



# ModelBuilder – Getting Started

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# Agenda

- **What is geoprocessing?**
- **The problem we will solve**
- **Create a model**
- **Streamline the model**
- **Tips and pitfalls**
- **Sharing models**
- **ArcGIS Pro**
- **Where to get help**

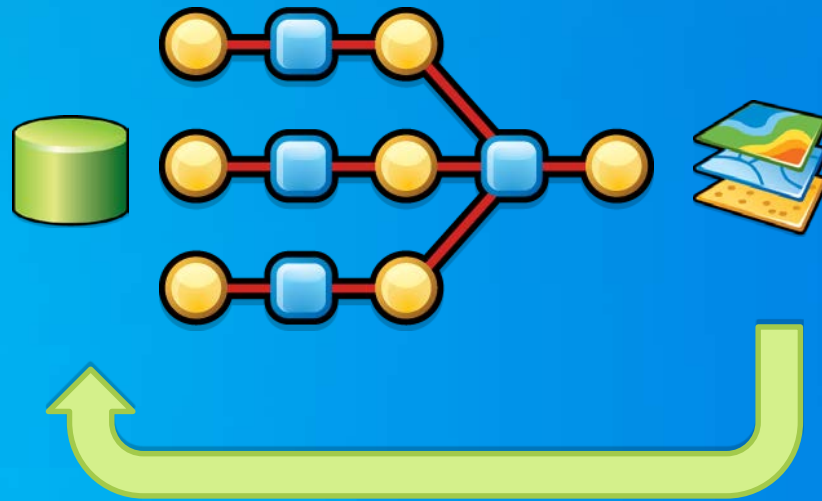


**What is geoprocessing?**

# Geoprocessing is...

The ArcGIS system for managing and manipulating data

- Solve spatial problems
- Diagram workflows
- Ask questions
- Get results

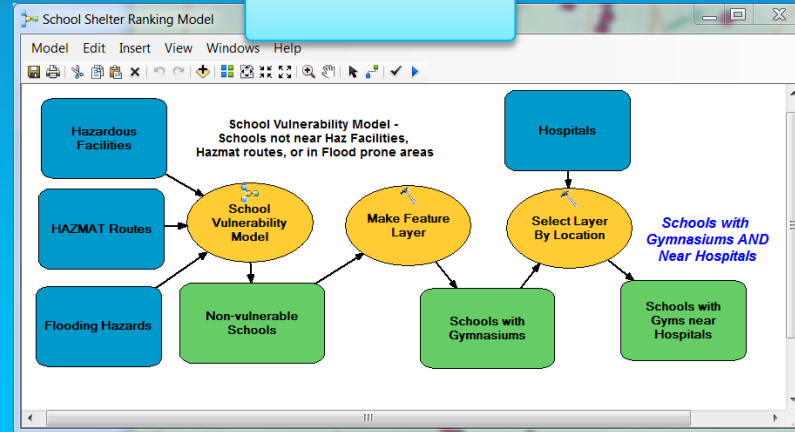


# The Geoprocessing Framework – ArcMap and ArcGIS Pro

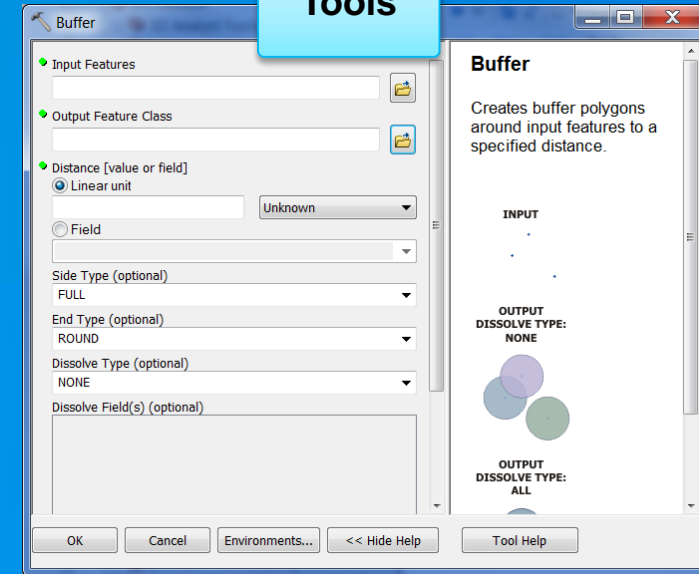
Search



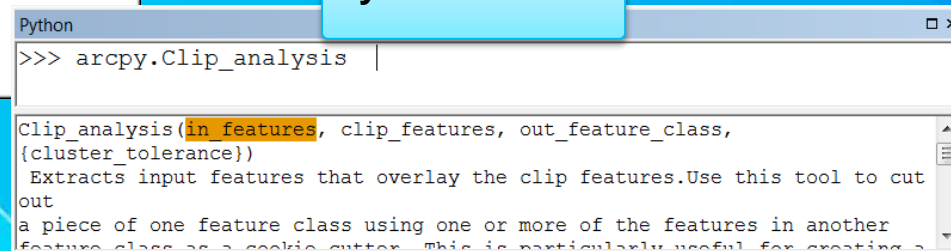
ModelBuilder



Tools



Python Window



Scripts

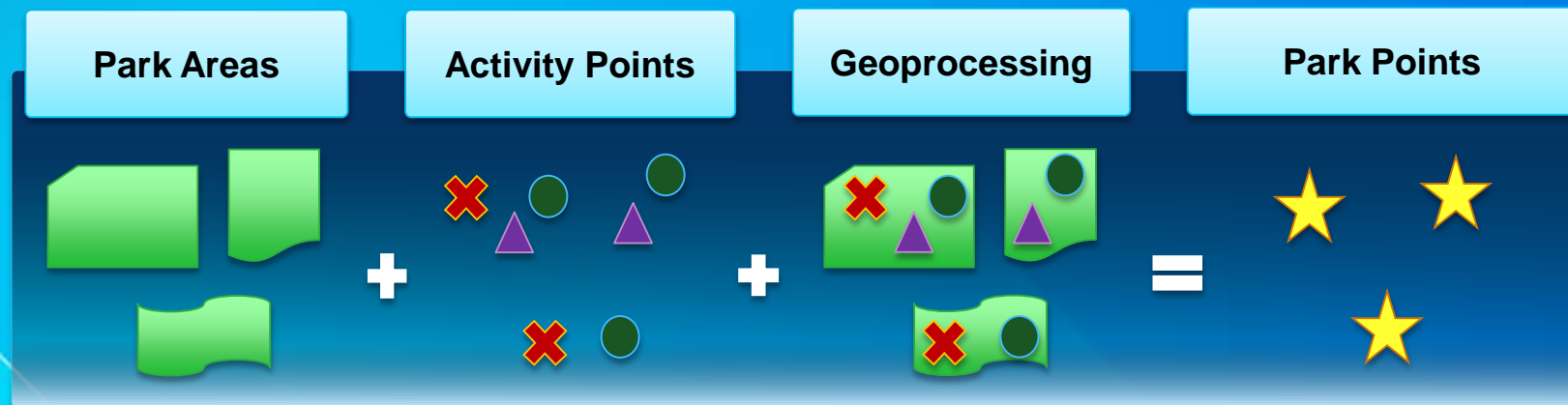
```
# start try block  
try:  
    arcpy.analysis.Buffer("c:/ws/roads.shp", "c:/outws/roads10.shp", 100)  
  
# If an error occurs when running a tool, print the tool messages  
except arcpy.ExecuteError:  
    print arcpy.GetMessages(2)  
  
# Any other error  
except Exception as e:  
    print e.message
```

The background features a vibrant blue gradient. On the left side, there are several overlapping geometric shapes: a large purple triangle pointing upwards, a yellow triangle pointing downwards, and a dark purple triangle pointing to the right. These shapes are layered, creating a sense of depth. The text 'Let's Solve a Problem' is centered in the upper half of the image in a white, bold, sans-serif font.

**Let's Solve a Problem**

# Workflow

- **Goal:** Map parks for citizens
- **Problem:** Park data needs to be organized
  - Park areas lack facility information
  - Activity data spread across multiple point layers
  - Data does not fit web application
  - Need to automate data update process





## Remember the process

- **Create a model and set properties**
- **Sketch out the workflow and test**
- **Streamline with parameters and variables**
- **Control the flow with pre-conditions**
- **Share your work**
- **Document everything**
- **Leverage the Geoprocessing Framework**



# ArcGIS Resources

- **Geoprocessing with ArcGIS Pro**

- <https://pro.arcgis.com/en/pro-app/help/analysis/geoprocessing/basics/what-is-geoprocessing-.htm>

- **Communities – Analysis and Geoprocessing**

- <http://resources.arcgis.com/en/communities/analysis/>

- **Blogs**

- <http://blogs.esri.com/esri/arcgis/category/subject-analysis-and-geoprocessing/>

- **Videos**

- <http://video.arcgis.com/channels>

- **Forums**

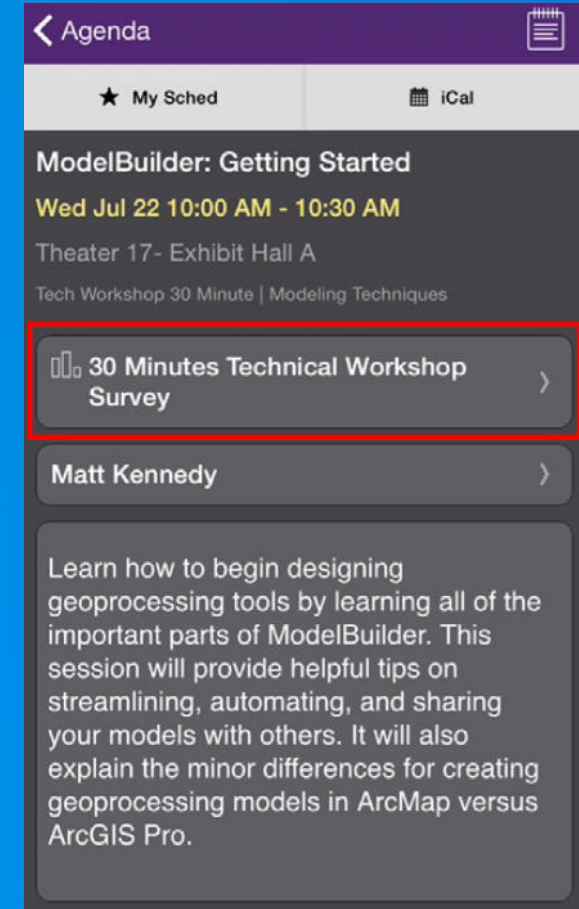
- <https://geonet.esri.com/community/gis/analysis/geoprocessing>

# Learning More at the User Conference

- ***ModelBuilder: Branching, Iterating, and Other Advanced Methods***
  - Thursday 8:30 – 9:45 AM, Room 09
- ***ArcGIS Pro: Data Best Practices for Geoprocessing***
  - Wednesday 12:30 – 1:00 PM, Demo Theater 14
- ***Creating Geoprocessing Services***
  - Thursday 10:15 – 11:30 AM, Room 33A
- ***Python: Building Geoprocessing Tools***
  - Thursday 1:30 – 2:45 PM, Ballroom 06 B
- ***And many more....***

# Thank you...

- Please fill out the session survey in your mobile app
- Search ***ModelBuilder: Getting Started***
  - Use the Search Feature to quickly find this title
- Click “30 Minutes Technical Workshop Survey”
- Answer a few short questions and enter any comments





Understanding our world.