

# Engaging community stakeholders in reactivation of idle land using Web GIS

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**GIS**day

**Idle land poses a challenge for shrinking cities.**



Photo credit: [Flickr user William Real](#)



# The Land Exchange model offers a community-centered response.



The LEX process:

Today's focus

Reaching Out

Clustering

Building Capacity

Forming Coalitions

Deepening Engagement

Reaching Agreements

Breaking Ground

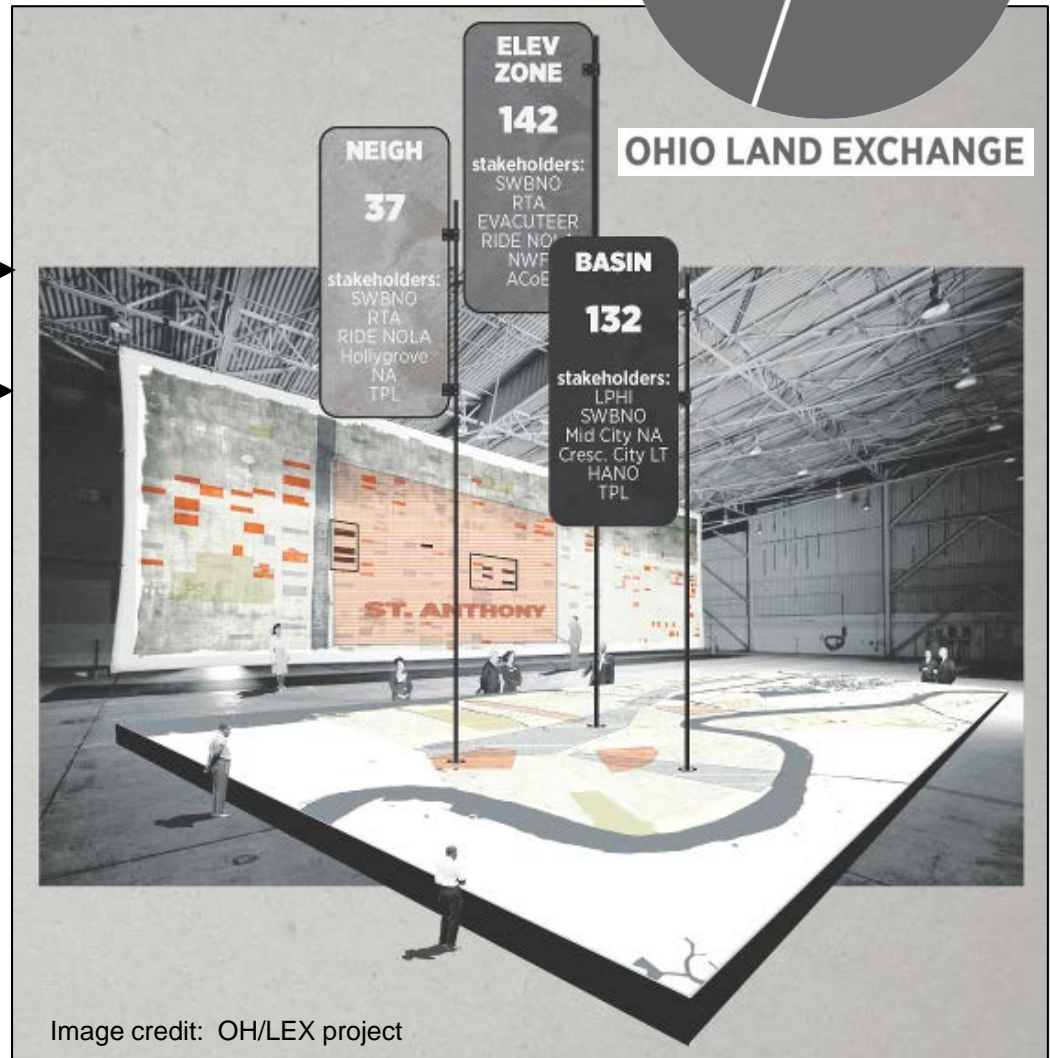
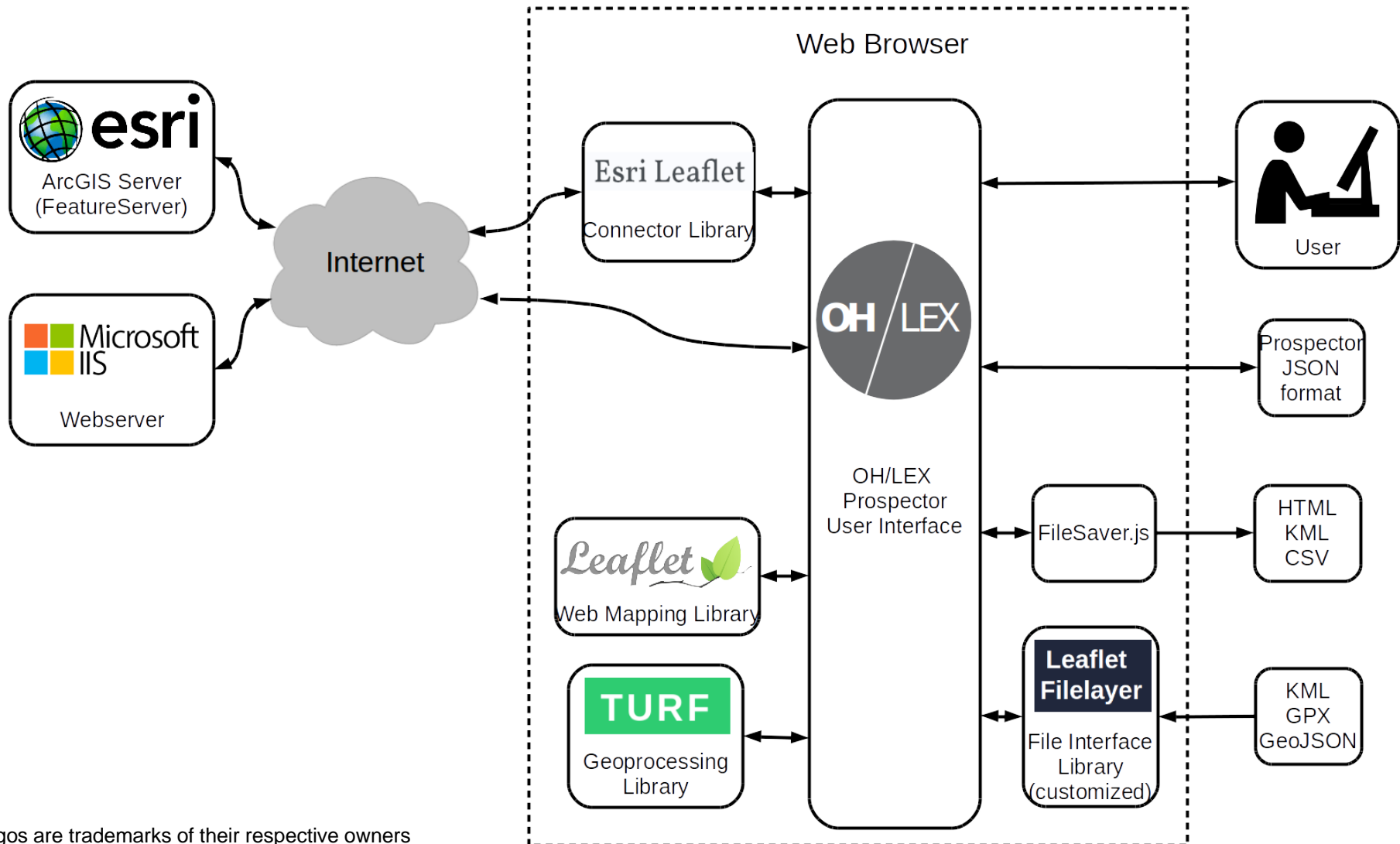
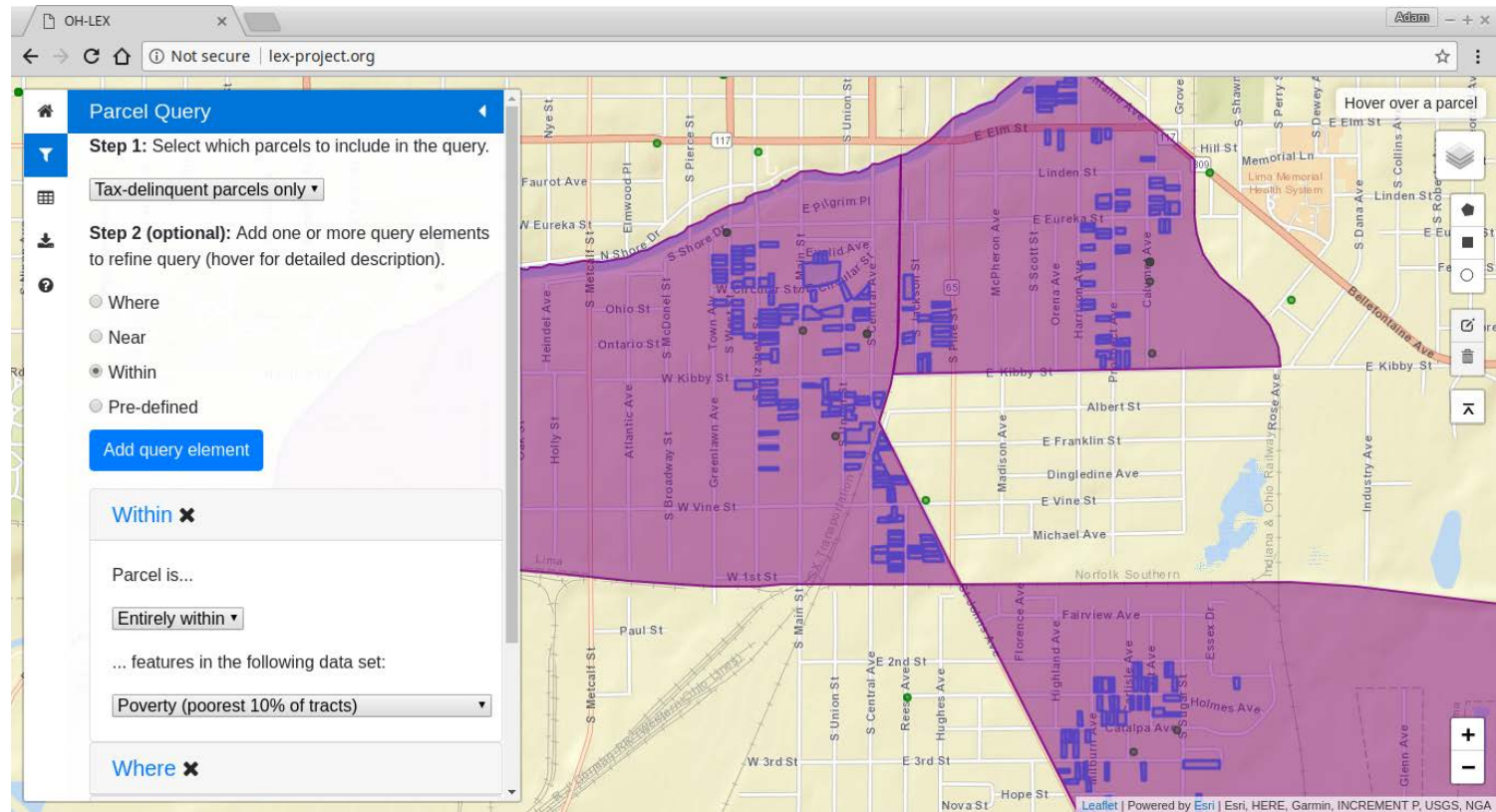


Image credit: OH/LEX project

# The OH/LEX Web GIS leverages Leaflet and ArcGIS server.



# Live demonstration!



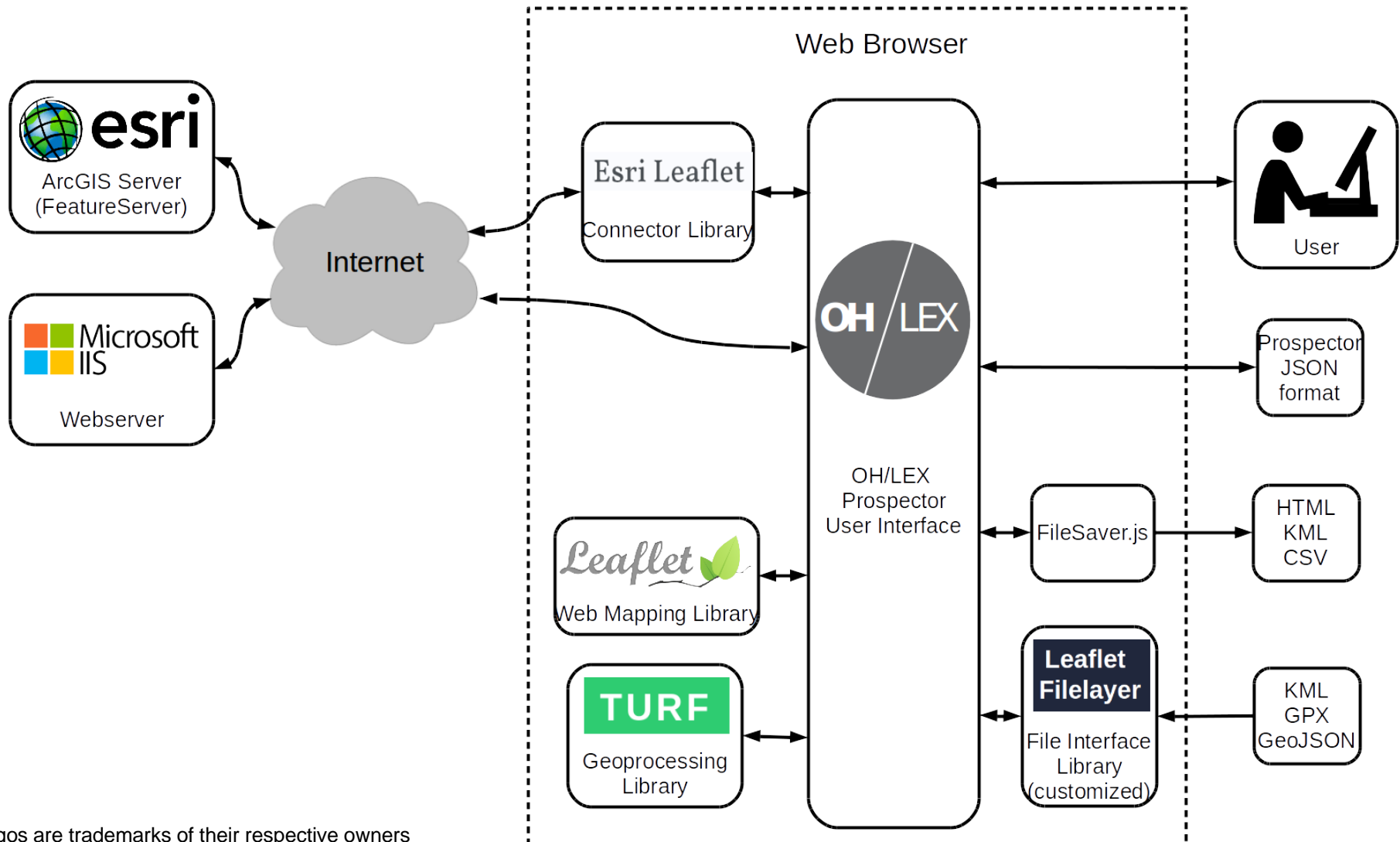
# Acknowledgements

This project is made possible through a Connect and Collaborate Grant, a program supporting innovative and scholarly engagement programs that leverage academic excellence of The Ohio State University in mutually beneficial ways with external partners.

The following organizations contributed to the project:

- Center for Urban and Regional Analysis
- Knowlton School of Architecture
- Spatial data providers (details in later slide)
- Open source software libraries (details in later slide)

# Questions?



# Reference Slides



# Contacts

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# Data providers

- Esri (basemaps)
- Lima Landbank (landbank parcels)
- Ohio Department of Transportation (railroads)
- U.S. Census Bureau (census tracts)
- U.S. Department of Agriculture (food deserts)
- Ohio Land Exchange project (vacancy)
- Center for Urban and Regional Analysis (parks, user-imported data)
- Allen County Auditor (everything else)

# Open source Javascript libraries

This project would have been cost-prohibitive (and tedious) but for the excellent foundation provided by these open source projects (in no particular order):

- [Leaflet](#) (mobile-friendly web mapping)
- [Esri Leaflet](#) (interface to ArcGIS server)
- [Leaflet.draw](#) (on-map vector drawing/editing)
- [Leaflet-image](#) (convert Leaflet maps to images)
- [Mapbox togeojson](#) (convert KML and GPX to GeoJSON)
- [Mapbox tokml](#) (convert GeoJSON to KML)
- [Leaflet.FileLayer](#) (import local GeoJSON/KML/GPX files to map)
- [FileSaver.js](#) (export data as a local file)
- [jQuery](#) (easily manipulate HTML documents)

# Open source libraries (continued)

- [Tether](#) (easily position HTML elements on-screen)
- [Popper](#) (easily create and position Tooltips)
- [Bootstrap](#) (HTML/CSS/Javascript web application framework)
- [FontAwesome](#) (fonts and icons)
- [Buckets](#) (set-manipulation)
- [Sortable](#) (drag-and-drop collapsible lists)
- [Turf](#) (geospatial analysis)
- [Leaflet sidebar-v2](#) (mobile-friendly sidebar)