Mapillary and OpenStreetMap

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Systems Engineer
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GIS-T Symposium, Little Rock AR
Topics:

• Mapillary.
• OpenStreetMap.
• Other Cool Stuff KDOT is doing.
Mapillary on the Web

“View map objects and segmentations with computer vision tools, create maps of the future by extracting map data from images”

Street-level imagery for the future of maps

Images from anyone with a camera, combined to generate map data

248,441,735 images, 4,100,063,752 meters
Mapillary on my iPad

“View map objects and segmentations with computer vision tools, create maps of the future by extracting map data from images”
Mapillary in my Email

Mapillary user account is a group email account
The group is notified of each upload

Your upload is now published on Mapillary for anyone to use. Below you will find the result. Enjoy!

... and 90 more.
Mapillary on a Blog

Mapillary communicates
Mapillary is polite and encouraging!

MapillaryJS Now Enables Fast Sequence Navigation

- Posted on 22 Feb 2018
- With the recent update of MapillaryJS, we have added controls for fast sequence navigation and better sequence overview. Now you can easily navigate to the beginning, end, or any other position of interest in a sequence.

Challenging the Winter Dip, from Australia to Uganda

- Posted on 21 Feb 2018
- The first edition of the Global Complete the Map challenge has drawn to an end with remarkable results despite the hardships of the winter in the Northern Hemisphere. Here’s a recap of what was achieved and what’s planned next.

What We Learnt about GIS at the Mapillary Meetup

- Posted on 13 Feb 2018
- Conversations at the first Mapillary GIS Meetup had a recurring theme. GIS work can include some cumbersome processes, but the experts working in the field have lots of creative solutions. Mapillary’s role is to provide the tools that help bring these to life.

January 2018 Leaderboards

- Posted on 09 Feb 2018
- To keep the competitive spirits up, we’re publishing a series of monthly leaderboards. Take a look at who contributed with most images, edits, blurs, and verifications in January.

Mapillary for ArcGIS Pro Enters Public Beta

- Posted on 07 Feb 2018
- Mapillary for ArcGIS Pro is now available as a Public Beta with considerable performance improvements compared to the previous version. We invite you to join directly from the
Hello kdot_collector,

Your 34 requested blur edits have been approved. It may take up to one day for you to see the edits live.

... and 31 more.

Thanks for making Mapillary better!

- The Mapillary team
Mapillary on 3D

Open SfM technology for 3D reconstructions from images. Structure from Motion.
Mapillary on AI

Human in the Loop AI and Machine Vision Learning
Mapillary on ArcGIS Pro

Mapillary Plugin for ArcGIS Pro
Mapillary on a Bike

Mapillary on the web, filtered for user “toebee”, date < 2014-03-01
Mapillary in a Boat

Mapillary on the web, filtered for user “toebee”
Mapillary in an Airplane

Mapillary on the web, filtered for user “toebee”
Mapillary on a Ski Lift

Mapillary on the web, filtered for user “toebee”
Mapillary on a Tour Bus

Mapillary on the web, filtered for user “toebee”
Mapillary on ArcGIS Online

Mapillary in Esri Story Maps,
Mapillary for ArcGIS Online, free evaluation
Esri Marketplace Presence, “Contact Us” pricing

Mountain Highways
A tour of mountain highway sequences on Mapillary

Colorado
The wide valleys and dry climate of Colorado make for beautiful mountain scenery that’s visible from a well-built network of highways such as this one. Just an hour east of the bustling city of Denver, you can find quiet stretches of green forest.

Apps & Integrations:
- Mapillary app (for capture) on iOS and Android
- Web uploader for uploading geotagged photos from any GPS-enabled camera or rig
- Mapillary for ArcGIS Online (sign up here for a free 30-day trial or view the tutorial)
- WebAppBuilder custom widget (contact us to request the download)
- Mapillary for ArcGIS Pro (contact us to join the Beta program)
Mapillary on Developers

Build applications and tools
APIs, vector (or raster) tiles and open source tools.

APIs
Set of powerful, cross-platform APIs which allow you to interact with various aspects of Mapillary data and build upon it.

Mapillary API
Easy and powerful cross-platform API, interact with images, sequences, changesets, map objects, image detections and users

Tiles
Mapillary data on the map. Visualize, query and interact with set of vector and raster tiles.

Coverage - Vector Tiles
Mapillary coverage with additional properties in .mvt format

Coverage - Raster Tiles
Mapillary coverage in raster tile format

Data - Map Objects
Mapillary map objects data in .mvt format

Data - Image Detections
Mapillary image detections data in .mvt format

Viewer
Viewers for street-level image from Mapillary

Mapillary JS
JavaScript & WebGL library which renders street level images from Mapillary

Open Source at Mapillary

Mapillary on GitHub
Mapillary on GitHub

Python, MapillaryJS, OpenSfM, SVG Sprites for Traffic Signs
Mapillary on the World
Mapillary on the USA
Mapillary in Kansas
Mapillary on OpenStreetMap

Images & Data for OpenStreetMap
Enrich your mapping with detailed data collection and editing in iD and JOSM

Get started

Capture your drives, walks, and bike rides. All images are available to improve OpenStreetMap.
KDOT on OpenStreetMap

“KDOT” user
We contribute
We attribute
We edit
OpenStreetMap
## OpenStreetMap on KDOT

![OpenStreetMap on KDOT](image)

### Geofabrik.de

**Download OpenStreetMap Vector Data**

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Processing OSM raw data requires software. You can find map renderers, editors, and converters in the [subversion repository](https://openstreetmap.org) of OpenStreetMap.

### Shape Files

Files ending in "shp.zip" are shape files that you can process with almost any GIS software. In converting OSM data to shape files, we often make a simple default selection of layers where the most important features get exported (road and railway network, forests, water areas, some points of interest). We offer...
OpenStreetMap on Ramps

Ramp Maintenance Sketches

Overpasses and Underpasses

Base Map Tiles

I-70 & I-470 East KTA, US 40, K-4 at 6th

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA
Bridge Credits: KDOT, © OpenStreetMap contributors - http://www.openstreetmap.org

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OpenStreetMap on Vertical

Over and Under

Cartographic Representation

Data Driven Mapping

Maintained By

KDOT

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KDOT on Social Media

Twitter

Pinterest

Facebook

Flickr

YouTube

BlogSpot
KDOT's first design-build project
Will cost $288 million to complete
Expected opening date December 2016

Questions?
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