



Spring Nearc 2011 Lightning Round

NEARC



Northeast Arc Users Group



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Lightening Talks



Q&A



PowerPoint Karaoke



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Automation in About Five
Minutes



Guido Stein

GIS Analyst
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State of Washington Broa... x +

wabroadbandmapping.org

bit.ly sidebar resources links Other bookmarks

Washington State Broadband Mapping

[Broadband Home](#) | [Mapping](#) | [Community Anchor](#) | [Providers](#) | [Your Voice](#)

A Typical Broadband Story

Morgan lives in Bellevue, a highly populated urban area in Washington, it has access to some of the fastest high-speed Internet service in America also known as "broadband".

On the other hand, Sally lives in Republic, a rural town in eastern Washington, where she pays higher prices for internet speeds that are much slower than Morgan's. This service isn't even available to her neighbors living outside of town.

This difference is known as the digital divide — or the "Have and Have-Nots." Lack of broadband service can cause serious disadvantages for the citizens of our state.

[Get Involved](#) [Tell Us Your Story](#) [Test Your Speed](#)

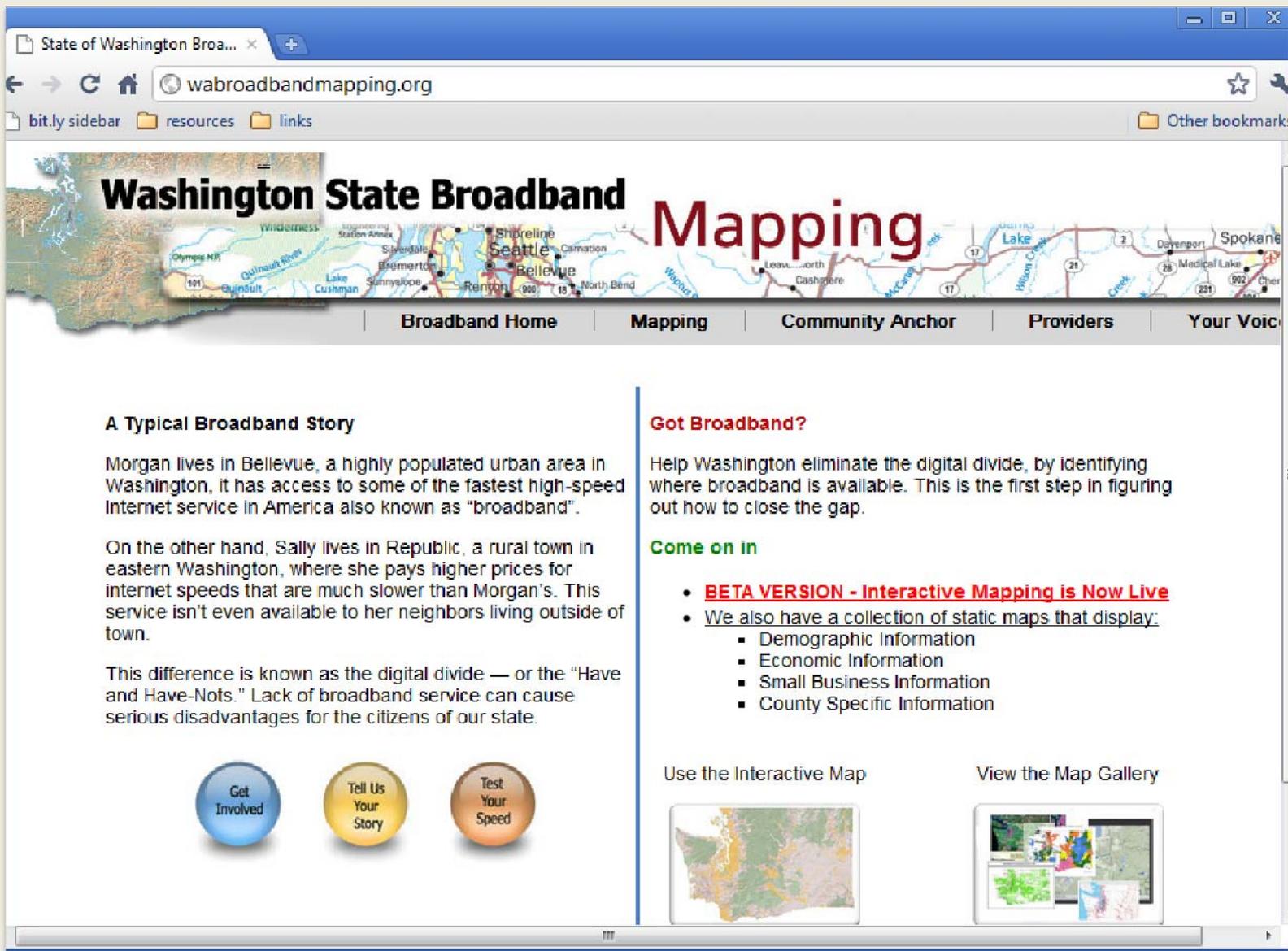
Got Broadband?

Help Washington eliminate the digital divide, by identifying where broadband is available. This is the first step in figuring out how to close the gap.

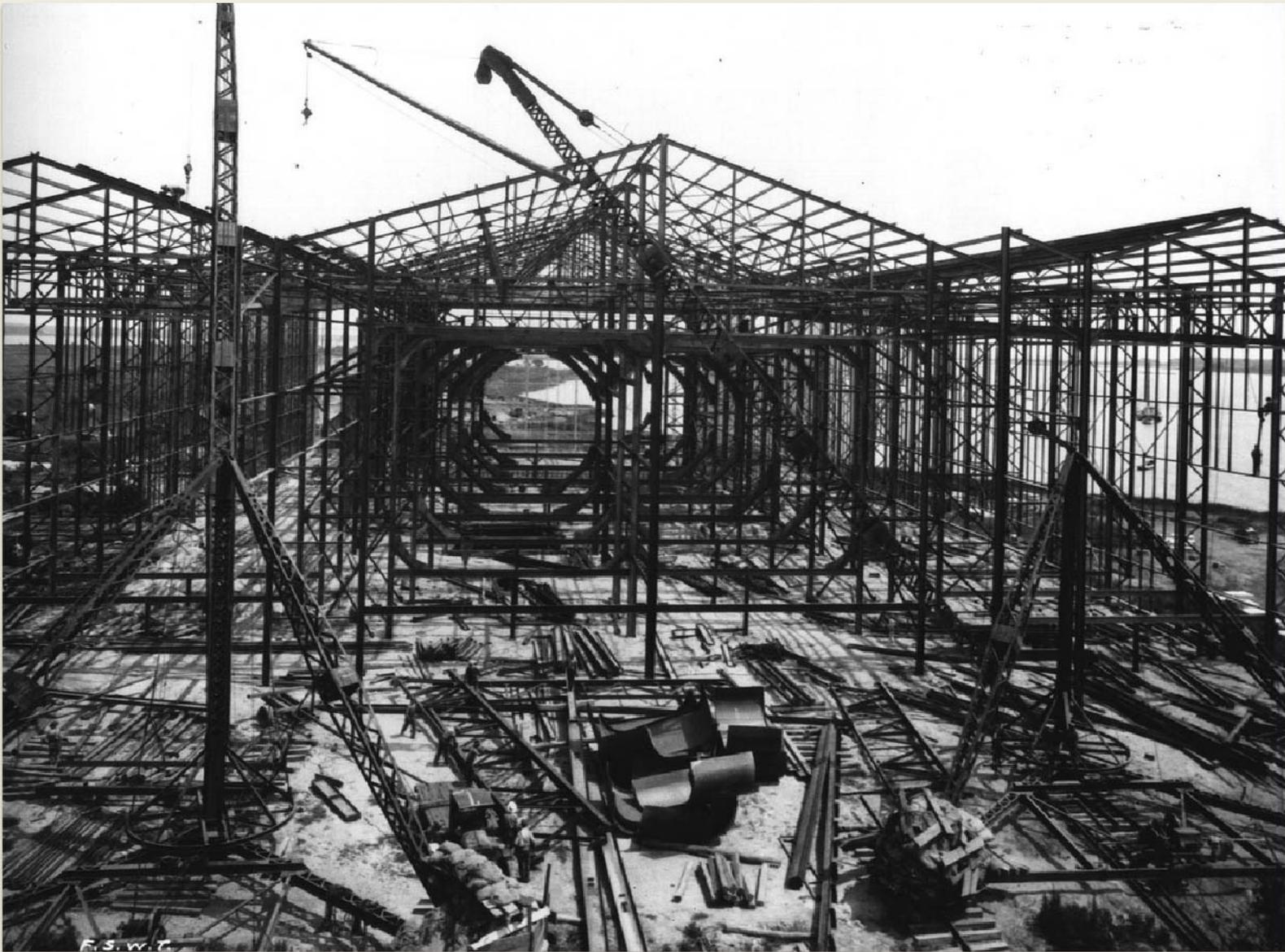
Come on in

- **BETA VERSION - Interactive Mapping is Now Live**
- We also have a collection of static maps that display:
 - Demographic Information
 - Economic Information
 - Small Business Information
 - County Specific Information

[Use the Interactive Map](#) [View the Map Gallery](#)



Washington State Broadband Mapping Web Site



Workflow underpinnings



Workflow Through Folder Management



Toolboxes



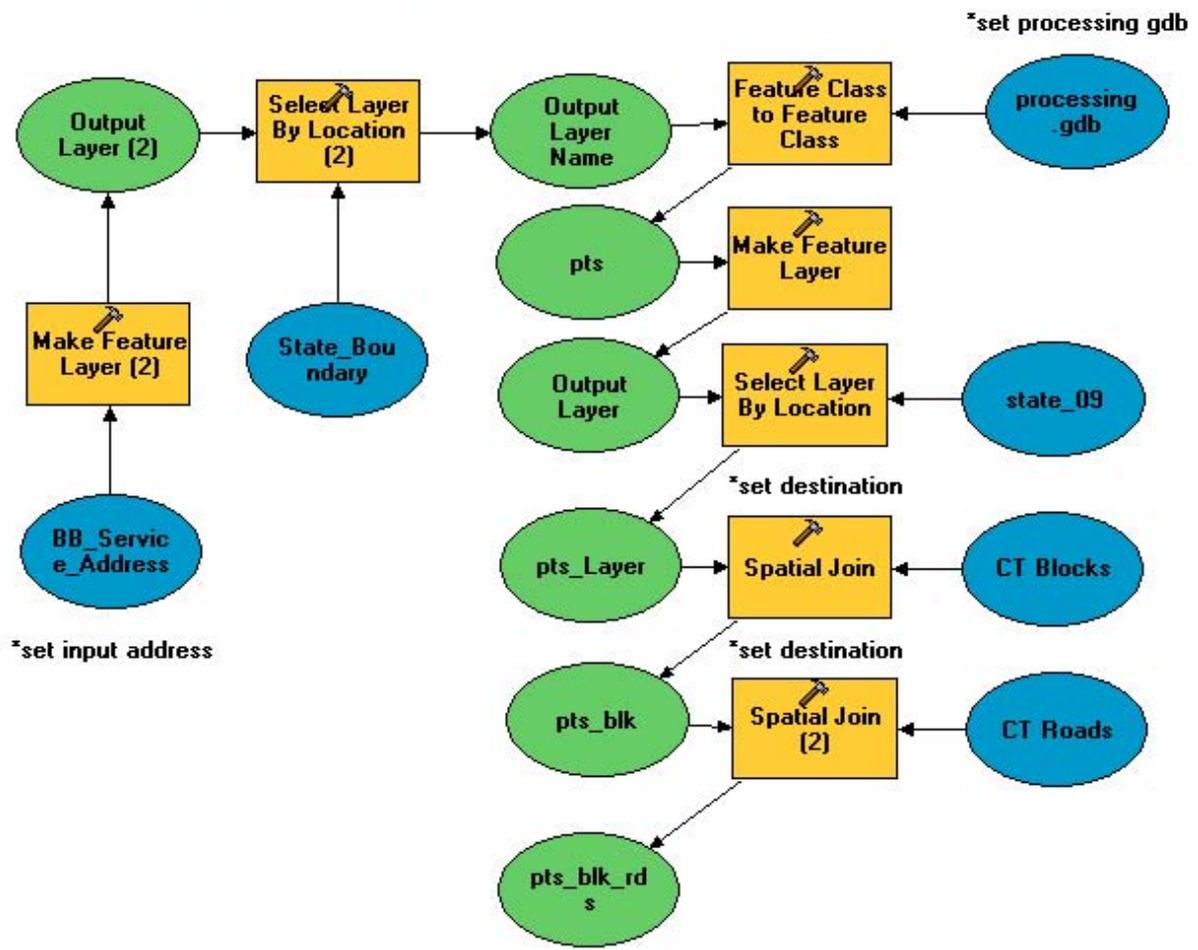
Apples and Oranges
ModelBuilder, Python and Interop Scripts/Models Templates



Modelbuilder
Prototyping and Documenting

1_SpatialJoin_CT

Model Edit View Window Help





Python
Powerful poison

```
*ExtractProviderFrom51.py - Q:\clients\c587.StateOfWABroadbandMapping\2009-0221p.WA_BB_Mapping\DataProcessing\S...
File Edit Format Run Options Windows Help

def extract(gp, srcGDB, destGDB, StateAbbr, ProviderSN):
    """if input FC has features, copy to output GDB"""

    expression = "[ID] = '" + StateAbbr + "_" + ProviderSN + "'"
    layer = "lyr"

    gp.Workspace = srcGDB

    for fc in ListFeatures(gp,srcGDB):

        # assigns output fc and removes an ds information
        if fc.find("\\") == -1:
            out_fc = fc
        else:
            out_fc = fc.split("\\")[1]

        gp.MakeFeatureLayer(srcGDB + "\\ " + fc,layer, expression)

        count = int(gp.GetCount_management(layer).GetOutput(0))

        if count <> 0:
            gp.FeatureClassToFeatureClass_conversion(layer, destGDB, out_fc)
            print AGSP(gp, str(count) + '\n'+fc + ' features transfered')

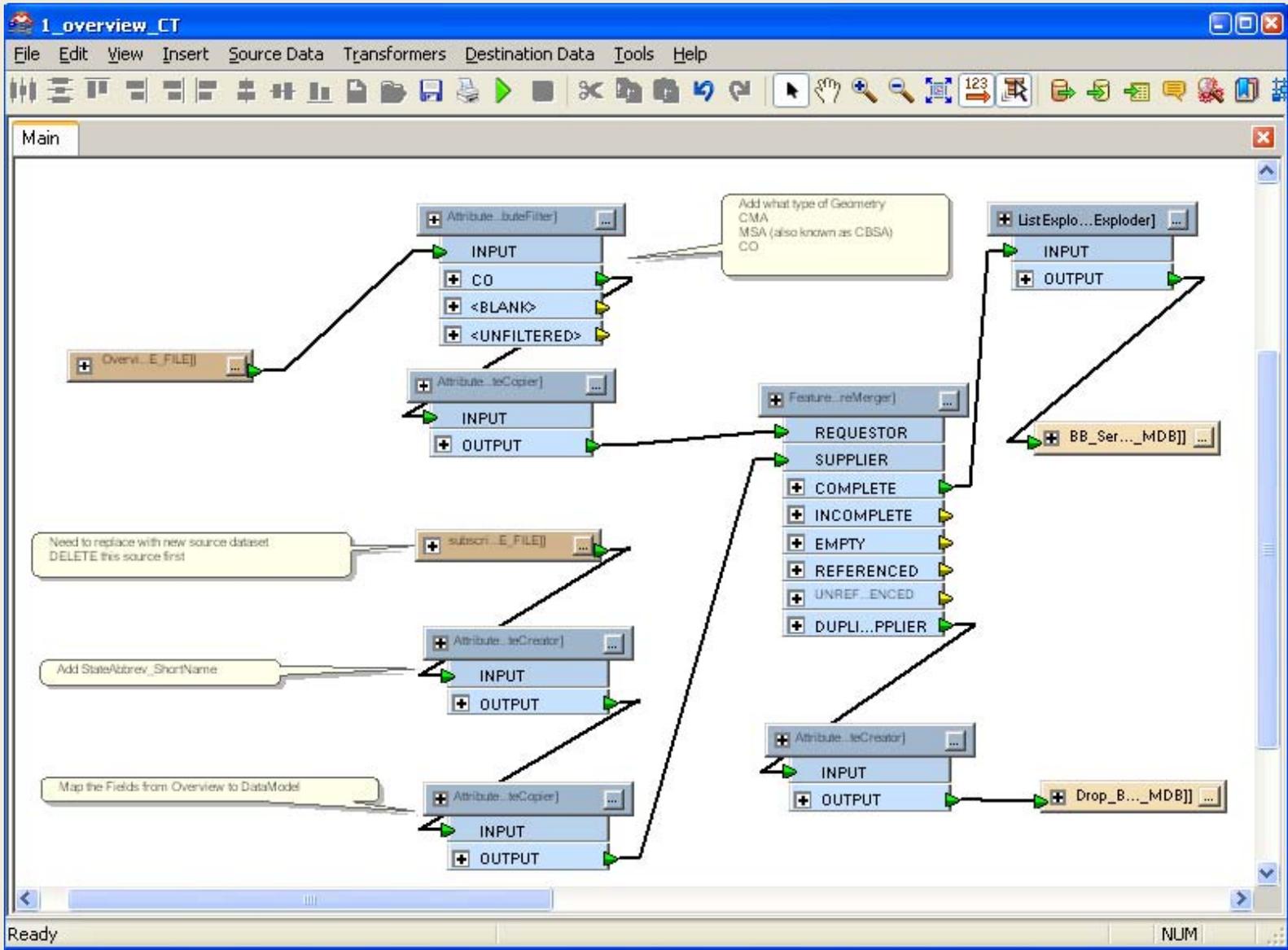
def ListFeatures(gp, GDB):
    """Iterate through objects in GDB and return list of features in GDB"""

    #create out_list and header
    out_list = []

    #Iterate in Workspace
    for fc in gp.ListFeatureClasses(GDB):
```



Interoperability Extension
No kneading data





Lessons Learned

Lessons Learned

Modelbuilder

- Pay attention to all variables

Python

- Take advantage of python path append to allow for central repository of external tools
- Do not rely on selections statements if you can help it

Interop Extension

- FME is nothing like DB or GIS
- Use custom transformers for simplicity



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