

# GDOT REVAMP

## Bucket 2 - Speed Limit Signs

### GIS ArcPro Tasks User Manual

Updated 8/12/2021

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New to ArcPro? Review [Appendix A](#) before starting.

## Step 1: Open ArcPro Template

1. Unzip the ArcPro\_SpeedLimits package
2. Open the ArcPro map
3. Make sure the Tasks panel is docked (**If not:** in the catalog panel under the Project tab, open the Tasks dropdown, right-click "Speed Limit Editing Set Up" task, and click **Open.**)
4. Make sure the Google StreetView tool is added (**If not:** refer to REVAMP website to download the tool and watch the tutorial videos on how to add the tool to ArcPro.)

<http://www.valorgis.com/REVAMP/>

## Step 2: Run Tasks

### Task 1 – Delete & Append

#### 1. Delete

This step deletes the Speed Limit Routes template feature class to prepare it for appending the delivered ITOS data.

- a. Input – **SpeedLimit\_Routes**
- b. Click the Folder button and import GDOT Database from the location stored on your machine.
- c. Click **Run**
- d. Click **Finish**
- e. **Refresh** the map to see the changes

## 2. Append

This step Appends the Speed Limit Routes template feature class with the delivered ITOS data.

- a. Input – **SpeedLimit\_Routes** (ITOS GDB)
- b. Target Dataset – **SpeedLimit\_Routes** (In Map/ArcPro\_SpeedLimits GDB)
- c. Field Matching Type - **Use field mapping to reconcile field differences**  
(The Global ID's and editor tracking will appear red; this is okay, and leave as is. If other fields are red, adjust accordingly)
- d. Click **Run**
- e. Click **Finish**
- f. **Refresh** the map to see the changes
- g. **QAQC** the SpeedLimit\_Routes attribute table that the Global IDs populated, that the append tool wasn't accidentally run more than once (it duplicates records).
- h. **Save Edits** if everything is correct
- i. Check that editor tracking is enabled on the Speed Limit Signs (**If not:** in the catalog pane under the Project tab, open Databases dropdown, right-click SpeedLimit\_Signs, click Manage, and click Enable Editor Tracking).

## Step 3: Setup Validation Environment

1. **OPTIONAL:** Add Local Reference Data (if available or needed)
  - a. **Input –**
    - Validation Grid
    - Any other local sign data

## Step 4: Validation

### Mapillary data:

The Mapillary data is the entire GA state captured speed limit data hosted on the GARC AGOL account. It will be used as a reference layer for identifying possible speed limit sign locations. Whether there is Mapillary data present or not present in an area, all routes should still be checked for speed limit signs.

- Arrows show the direction in which the sign was captured by the dash camera
- **Mapillary Speed Limit Groups Layer:** Symbolized on generalized Low, Medium, High-speed groups for visualization
- Symbolize the data as needed based on personal preference or area density

### GDOT Speed Limit Routes:

The GDOT Speed Limit Signs are symbolized with arrows showing the route's direction to quickly illustrate the left and right sides of the route.

*\*The symbol for 40 MPH has a 45 icon symbol; that's okay the attribute will still reflect 40 MPH.*

- Arrows show the direction of the route.
- **The right side of the route indicates the increasing (INC) side**
- **The left side of the route indicates the decreasing (DEC) side**
- **Speed Limit Routes with Mile Posts Layer:** route with mileage symbology labels.

### GDOT Speed Limit Signs:

The imported Speed Limit Signs are symbolized by speed limit value for quick feature creation without manually changing the attributes.

- Snap created features to the route where speed limit sign is found
- The Route ID auto-populates as an attribute in the Speed Limit Signs layer
- **The right side of the route: use the green symbolized Speed Limit Signs INC Right features**
- **The left side of the route: use the red symbolized Speed Limit Signs DEC Left features**



**Example:** The yellow arrows indicate the Mapillary captured speed limit signs with general accuracy. The red outlined box is the actual location of the speed limit sign. Based on the route direction of the arrows, the speed limit sign is on the left side of the road. Therefore, the red DEC speed limit sign feature is used.

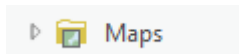
## Appendix A

### Getting Familiar with ArcPro Catalog

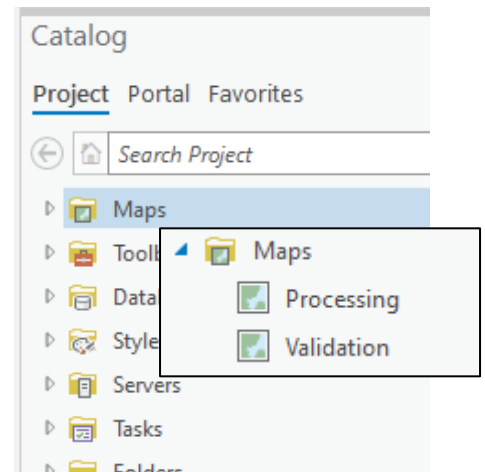
1. Open Default Project and examine the Project Tab of Catalog Pane on the right pane.

8 folders conveniently encompass Maps, Toolboxes, Databases, Symbology Styles Packages, Server Connections, Folder Connections, and Locators into one project. Thus, while working through the REVAMP validation, data from each county could be organized and validated in this one project if desired.

- a. Expand **Maps** Folder

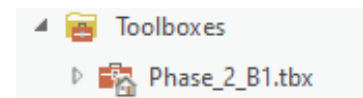


There are 2 maps: Processing and Validation. The Processing Map is the environment where the ArcPro Tasks will run. The Validation Map is where validation and editing occur. Right-click and open the Validation Map. There are layers with symbology styles set up already. Don't worry about the data in there at this stage—closeout of Validation. Right-click and Open Processing. You will be using this map to get started.



- b. Expand the **Toolboxes** folder

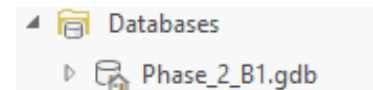
There is a default Project Toolbox created with every Pro Project. Still, you will **not** need to use any of these tools in this box because they are already built into the Task workflow.



- c. Expand the **Databases** folder

There is a default Project Database inside of this folder. After the Task workflow is completed, editing will occur with the data in this GDB.

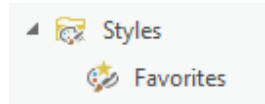
The rules and domains are already in place and sourced to the layers in the Validation map.



d. Expand the **Styles** folder

Every ArcPro Project contains default symbology, much like in ArcMap.

However, they are called Styles in ArcPro. With ArcPro, there is an ability to curate custom styles.



e. Expand the **Servers** Folder

This is where server connections are stored.

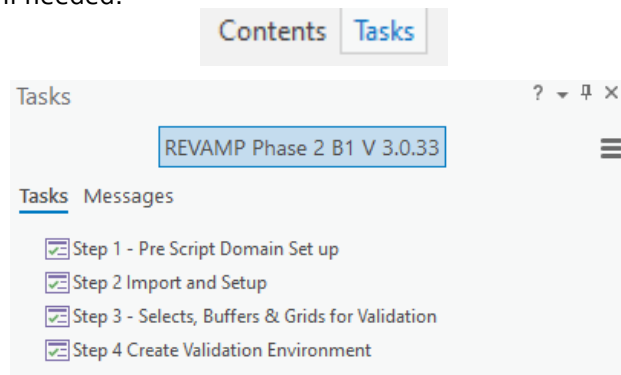
If you add GIO imagery to this project, it will be stored here.



f. Expand the **Tasks** Folder

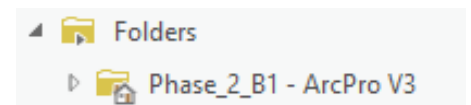
Here is where the Task for this Pre- Processing Workflow is stored. Double Click on the Task File; it opens and docks to the

TOC pane. Leave the Tasks Window Open. At the bottom of the TOC pane, you can toggle between Tasks and Contents if needed.



g. Expand **Folders**

Each ArcPro project comes with a default Folder connection. All of the project files, databases, toolboxes, etc., can be found in this folder, as well as their subfolders.



## Appendix B

### Troubleshooting

#### Lost Mapillary Data Connection

1. Sign into ArcPro with your individual GARC AGOL account
2. Select the Portal tab in the Catalog pane
3. Select the My Organization tab
4. Find and add the layer called "Georgia Speed Limits (Mapillary Traffic Signs)" to your map

#### Error Message When Creating Speed Limit Signs

The attribute rules for the Speed Limit Signs need to be re-imported to update the rules connection to the Global IDs.

1. **In the TOC**
  - a. Right-click Speed Limit Signs
  - b. Select Design
  - c. Select Attribute Rules to open the Attribute Rules: Speed Limit Signs table
2. **In the Attribute Rules Table**
  - a. Delete rules and import Attribute Rules from the project folder  
**OR**
  - b. Copy and paste each rule to create a duplicate of all the rules
  - c. Delete the original rules (then remove the 1 in the rule names if needed)
  - d. Save the changes in the Attribute Rules ribbon