

NACo Technology Guides FOR COUNTY LEADERS



GIS



EXECUTIVE SUMMARY

The NACo IT Advisory Council is developing layman's guides for county elected officials, as well as other county executive leadership to help raise the awareness and understanding of the technology that is needed to support county essential functions. The guides will further provide for education in the innovative uses of technology to take the county beyond the essentials and improve the delivery of citizen services and programs.

Each guide will include an executive summary and then will focus on a series of questions to ask that will include the risk or missed opportunity if not implemented. Guides identified include

CYBER

Detection

Prevention

Response



GEOGRAPHIC TECHNOLOGIES

*Use Cases and
Investment*

Strategy

*Policies and
Data Sharing*



BUDGETING

Procurement

Contracts

Grants



WORKFORCE TALENT

Flextime

Benefits

Career Growth



TECHNOLOGY PLANNING, STRATEGY

Projects

Priorities

Innovation



GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Purpose:

As an Elected Official – It is vital that county leaders communicate with the IT leader or support on important GIS questions. One may ask “why is this important? While it is the responsibility of the GIS staff to implement many of the day-to-day GIS projects and map requests, and for other department leaders to provide the business requirements for those requests, it is an elected official responsibility to understand and provide input to the impacts that these GIS efforts have in relation to resources, budget, and overall Return on Investment.

Elected Officials, both incoming as well as seasoned, can benefit from a layman's guide for emerging and innovative technologies that are required in local government. The theme of this guide is GIS, which stands for Geographic Information Systems. While GIS is often interchangeable with Geospatial Information Systems, it basically refers to the same concept of capturing and analyzing data in a visual way that in turn aids others in strategic decision making. This

GIS guide is the second in a series that will provide an overview of benefits as well as a checklist of questions to dialogue with your GIS director, GIS staff or other related support. As you discuss the county GIS strategy, please keep in mind that the use of GIS is a journey rather than a one-time project. Ask yourself the all-encompassing question of “What does your future state look like and how can it benefit from the use of Geospatial Tools?”

With a basic understanding of the importance of GIS, this guide has been compiled with input from the IT Advisory Council and GIS directors as well as NACo Tech Xchange members and ESRI representatives. The next two pages are the executive summary of benefits and top ten questions to ask concerning GIS. As you dialogue with your GIS support, whether full-time with the county or outsourced, it is important to remember that understanding the use of GIS is a journey requiring ongoing assessment, adjustment, and dialogue.



Top Ten Benefits That a GIS Foundation Can Bring to Your County:

1 IMPROVED RESIDENT INSIGHT

GIS shows resident demographics, including unserved and underserved and provides demographic analysis in areas such as land management, tax parcel/property tax data management.

2 SUPPORTS ECONOMIC DEVELOPMENT

GIS helps to identify locations that will benefit from reinvestment or reinvention, which in turn can help promote economic development.

3 SUPPORTS COST SAVING

The use of GIS promotes cost savings by identifying areas such as 3rd party vendor expenses that can be lowered or eliminated with current county GIS staff, as well as supports database management for tracking and maintenance.

4 DEMONSTRATES COLLABORATION

Promotes Transparency, opens collaboration and communication and leads to more efficiencies and open trust.

5 RESOURCE FOR OTHER APPLICATIONS

Is a necessary component of modern 911 systems, asset management systems, Computer Assisted Mass Appraisal (CAMA) systems, etc. GIS data is the “food” that other software systems consume.

6 PROMOTES POSITIVE RESIDENT EXPERIENCES

Improves the customer experiences for local government business processes. (i.e. locating voter locations, food banks, homeless assistance, property information)

7 PROVIDES VITAL DATA

GIS can also be the base for more significant and impactful technologies, processes, and operations, in areas such as utilities, public works, fire, and emergency management.

8 BRINGS ADDITIONAL TRANSPARENCY TO PROJECTS

Increases public knowledge of where projects are being scheduled, as well as the phases, which in turn provides the ability for the county to answer any question from the public regarding locations and zones.

9 HIGHLIGHTS DATA RELATIONSHIPS ACROSS DEPARTMENTS

Readily depicts relationships between data that can otherwise seem unrelated, in a common framework and layered in a way that is useful and georeferenced.

10 VISUALLY TELLS THE STORY

Promotes engagement by other departments/divisions to bring GIS to the table for any data-based project or initiative. In most cases that data has a location component and GIS can help tell that story and communicate value in a visual way to staff, leadership, and the public



Top Ten GIS Questions for County Leadership

- 1** Can you show me how the budget dollars were spent and where they went to for GIS?
- 2** When do I see the “return on investment” for GIS?
 - Is it immediate, long-term?
 - Or a steep curve early on?
 - And what is this “open-source option”? How can it contribute to a more effective budget?
 - How are we leveraging funding from all possible sources (e911, grants, utilities, etc.) to fund our geospatial operations?
- 3** What are the last three projects you can share utilizing GIS?
- 4** Are we sharing GIS software, services, and data among all departments and partners via our network infrastructure?
- 5** Why do some departments use GIS, and some do not? Do departments cooperate with you on sharing data?
- 6** Show me how our GIS layers (parcels, roads, etc.) are being used in all our county departments and in their systems.
- 7** How is the county GIS plan prioritized based on criteria that considers critical services and potential impact?
- 8** How and where are we using GIS to promote change and better efficiencies?
- 9** How can we use GIS to tell the story (i.e. “where do I need the resources” and “how can the quality of life be improved using GIS”)?
- 10** How is our use of GIS secure, especially if we are using the cloud hosted options? And should we be in the cloud if we are not already?



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Phase two will include the tracks below which will contain additional questions county leaders can use in dialogue with the county IT support.

Track 1

More in-depth questions for elected officials

Track 2

An IT track for county GIOs, CIOs, IT Directors, outsourced GIS support

Track 3

A track for county executives and administrators

Track 4

A track for department directors

For more information on the guides or on NACo Technology resources, visit

County Tech Xchange (naco.org), or reach out to Rita Reynolds, NACo CIO at rreynolds@naco.org

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