# **LARIAC5 Pilot Project**

#### Background for project:

- Cities have asked me for curb data
- Meet a State of CA mandate that all sidewalks and curbs be ADA-compliant. Identify and prioritize non-ADA compliant sidewalks and curbs for work
- Technical Advisory Group: DPW Road Maintenance, DPW Operational Services Division, DPW ADA, City of Torrance, City of Glendale PW
- > Subcontract with CycloMedia to capture 360 degree street-level imagery & LiDAR







# LARIAC5 Pilot Project (continued)

#### Feature Extraction

Asset	Asset Class	Attributes	Description
Signs	Point (Ground-based)	Point Location and MUTCD Code	Location of MUTCD Signs with associated MUTCD code
Utility Pole	Point (Aerial-based)	Point location for utility poles	Poles with power and/or communication lines attached to them
Other Poles	Point (Aerial-based)	Point location for non- utility, non-light poles, non-traffic poles	Location of Other Poles (non-utility, non-light, non-traffic)
Traffic Lights	Point (Aerial-based)	Point layer for traffic lights	Point placed at base of traffic light pole OR on physical traffic light
Street Lights	Point (Aerial-based)	Point layer for street lights only. Not power poles that have street lights on them.	Light meant to luminate ROW. Private lights will not be collected
Trees	Point (Aerial-based)	Point layer for all trees within ROW	Location of Trees
BOC	Line (Ground-based)	Lines representing back of curb	Back of Curb (BOC)
EOP	Line (Ground-based)	Lines representing edge of pavement	Can be extracted at base of curb or seam where curb meets roadbed
Driveways	Line (Ground-based)	Lines representing edge of driveway	Two lines extracted at each edge of driveway where driveway meets roadbed going back ~20 feet into driveway
Sidewalks	Line (Ground-based)	Lines edge of sidewalks	Lines at two edges of sidewalk OR line up center of sidewalk
Pavement Striping	Line (Ground-based)	Line representing pavement stripes used to denote lanes	Type (Dashed, Solid, Solid-Dashed, Double Solid), Color (White, Yellow)

Asset	Asset Class	Attributes	Description
Paint Symbols	Point (Ground-based)	Points on paint marking in the road	Single pavement messages on road (STOP, ONLY, LEFT ARROW, etc.) – full list available upon request
ADA Ramp	Point (Ground-based)	Points on ADA ramps	Point where elevated sidewalk slopes downward toward road to meet ADA compliancy, generally found at intersections
Bus Stop and Pads	Point (Ground-based)	Points representing bus stops and Pads	Point feature denoting designated areas for a bus to pull over and pick up passengers
Cabinets	Point (Ground-based)	Points on above ground cabinets	Large metal structure with door & handle for access
Fire Hydrants	Point (Ground-based)	Points on Fire Hydrants	Location of Fire Hydrants
Maintenance Holes	Point (Ground-based)	Points on manholes in streets	Large circular cap covering an access point for underground utilities
Strom Drains	Point (Ground-based)	Points on Storm Drains and Catch Basins	Structure meant for excess water in roadway to drain into
Underground Substructure	Point (Ground-based)	Points for Underground Substructures	Small square or rounded structures to allow underground access to utility
Valves	Point (Ground-based)	Points on Ground Valves	Small circular caps meant to control water or gas flow for pipelines beneath surface of the road
Pedestal	Point (Ground-based)	Point on Ground Pedestals	Smaller above ground structure without access door. Are generally green and near residential housing



# LARIAC5 Pilot Project (continued)

#### Extremely rich and valuable dataset

- Property assessment
  - Desktop appraisal
  - Address verification
  - Catastrophic event imagery capture
- Urban planning
  - Identify housing units
  - Illegal houses
  - First floor flooding analysis
- Buildings / Public Works Department
  - Asset inventory and management
  - Code enforcement and inspection



## **Example: Illegal Cannabis Dispensary**



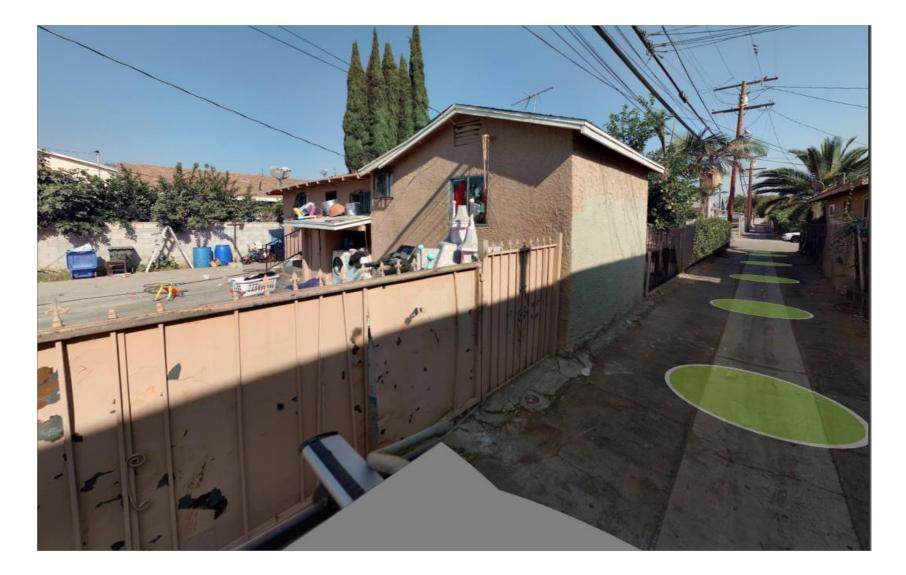
#### **Google Street View 2015**

#### GeoCyclorama 2019



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## **Example: Unsafe Living Conditions**



#### GeoCyclorama 2019



### **Street Smart**





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### **Street Smart**

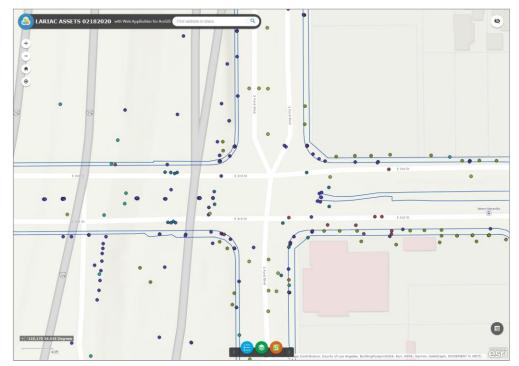




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## **Integration with ArcGIS Products**

- Street Smart for ArcGIS Desktop
- Street Smart with ArcGIS Online
- Street Smart Widget for Web AppBuilder for ArcGIS





# **Questions?**



# **Thank You**

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