GIS APPLICATIONS & SMART COMMUNITY

CROWDSOURCING FOR DATA DRIVEN DECISIONS

Esri Mid-Atlantic Users Conference
December 11, 2019
1. **Beaver County Regional Council of Governments**  
   **Presenter:** Bethany Williams

2. **A Collaborative GIS Program**  
   Maximizing the ROI  
   **Presenter:** Gary Sheets

3. **Citizen Problem Reporter**  
   (Survey 123, Web Applications, and Operations Dashboard)  
   **Presenter:** Matt Kalcich
BEAVER COUNTY REGIONAL COG

40 MUNICIPAL MEMBERS

SERVICES:

- Joint Purchasing
- Education & Training
- Shared Services
- Fiscal Sponsorship
- Appeals Boards
LIMITATIONS OF A DECLINING REGION

BEAVER COUNTY

- 53.5 municipalities
- 170,539 population (2010 census)
- $53,981 median income
- 11.1% poverty rate
- Slow Economy after Collapse of Steel Industry
LIMITATIONS OF LOCAL GOVERNMENT

- Limited Capacity
- Financial Instability
- Inadequate Technology
SOLUTIONS

- Data Development
- Citizen Education
- Civic Engagement
- Municipal Responsiveness
- Neighborhood Improvement
- Collective Governance
ACCOUNTABILITY & PARTNERSHIP

- Government → Citizen
- Citizen → Government
- Collective governance supports responsible government
A COLLABORATIVE GIS PROGRAM
MAXIMIZING THE ROI
PRESENTER: GARY SHEETS
GIS PROGRAM LAUNCH

Setting the stage

- GIS 101
- Smart Community Initiatives

GIS 101

- Local governments use GIS to improve decision making, manage infrastructure and services delivery, and citizen engagement
- Five (5) Key Components to a successful GIS Program

- Successful GIS Programs begin with an Implementation Plan
  - Define User Roles, Data Needs & Priorities
  - Understand the Cost & Benefits for each planned phase
GIS PROGRAM LAUNCH

Setting the stage
- GIS 101
- Smart Community Initiatives

Introduction to ArcGIS Solutions & the Local Government Model
- Early Adopters
- Cost Comparison

GIS 101: Process & Analysis

ESRI for Local Governments offers tools designed to **SAVE Time & Money**!

http://solutions.arcgis.com/gallery/#s=0&md=industries:state-government
A CHARRETTE is an intensive, multi-disciplinary workshop with the aim of developing a design or vision for a PROJECT or PLANNING activity.

CHARRETTES are often conducted to design such things as parks and buildings, or to plan communities or transportation systems.
CHARRETTE SESSION 1

1. Review of Pre-Workshop Materials
2. Voting on Importance of “Example” Applications
3. GIS Collaboration Case Study Review: Union County & Lewisburg, PA
4. Break Out-Session
   - Story Maps
   - Engagement / Crowdsourcing
   - Operations (Tools and Workflow to improve current activities)
5. Results: 74 Potential Applications
Consolidation of Applications

Ranking the “Brainstorm” Applications
- Development Tracker
- Site Selection
- Citizen Reporter
- Beaver County Outdoors
- MS4 Compliance

Detailed discussion and analysis of Data & Mapping required for Top 5
CITIZEN REPORTER
(SURVEY 123, WEB APPLICATIONS, AND OPERATIONS DASHBOARD)
PRESENTER: MATT KALCICH
CITIZEN REPORTER

Workflow

PROBLEM noticed/survey SUBMITTED

Municipality ACKNOWLEDGES and ADDRESSES problem

DASHBOARDS to track and assess how municipality is handling problems

WEB APPLICATION
For resident to follow status of their problem

NOTIFICATION

SATISFACTION SURVEY
CITIZEN REPORTER

Workflow

PROBLEM noticed/survey SUBMITTED

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NOTIFICATION

SATISFACTION SURVEY
Easy-to-use public facing applications for citizens to report problems to municipalities
CITIZEN REPORTER

Workflow

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WEB APPLICATION
For resident to follow status of their problem

NOTIFICATION

SATISFACTION SURVEY
New Survey to Review - test
Microsoft PowerApps and Flow <micrsoft.powerapps.com>

Subject: A new survey has been submitted and is waiting for your review.

Problem ID: 29322-154046
Category: Road
Ticket: PURK

To: [Redacted]@ladgroup.com

Please remember to make the feature viewable to the public if approved.
If you want to unsubscribe from these emails, please use the [Unsubscribe].
CITIZEN REPORTER

Workflow

PROBLEM noticed/survey SUBMITTED

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WEB APPLICATION

NOTIFICATION

SATISFACTION SURVEY

For resident to follow status of their problem
Thank You for Your Submission - test

Microsoft PowerApps and Flow <microsoft@powerapp.com>

Hi Matthew Karlson,

Thank you for your submission. Your report data is being reviewed.

Problem ID: 73522-124446
Category: Road
Type: report
Date: Hot Lake Dr & Market Street

You will be notified when the problem is resolved. You can track the progress of this report and all submitted reports through our online map viewer, which is optimized for Google Chrome.

If you have any questions, please contact the Citizen Reporter Team by clicking here.

Regards,

The Citizen Reporter Team

If you want to unsubscribe from these emails, please use the form.

Microsoft PowerApps and Flow
New Microsoft Power Apps

Matthew Karlson
Co-Founder, Larson Design Group

Customer Service

+1-315-237-0096

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CITIZEN REPORTER

Workflow

PROBLEM noticed/survey SUBMITTED

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NOTIFICATION

SATISFACTION SURVEY
Thank You for Your Submission - test

Microsoft PowerApps and Flow <micouc@powerapp.com>
Kalisch, Matthew
Dear Problems Reported Survey

Hi Matthew Kalisch,

Thank you for your submission. Your report has been received.

Problem ID: 9313-3-194-064
Category: Road
Type: Pothole
Date: Hot Spot Old Mill Street

You will be notified when the problem is resolved. You can track the progress of the repair through our online map viewer which is optimized for Google Chrome.

If you have any questions, please contact the Citizen Reporter Team by clicking here.

Regards,
The Citizen Reporter Team

If you want to unsubscribe from these emails, please use the form.
CITIZEN REPORTER

Workflow

PROBLEM noticed/survey SUBMITTED

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NOTIFICATION

SATISFACTION SURVEY
### Citizen Reporter Dashboard

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Last 7 Days</th>
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<tbody>
<tr>
<td>Animal Control</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Blight</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Environmental Health</td>
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<td>0</td>
</tr>
<tr>
<td>Land Use</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Park / Tree</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Road</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Trash</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Water / Sewer</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
NEXT STEPS

- Native applications
- Refine customize with Java Script API
- Streamline delivery to municipalities
- Deploy From Enterprise GIS
- Follow and develop around Experience Builder
QUESTIONS