisition from a small plane

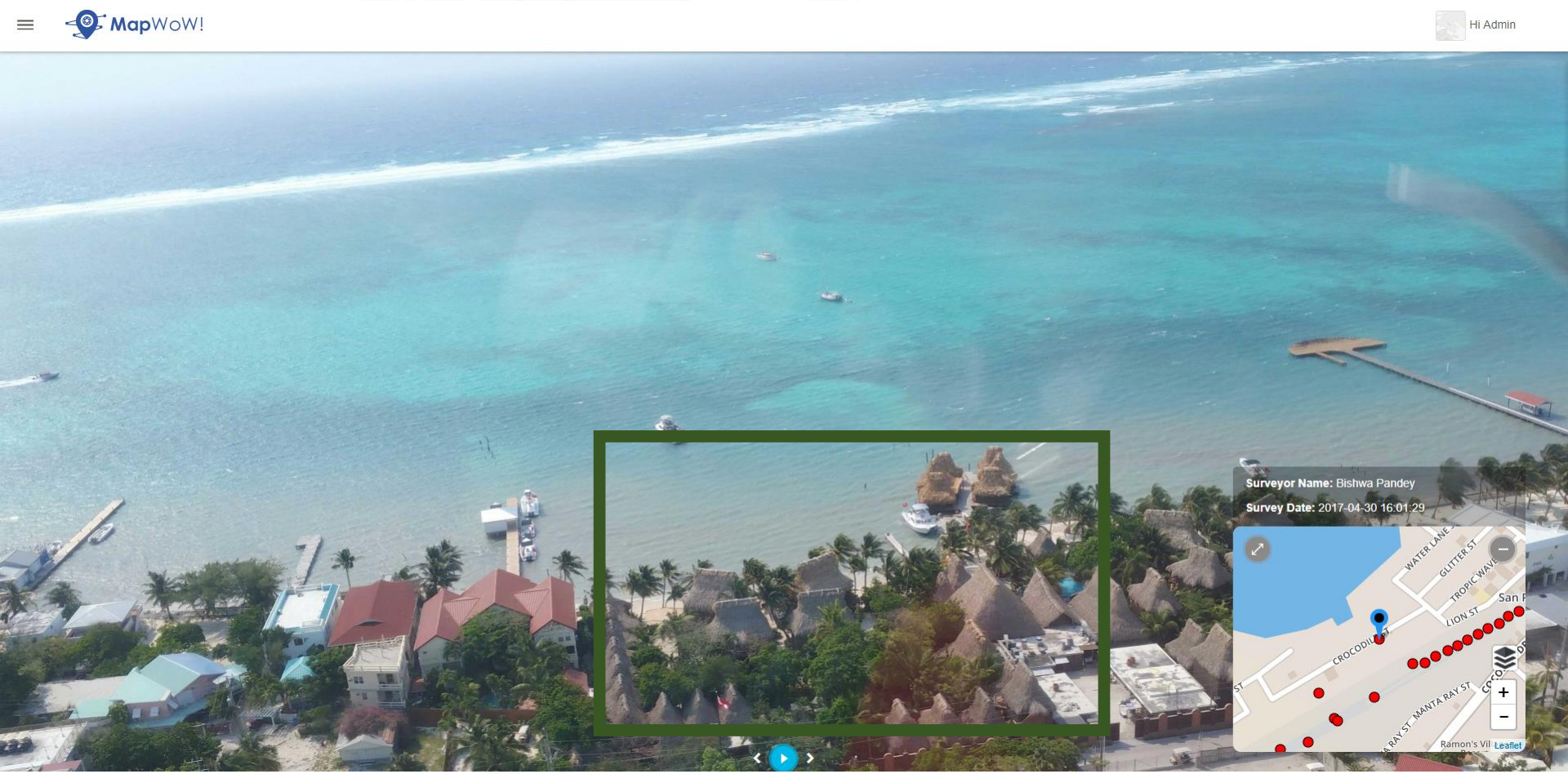
Same area in Google Satellite

Same area in DigitalGlobe Satellite

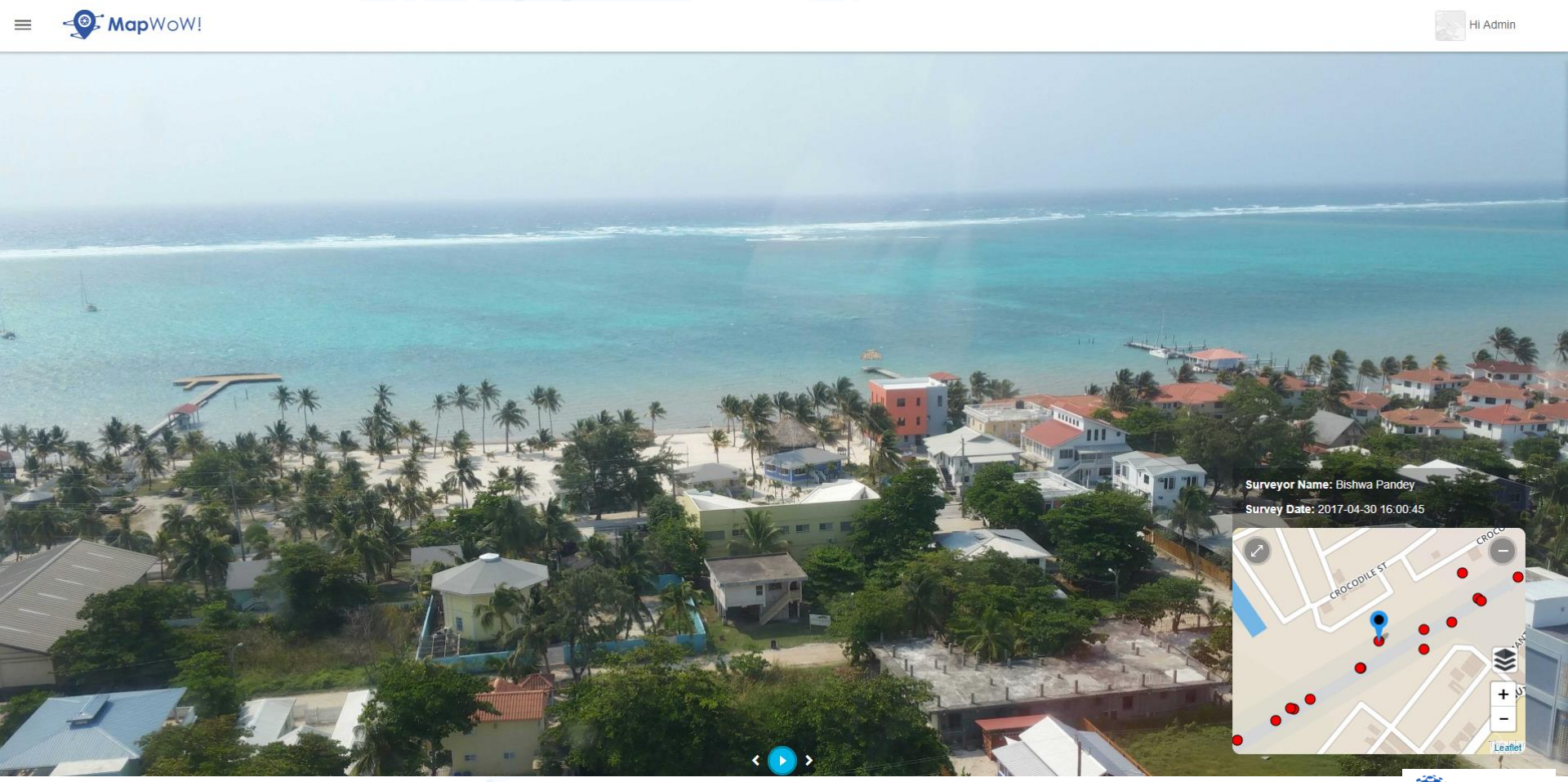
MapWoW! data and Google Satellite

MapWoW! data at full resolution

Detail building characteristics can be extracted



Additional MapWoW! data



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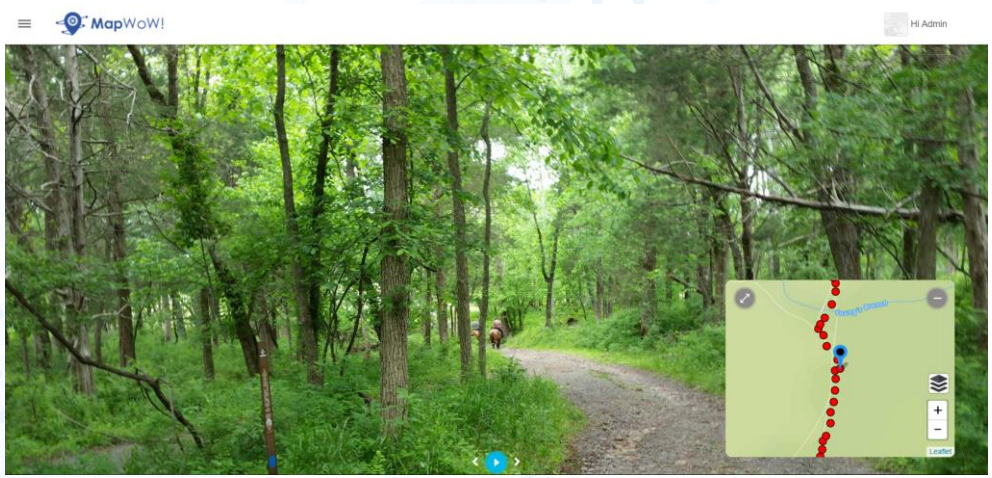
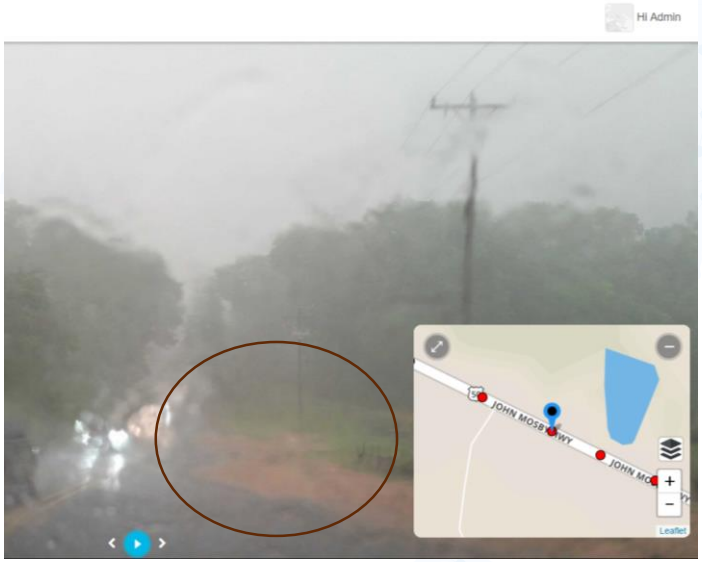
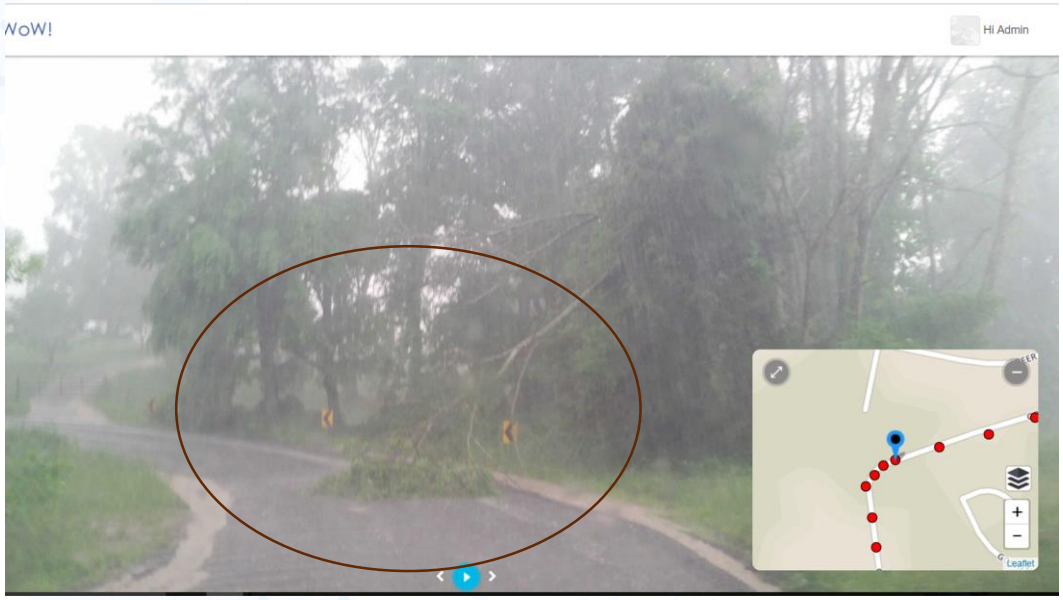


Mapping hard to reach places (trails, narrow alley etc.)



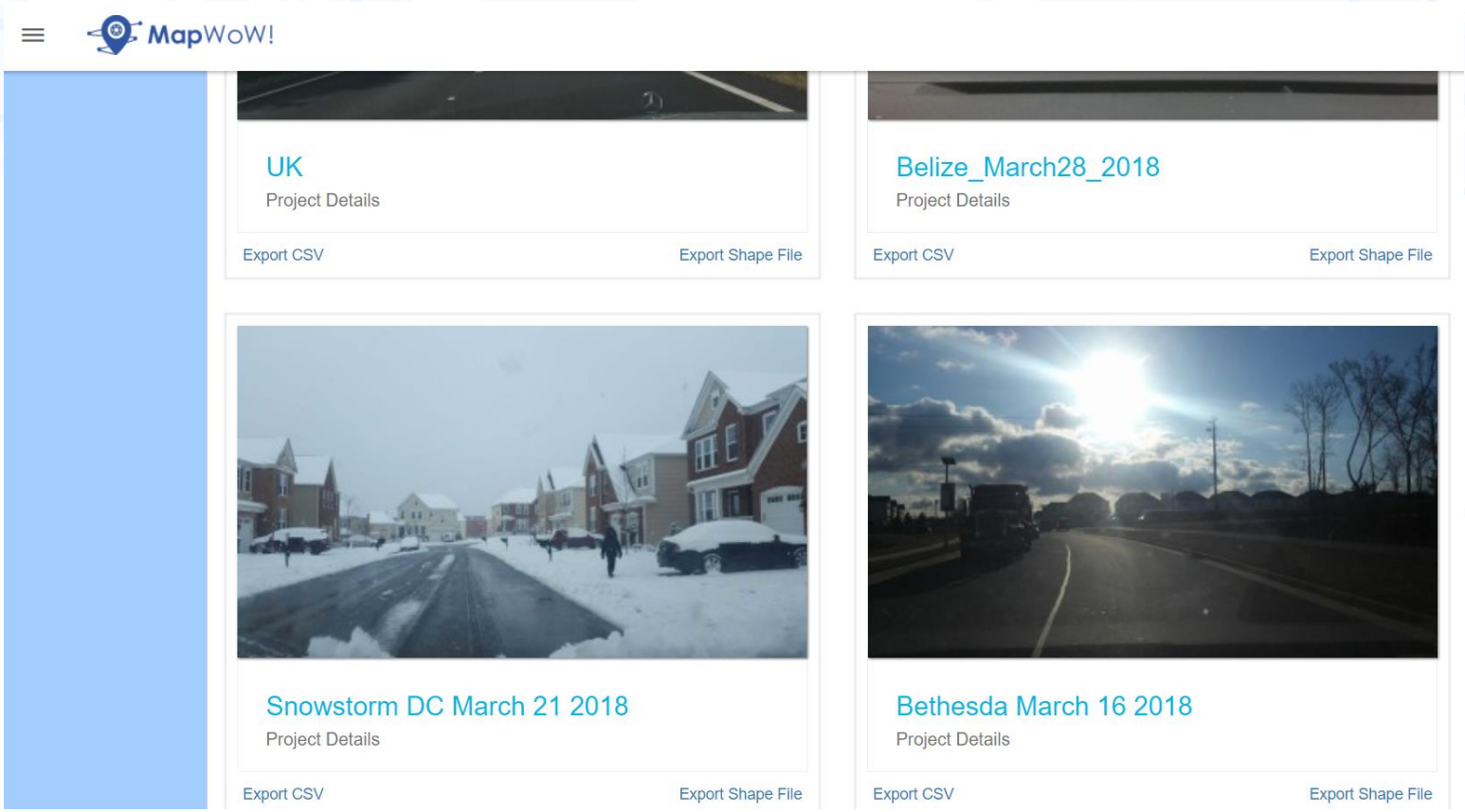
Road flooding from a construction site after heavy rain



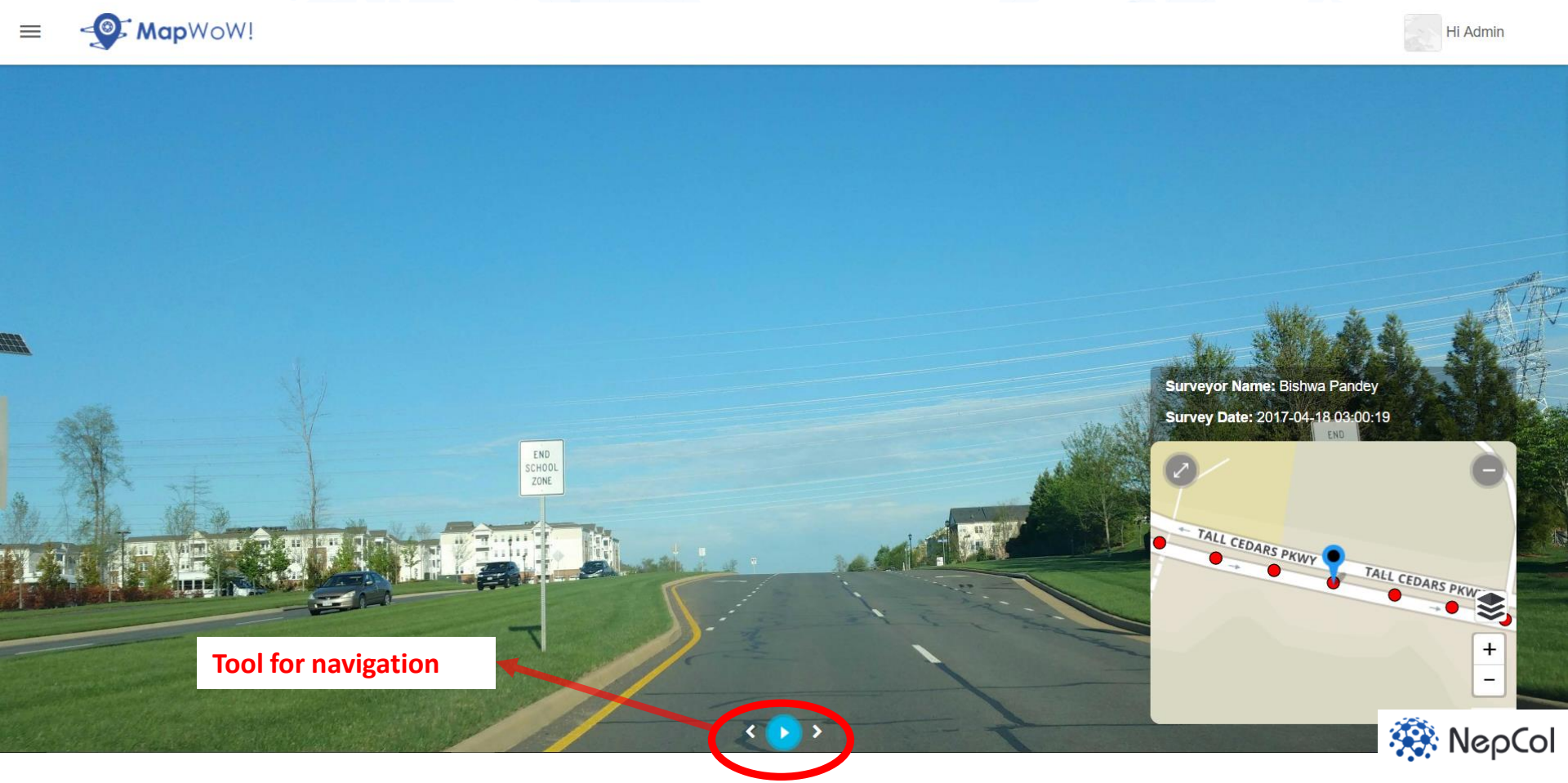
Fallen tree after heavy rain

Using mapWow! to capture road incidence/ emergency

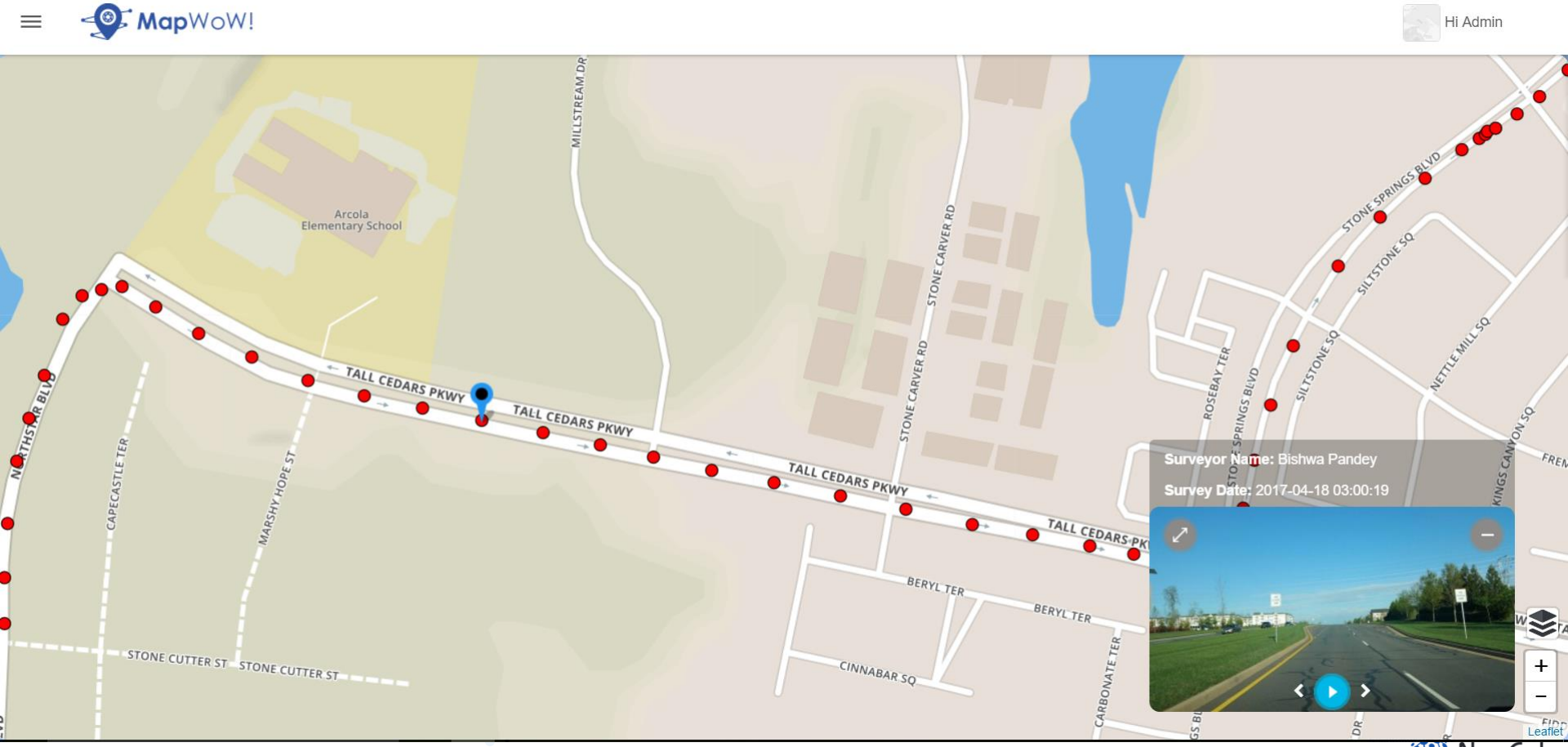
Visualization and GIS integration



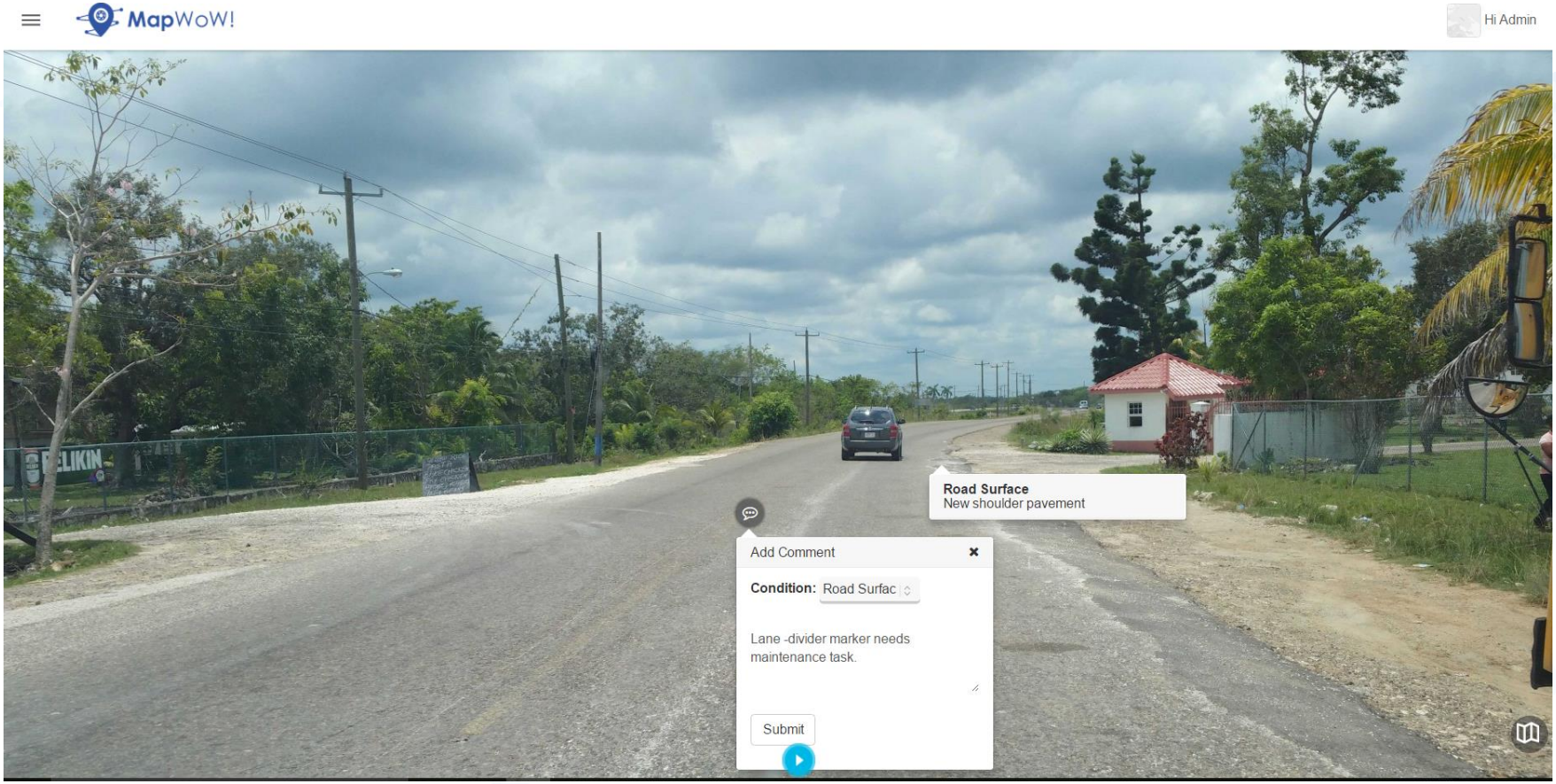
Navigating through collected data



Collapsing picture, bigger map



Ability to tag pictures – triggering maintenance/monitoring



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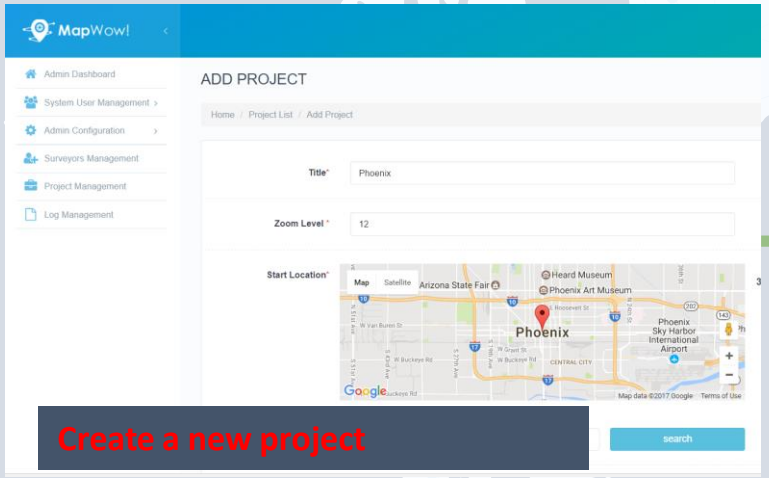
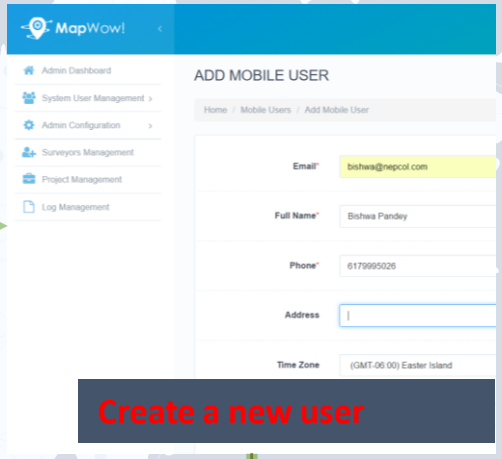
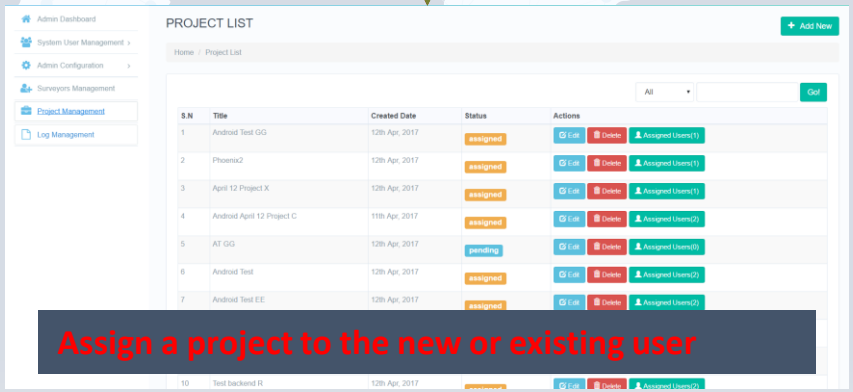
Live Demo

https://mapwow.spatialedge.net/

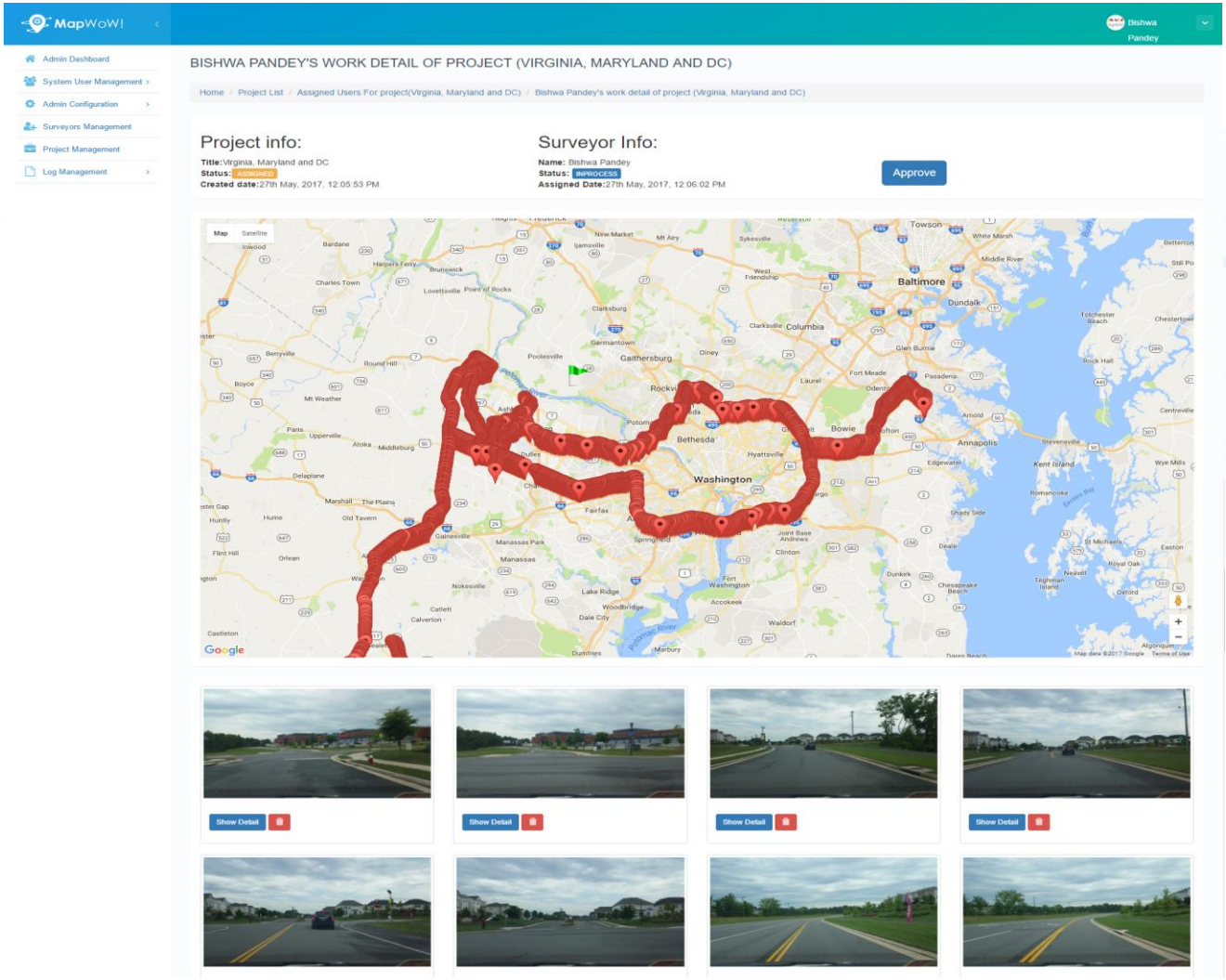
MapWoW! is an Enterprise System





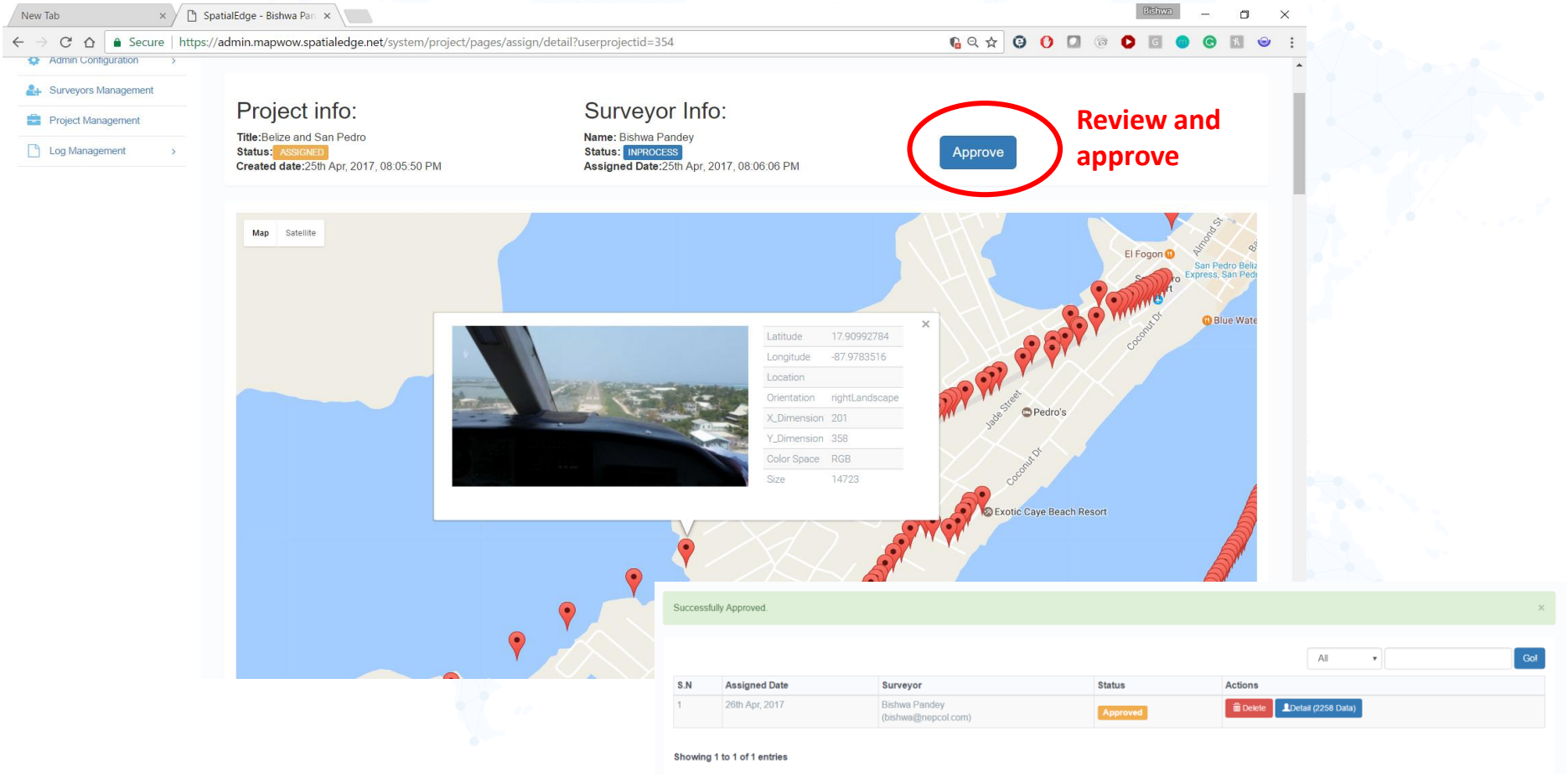


Data review and edits



Post-processing/ Admin module

Data publication into GIS system



Live Demo

https://admin.mapwow.spatialedge.net/system/login

Bishwa Pandey

More than 20 years working
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