Baltimore County
GIS Strategic Business Plan

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Agenda

Introduction
Methodology
GIS Utilization
Annual GIS Costs and Benefits
Cost Benefit Assessment
Enterprise Recommendations
Next Steps
GIS Strategic Business Plan

Introduction:

Overview of Project
Methodology

Agency Data Collection and Analysis
    Project Board reviewed and supports the applied methodology

Enterprise Summary and Analysis:
    Cost/benefit summary
    GIS recommendations

Cost/Benefit Analysis:
    Budget analysts and agency leads verified results

Industry Research:
    King County, WA (Seattle)
    Mecklenburg County, NC (Charlotte)
    Baltimore County, MD
GIS Utilization

GIS Databases:
98% (270 of 274) of supported & maintained GIS data layers are utilized by County agency programs and activities.

GIS Applications:
Most agencies are maximizing use of software provided by the County, especially ArcGIS standard (79 out of 91 programs) and DataQuery.

Overall GIS Technology:
Most agencies productively use GIS technology.
A few agencies are under-utilizing GIS.
PDM and Health – more business processes could benefit.
The County should increase its focus on using GIS for more complex spatial analyses.
### Annual GIS Costs / Benefits

#### Annual Costs:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Operating Costs:</td>
<td>$859,717</td>
<td>Hardware, Software, Supplies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OIT GIS Personnel, Training</td>
</tr>
<tr>
<td>Total Capital Costs:</td>
<td>$272,000</td>
<td>Enterprise Databases</td>
</tr>
<tr>
<td>Total Agency Costs:</td>
<td>$976,353</td>
<td>GIS Database Maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff, Training, Supplies</td>
</tr>
<tr>
<td><strong>Total GIS Enterprise Costs:</strong></td>
<td><strong>$2,108,070</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Annual Benefits:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Hours Saved:</td>
<td>119,377</td>
<td></td>
</tr>
<tr>
<td>Annual Time Benefits:</td>
<td>$4,052,895</td>
<td></td>
</tr>
<tr>
<td>Other Benefits:</td>
<td>$606,626</td>
<td></td>
</tr>
<tr>
<td><strong>Total Annual Benefits:</strong></td>
<td><strong>$4,659,521</strong></td>
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</table>
# Cost Benefit Assessment

<table>
<thead>
<tr>
<th>Agency</th>
<th>Net Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>911</td>
<td>-$115,923</td>
</tr>
<tr>
<td>DED</td>
<td>+$147,079</td>
</tr>
<tr>
<td>DEPRM</td>
<td>+$1,446,448</td>
</tr>
<tr>
<td>DPW</td>
<td>+$149,042</td>
</tr>
<tr>
<td>DRP</td>
<td>+$114,281</td>
</tr>
<tr>
<td>Fire</td>
<td>+$107,460</td>
</tr>
<tr>
<td>Health</td>
<td>+$63,057</td>
</tr>
<tr>
<td>OCC</td>
<td>+$3,250</td>
</tr>
<tr>
<td>OIT</td>
<td>+$57,914</td>
</tr>
<tr>
<td>OP</td>
<td>+$376,718</td>
</tr>
<tr>
<td>PDM</td>
<td>+$67,995</td>
</tr>
<tr>
<td>Police</td>
<td>+$177,213</td>
</tr>
<tr>
<td>Misc</td>
<td>-$43,084</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>+$2,551,450</strong></td>
</tr>
</tbody>
</table>

### Diagram

![Cost Benefit Assessment Diagram](image-url)

- **911**
  - Cost: $10,027
  - Benefits: $255,950
  - Net Benefit: -$140,923
- **DED**
  - Cost: $11,008
  - Benefits: $58,088
  - Net Benefit: +$47,080
- **DEPRM**
  - Cost: $292,828
  - Benefits: $820,265
  - Net Benefit: +$527,437
- **DPW**
  - Cost: $48,115
  - Benefits: $671,243
  - Net Benefit: +$623,128
- **DRP**
  - Cost: $53,834
  - Benefits: $59,463
  - Net Benefit: +$5,630
- **Fire**
  - Cost: $75,097
  - Benefits: $12,040
  - Net Benefit: -$63,057
- **Health**
  - Cost: $24,342
  - Benefits: $21,092
  - Net Benefit: -$3,250
- **OCC**
  - Cost: $52,003
  - Benefits: $59,463
  - Net Benefit: +$7,460
- **OIT**
  - Cost: $12,186
  - Benefits: $60,272
  - Net Benefit: +$48,086
- **OP**
  - Cost: $295,676
  - Benefits: $672,294
  - Net Benefit: +$376,618
- **PDM**
  - Cost: $276,170
  - Benefits: $208,175
  - Net Benefit: -$68,095
- **Police**
  - Cost: $101,585
  - Benefits: $278,798
  - Net Benefit: +$177,213
- **Misc**
  - Cost: $43,579
  - Benefits: $86,683
  - Net Benefit: +$43,104

**Total Net Benefit**: +$2,551,450
Enterprise Recommendations

GIS Data Development and Maintenance

GIS Application Development and Maintenance
Prioritize and Develop “Activity-Specific” applications

Business Process Redesign
Land Management System

Enhance GIS Utilization in Additional Agencies
- PDM
- Health
- DSS
Enterprise Recommendations

Organization:

GIS Program Manager

Agency GIS Champion

Resource Consolidation
Baltimore County Next Steps

1. Prioritize and assess recommendations
2. Develop full business use cases
3. Develop implementation plan and timeline
4. Execute implementation plan
5. Maintain GIS Strategic Business Plan
Baltimore County
GIS Strategic Business Plan

Questions