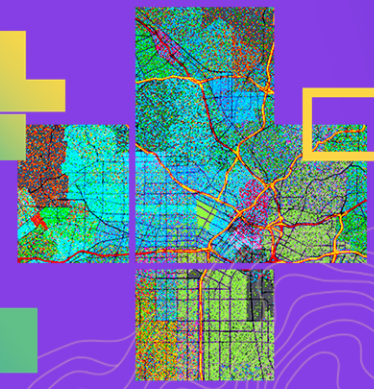
Custom Basemaps with Vector Tile Style Editor

Patrick Arlt and Allison Davis

slides: bit.ly/2TYI0bmX

2020 ESRI DEVELOPER SUMMIT | Palm Springs, CA



Vector Tile Refresher

- Compressed vector geographic data
- Binary indexed tile scheme
- Transfer and render *LOTS* of features
- Styled on the client
- Seperation of data (tiles) and style

Styling Spec

- Mapbox Style Specification
- Styles have ~150-300 layers
- Each layer has a "source" layer
- Layers can have an optional "filter" for data
- Background, fill, symbol, line layers
- Hard to write by hand

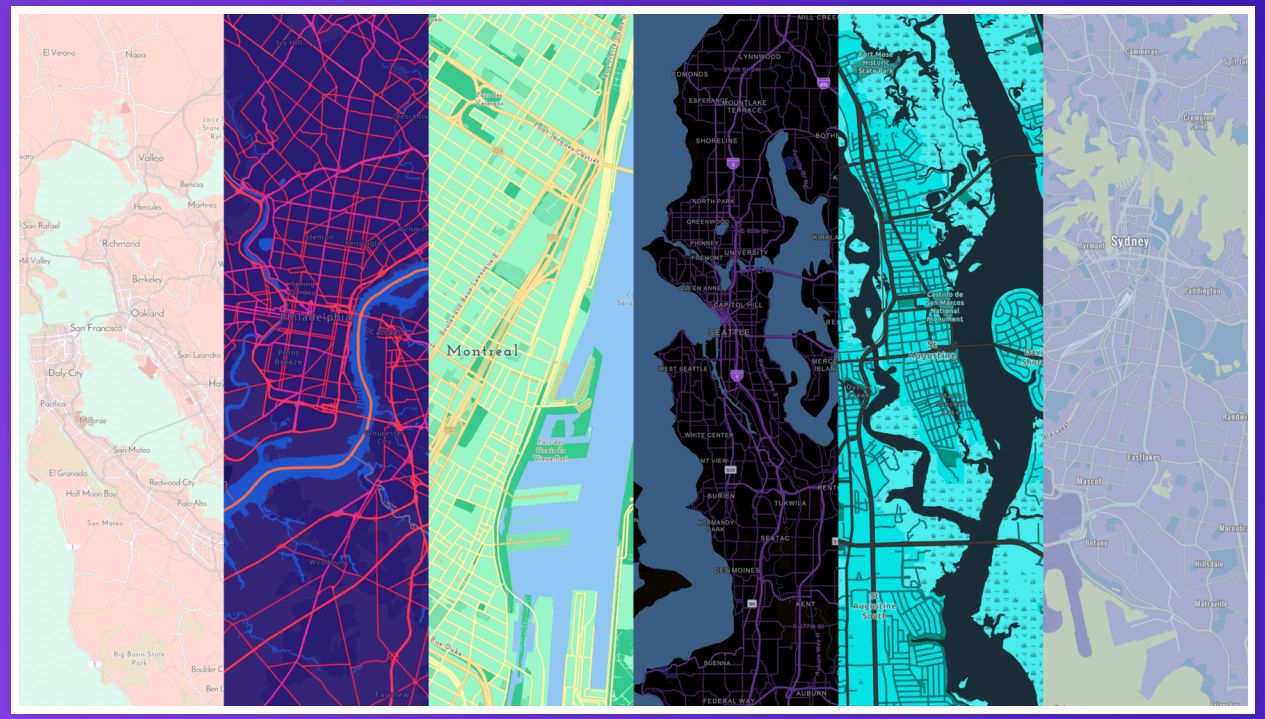
Vector Tile Style Editor

- A visual editor for styling vector tile data
- Extra tools for editing Esri basemaps
- Goal: a complete editing experience

What's new?

- Now available in ArcGIS Online and ArcGIS Enterprise
- Open Street Map now available
- New Esri styles: Community, Charted Territory, National Geographic
- Sprite deletion

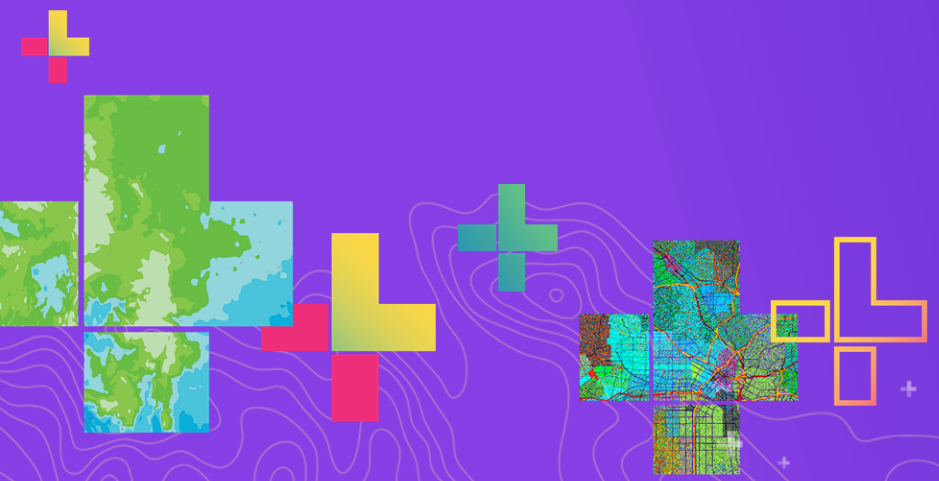
Showcase



Showcase App

Editor Overview

Let's get started



Editing in ArcGIS Online

Quick Editor

- Fast, bulk styling for Esri and OSM basemaps
- 6 color groups
- ~500-1000 styling rules
- Label and road size editing

Inside Quick Editor

1. 6 color groups
2. Style rules run
3. Labels colored to meet contrast threshold
4. Shadows and road casings colored for contrast
5. Icons and patterns are tinted to match color groups

Group Editor

- Bulk edit 1 category of layers
- Same rules as quick editor
- Great for big categories like major or minor roads
- Edit a large number of layers fast

Layer Editor

- Edit any propery of any layer
- Verbose, but detailed editing
- Use stops for different style across zoom levels
- Show/hide layers
- Customize zoom levels
- High level of control

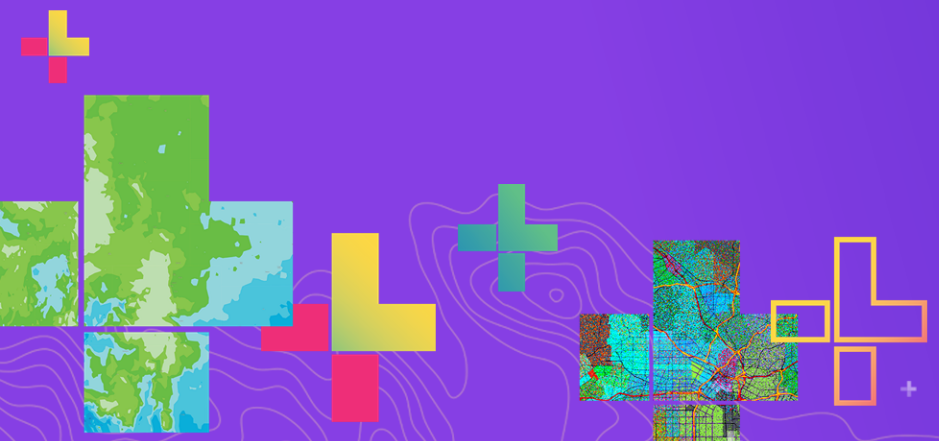
Sprite Editor

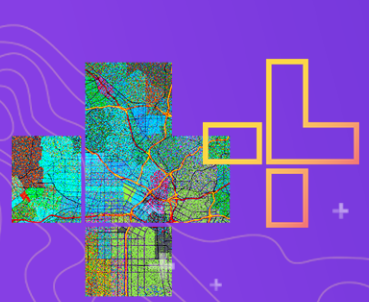
- Recolors icons and patterns
- Upload new sprites
- Delete sprites

Color Editor

- Find and replace colors in a style
- Great for auditing a map to identify out of place colors

Let's make a style





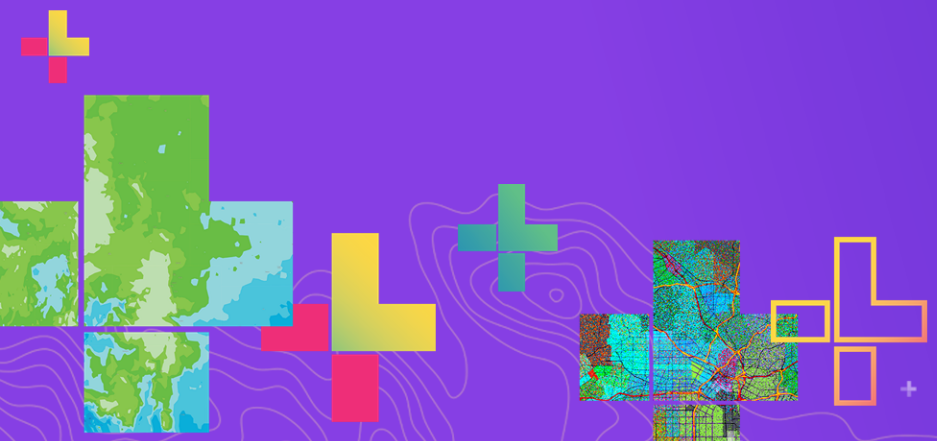
Roadmap

- Layer management and reordering
- Upload custom fonts
- Editing raw JSON

How do I get started?

- Tutorial: Style a vector basemap
- Tutorial: Display a styled basemap in your app
- Feedback on Geonet: https://bit.ly/2RzadCc

Slides at https://bit.ly/2TYI0bm



esri
THE SCIENCE OF WHERE