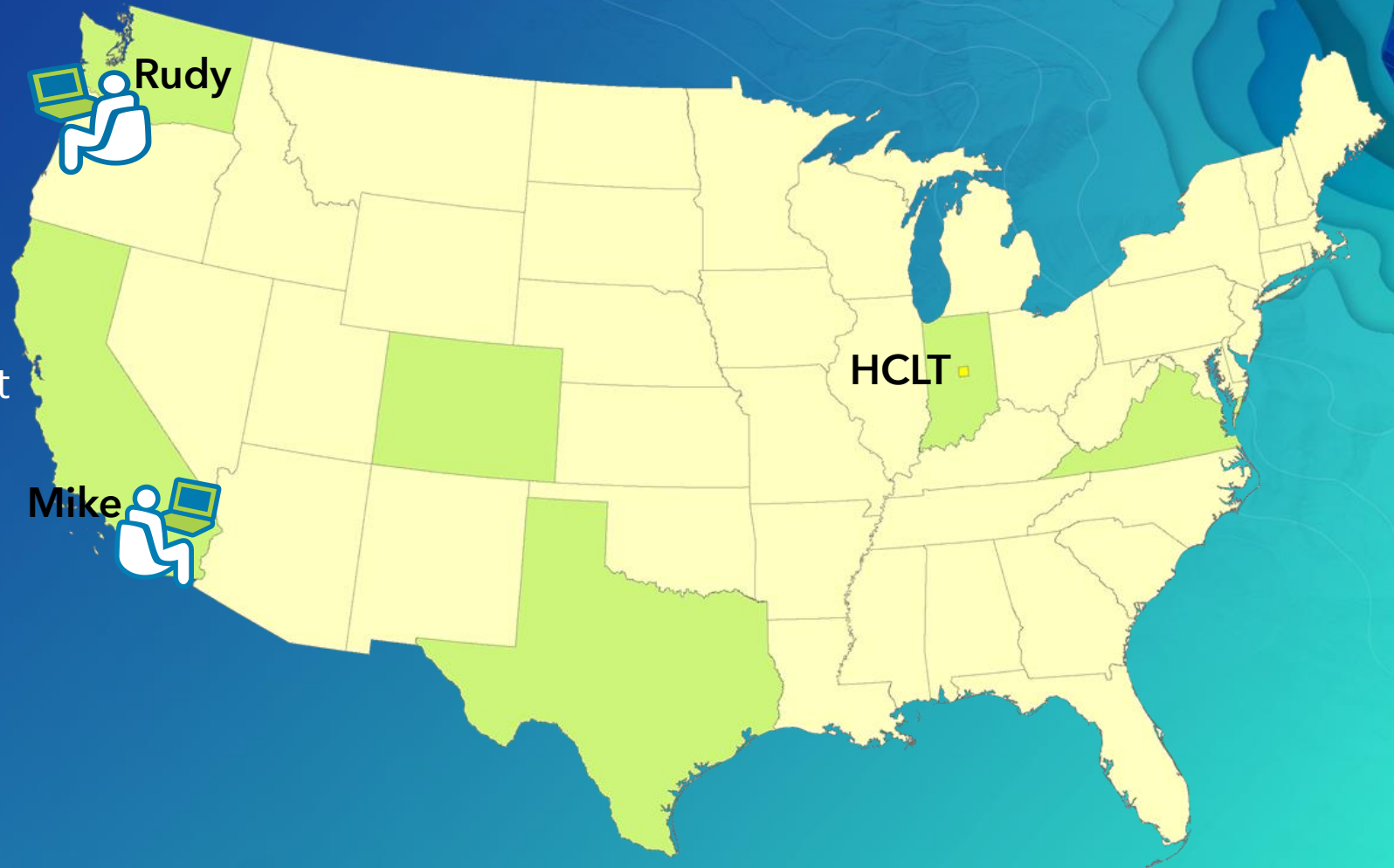


Learning Common GIS Workflows

Rudy Prosser & Mike Flanagan

Scenario

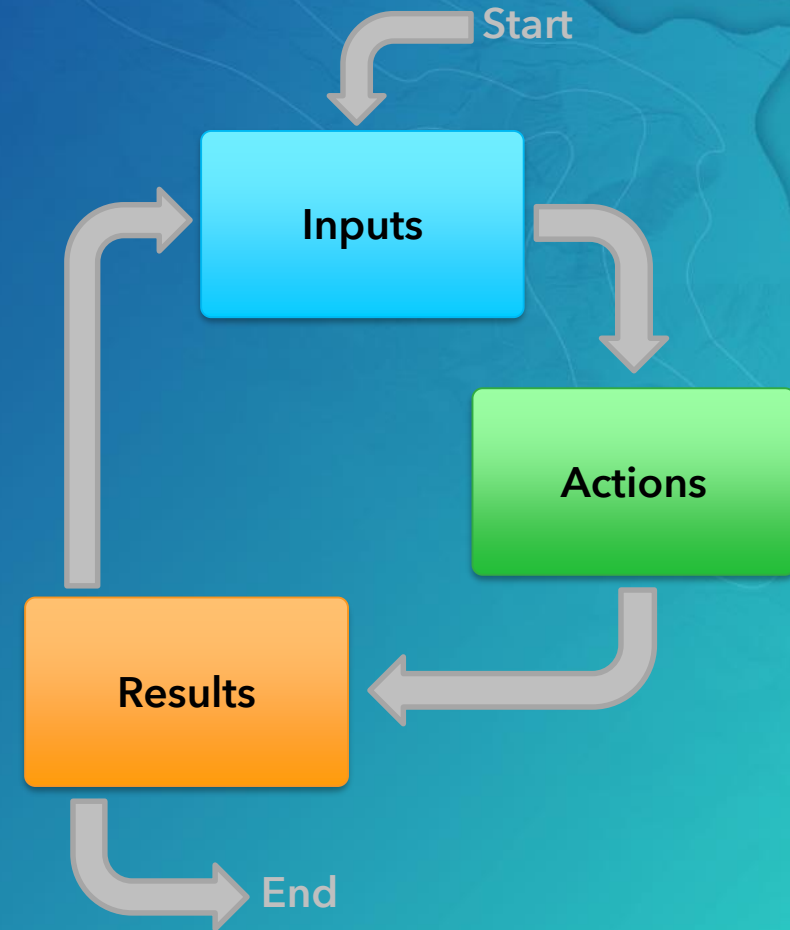
- Hamilton County Land Trust
- GIS Staff and volunteers
- Remotely located
- Working on a special project



Common GIS workflows

Getting things done

- Geodata
 - Geodatabase design
- Geoprocessing
 - Sharing geoprocessing packages
- Cartography & editing
 - Designing for GIS services
- Creating services
- Web map design
 - Symbolology & functionality
- Web app design
- Field use

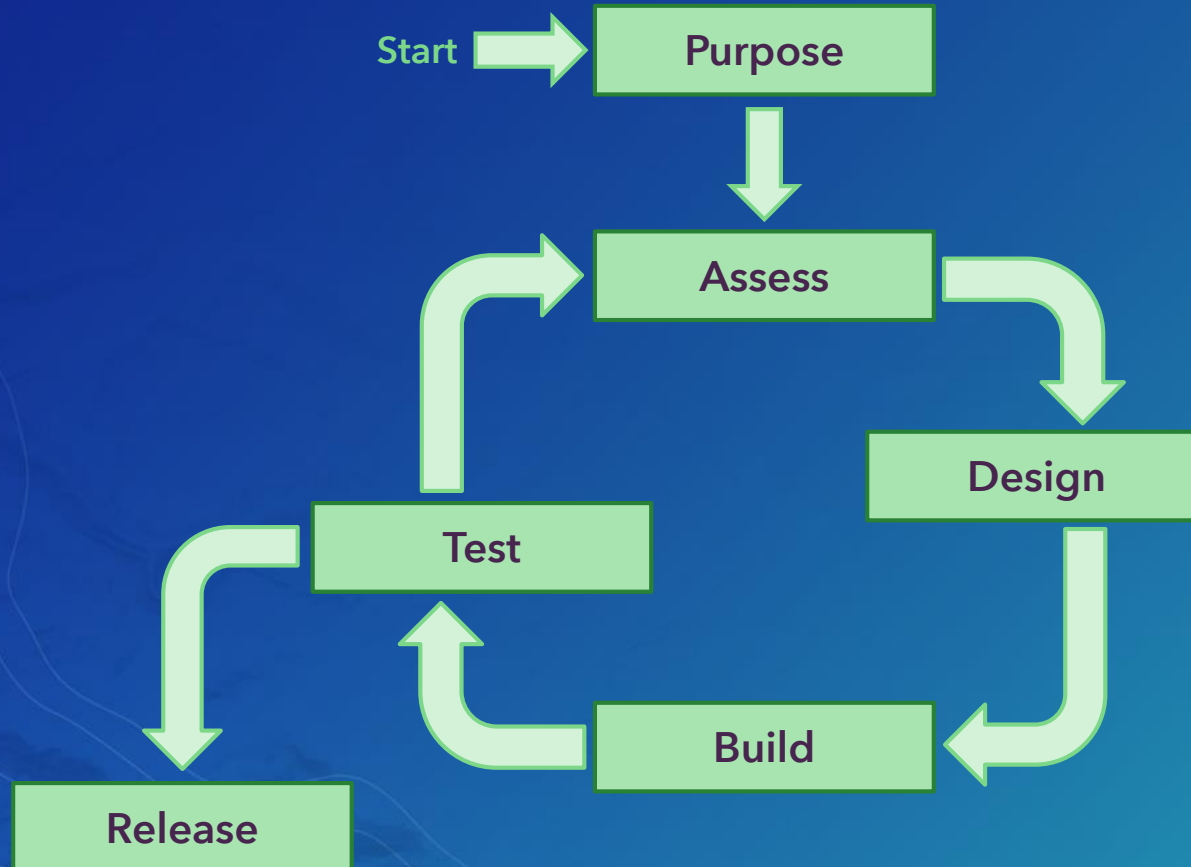


Geodata



Geodatabase design

Geodata workflow



PeopleTracker Project—Geodatabase Design¶

Purpose: HCLT management wishes to know where people who work for, volunteer for and visit the Land Trust are located. Management requires this to be available online in a web application that allows anyone (staff, volunteers, visitors) to add a point to a map showing their home location and, if possible, upload a picture of themselves (selfie).¶

Assessment: No data structures currently exist which could support this project. Interviews with HCLT executive director, operating officer, and technology officer identified the following basic structure:¶

For staff—track employment date, employment status (full time or part time, permanent or temporary), and employment classification (Professional, Staff, Field, Technical)¶

For Volunteers—track start date, volunteer assignment (Guide/Docent, Technical support, Admin support), commitment hours (<100 hours, >100 hours).¶

For Visitors—track date of visit, 1st time visitor or repeat visitor, interests (wildlife, birds, nature).¶

All should allow for comments and/or name.¶

Design:¶

- Single point feature class, Web Mercator¶

Attribute fields¶

- Role, Integer, Subtype (100—Staff, 200—Volunteer, 300—Visitor)¶
- Comments—text (contain comments or name)¶
- Function, Text—domains for each subtype¶
- Interests, Text—domains for each subtype¶
- Date, Date—value depends on subtype¶

Design

Geodatabase workflows

PeopleTracker

Point
Web Mercator

Fields

ROLE, Int
DATE, Date
FUNCTION, Text
INTERESTS, Text
COMMENTS, Text

Subtypes

Staff

Volunteer

Visitor

Domains

Staff employment
Staff role

Volunteer hours
Volunteer assignment

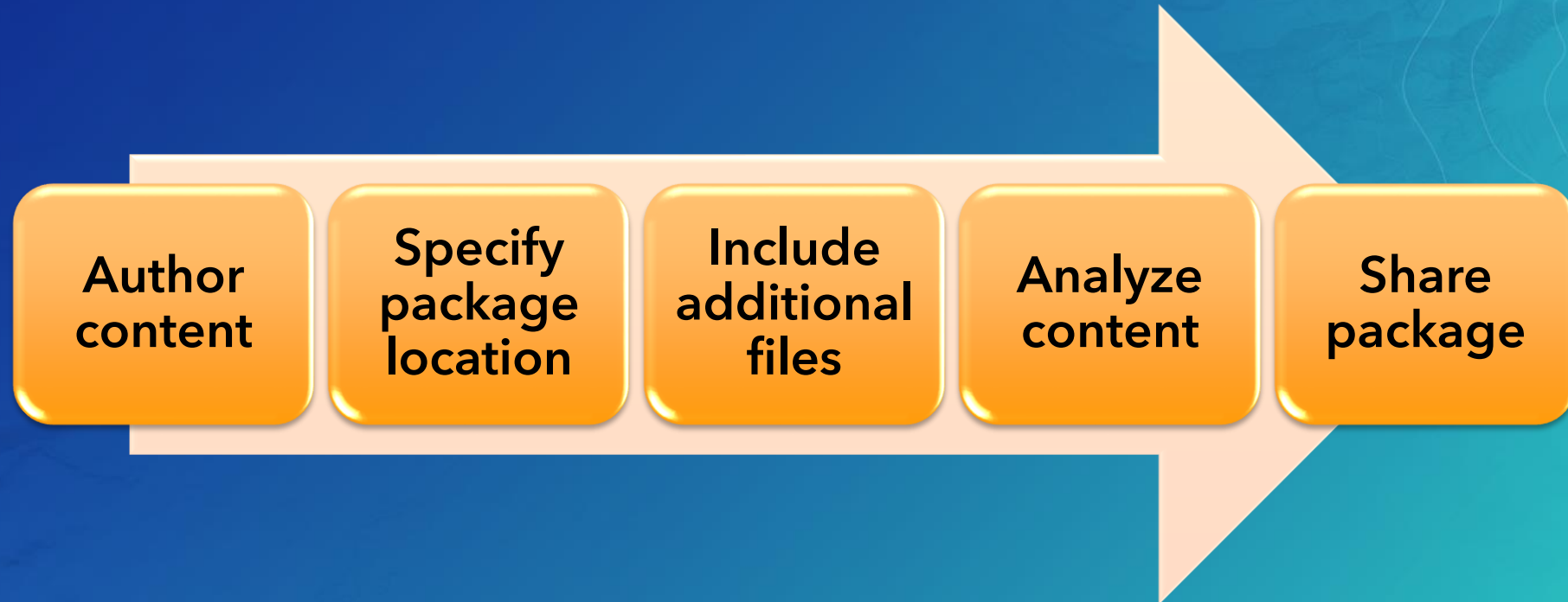
Visits
Visitor interests

Geoprocessing



Sharing a geoprocessing model

Geoprocessing workflow



Cartography & Editing



Designing service functionality

Cartography & editing



Web Map Design



Creating a web map

Web map design



Choose Basemap



Add Layers



Symbolize Layers/
Configure Pop-ups



Save as Web Map

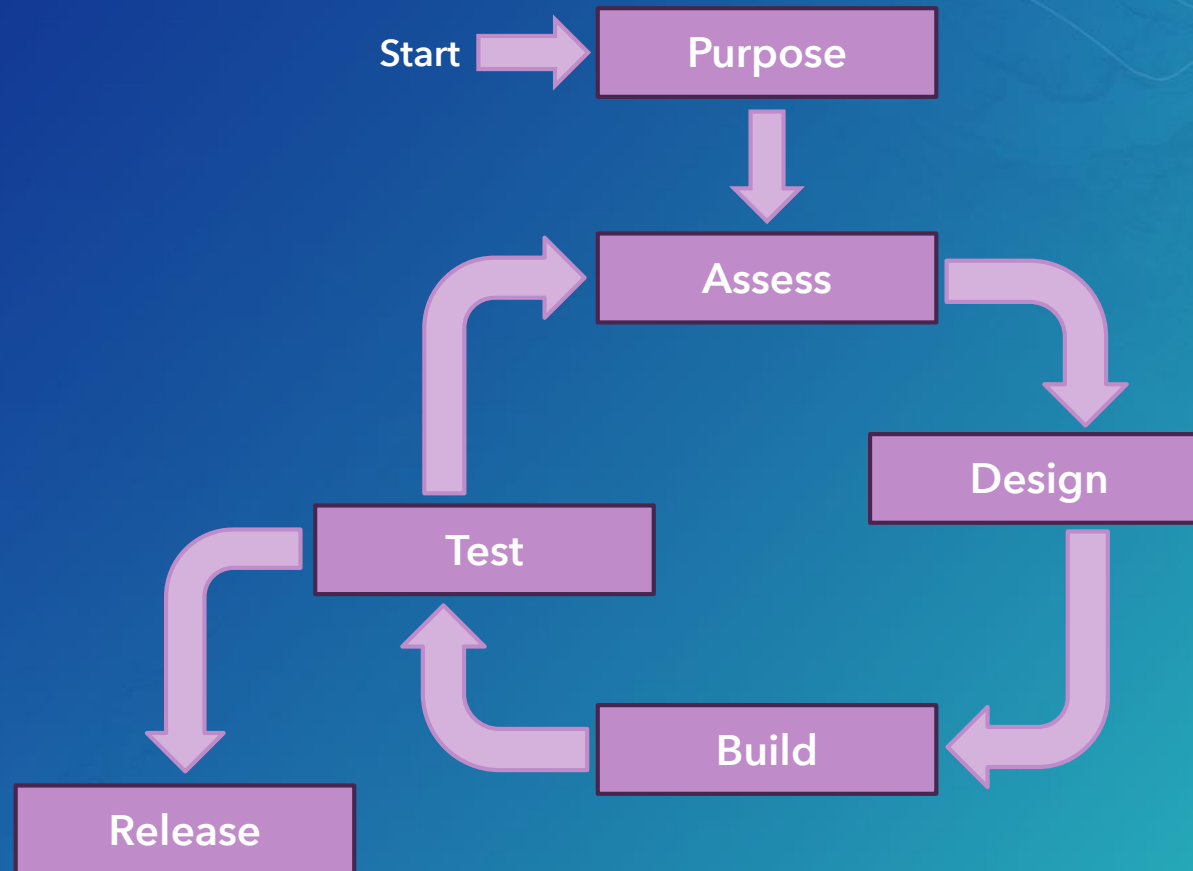


Share & Configure

Web App Design



Web app design



Create a web app

Web app design



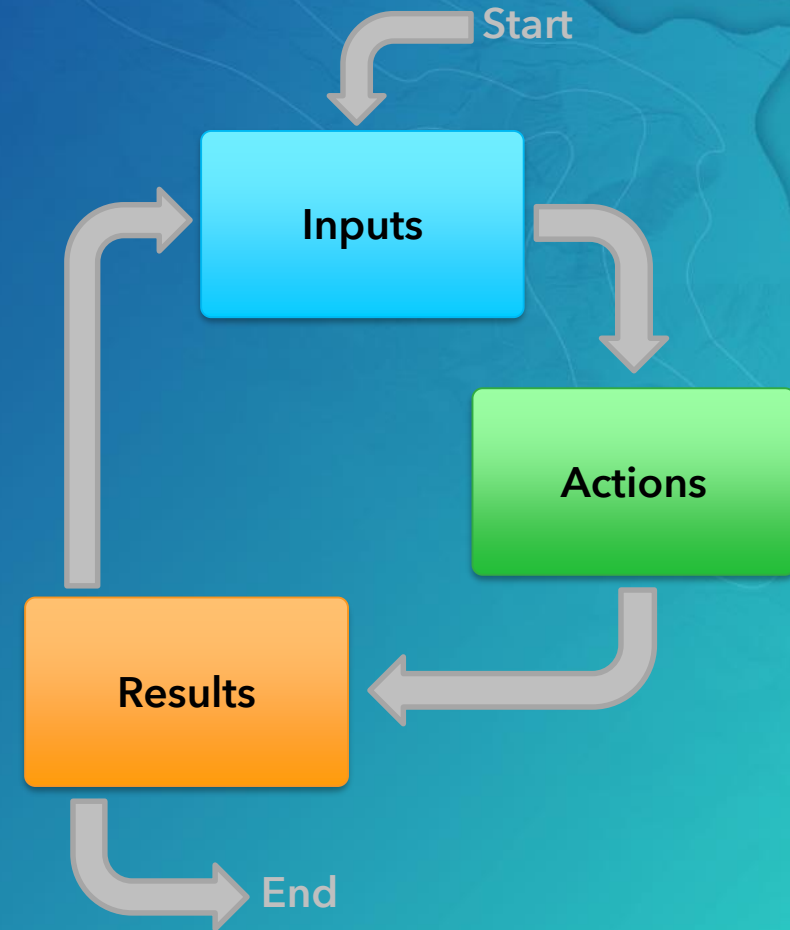
Conclusion



GIS workflows covered

Learning common GIS workflows

- Geodata
 - Geodatabase design
- Geoprocessing
 - Sharing geoprocessing packages
- Cartography & editing
 - Designing for GIS services
- Creating services
- Web map design
 - Symbolology & functionality
- Web app design
- Field use



Resources

Learning common GIS workflows

- Geodatabase design
 - ArcGIS Desktop Help > Designing a geodatabase
- Geoprocessing
 - Sharing data through packaging
- ArcGIS Enterprise tutorials
 - Publishing a map service
- ArcGIS Online
 - Create maps
 - Publish hosted feature layers
- Web AppBuilder



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THE
SCIENCE
OF
WHERE