Spatial Real Property and Assessment Information Systems

Presented by
Girk Cakmak and Scott Mastellon

Spring 2009
Agenda

- Property Data available to Residents via Web
- Spotlight on six (6) projects
- Technology
- Spatial Functionality
- Benefits
- Questions & Answers
Property Data Available on Web

- Real Property Tax Administration Technology Improvement Grant Program (RPTATIP)
  - Over 75 Grants awarded to create on-line real property systems from 2005-2007
  - Approximately $5,000,000 of grant funding was made available to support these systems
  - Many (if not most) were integrated with GIS
2005 - 06
RPTATIP Grant Program

Grants Awarded
- A1 (15)
- A2 (18)
- B1 (7)
- B2 (2)

May 11, 2006

© New York State Office of Real Property Service (ORPS)
Spotlight of Six (6) Projects

- **Nassau County**
  - Land Records Viewer
- **Schoharie County**
  - Real Property Assessment Information System
- **Putnam County**
  - eParcel
- **Town of Babylon**
  - Intranet GIS Land Records Viewer
- **East Greenbush Consortium**
  - Assessment Information System
- **Town of Eastchester**
  - Assessment Information System
Nassau County
Land Records GIS Viewer
Schoharie County

Real Property Assessment Information System (RPAIS)
Putnam County
eParcel
Town of Babylon
Intranet GIS Land Records Viewer
Town of Eastchester
Assessment Information System (AIS)
Enterprise GIS

- Enterprise GIS is an answer to Departmental “silo-based” GIS
  - Efficiency – Is data replicated in multiple locations?
  - Standardization – Multiple data formats and software package versions?
  - Data Integrity – Main St spelled 4 ways?
  - Access – Can employees use the GIS? Does public has access to your data?
  - Security – Is the current GIS secure?
  - Cost - Do you have a positive return on investment for GIS?
Technology

- **Nassau County**
  - ArcIMS, ArcSDE, Oracle, Java, WebSphere
- **Schoharie County**
  - ArcIMS, ArcSDE, MS SQL Server and Java
- **Putnam County**
  - ArcIMS, ArcSDE, MS SQL Server and .NET
- **Town of Babylon**
  - ArcIMS, SQL Server, Microsoft .NET, RouteSmart, Ricoh, GeoSpatial Experts, OnBase
- **East Greenbush Consortium**
  - ArcIMS, ArcSDE, MS SQL Server and .NET
- **Town of Eastchester**
  - ArcEngine and MS Access
Spatial Functionality

- GIS Map Viewer
- Property Search
- Parcel Buffering, Radius Searches
- Sales/Assessment Comparable Search
- Integration with Pictometry
- Attribute Queries on Spatial Data
GIS Map Viewer
Property Search

You can locate properties by using one of the following search options:

- Tax Map Number
- Owner Name
- Address
- Deed Book and Page
Parcel Buffering, Radius Searches
# Sales/Assessment Comparable Results

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Subject</th>
<th>Comp 1</th>
<th>Comp 2</th>
<th>Comp 3</th>
<th>Comp 4</th>
<th>Comp 5</th>
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<td>31626000</td>
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<td>265 W MAIN ST, BABYLON</td>
<td>265 W MAIN ST, BABYLON</td>
<td>265 W MAIN ST, BABYLON</td>
<td>265 W MAIN ST, BABYLON</td>
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<td>STYLE</td>
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<td>$152,000.00</td>
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<td>SCO01 - SCHOOL DI...</td>
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<td>FULL</td>
<td>FULL</td>
<td>FULL</td>
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</tbody>
</table>

Spring 2009

Bowne Management Systems, Inc.
Integration with Pictometry
Attribute Queries on Spatial Data

Nassau County Department of Assessment
240 Old Country Road, Mineola, NY 11501

Section 10  Block 148  Lot 14  Condo
Address 25 Rugby Rd, Westbury, 11590
Village Incorporated Village of Westbury
School District WESTBURY UFSD - 1
Acre 0.3082
Lot Square Ft 5002

Property Class Code 210.01  210.01  210.01

Sales
Street  Town  Zip
RUGBY RD  WESTBURY  11590
OXFORD ST  WESTBURY  11590
POPLAR ST  WESTBURY  11590
DUNCAN DR W  WESTBURY  11590

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Unique Components to Projects

- **Town of Babylon**
  - Street Level Photographs
  - Tax Breakdown Pie Chart

- **Schoharie County**
  - Java Listener – Live RPS v4 data

- **East Greenbush Consortium**
  - 5 municipalities (East Greenbush, Schodack, Sand Lake, Troy, and Rensselaer)
  - Integration of workflows
Town of Babylon
Street Level Photographs - Routes

- Geocode Addresses
- Develop Routes
- Optimize Routes
- Estimate Mileage
- Estimate Hours

---

### Route Summary

<table>
<thead>
<tr>
<th>Route</th>
<th>Start Time</th>
<th>End Time</th>
<th>Travel Time</th>
<th>Service Time</th>
<th>Facility Time</th>
<th>Idle Time</th>
<th>Total Time</th>
<th>Location Count</th>
<th>Total Distance</th>
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<tbody>
<tr>
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<td>2:16PM</td>
<td>0:19</td>
<td>4:42</td>
<td>0:00</td>
<td>0:00</td>
<td>5:01</td>
<td>188</td>
<td>10.89</td>
</tr>
<tr>
<td>102</td>
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<td>2:41PM</td>
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<td>0:00</td>
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<td>194</td>
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<td>2:17PM</td>
<td>0:20</td>
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<td>188</td>
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<td>5:21</td>
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<td>3:44PM</td>
<td>0:21</td>
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<td>11.65</td>
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<td>112</td>
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<td>2:45PM</td>
<td>0:13</td>
<td>5:16</td>
<td>0:00</td>
<td>0:00</td>
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<td>212</td>
<td>7.72</td>
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<td>113</td>
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<td>2:45PM</td>
<td>0:17</td>
<td>5:17</td>
<td>0:00</td>
<td>0:00</td>
<td>5:33</td>
<td>211</td>
<td>9.07</td>
</tr>
<tr>
<td>114</td>
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<td>2:07PM</td>
<td>1:02</td>
<td>3:50</td>
<td>0:00</td>
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<td>4:52</td>
<td>153</td>
<td>42.77</td>
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<td>0:17</td>
<td>2:45</td>
<td>0:00</td>
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<td>3:02</td>
<td>110</td>
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<td>206</td>
<td>9.72</td>
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<td>2:38PM</td>
<td>0:19</td>
<td>5:05</td>
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<td>0:00</td>
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<td>203</td>
<td>11.08</td>
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Totals: 5:56  80:29  0:00  0:00  89:25  3,339  209.36

*All service locations have been sequenced.*
# Routes – Street by Street Directions

<table>
<thead>
<tr>
<th>Route 101</th>
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</thead>
<tbody>
<tr>
<td><strong>Start route</strong></td>
</tr>
<tr>
<td><strong>Right out of facility</strong></td>
</tr>
<tr>
<td><strong>Turn left onto</strong></td>
</tr>
<tr>
<td><strong>Turn left onto</strong></td>
</tr>
<tr>
<td><strong>Straight onto</strong></td>
</tr>
<tr>
<td><strong>Straight onto</strong></td>
</tr>
<tr>
<td><strong>Turn right onto</strong></td>
</tr>
<tr>
<td><strong>Straight onto</strong></td>
</tr>
<tr>
<td><strong>Stay straight on</strong></td>
</tr>
<tr>
<td><strong>Service on the right</strong></td>
</tr>
<tr>
<td><strong>Service on the right</strong></td>
</tr>
<tr>
<td><strong>Service on the left</strong></td>
</tr>
<tr>
<td><strong>Service on the left</strong></td>
</tr>
<tr>
<td><strong>Service on the left</strong></td>
</tr>
<tr>
<td><strong>Service on the left</strong></td>
</tr>
<tr>
<td><strong>Service on the right</strong></td>
</tr>
<tr>
<td><strong>Service on the right</strong></td>
</tr>
<tr>
<td><strong>Service on the right</strong></td>
</tr>
<tr>
<td><strong>Service on the right</strong></td>
</tr>
<tr>
<td><strong>Turn right onto</strong></td>
</tr>
<tr>
<td><strong>Service on the left</strong></td>
</tr>
<tr>
<td><strong>Service on the left</strong></td>
</tr>
</tbody>
</table>
RouteSmart Routes
Street Level Photographs - Photos

- Assign Routes
- Take Photos
  - Ricoh GPS Camera
- Capture House No.
- Process Photos
  - Photo-Link Software
- Assign Tax Map
  - Customized ArcGIS
Digital Street Level Photo
## Town of Babylon – Tax Year Pie Chart

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>1st Half Tax</th>
<th>2nd Half Tax</th>
<th>Total Tax</th>
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<tbody>
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<td>D004</td>
<td>Highway Tax No.1</td>
<td>17.99</td>
<td>340</td>
<td>320.95</td>
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<td>D005</td>
<td>Town Tax</td>
<td>9.28</td>
<td>340</td>
<td>29.31</td>
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<td>D006</td>
<td>Town Outside Villages</td>
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<td>0.00</td>
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<td>D010</td>
<td>FPD - Wyandanch No. 43</td>
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<td>D019A</td>
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<td>D010F</td>
<td>FD - Firemens Service Award</td>
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<td>1.47</td>
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<td>D010S</td>
<td>FD - Ambulance Service Award</td>
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<td>D007</td>
<td>NY State Real Prop Tax Law</td>
<td>9.28</td>
<td>340</td>
<td>16.55</td>
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</table>

**1st Half Tax** | **2nd Half Tax** | **Total Tax**

- **1st Half Tax**: $332.70
- **2nd Half Tax**: $332.59
- **Total Tax**: $665.30

### Breakdown

- **School**: 52.1%
- **Police**: 12.2%
- **Fire**: 5.9%
- **Highway**: 4.7%
- **Towns**: 4.6%
- **Ambulance**: 4.3%
- **NY's Real Property**: 2.8%
- **Library**: 2.6%
- **County**: 0.8%
- **Lighting**: 0.5%
Schoharie County
Schoharie County - RPAIS

Real Property Tax Services

Assessment Data County and Towns

RPS

RDBMS (Sybase)

Tax Parcels/Maintenance

Central Data Processing

ArcIMS (Java/JSP)

RDBMS SQL Server ArcSDE

JavaListener

Public

Town Departments

Bowne Management Systems, Inc.
Town of East Greenbush Consortium

- Consortium consists of
  - Towns of East Greenbush, Sand Lake, and Schodack and
  - Cities of Troy and Rensselaer
- Town of East Greenbush housing/hosting all hardware/software from a single, secure location
- Savings in terms of hardware, software, and consulting services
- Required making changes to existing workflows
Benefits

- Provide “real-time” parcel level data to the departments and public
- Reduce the number of inquiries - phone calls and walk-ins
- Save time and tax dollars
- Increased efficiency with Assessment Activities
  - Obtaining Property Records
  - Evaluating Property Information
  - Performing Sales/Assessment Comps
  - Assessment Workflow Automation
- Increased Access to Information
- Improved Property Inventory
Questions?