Solid Waste Incident Tracking (SWIT) and Trash Monitoring Program (TMP)
Overview

• A web-based program developed to replace paper monitoring forms

• Allows field staff to report incidents of illegal dumping and bulky items and verify their collection through ArcGIS Field Maps

• Allows office staff to review reports from field staff in WebApp Builder application and through the Solid Waste Incident Tracking (SWIT) site

• Daily illegal dumping and bulky item reports are sent to the waste haulers through the Solid Waste Incident Tracking (SWIT) site
# Paper Monitoring Forms

## Solid Waste Collection Daily Monitoring Form

### County of Los Angeles Department of Public Works

<table>
<thead>
<tr>
<th>Name of Site</th>
<th>Incident Code</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

### Notes

- **Date:**
- **Time in Area:**
- **Time Out Area:**

### Directions
If incident is observed, provide a full description in columns to the right.

### Items

1. **Waste collection off baseline:**
   - Incident Code: Time

2. **Customer stoppage:**
   - Incident Code: Time

3. **Malfunction observed in collection equipment:**
   - Incident Code: Time

4. **Vandalism:**
   - Incident Code: Time

5. **Vandalism reported:**
   - Incident Code: Time

6. **Additional information:**
   - Incident Code: Time

### Items to be address:

- Add additional comments

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**Address**:

<table>
<thead>
<tr>
<th>Address</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

**First Visit Date**:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td></td>
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</table>

**Follow-Up Date**:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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**Public Works**

Los Angeles County
Business Workflow

- Incident Intake
- Incident Routing
- Post-Routing
Incidents enter the system via desktop (SWIT) or mobile (TMP)

Data is preprocessed for useful metadata

Routing is handled using these preprocessed values

Compliance reports are sent to agencies with open incidents

Staff analyze data with the use of the query tools and reference layers

Total monthly incidents can be verified with monthly invoicing fees
Mapping Capabilities

- Ability to query and filter layers by case type and location
- Includes reference layers like illegal dumping “hot zones”
Ability to review heat maps and identify hot spots for illegal dumping
ArcGIS Field Maps Mobile App

- Trash Monitoring Program (TMP) Field map has reference to additional layers that are not currently offline-enabled (i.e. parcels)

- Offline Map has only reporting layers to download for offline use

- Multiple trainings provided along with PDF guide
ArcGIS Field Maps Mobile App Reporting
Trash Monitoring Program (TMP)
Desktop Web App

WebApp Builder

- Allows staff to review issues as they are reported
- Includes Query and Filter tools to facilitate searching
Challenges and Learning Moments

• Initial resistance from field users and extensive training for staff

• Disconnect with internal reporting application and providing intermediate solutions prior to the integration with the Solid Waste Incident Tracking (SWIT) application

• Growing use by field staff and accommodating for performance and enhancements
Future of Application

- Communicating with waste haulers on a version of the app dedicated to their operations with LA County Public Works
- All solid waste collection contracts include requirements for waste haulers to utilize this program
- Waste haulers will use the application to take pictures to validate the removal of items and streamline the closure of illegal dumping cases
- Access to the application will allow haulers to review cases and allocate proper resources and equipment to address any items
- Started testing with Republic Services
Contact Information

Juan Parra
Administrative Assistant III
juparra@pw.lacounty.gov

Peter Nguyen
Senior Application Developer
pnguyen@pw.lacounty.gov

Natalie Mann
Application Developer II
nmann@pw.lacounty.gov