

Transportation & Mobility Hackathon Nov. 16-17



Team "NerDOT"

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#dctech





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AUTHORIZED
VEHICLES
ONLY

Commuter
Information
800-748-7433

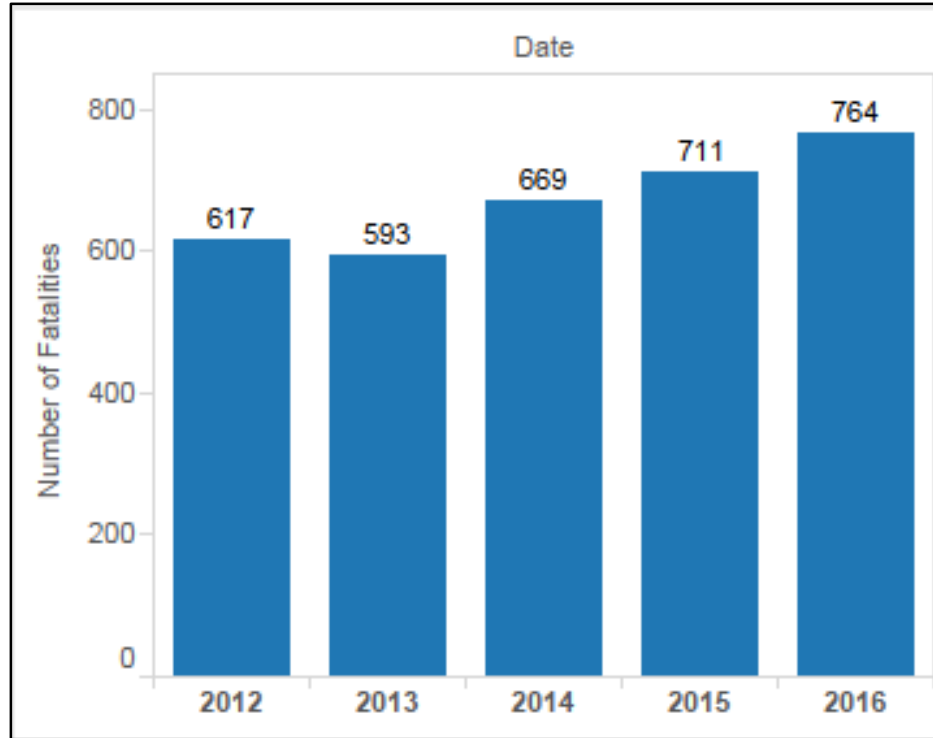
Jeep

HONDA

PRINTER

Wheaton

National Work Zone Fatalities



Source: workzonesafety.org

Virginia Work Zones

- Crashes: **1,777**
- Injuries: **870**
- Fatalities: **10**

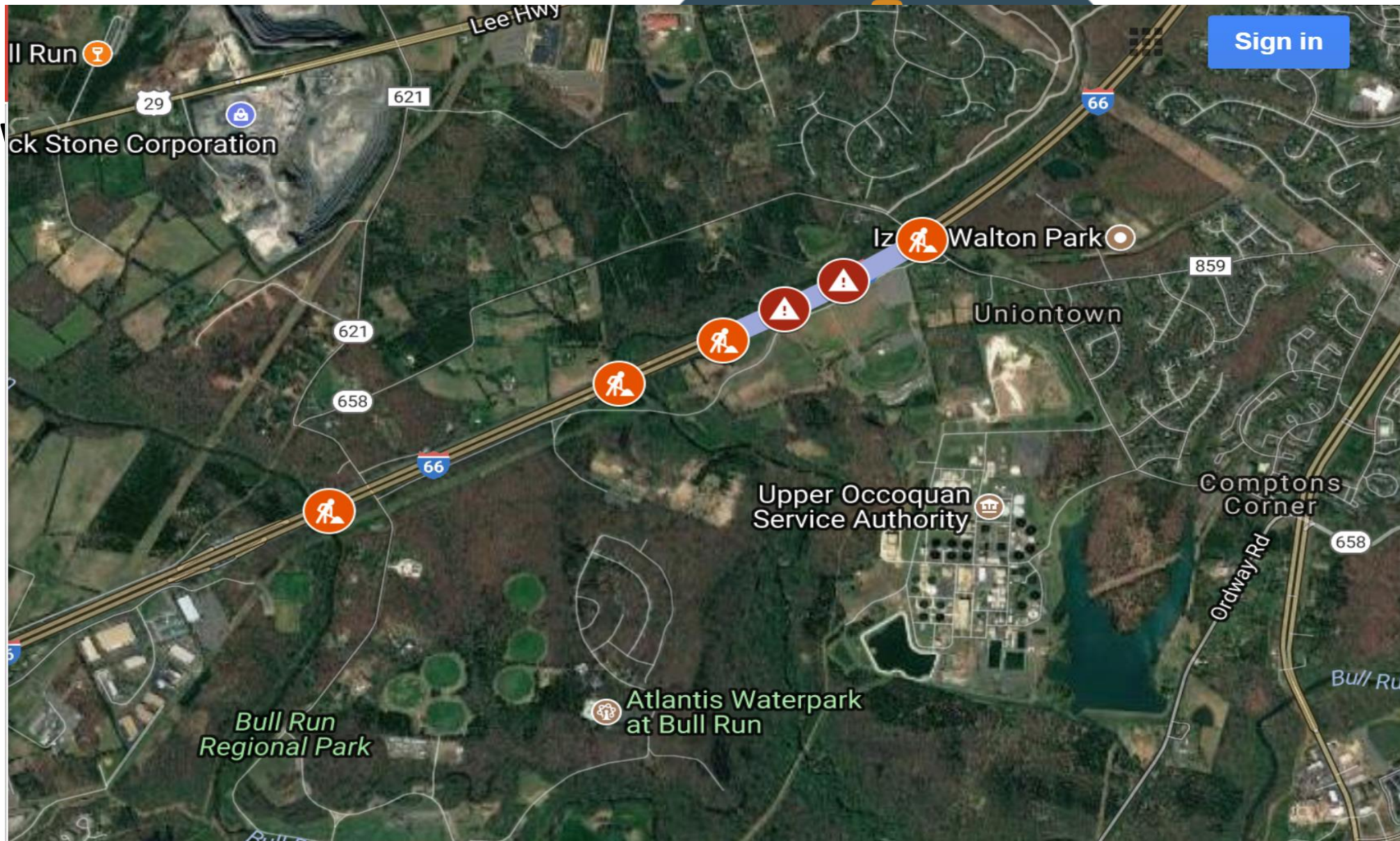
(Numbers represent motorists
and VDOT workers)

Source: VDOT Traffic Engineering

Goals

1. Raise awareness of work zones and incidents
2. Increase safety
3. Reduce congestion
4. Save lives

Zone Alert

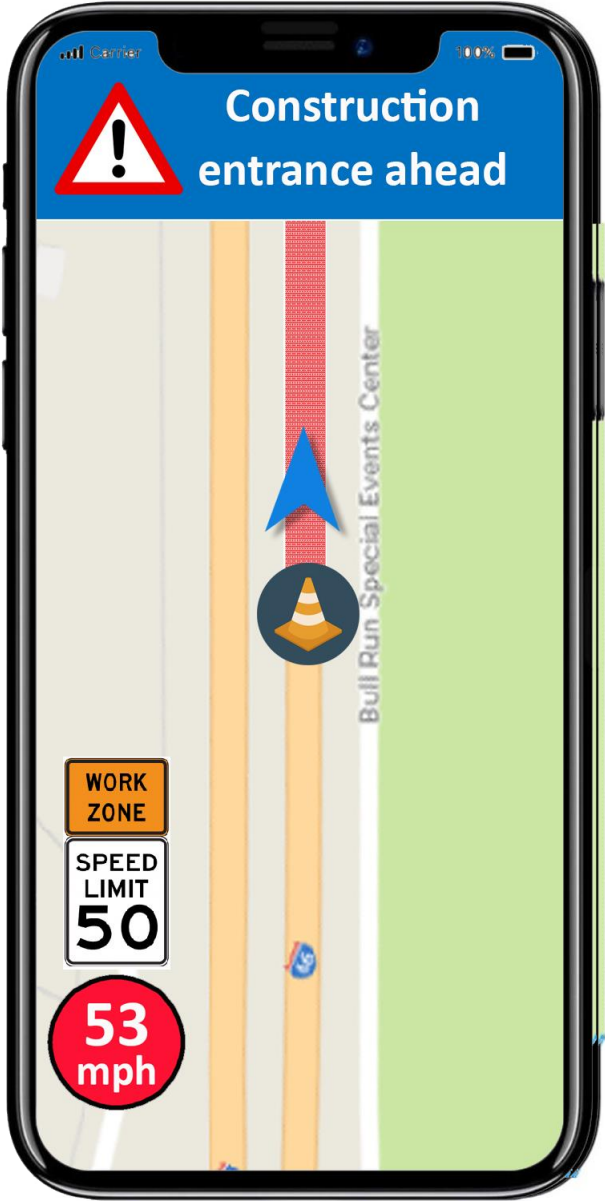




Zone Alert Summary



<u>Problem</u>	<u>Solution</u>	<u>Unique Value Proposition</u>	<u>Unfair Advantage</u>	<u>Customer Segments</u>
<ul style="list-style-type: none"> • Work zones can be hazardous, w/ increasing deaths, crashes & incidents • Driver behavior in work zones is difficult to modify • Current approaches do not adjust driver behavior 	<ul style="list-style-type: none"> • Plug-in that provides targeted alerts integrated with existing navigation 	<ul style="list-style-type: none"> • Save lives, improve safety, and reduce congestion by raising awareness of work zones & incidents • No existing nav platform w/level of detail on work zones • User Experience approach -- relevant data when driver needs it (vs. data dump) 	<ul style="list-style-type: none"> • Simple to design & execute w/ fast impact • Built-in 250k+ starter user base with VA511 • Massive, rapid scalability to popular platforms (e.g., Waze, GoogleMaps) 	<ul style="list-style-type: none"> • VA 511 • Waze • Google Maps • Other real-time navigation platforms • Other State DOT's • FHWA
<u>Existing Alternatives</u>	<u>Key Metrics</u>	<u>Key Data Sources</u>	<u>Channels</u>	<u>Early Adopters</u>
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Number of users • %Δ Fatalities in WZ • %Δ Crashes in WZ • %Δ Incidents in WZ • %Δ Congestion metrics 	<ul style="list-style-type: none"> • VA Roads – Projects in SYIP • SmarterRoads.Org • Beacons (Cones & Vests) • Crowdsourced data (Waze, etc) 	<ul style="list-style-type: none"> • VA 511 • Waze • Google Maps • Other real-time navigation platforms • Other State DOT's • FHWA 	<ul style="list-style-type: none"> • Current VA 511 users • Waze



Questions...(we have some too)

Ok, great. But how is this different from what's already out there?



Areas of additional research...

- Locality, first responder and VDOT coordination to ensure seamless integration.
- Crowd-sourcing to help us fill in the gaps?
- Localities able to submit work zones to 511 for inclusion in Zone Alert app/plugin.

What's Next?

- Scalable



- CAV



- Beacons





Thanks for listening!

Q & A

Video stills

