Introduction to Navigator for ArcGIS

Heather McCracken
Scott Ball
Agenda
Introduction to Navigator for ArcGIS

• ArcGIS platform overview
• Navigator for ArcGIS overview
• Who’s using Navigator?
• Working with ArcGIS Online + Enterprise
• Working with ArcGIS field apps
• Sending routes to Navigator using URL schemes
• Using custom maps with Navigator
• Q&A
ArcGIS platform overview
Apps Are Bringing the Power of GIS to Everyone
Extending the Reach of GIS

Across Organizations and Beyond
What is Navigator for ArcGIS?
Navigator for ArcGIS
Get your field workforce where it needs to be

Use your own map (custom search, custom roads, custom routes)

Work offline - maps on your device

Route with travel modes (your vehicles, your rules)
Demo
Navigator Basics
Who’s using Navigator for ArcGIS?
“Navigator has given us a lot more flexibility. Any driver can deliver any route.” Alan Knudsen

“Navigator for ArcGIS has been a great tool for the newer employees. They are able to efficiently get to our assets without having years of experience navigating through our service area. The Navigator app guides them efficiently and safely to where they need to go.” Andy Adrian

“We are saving $197,000 per year on mileage and inspectors’ time by using ArcGIS.” Rich Franz-Under

Infrastructure Repairs

Building Inspections

Home Delivery Meals Program
Working with ArcGIS Online and ArcGIS Enterprise
How to use Esri provided Navigator maps

1. Login to your organization in Navigator
2. Download from ArcGIS Online
3. Start using map in Navigator

Note: Maps can be side loaded onto devices also
Global Coverage

Navigator Maps

*Green* is coverage to local roads

*Orange* is coverage to major roads
How to create and use custom Navigator maps

1. Create Mobile Map Package with ArcGIS Pro
2. Upload to ArcGIS Online or Enterprise
3. Download to a Device with Navigator
4. Start Using Navigator

Note: Maps can also be side loaded onto devices
Note: Network Analyst license necessary to create networks
Automatic map updates

North America: three times a year
Europe: two times a year
All other regions: annually
Troubleshooting & Licensing

Administrator

Manage Product Licenses for Esri Directions and Routing

Sign In Failed
Your organization administrator needs to configure a license for your user account.

OK

MY ORGANIZATION

ArcGIS Pro  Additional Products


Licenses  50  50  50  50  50  50
Available  50  50  49  50  43  50

Licensed Products for Scott Sandusky (ssandusky)

- Esri Applications
  - Drone2Map for ArcGIS
  - GeoPlanner for ArcGIS
  - AppStudio for ArcGIS Standard
  - Esri Community Analyst
  - Navigator for ArcGIS
  - Esri Business Analyst web app

UPDATE  REVOKE ALL  CANCEL
# Navigator Maps Licensing

User: navappuc2018  
Password: apps2018

<table>
<thead>
<tr>
<th>Level 1 Named User</th>
<th>Level 2 Named User</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="ArcGIS Online" /></td>
<td><img src="image" alt="ArcGIS Online" /></td>
</tr>
<tr>
<td><img src="image" alt="ArcGIS Enterprise" /></td>
<td><img src="image" alt="ArcGIS Enterprise" /></td>
</tr>
</tbody>
</table>

Soon…
Working with ArcGIS field apps
ArcGIS in the Field

Field Operations

- Operations Dashboard for ArcGIS
- Survey123 for ArcGIS
- Collector for ArcGIS
- Navigator for ArcGIS
- ArcGIS Desktop
- Workforce for ArcGIS
Field Apps Work Together as One

Explorer for ArcGIS → Navigator for ArcGIS → Explorer for ArcGIS
Demo
Working with ArcGIS Field Apps
Working with URL schemes
Sending Stops to Navigator

URL Scheme

Stop list

- Location or address
- Stop name
- Stop sequence

Navigator for ArcGIS
Navigator URL Scheme

Supported Arguments:

- **start** - Start location
- **startname** - Name of start location
- **stop** - Location of a stop
- **stopname** - Name of stop
- **callback** - Callback URL scheme
- **callbackprompt** - Prompt displayed in the app
- **optimize** - Boolean to determine if route is optimized
- **travelmode** - Travel mode used when calculating the route

GitHub Repository: https://github.com/Esri/navigator-integration
1. Identifying information for the app being invoked. This is often referred to as the “Scheme”. Note that this is the same for the app on all platforms but is different than the AGOL App ID.

2. App specific data or parameters

```
arcgis-navigator://?stop=43.65958,-70.25118&stop=43.65761,-70.25388&optimize=true
arcgis-navigator://?stop=777+East+Alejo+Rd,+Palm+Springs,+California&stop=…&stop=…
```

GitHub Repository: https://github.com/Esri/navigator-integration
Implementation Patterns

URL Scheme

- Host a web page with links
- Email or text message
- Email or text attachment
- Custom app

Navigator for ArcGIS
Using custom maps and networks
What is a Navigator map?

• Create in ArcGIS Pro
  - Search (geocoding locator)
  - Route (network dataset with travel mode)
  - Display (basemap and operational layers)

• Mobile map package (.mmpk)
Data Options

Use all your own data

Or

Customize the Esri Navigator map
  - Requires StreetMap Premium
Demo

Custom Navigator Maps
Summary

• Works disconnected
• Comes with global maps for download
• Supports custom GIS maps (search, route, display)
• Model your vehicle with travel modes
• Creates multi-stop optimized routes
• Works with other ArcGIS field apps
• Send customized stop lists
Road Ahead: Pre-Planned Route Workflow

1. Create Route with ArcGIS Pro, WebMap Viewer, GP Tools, Python, SDKs
2. Save Route to ArcGIS Online or Enterprise
3. Download to a Device with Navigator
4. Start Using the Route in Navigator
Navigator
The Road Map

Major Features of 18.1.0
• Pre Planned Routes
• Popup support
• IWA Support
• Panning and Zooming while Navigating
• Pausing Navigation
• Major UI Improvements
Resources

• Free trial
  http://go.esri.com/navigatortrial

• Overview (including case studies)
  www.esri.com/products/navigator

• Help

• Map Coverage
  http://www.arcgis.com/home/group.html?id=5f430cab7f2b4cb5926bb9fe4e054ecc

• Community
  https://geonet.esri.com/groups/navigator

• GitHub repo
  https://github.com/esri/navigator-integration

Heather: hmc-cracken@esri.com
Scott: sball@esri.com
Other Sessions this week

- Navigator for ArcGIS: Connecting to Preplanned Routes
  - Weds 12:15 – Demo Theater 09
- Navigator for ArcGIS: Connecting to Preplanned Routes
  - Thurs 10:00 – Demo Theater 05
- ArcGIS Apps for the Field: Working Together
  - Weds 10:00 – SDCC Room 08
- Many others – Apps for the Field
  - Explorer
  - Workforce
  - Collector
  - Survey123…
Please Take Our Survey on the App

Download the Esri Events app and find your event

Select the session you attended

Scroll down to find the feedback section

Complete answers and select “Submit”