What to expect when you’re collecting:

We interviewed a Pro to find out...

Mary Crane
Sr. Software Engineer
Center for Technology & Training
Plan your Route...
Data Collection Cycle
Roadsoft and the Laptop Data Collector

1. Import network into the LDC
2. Export data from the LDC
3. Collect Data
4. Export a data type from Roadsoft (Ex. signs, culverts, guardrails, driveways)
5. If exporting a road network, choose a saved filter

**NOTE**
Performing steps 4 and 5 after data collection ensures that all of your assets are stored in Roadsoft for managing, reviewing and reporting data. The data cycle should be completed whenever you are collecting data using the LDC.
Choose the data types to collect

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Export Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road</td>
<td>Exporting Network</td>
</tr>
<tr>
<td>Export Network</td>
<td>Alcona County Act 51 Roads</td>
</tr>
<tr>
<td>Sign</td>
<td>All Signs</td>
</tr>
<tr>
<td>Culvert</td>
<td>All Culverts</td>
</tr>
<tr>
<td>Driveway</td>
<td>All Driveways</td>
</tr>
<tr>
<td>Guardrail</td>
<td>All Guardrails</td>
</tr>
<tr>
<td>Linear Pavement Marking</td>
<td>All Linear Pavement Markings</td>
</tr>
<tr>
<td>Point Pavement Marking</td>
<td>All Point Pavement Markings</td>
</tr>
<tr>
<td>Sidewalks</td>
<td>All Sidewalks</td>
</tr>
</tbody>
</table>

- [ ] Export Directly to LDC Data Folder
- [ ] Export to Folder

**Export Path:**

`C:\Users\webinar\Desktop\DemoFiles\LDC`

- [ ] Include Attached Documents
- [ ] Export FW Change Request History

[Export] [Cancel]
Can choose roads by type
Consider “when” might be the best time to collect
Tips

• Do north/south streets during sunrise/sunset
  • So other drivers can see YOU not the sun
• Consider peak hours of roads
• Multi-lanes at night or weekends
• Pavement markings:
  • From South to North and West to East (standard LDC direction)
Things to consider…
Other things to consider…
And...still other things to consider...
In an emergency, find good cover...
Select the Vehicle...
Choosing the right vehicle

- Do you fit?
- Is it comfortable?
- Is it easy to get in and out of?
- Do the climate controls work well?
- Is it dependable?
- Is it safe?
Will you permanently mount your laptop?
Or make it more portable?
To mouse or not to mouse?
Tips for your vehicle

• Always leave with a full tank of fuel
• Check oil weekly
• Check tire pressure
• Make sure you have a spare tire and jack
• Registration and proof of insurance
• Copy of your ROW permit (if you are a private contractor working for an agency)
Pack it all up...
Equipment Needed

• Laptop computer (Windows 7 or newer)
• LDC program installed (and up-to-date)
• GPS Unit (and cables?)
  – USB to Serial Driver
    (Google: Prolific 2303 driver)
• USB Jump Drive
• 12v power adaptor for laptop
• Wireless mouse?
Equipment Needed

1. Laptop or Tablet (charged)
2. LDC installed and all updates current
3. Portable charger for the laptop
4. GPS unit (must be one that guarantees accuracy within 10’)
5. An additional GPS unit?
6. Jump drive
7. Mouse
And... depending on what kind of data you are collecting...

1. Measuring wheel
2. Tape measure (25’ foot tape works best) because sometimes lanes are over 16’
3. Laser Distance Measure
4. Camera
5. Metal Detector or Magnet
6. Laser Auto-Level & Grade Rod
7. Probe Rod/Shovel
8. Flashlight
And… what about these things for you?

1. Phone charger
2. Mobile hotspot
3. Any anti-glare for the laptop is helpful
4. Glasses for reading
5. Sunblock and bug spray
6. Snacks
7. Drinks
8. Motrin for headaches (switching back and forth from the screen to road all day can cause these)
And... for keeping you safe and comfortable...

1. Work boots
2. Reflective safety green shirts or sweatshirts
3. Loose non-fitted shorts or pants
4. 360º amber light with multi flash options

Tips:
• use hazard lights
• leave the rear doors open to alert drivers of presence outside the vehicle
Tips:

• Make sure your laptop is fully charged
• Make sure your digital measuring instrument is properly calibrated on a monthly basis
Make sure your dashboard is clear of papers and obstructions
Positioning your GPS unit
Hit the road...
**Track your Time?**

### Daily Time Sheet

**TRAFFIC TECH SERVICES LLC.**

<table>
<thead>
<tr>
<th>WORK</th>
<th>LOCATION</th>
<th>TIME</th>
<th>TOTAL TIME</th>
<th># of hours</th>
<th># of points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM Update</td>
<td>V30h to 45h</td>
<td>9:15 AM</td>
<td>0:55</td>
<td>0.55</td>
<td>0.55</td>
</tr>
<tr>
<td>45h to UV</td>
<td>10:45 AM to 1:45 AM</td>
<td>0:15</td>
<td>5.00</td>
<td>0.00</td>
<td>0.320</td>
</tr>
<tr>
<td>UV</td>
<td>1:45 AM to county line</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>1 30h to 33h</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>33h to T</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>4th to W</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>Y to 48h</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>48h to V</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>6th to X</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>X to 40h</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>40h to 44h</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>4th to W</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>4th to W</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>4th to W</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>4th to W</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>4th to W</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
<tr>
<td>44h to 4th</td>
<td>1:45 AM to 1:45 AM</td>
<td>0:30</td>
<td>3.015</td>
<td>0.015</td>
<td>0.015</td>
</tr>
</tbody>
</table>

**Total Hours:** 5.42
Stay organized…

• Keep electronic files:
  • Agency
  • Township
  • Primary
  • Local

• Keep vehicle organized
Expect the Unexpected...
Everyone will want to know what you’re up to
Accidents do happen
You’ll never know who you might see…
Beating the Data Collection Blues
Listen to music
Take a break

Pull over and:

• Check your email, texts, voicemail
• Phone a friend
• Have lunch or a snack
• Get out and stretch
Roadsoft tips...
Use Defaults
Linear Marks - add spaces too

This image shows what Roadsoft looks like with no spaces

This image shows what Roadsoft looks like with spaces added represented by blue lines
Don’t adjust Linear Marks without the GPS
Split Form - Milepoint: shows milepoint of GPS, not segment
Split Form – Blue dot will give segment milepoint
Split Form – Entering a new milepoint

This image shows the adjustment by entering a new milepoint and showing it moved.

Milepoint: 2221
Roadsoft Tips/Suggestions

• Offsets should be carried forward
• Sliding to adjusting GPS points is difficult & frustrating (use milepoints -- .001=5 foot)
• LDC reference GPS mile point, not the segment milepoint

• Never try to collect more than one module at a time.
Fruits of the labors...
Visual of all markings
What needs to be replaced

---

### Wakeema Local

<table>
<thead>
<tr>
<th>Pit</th>
<th>Road Name</th>
<th>Between Roads</th>
<th>SMP</th>
<th>EPR Length</th>
<th>Edge Line Width</th>
<th>Left Edge</th>
<th>Right Edge</th>
<th>Solid Yellow</th>
<th>Yellow Dash (2G)</th>
<th>Solid White</th>
<th>White Dash (2G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2606</td>
<td>E U Ave</td>
<td>6th St - 6th St</td>
<td>0.000</td>
<td>1.154</td>
<td>1.898 m (6.274 ft)</td>
<td>0</td>
<td>0</td>
<td>1,152.4</td>
<td>573.2 (424.6)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>16322</td>
<td>E U Ave</td>
<td>0.150 - 0.350</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>2606</td>
<td>E U Ave</td>
<td>0.300 - 0.500</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>2606</td>
<td>E U Ave</td>
<td>0.500 - 0.750</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>1537</td>
<td>E 39th St</td>
<td>6th Ave - 6th Ave</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>2606</td>
<td>E 39th St</td>
<td>6th Ave - 6th Ave</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>2606</td>
<td>E 39th St</td>
<td>6th Ave - 6th Ave</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
<tr>
<td>2606</td>
<td>E 39th St</td>
<td>6th Ave - 6th Ave</td>
<td>0.000</td>
<td>0.956</td>
<td>1.022 m (3.360 ft)</td>
<td>0</td>
<td>0</td>
<td>956.4</td>
<td>473.5 (350.3)</td>
<td>0.3</td>
<td>0.0 (0.0)</td>
</tr>
</tbody>
</table>

**Total Lane Miles:**

- 0.0

**Total Lane Feet:**

- 0.0

**Total Length:**

- 8,461 ft (1,454.8 m)
Repainting Markings
Our Pro:

Brian Burlingham
Traffic Tech Services, L.L.C.

burlyb50@aol.com
(269) 207-9399