



Paul Sandvik, Sr. Appraiser (SAMA)

September 24th 2013

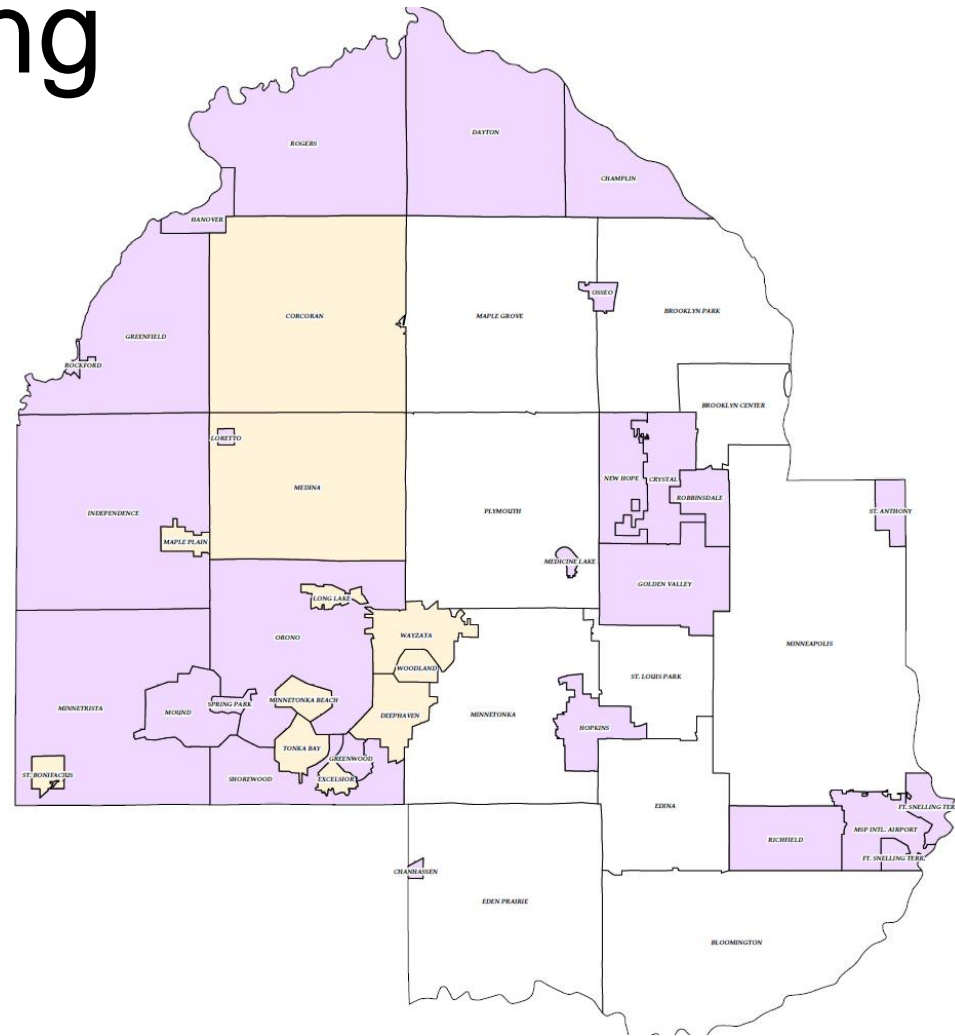
Mobile Assessing

Hennepin County Assessor's Office's
Electronic Field Card

Mobile Assessing

Background – Who We Are

- HCAO
 - ~ 40 full time staff
 - ~ 15 res appraisers
 - ~ 6 com appraisers
- HCAO's two roles
 - Some county-wide assessment oversight duties
 - Acts as the local assessor for ~25 of the cities in Hennepin (~ 80,000 parcels)



Hennepin County Assessor's Office:
Local Assessor Jurisdictions – 2013

HERE IS AN EXAMPLE OF OUR PAPER FIELD CARD:

| | | | | | | | | | | | | | | | | | |
|------------------------------------|--|------------------------|--|------------------------|--|------------------------|--|--------------------|--|-------------------|--|---------------------|--|---------------------|--|----------------------|--|
| HC221 (9/01) | | HENNEPIN COUNTY | | PRINTED: 5/9/2006 | | BATH FLOOR | | KIT. CAB. QUALITY | | ROOM COUNT | | PORCHES | | POOL | | BUILDING SIZE | |
| ASSESSOR'S OFFICE REAL ESTATE DATA | | MUNIC # (86) | | ID # 01-118-21-21-0026 | | Ceramic # 1 | | Excellent 1 1 | | Total Rooms 4 | | Glazed 340 | | Quality (1-5) 1 | | G.B. Area 1200 | |
| PROPERTY ADDRESS | | 1234 - SUNNY DAY AVE N | | | | Lino. # 1 | | Good 2 1 | | Bedrooms 2 | | Bedrooms (1-5) 13 | | None 0 | | G.F. Area 1200 | |
| OWNER | | ROBERT SMITH | | | | Other # 1 | | Average 3 1 | | Family 1 | | Screened | | OVERALL CONDITION | | 2nd Fl. Area | |
| TAXPAYER | | ROBERT SMITH | | | | Poor 4 1 | | Living 1 1 | | Quality (1-5) 1 | | Excellent 1 1 | | LAND | | | |
| LEGAL DESCRIPTION | | | | | | BATH RATING | | 4 | | Dining 1 1 | | Good (+) 2 1 | | Frontage (80) | | | |
| | | | | | | Quality (1-5) 1 | | KIT. EQUIPMENT | | Kitchen 1 1 | | Average (+) 3 1 | | Depth 12308 | | | |
| | | | | | | Dishwasher 1 | | Other 1 | | Quality (1-5) 1 | | Fair 4 1 | | Area | | | |
| | | | | | | Oven/Cooktop 1 | | Deck/Patio 120 | | Deck/Patio 120 | | Poor 5 1 | | Irregular Shape 1 | | | |
| | | | | | | Total Rooms 3 | | Microwave 1 | | 2nd FLOOR | | Quality (1-5) 1 | | AGE/DEPRECIATION | | Eff. Front. | |
| | | | | | | Bedrooms 1 | | Refrigerator 1 | | INTERIOR | | PRIMARY GARAGE | | Act. Year 1960 | | On Lake | |
| | | | | | | Family 1 | | KIT. REMODELED | | Plaster 1 1 | | Ext. Walls (1-7) 6 | | Eff. Year (1980) | | On Bay | |
| | | | | | | Kitchen 1 | | Approx. Y. 1995 | | Sheetrock 2 1 | | Floor Area 528 | | Func. % | | Lake Rating | |
| | | | | | | Other 1 | | Unfinished 4 1 | | Paneling 3 1 | | # of Cars 1 | | Econ. % | | Landscape 3 | |
| | | | | | | Ceiling Height (1-5) 4 | | KIT. RATING | | INTERIOR | | TRIM | | Attached 1 1 | | LAST INT. INSP. 1994 | |
| | | | | | | Excellent 1 1 | | Plaster 1 1 | | Hardwood 1 1 | | Detached 2 1 | | Year | | LEFT TAG | |
| | | | | | | Good 2 1 | | Sheetrock 2 1 | | Softwood 2 1 | | Tuckunder 3 1 | | Yes 8/05 1 | | EXTRAS \$1000 SHED | |
| | | | | | | Standard 3 1 | | Painting 3 1 | | Painted 3 1 | | SECONDARY GARAGE | | No | | MANUAL | |
| | | | | | | Substandard 4 1 | | TRIM | | Other 4 1 | | Ext. Walls (1-7) 1 | | No | | PARTIAL | |
| | | | | | | Obsolete 5 1 | | Hardwood 1 1 | | Softwood 2 1 | | FLOOR COVER | | Floor Area | | Yes 1 1 | |
| | | | | | | KIT. EATING AREA | | Painted 3 1 | | Wood 1 1 | | # of Cars 1 | | Quality (1-5) 1 | | No 0 1 | |
| | | | | | | Yes 1 1 | | Other 4 1 | | Carpet 2 1 | | Quality (1-5) 1 | | No 0 1 | | No 0 1 | |
| | | | | | | No 0 1 | | Other 3 1 | | Other 3 1 | | PLACEMENT | | Attached 1 1 | | 6/17/1998 | |
| | | | | | | FLOOR COVER | | Attached 1 1 | | Attached 1 1 | | Detached 2 1 | | 7/12/2002 | | 76 | |
| | | | | | | KIT. FLOOR | | Wood 1 1 | | BATHS (2nd) | | Tuckunder 3 1 | | 12/14/1994 | | 11 | |
| | | | | | | Marble/Stone 1 1 | | Carpet 2 1 | | Deluxe # 1 | | Tuckunder 3 1 | | 8/21/2005 | | 50 | |
| | | | | | | Glazed Tile 2 1 | | Glazed 3 1 | | Full # 1 | | | | COMMENTS - KEYPUNCH | | | |
| | | | | | | Wood 3 1 | | Other 4 1 | | 3/4 # 1 | | | | L 75,000 | | B 157,000 | |
| | | | | | | Linoleum 4 1 | | X | | 1/2 # 1 | | | | T 232,000 | | | |
| | | | | | | Carpet 5 1 | | BATHS 1st | | | | | | | | | |
| | | | | | | Other 6 1 | | Deluxe # 1 | | BATH FLOOR | | | | | | | |
| | | | | | | Full # 1 | | Ceramic # 1 | | Ceramic # 1 | | | | | | | |
| | | | | | | Lino # 1 | | Lino # 1 | | Lino # 1 | | | | | | | |
| | | | | | | Other # 1 | | Other # 1 | | Other # 1 | | | | | | | |
| | | | | | | Deluxe 1 1 | | 1/2 # 1 | | Other # 1 | | | | | | | |
| | | | | | | Glazed Tile 2 1 | | Formica 3 1 | | X | | | | | | | |
| | | | | | | Other 4 1 | | Ceramic # 1 | | Quality (1-5) 1 | | | | | | | |
| | | | | | | Lino # 1 | | Lino # 1 | | Lino # 1 | | | | | | | |
| | | | | | | Other # 1 | | Other # 1 | | Other # 1 | | | | | | | |
| | | | | | | Quality (1-7) 1 | | KIT. CAB. MATERIAL | | BATH RATING | | Quality (1-7) 1 | | | | | |
| | | | | | | None 1 1 | | X | | Hardwood 1 1 | | Quality (1-5) (2) A | | None 1 1 | | X | |
| | | | | | | Softwood 2 1 | | Formica 3 1 | | FIREPLACE QUALITY | | ROOM COUNT | | | | | |
| | | | | | | Metal # 1 | | Metal 4 1 | | First (1-7) 1 | | Total Rooms 1 | | | | | |
| | | | | | | Other # 1 | | Other 5 1 | | Second (1-7) 1 | | Bedrooms 1 | | | | | |
| | | | | | | None 1 1 | | X | | Other 1 1 | | Other 1 1 | | | | | |
| | | | | | | Deluxe # 1 | | Formica 3 1 | | FIREPLACE QUALITY | | ROOM COUNT | | | | | |
| | | | | | | Full # 1 | | Metal 4 1 | | First (1-7) 1 | | Total Rooms 1 | | | | | |
| | | | | | | 3/4 # 1 | | 1 | | Second (1-7) 1 | | Bedrooms 1 | | | | | |
| | | | | | | 1/2 # 1 | | 1 | | Other 1 1 | | Other 1 1 | | | | | |
| | | | | | | None 0 1 | | 1/2 # 1 | | None 1 1 | | Other 1 1 | | | | | |

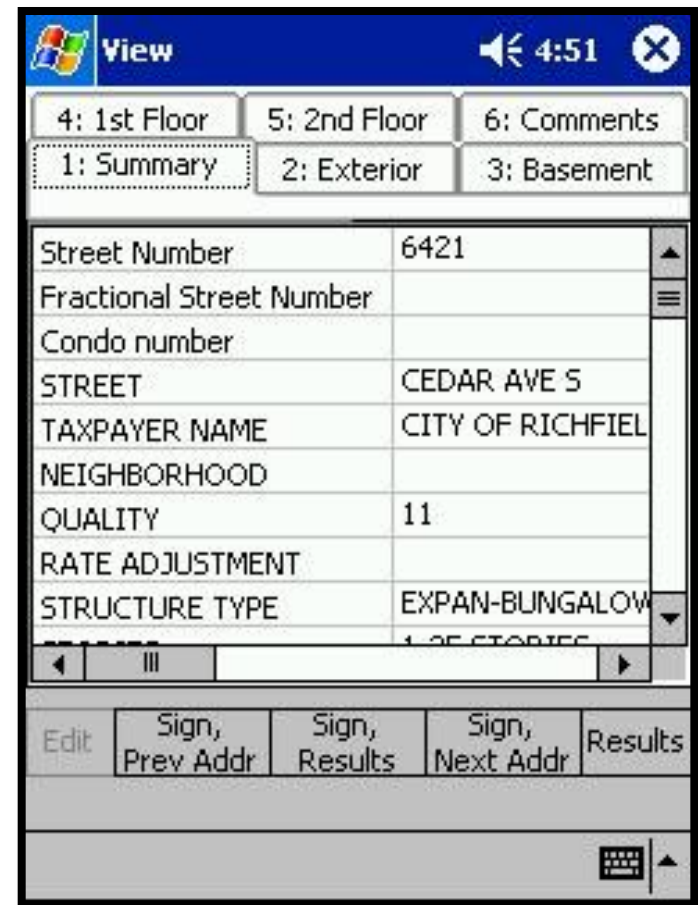
Mobile Assessing

History – PDA's

- About 2002, we started using mobile devices
- First used a PDA device (**HP Jornada**)
- PDA demonstrated that it could be economical, and efficient solution.

- PDA's Limitations

- Managing changes
- Cumbersome to use photos
- No mapping tools
- No sketching tools
- Hardware & software quickly became dated & increasingly difficult to update



Mobile Assessing

Present – Custom Data Collection App

- Started with Lenovo (IBM) X41's, X61's & X200's convertible tablet PCs.
- Now using HP 2740 P (and HP 2760 P) Tablets
- Fully functional laptop with a stylus
- Runs full version of Windows XP (32 Bit)
- Tablet is their only computer
 - external monitors, mice & keyboards at satellite offices



Considerations 1

- Cost (what is your budget)
- Type of Device
 - Tablet vs Convertible PC
 - Size & Weight
 - Durability (i.e. min/max temp ranges)(ex. Toughbooks)
 - Hardware (hard drive size, processor, RAM, etc...)
 - Software requirements (Windows vs Android versus iOS)
 - Does it meet your organizations / your IT Dept.'s standards
 - Screen Visibility (how does it perform in direct light
 - Camera (appropriate resolution, front facing vs. rear-facing)
 - External Memory Options (Memory Card Slot, Disc Drives, etc...)
 - External Ports (USB, SD, etc...)

Considerations 2

- Costs for peripherals
(i.e. cases / sleeves, extra batteries, docking stations, battery chargers, etc...)
- Battery Life (can battery be hot-swapped)
- Disconnected (vs. connected)
- Backing up data between synchs *(if not connected)
- Mapping Data to include
 - Sales Layers
 - Neighborhood & Land Adjustments Layers
 - Quintile Layers (to be view & completed)
- How to integrate Parcel Photos & Photo Management
(can you take photos with the device)

Considerations 3

- Reviewing Mechanism / Process for Approval of changes
- Supervisor Tools / Reporting
- Audit Trail System
 - Who is making change
 - Reason For Change
 - Time of change
 - Historical info
- Built in Edits / Required Fields
- App performance (speed, usability, customizability, etc..)

HCAO MAI APP - SCREEN SHOT OF HOME PAGE / EDIT TAB

Assessor Field Card -- Tax Year: 2009 (last synch date: 11/19/2008 2:03:30 PM)

Assessor: READ-ONLY USER
 Appr. Type: READ-ONLY USER
 PID: 1911821340073

SITE ITEMS

Neighborhood: 08 Site Adjustment:
 Site Rating: 3 -- Average Site Adj Comment:
 View: 2 -- Average
 Yr Interior Last Insp: 1991 2008 -- Partial Constr Indic: 0 -- No
 Left Tag Indicator: 1 -- Yes Appr Perm Comment:
 Manual: 0 -- No
 Frontage Lot: LAYOUT:
 Depth Lot: Additional Comment:
 Area Lot: 011599
 Irregular Shape: X -- Yes
 Effective Frontage:
 On Lake:
 On Bay:
 Lake Rating:
 Landscape: 4 -- Fair
 Wooded:

Status: Reval Inspection Completed
 8708 30TH AVE N
 NEW HOPE 55427
 J D BURSELL L M BURSELL
 Neighborhood: 08
 Sale: * 200506 R \$200,000
 Seller Paid Points: \$0
 Land Mkt Val: \$61,000
 Building Mkt Val: \$182,000
 Tot Mkt Val: \$243,000
 Val: Price Ratio:
 All Property Types: R

Year Last Appraised: 04
Sections Viewed
 Site
 Exterior/Depr/GBA
 Basement
 Kitchen/1st Floor
 2nd Floor
 Porch/Gar/Other

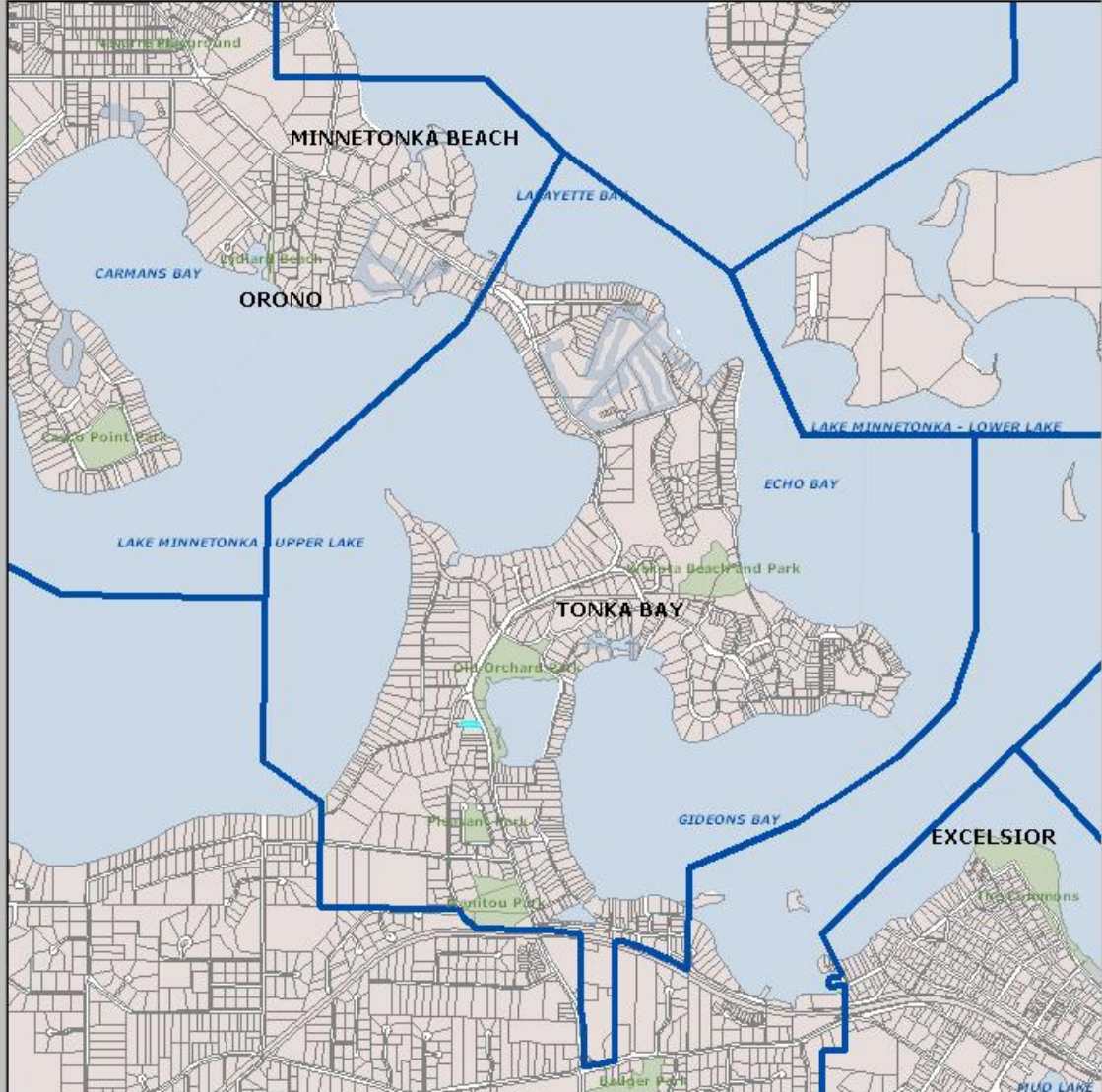
Legend
 Reviews
 Revaluations
 New Construction
 MLS
 Exceptions
 Required item is blank
 *Most recent sale in the past 36 months
 **Only shown for sales in past 12 months

HCAO MAI APP - SCREEN SHOT OF MAP TAB MAP TOOLS

Assessor Field Card -- Tax Year: 2014 (last synch date: 9/19/2013 10:03:47 AM)

Edit Data | View Map | Photography/Sketches | Synchronize Your Data | Back Up Data to SD Card | One-Page Overview | Read Me

Map Tools | Parcel Info | Map Layers



The map displays the Lake Minnetonka area, divided into several bays: CARMANS BAY, LAZAYETTE BAY, ECHO BAY, GIDEONS BAY, and MUD LAKE. Municipalities shown include MINNETONKA BEACH, ORONO, TONKA BAY, and EXCELSIOR. Parks such as Coko Point Park, Phyllis Beach and Park, and Phyllis Park are also marked. A blue boundary line outlines a specific area of interest.

Search Tools

Search By PID:
2811723420031 Search
(e.g. 2602924220080)

Search By Address:
Search
(e.g. 4930 WINDSALE)

Map Controls

ZOOM IN

ZOOM OUT

PAN MAP

FULL EXTENT

SELECT PARCEL

Recenter Map on Select


OVERVIEW MAP

MEASUREMENT
(Map Units = Feet)

Segment:

Total:

Note: Measurements are approximate and may contain discrepancies.

 MOBILE MAPPER
Version: 9.31

HCAO MAI APP - MAP TAB LAYERS – PARCEL INFO

Assessor Field Card -- Tax Year: 2014 (last synch date: 9/19/2013 10:03:47 AM)

Edit Data | View Map | Photography/Sketches | Synchronize Your Data | Back Up Data to SD Card | One-Page Review | Read Me

Map Tools | Parcel Info | Map Layers

Parcel Information

PID: 2811723420031
House #: 5040
Street: MANITOU RD
City: TONKA BAY
Zip: 55331
Owner: JONATHAN E. DIXIE L GROTHE
Area (sqft): 12550
Area (acres): 0.29

Est. Market Total: \$212,000
2013 Tax Total: \$2,521
Homestead: HOMESTEAD
Build Year: 1920
Sale Date: 05/2001
Sale Price: \$186,000
Sale Type: WARRANTY DEED
Property Type: RESIDENTIAL

Edit Assessment Record

Display Preference

- One-Page Mode
- Edit Mode

The screenshot shows a map of Lake Minnetonka with various bays and parks labeled. A red arrow points from the map to the parcel information panel on the right, which is circled in red. The panel contains detailed information about a specific parcel, including its PID, house number, street, city, zip, owner, area, and market value. It also includes buttons for 'Edit Assessment Record' and 'Display Preference' with radio buttons for 'One-Page Mode' and 'Edit Mode'.

HCAO MAI APP - MAP TAB LAYERS – REVAL AREA

The screenshot displays the 'Assessor Field Card' application interface. The title bar indicates the 'Tax Year: 2014' and the last sync date. The main map area shows a residential area with various colored overlays: yellow for parcels, blue for water bodies (Gideon's Bay and several ponds), and green for parks (Pleasant Park and Manitou Park). A large red arrow points from the map towards the 'Map Layers' panel on the right. This panel is circled in red and contains a 'Table of Contents' with the following options:

- Map Labels:
 - PID Numbers
 - Sale Date (Last 3 Years)
 - Sale Price (Last 3 Years)
 - House Numbers
 - Street Names
 - Lake Names
 - Park Names
- Map Layers:
 - Assessments Completed
 - Assessment Due (Current Year)
 - Site Adjustments
 - Property Sales (Last 1 Year)
 - Sale Price (Last 3 Years)
 - Streets

A 'Refresh Map' button is located at the bottom of the panel.

HCAO MAI APP - MAP TAB LAYERS – SITE ADJUSTMENTS

Assessor Field Card -- Tax Year: 2009 (last synch date: 11/19/2008 2:03:30 PM)

Edit Data | View Map | Photography/Sketches | Synchronize Your Data | Back Up Data to SD Card | One-Page Overview | Pictometry | Read Me

Map Tools | Parcel Info | Map Layers

Table of Contents

Map Labels:

- PID Numbers
- Sale Date (Last 3 Years)
- Sale Price (Last 3 Years)
- House Numbers
- Street Names
- Lake Names
- Park Names

Map Layers:

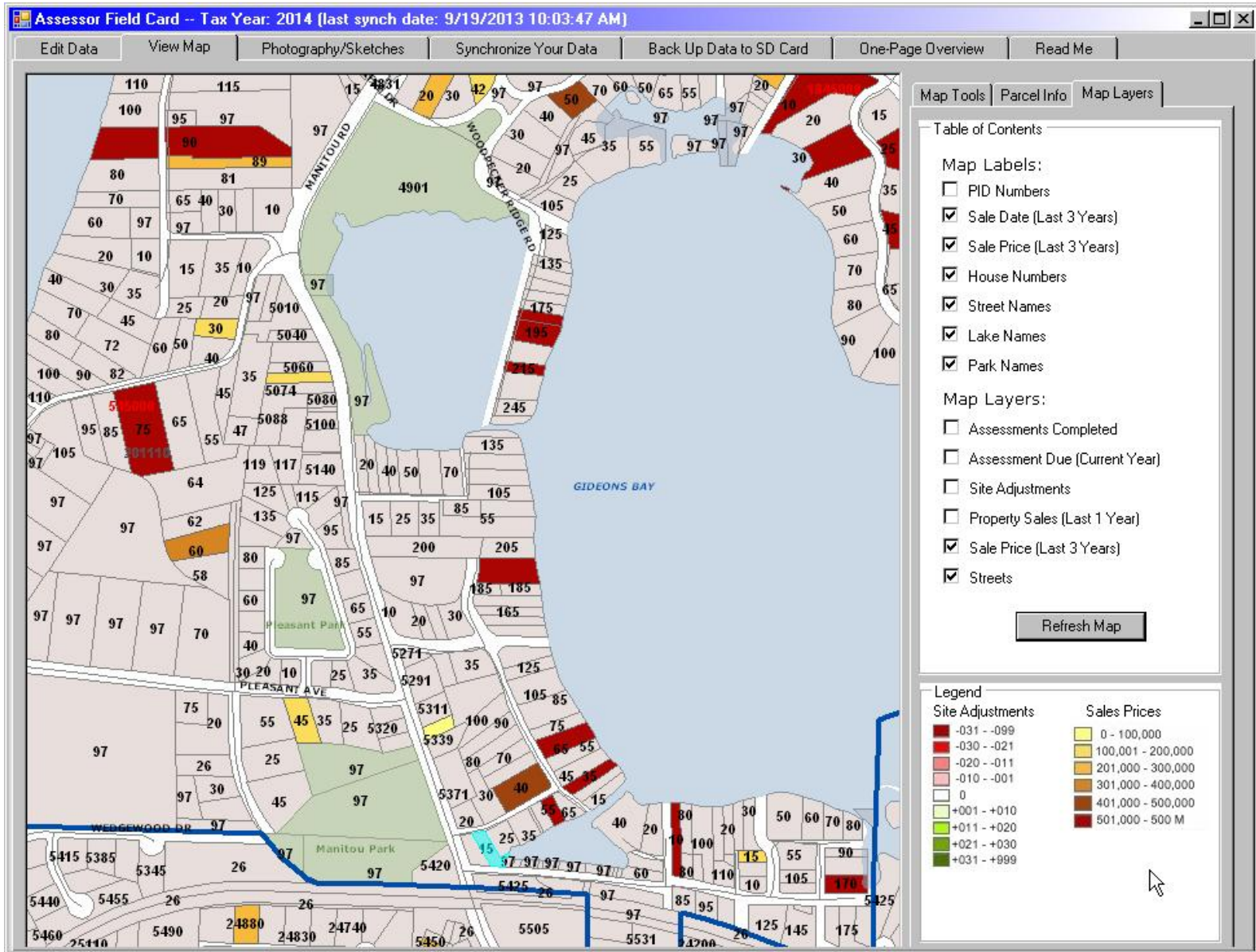
- Assessments Completed
- Assessment Due (Current Year)
- Site Adjustments
- Property Sales (Last 1 Year)
- Sale Price (Last 3 Years)
- Streets

Refresh Map

Map Data:

| Parcel ID | Assessment Value | Adjustment |
|-----------|------------------|------------|
| 8908 +015 | 292000 | +005 |
| 8816 | 286500 | +005 |
| 8809 | 325000 | -05 |
| 3933 | 249900 | -05 |
| 3924 | - | -05 |

HCAO MAI APP - MAP TAB LAYERS – SALES



HCAO MAI APP - SCREEN SHOT OF PHOTO / SKETCH TAB

Assessor Field Card -- Tax Year: 2009 (last synch date: 11/19/2008 2:03:30 PM)

[Edit Data](#) | [View Map](#) | **Photography/Sketches** | [Synchronize Your Data](#) | [Back Up Data to SD Card](#) | [One-Page Overview](#) | [Pictometry](#) | [Read Me](#)

Photos


Camera On

Take Snapshot

Camera Off

Save Snapshot

c:\AssessorMobileData\Photos\86\1911821340073a.jpg



[Rename](#) | [Delete](#)

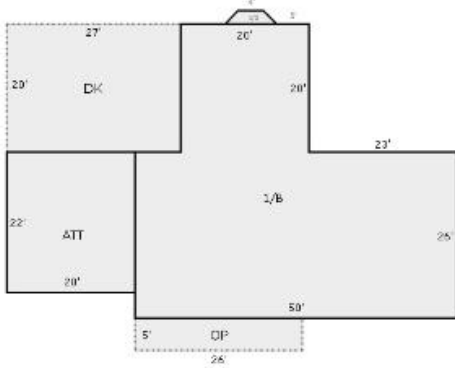
c:\Asses...

Sketches

Launch Apex Sketching
 Software with no file open

Save all new sketch jpg's to:
 C:\AssessorMobileData\Sketches\ plus
 Munic number\ plus PID plus letter.
 Save all new sketch ax3 files to
 C:\AssessorMobileData\Appraisal-Residential
 \Apex_Sketches\ plus Munic number\ plus
 PID plus letter.

c:\AssessorMobileData\Sketches\86\1911821340073u.jpg



Sketch by Apex Mobile™

Click on file name to display image

Click on file name to launch Apex to file

c:\As...

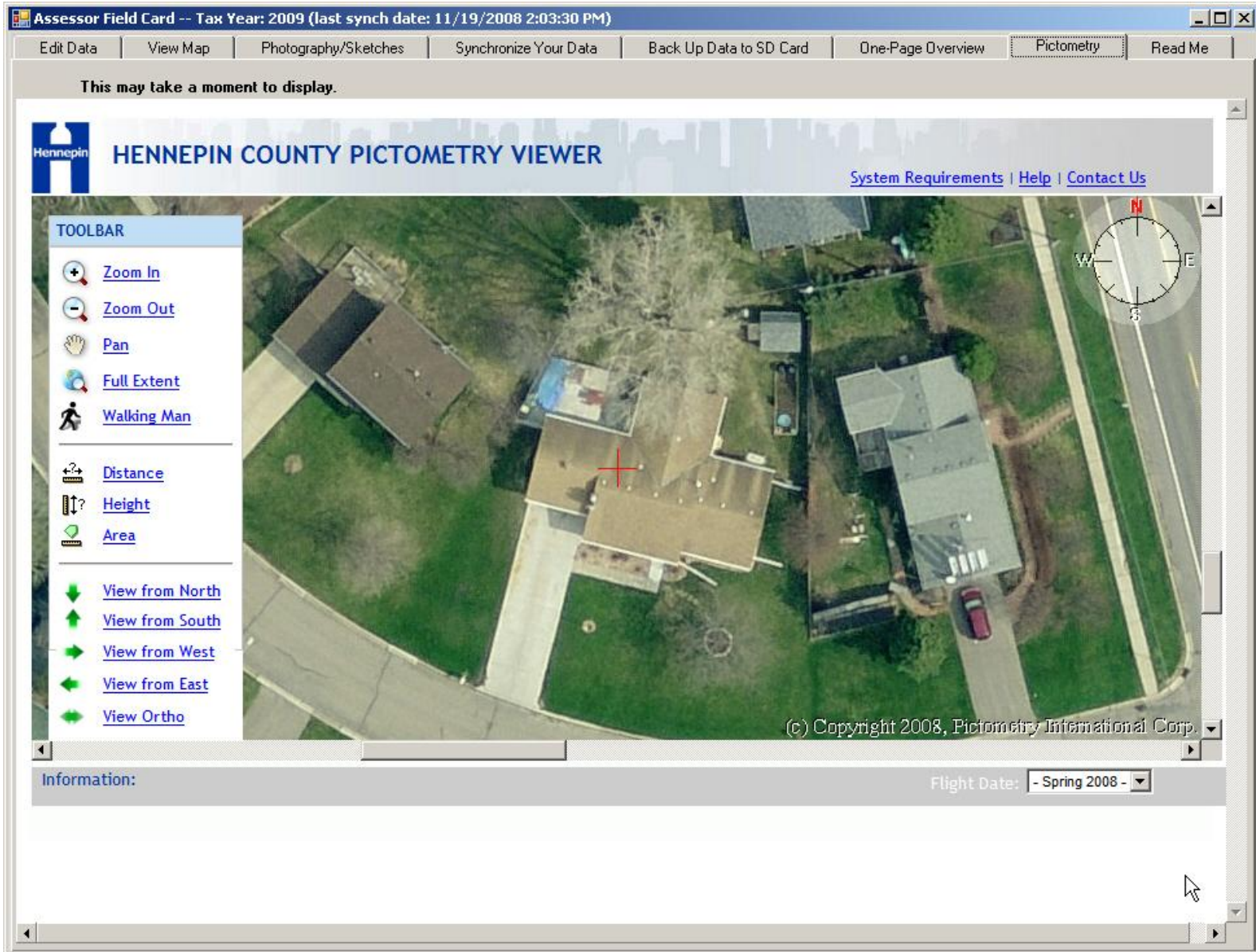
1911821340073u.ax4

HCAO MAI APP - SCREEN SHOT OF ONE PAGE OVERVIEW TAB

| Assessor Field Card -- Tax Year: 2009 (last synch date: 11/19/2008 2:03:30 PM) | | | | |
|--|----------------------------|---------------------------|----------------------------|---------------------------------------|
| Edit Data | View Map | Photography/Sketches | Synchronize Your Data | Back Up Data to SD Card |
| One-Page Overview | | Pictometry | Read Me | |
| PID: 1911821340073 | Get PID | 8708 30TH AVE N | NEW HOPE | J D BURSELL_L M |
| Neighborhood 08 | KITCHEN | 2ND FLOOR | CONDITION/SITE INFO | INSPECTION HISTORY |
| Site Rating ? 3 | Kitchen Rating ? 3 | 2nd Flr Walls ? | Overall Condition ? 3 | DATE TYPE ASSESSOR |
| View ? 2 | Kit. Eating Area 1 | 2nd Flr Trim ? | Actual Age 1963 | 07242008* C1* 14* |
| Arch/Appeal ? 3 | Kit. Floor ? 4 | 2nd Flr Flr Cov ? | Effective Age 1970* | 09092008* C2* 05* |
| Quality ? 09 | Kit. Counter ? 3 | | Functional 03 | 09172003 11 |
| Rate Adj. | Kit. Cab. Material ? 1 | 2ND FLR BATHS | Economic 00 | MOST RECENT SALE IN PAST 3 YRS |
| Stors/Styl ? ? 100 R | Kit. Cab. Quality ? 3 | - Deluxe | Functional Comment | DATE PRICE SALE CODE |
| Framing ? 3 | BUILT-INS | - Full | LAYOUT * | 200506 \$200,000 R |
| Ext. Walls ? 4 | - Dishwasher 1 | - Three-Fourths | Economic Comment | Seller Pd 0 |
| Ext. Trim ? 2 | - Oven/Cooktop 1 | - One-Half | Interior Insp. Year 2008* | TAX INFORMATION |
| Roof Type ? 4 | - Microwave | 2ND FL BATH FLOORS | LAST REVAL 04 | Land Value \$61,000 |
| Dormers | - Refrigerator | - Ceramic | Left Tag 1 | Building Value \$182,000 |
| Roof Cover ? 3 | LAST REMODELED | - Lino | Manual 0 | Total Market Value \$243,000 |
| Windows ? 2 | - Approx. Year | - Other | Gross Bldg Area 01712* | Ratio Value to Price |
| Windows Secondary 1 | 1ST FLOOR | 2nd Flr Bath Rtg. ? | 1st Flr Area 01712* | PROPERTY TYPE(S) R |
| Window Quality ? 2 | Ceiling Ht. ? | 2nd Flr Fireplace ? | 2nd Flr Area | COMMENT (MAINFRAME) |
| Walkout ? | Interior Walls ? 2 | 2ND FLR ROOM COUNT | Frontage | LAYOUT * |
| Central Air 1 | Trim ? 1 | - Total Rooms | Depth | ADDITIONAL COMMENT |
| Heating ? 2 | Flr Cover Prim. ? 2 | - Bedrooms | Area 011599 | |
| Heating Inst. Year 2006 | Flr Cover Sec. | - Other Rooms | Irregular Shape X | Send Letter True* |
| High Efficiency Ind. | 1ST FLOOR BATHS | PORCHES AND DECKS | Eff. Frontage | Contact Name and Phone |
| Elect. Service 1 | - Deluxe | Glazed Porch Area | On Lake | Flag/Unflag for Review |
| Foundation ? 2 | - Full 1 | Glazed Porch Qual ? | On Bay | Red = Changed in past 12 mos. |
| BSMT AREA 10 | - Three-Fourths 1 | Screen Porch Area | Lake Rating | * = Changed during a Reval |
| Finished Area 1* | - One-Half | Screen Porch Qual ? | Landscape 4 | |
| Bsmt Ceiling Ht. ? 4* | 1ST FLR BATH FLOORS | Open Porch Area 0130 | Wooded | |
| Bsmt Quality ? 2 | - Ceramic 2 | Open Porch Qual ? 4 | SITE ADJUSTMENT | |
| Bsmt Fireplace ? 6 | - Lino | Deck/Patio Area 0540 | FLAT CHARGE \$ | |
| BSMT BATHS | - Other | Deck Quality ? 3 | Flat Charge Comment 1 | |
| - Deluxe | 1st Flr Bath Rtg. ? 4 | GARAGES | Flat Charge Comment 2 | |
| - Full | 1st Flr Fireplace 1 ? 6 | Garage 1 Wall ? 4 | Partial Constr. Ind. 0 | |
| - Three-Fourths | 1st Flr Fireplace 2 | Garage 1 Area 0440 | | |
| - One-Half | 1ST FLR ROOM COUNT | Garage 1 N Cars 2 | | |
| BSMT BATH FLOORS | - Total Rooms 07 | Garage 1 Rating ? 4 | | |
| - Ceramic | - Bedrooms 3 | Gar 1 Placement ? 1 | | |
| - Lino | - Family Rooms 1 | Garage 2 Wall | | |
| - Other | - Living Rooms 1 | Garage 2 Area | | |
| Bsmt Bath Rtg. ? | - Dining Rooms 1 | Garage 2 N Cars | | |
| BSMT ROOM COUNT | - Kitchens 1 | Garage 2 Rating | | |
| - Total Rooms 1* | - Other Rooms | Garage 2 Placement | | |
| - Bedrooms | | POOL ? | | |
| - Family Room 1* | | | | |
| - Kitchen | | | | |
| - Other | | | | |

HCAO MAI APP - SCREEN SHOT OF PICTOMETRY TAB

NOTE: This function is no longer supported by our GIS and when it was supported it required a network connection.





Residential Appraiser Mike Smerdon of the Hennepin County Assessor's Office, reviews a homes basement using our MAI application.

Supervisory Approval App – Home Screen

Supervisor Authorization

Selection Settings | Summary | Photos/Sketches | Pictometry | Recently Approved

① **Identify Yourself:** 11 -- SANDVIK

Select Records Edited Between: 1/ 1/2013 and 9/23/2013

② Search By PID

Search By Assessor/City

Assessor: ALL ASSESSORS and/or City: ALL CITIES

Options: Unapproved Records

GET EDITED RECORDS

ALL ASSESSORS ALL CITIES

Scroll Records

ADDRESS: - PID:

Supervisory Approval App – Parcel Screen

| Supervisor Authorization | | | | | | | | | | |
|--------------------------|-------|----------------------------|------|---------------------------|------|----------------------------|-------|---------------------------------------|-------|-----------|
| Selection Settings | | Summary | | Photos/Sketches | | Pictometry | | Recently Approved | | |
| Neighborhood | 00 | KITCHEN | | 2ND FLOOR | | CONDITION/SITE INFO | | INSPECTION HISTORY | | |
| Site Rating | 2 | Kitchen Rating | 3 | 2nd Flr Walls | 3 | Overall Condition | 2 | DATE | TYPE | ASSESSOR |
| View | 1 | Kit. Eating Area | 1 | 2nd Flr Trim | 2 | Actual Age | 2008 | 08022010 | C1 | 88 |
| Arch/Appeal | 3 | Kit. Floor | 4 | 2nd Flr Floor Cov | 2 | Effective Age | 2008 | 12102008 | | 19 |
| Quality | 08 | Kit. Counter | 3 | 2ND FLR BATHS | | Functional | | 12282009 | | 59 |
| RATE ADJUSTMENT | | Kit. Cab. Material | 1 | - Deluxe | 1 | Economic | | MOST RECENT SALE IN PAST 3 YRS | | |
| Stories/Style | 200 X | Kit. Cab. Quality | 1 | - Full | | Functional Comment | | DATE | PRICE | SALE CODE |
| Framing | 2 | BUILT-INS | | - Three-Fourths | | Economic Comment | | TAX INFORMATION | | |
| Ext. Walls | 5 | - Dishwasher | 1 | - One-Half | | Interior Insp. Year | 2008 | Land Value | | 447000 |
| Ext. Trim | | - Oven/Cooktop | 1 | 2ND FL BATH FLOORS | | LAST REVAL | 11 | Building Value | | 228000 |
| Roof Type | 4 | - Microwave | 1 | - Ceramic | 1 | Left Tag | 0 | Total Market Value | | 825000 |
| Dormers | | - Refrigerator | | - Lino | | Manual | 0 | PROPERTY TYPE(S) RL | | |
| Roof Cover | 3 | LAST REMODELED | | - Other | | Gross Bldg Area | 02148 | COMMENT (MAINFRAME) | | |
| Windows Primary | 1 | - Approx. Year | 2008 | 2nd Flr Bath Rating | 4 | 1st Flr Area | 01282 | COMMONS | | |
| Windows Secondary | 2 | 1ST FLOOR | | 2nd Flr Fireplace | | 2nd Flr Area | 00866 | ADDITIONAL COMMENT | | |
| Window Quality | 1 | Ceiling Ht. | 4 | 2ND FLR ROOM COUNT | | Frontage | 00093 | bsmt data cleansing | | |
| Walkout | 5 | Interior Walls | 2 | - Total Rooms | 3 | Depth | 00190 | SEND LETTER Fals | | |
| Central Air | 1 | Trim | 1 | - Bedrooms | 3 | Area | 01673 | CONTACT NAME AND PHONE | | |
| Heating | 2 | Floor Cover Prim. | 2 | - Other Rooms | | Irregular Shape | | | | |
| Heating Inst. Year | 2008 | Floor Cover Sec. | | PORCHES AND DECKS | | Eff. Frontage | 00093 | | | |
| High Efficiency Ind. | 0 | 1ST FLOOR BATHS | | Glazed Porch Area | | On Lake | 01 | | | |
| Elect. Service | 1 | - Deluxe | | Glazed Porch Qual | | On Bay | 14 | | | |
| Foundation | 1 | - Full | | Screen Porch Area | | Lake Rating | 20 | | | |
| BASEMENT AREA | | - Three-Fourths | | Screen Porch Qual | | Landscape | 4 | | | |
| Finished Area | 6 | - One-Half | 1 | Open Porch Area | 0054 | Wooded | X | | | |
| Bsmt Ceiling Ht. | 4 | 1ST FLR BATH FLOORS | | Open Porch Qual | 3 | SITE ADJUSTMENT | | | | |
| Basement Quality | 3 | - Ceramic | | Deck Area | | FLAT CHARGE \$ | | | | |
| Bsmt Fireplace | | - Lino | 1 | Deck Quality | | Flat Charge Comment 1 | | | | |
| BSMT BATHS | | - Other | | GARAGES | | Flat Charge Comment 2 | | | | |
| - Deluxe | | 1st Flr Bath Rating | 3 | Garage 1 Wall | 4 | Partial Ind. | 0 | | | |
| - Full | | 1st Flr Fireplace 1 | 5 | Garage 1 Area | 0398 | | | | | |
| - Three-Fourths | | 1st Flr Fireplace 2 | | Garage 1 N Cars | 2 | | | | | |
| - One-Half | 1 | 1ST FLR ROOM COUNT | | Garage 1 Rating | 3 | | | | | |
| BSMT BATH FLOORS | | - Total Rooms | 03 | Garage 1 Placement | 3 | | | | | |
| - Ceramic | 1 | - Bedrooms | | Garage 2 Wall | | | | | | |
| - Lino | | - Family Rooms | | Garage 2 Area | | | | | | |
| - Other | | - Living Rooms | 1 | Garage 2 N Cars | | | | | | |
| Bsmt Bath Rating | 3 | - Dining Rooms | | Garage 2 Rating | | | | | | |
| BSMT ROOM COUNT | | - Kitchens | 1 | Garage 2 Placement | | | | | | |
| - Total Rooms | 2 | - Other Rooms | 1 | POOL | | | | | | |
| - Bedrooms | | | | | | | | | | |
| - Family Room | 1 | | | | | | | | | |
| - Kitchen | | | | | | | | | | |
| - Other | 1 | | | | | | | | | |

ALL ASSESSORS ALL CITIES Scroll Records Supervisor Action: Needs Approval

1 / 59 APPROVE PENDING Approval REMOVE Approval Send Question Help APPROVE ALL

ADDRESS: 1550 CANARY LA. MOUND PID: 1211724430010



Technology Behind the Application

General

- **Data Editing**

- Mainframe
- SQL Server
- SQL Server CE

- **Mapping**

- ArcGIS Server Mobile ADF

- **Programming**

- Visual Basic.net

Technology Behind the Application

Data on the Tablet PCs

- App is loaded via one-touch deployment (self-updating)
- SQL Server CE database is extracted from the server database and copied to tablet PC
- Photos & Sketch files are copied to the tablet PC
- Map Cache files are created annually for each city using ArcGIS Mobile ADF and are placed on the server where they can be downloaded by the tablets
- Map display, navigation, and query functions use arcGIS Server objects
- Integration with data editing through code, spatial queries, and SQL queries.



Benefits of an Electronic Field Card App



- ❑ Greatly reduces time needed to prep / assemble the records
- ❑ Easier to manage the records in general
- ❑ Eliminates rekeying changes (made on the paper files)
 - ❑ Increases accuracy / data quality
- ❑ Electronic maps & mapping software in the field
- ❑ Electronic photos & sketches in the field
- ❑ All records accessible to all appraisers from their tablet PC
- ❑ Reduces the expense of printing & storing paper cards
- ❑ Can quickly modify route as needed (i.e. can quickly accommodate for unknowns such as homeowners schedules)
- ❑ Assists management in how to best utilize available resources (i.e. determine how to best allocate available personnel & resources)
- ❑ Can consistify and equalize properties.
- ❑ Quickly ID anomalies and determine appropriateness

Other Possible Enhancements

- More mapping layers
 - Ariel Imagery
 - New Construction Permits
 - Neighborhoods
 - More Property Types
 - Lot Size, Frontage, Acreages
- Pictometry imagery
- Routing and scheduling tools
 - Especially for new construction & value reviews
- GPS integration – location identification / verification



THE FAR SIDE® BY GARY LARSON



"Mr. Osborne, may I be excused? My brain is full."

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? Questions ?

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Contact Info

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