

# SVG FROM SAS

Programming SAS  
to Program SVG

# Overview

---

- What is SVG?
- SAS Knowledge
- HTML Knowledge
- SVG Knowledge
- JavaScript Knowledge

# What is SVG?



- ❑ Scalable Vector Graphics
- ❑ XML-based file format to represent 2-D vector graphics
- ❑ Open standard under development by World Wide Web Consortium ([W3C](#))
- ❑ Compatible with CSS and JavaScript
- ❑ Unlike SAS, SVG is case-sensitive

# SAS Knowledge

## □ Statements

- ATTRIB
- DO
- FILE
- IF-THEN
- LINK
- PUT
- SET

## □ Functions

- CAT
- STRIP

# HTML Knowledge

- Hyper Text Markup Language ([HTML](#))
- Markup tags
  - Keywords
    - <HTML></HTML> HTML document
    - <HEAD></HEAD> Information about document
    - <BODY></BODY> Visible page content
- Cascading Style Sheets ([CSS](#))
  - Supported but not implemented in example

# SVG Knowledge

- Scalable Vector Graphics ([SVG](#))
  - SVG workspace is an object in the HTML document
- Document Object Model (DOM)
  - Each shape is a distinct object in an SVG document
    - Circle
    - Ellipse
    - Rectangle
    - Line
    - Text

# JavaScript Knowledge

- Document Object Model (DOM)
- Manipulate the properties of SVG objects
  - Position
  - Size
  - Color
  - Opacity

# SVG From SAS

## □ Advantages

### ▣ Interactive

- Charts dynamically respond to user requests

### ▣ Repeatable

- No typos
- Write one line of code; repeat as needed

### ▣ Control

- Customizable
- Scalable