



# LINK GIS

A Northern Kentucky Geographic Information System

## “Urban Planning: NKYmapLAB - GIS Analysis for Elected Leaders & the Public”

2016 ESRI User Conference – San Diego, CA

Louis Hill, AICP, GISP • Ryan Kent, GISP

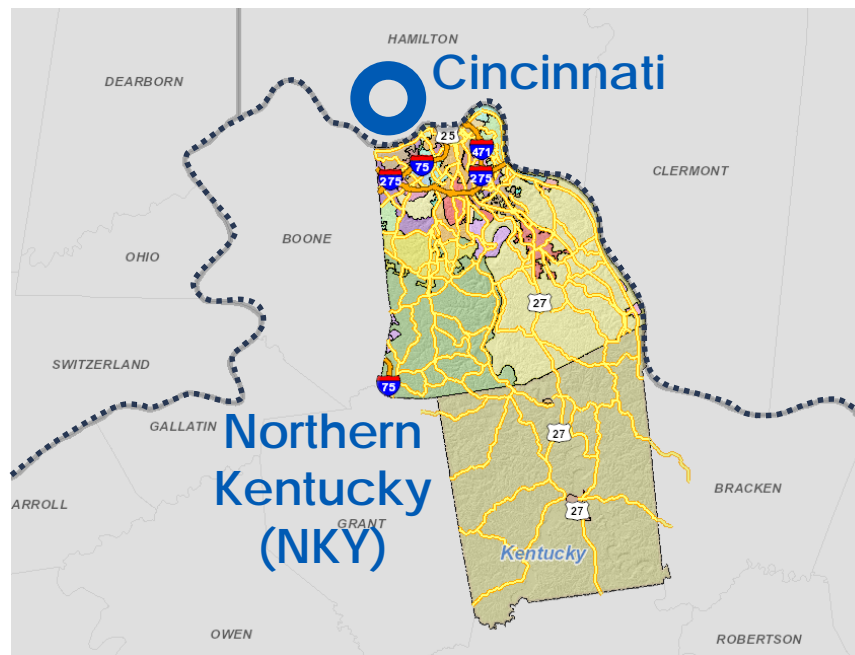


“We’re All Connected”



# What is LINK-GIS?

A Northern Kentucky GIS serving Kenton,  
Campbell, and Pendleton Counties.





## What is NKYmapLAB?

...a collaborative effort between Planning & Development Services of Kenton County, and LINK-GIS

A large graphic for NKYmapLAB. The top part is a black rectangle with "NKY" in white outlined font and "mapLAB" in a green-to-blue gradient outlined font. Below this is a white rectangle containing the logos for PDS and LINK-GIS, separated by a plus sign. The PDS logo includes a circular icon with a city skyline and green waves, followed by the text "PDS | Planning and Development Services of Kenton County". The LINK-GIS logo includes the blue geometric icon and the text "LINK-GIS" with a plus sign above it, and the tagline "A Northern Kentucky Geographic Information System" below.

# NKYmapLAB

A Collaborative Effort of



**PDS**

Planning and Development  
Services of Kenton County



**LINK-GIS**

A Northern Kentucky Geographic Information System

## What is NKYmapLAB?

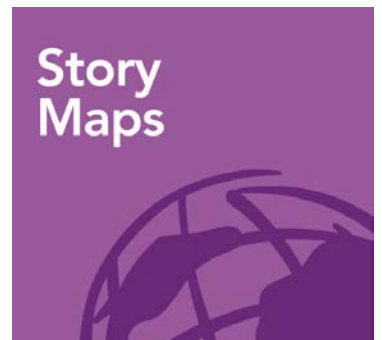
...is an initiative of Planning and Development Services of Kenton County, and LINK-GIS, which is intended to keep the public, citizens, and elected officials better informed about....

- Long-range planning implementation projects (Direction 2030)
- Quality of Life issues in cities, and throughout Kenton County
- Assist with economic development projects as needed

## NKYmapLAB Approach

Topics to date include: current bridge conditions, public park accessibility (walk-time and drive-time analysis), walkability and sidewalk connectivity, energy efficient construction in the community, traffic flow and congestion in the KY 536 corridor, urban tree canopy conditions by city, solar potential (via OKI regional MPO), trails, landslides, and the EF-4 Piner Tornado of 2012.

- **Traditional large-format maps 36" x 48"**
- **ESRI Story Map format, a multi-media and interactive approach**



## Getting Past “What is GIS?”

*19 cities + 1 unincorporated county + 165,000 citizens =  
Lots of Moving Parts*

Frequently changing Mayors, City Administrators, City Councils, Commissions, other boards. They typically deal with Fire & Police public safety issues, personnel items, budgets, tax rates, and day-to-day city operations.

- How to get GIS on the radar; Not be Underutilized?
- Over 6TB SDE data, orthos, obliques, LiDAR
- Move beyond “just” printed property / parcel maps

## Measuring Communities with GIS

Use GIS to measure our communities in more creative ways. Community fact sheets (Direction 2030 implementation) have traditional measures such as population and economic information. Add to these:

- **“Ped Shed” pedestrian walkable networks (viewsheds)**
- **Urban Tree Canopy %**
- **Sidewalk : Street Centerline ratios (as compared to subdivision regulations)**
- **Population access to parks (walk-time / drive-time)**



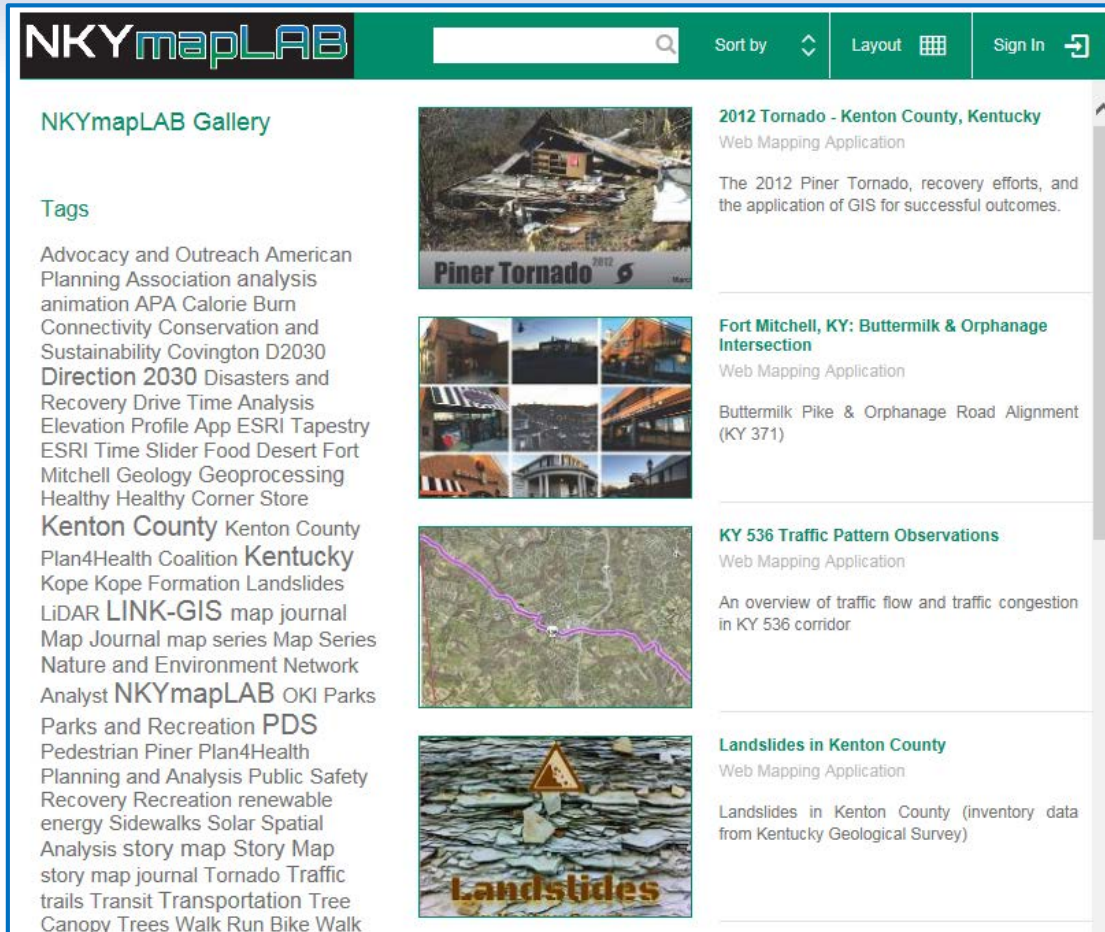
# Gallery of Topics - Through the Lens of GIS

Use AGOL "Map and App Gallery" to organize all Story Maps in one central location.

- **Catalog of subjects Planning Agency deals with on a regular basis**
- **Demonstrate wide variety of GIS solutions**
  - Elevation Profile app, Swipe app, network analyst, density "heat" mapping, GPS, Google Traffic data, drone video
- **Gallery App auto-populates word cloud for clickable topic searching**



# AGOL "Map and App Gallery"



Use AGOL "Map and App Gallery" to store all Story Maps in one central location.

Clickable "Word Cloud" is auto-populated by app using tags.

## NKYmapLAB on Social Media

One of the strategies to increase GIS awareness is to use Social Media platforms intentionally, timely, and frequently. *"No one will do it for you"*

- LinkedIn → weekly, or close to weekly
  - #AwesomePoweredByLINKGIS
- Twitter
  - Accounts - @NKYmapLAB @TWBrush
  - Tags - #NKYmapLAB #LINKGIS #PDS #StoryMap
- ESRI GeoNET → post all projects and highlights



## NKYmapLAB Approach

NKYmapLAB site  
&  
Story Maps / ArcGIS Online

## NKYmapLAB Successes

- Trails & Elevation Profile project → turned into Morning View Heritage Area conservation project
- River City Parks → Story Map to identify 53 “urban core” parks & amenities. Seeks citizen survey input
- Piner Tornado → “lessons learned” open house talks w/ South Kenton County Citizens Group



## NKYmapLAB Successes

- City of Fort Mitchell, KY → Story Map built specifically to demonstrate need for transportation funding, was able to help acquire **\$250,000** for design work
- Currently in early stage talks w/ American Planning Association to be featured in 10-year anniversary of APA's "Great Communities" program
- In May of 2016 "IBM Watson Analytics" began following us on Twitter....#NBD

## NKYmapLAB Awards & Honors

- Kentucky Chapter APA 2016 Award for “Outstanding Use of Innovative Technology” in planning
- ESRI 2016 Map Book, Volume 31 – 4 pages of maps/analysis *(see pages 21-24)*
- ESRI UC 2015 Map Gallery – 3rd Place “Large Format Printed Map”
- KY GIS Conference 2015 Map Gallery – 1st Place Overall

## Questions ?

- **Ryan Kent**, GISP – Principal GIS Data Analyst
- **Louis Hill**, AICP, GISP – Geospatial Data Analyst

