

# AN INTRODUCTION TO ESRI ARCADE EXPRESSIONS

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<https://pnmcartodesign.com/>

<https://github.com/pmacMaps>

# WHAT ARE ARCADE EXPRESSIONS?

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- ▶ "A simple, portable scripting language for creating custom visualizations and labeling expressions."
- ▶ "[C]an perform mathematical calculations, manipulate text, and evaluate logical statements."
- ▶ Includes feature and geometry data types
- ▶ Works across ArcGIS ecosystem

# **SUPPORTED PLATFORMS**

- ▶ ArcGIS Pro
- ▶ ArcGIS Enterprise
- ▶ ArcGIS Online
- ▶ ArcGIS JS API
- ▶ ArcGIS Runtime

▶ See

<https://developers.arcgis.com/arcade/guide/version-matrix/> for version support

# **ARCADE IN THE WILD**

- ▶ Cumberland County Crash Data
  - ▶ Use Decode function to convert numeric values to textual equivalents
- ▶ Pennsylvania Local Registrars
  - ▶ Various text formatting, string concatenation, Decode function

# ANATOMY OF ARCADE EXPRESSIONS

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- ▶ Similar to JavaScript syntax
- ▶ Declare variables using "**var**" keyword
- ▶ End lines with semi-colon (";")
- ▶ Can use conditional statements, loops, and perform math
- ▶ Good practice to end statement with "**return**" keyword (but not required)
- ▶ Can include comments in code
  - ▶ "//" for single line
  - ▶ "/\* .... \*/" for multi-line

# LET'S BUILD ARCADE EXPRESSIONS!

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# **RESOURCE FROM DEMOS**

Sample Expressions (text file)

Web Map without Expressions

Web Map With Expressions Applied