PRECISION CONCRETE CUTTING
Sidewalk Asset Management

CITY OF ORLAND

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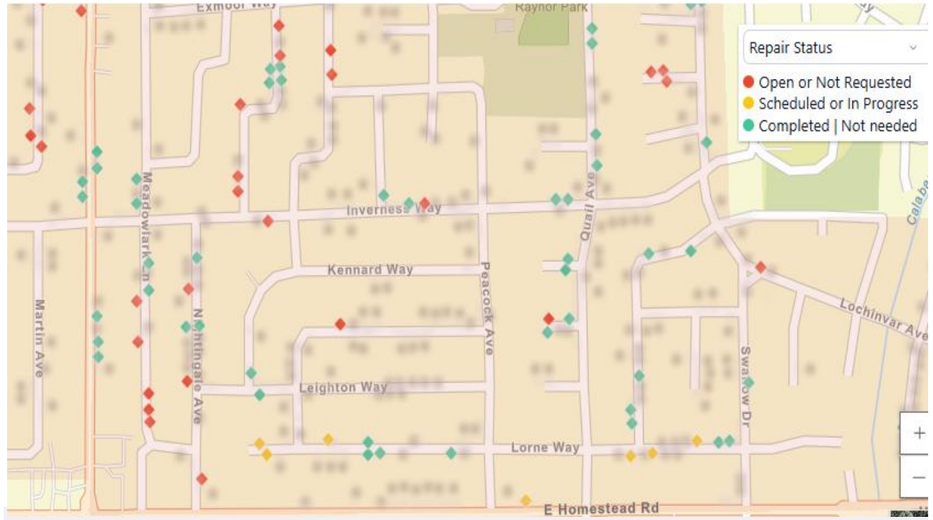

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Introduction

Precision Concrete Cutting (PCC) is the nation’s leader in sidewalk asset management, specializing in condition assessment, data collection and uneven sidewalk repair for over two decades. Leveraging industry-leading technology and cost-effective methods, PCC offers a superior solution for achieving ADA compliance compared to traditional scabblers and concrete grinders.

01 **Condition Assessment & Data Collection**

Expert technicians collect real-time, geo-located data and high-resolution photos of sidewalks, curb, and gutter conditions. The assessment identifies hazard severity, causes of damage, repair quantities, and recommended repairs to help cities prioritize maintenance.

02 **Uneven Sidewalk Repair**

Precision Concrete Cutting (PCC) uses a patented cutting technique to remove sidewalk trip hazards from ¼" to 2", creating a smooth transition that restores accessibility. This process eliminates trip hazards, reduces liability, and leaves behind an ADA-compliant ramp.

03 **Program Management**

PCC helps agencies develop and implement comprehensive sidewalk management programs, from inspections and prioritization to repair coordination and documentation. This ensures consistent repairs, improved ADA compliance, and a proactive approach to reducing liability.

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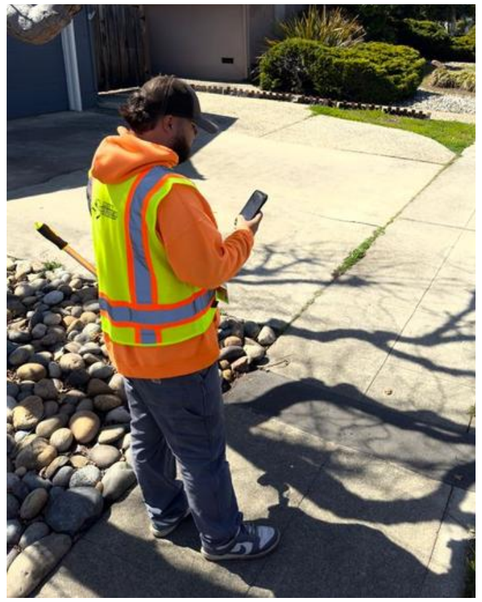
DataWorks
Right-of-Way Asset Management



Precision Concrete Cutting & Dataworks utilize proprietary platforms and patented technologies to collect, map, analyze, repair, and manage right-of-way assets.

Together, these tools create a seamless workflow: Inspection → Budgeting → Repair → Documentation, delivering a complete sidewalk management solution not available elsewhere.

01

Proprietary & Patent Pending Software

Mobile App and Desktop portal

02

Patented Repair Tools

Precision Concrete Cutting has been awarded 11 U.S. patents for its specialized sidewalk repair tools and methodologies.

03

Innovation

We continually improve our technology, tools, and software to deliver smarter sidewalk solutions.

Best in Class Software

DataWorks
Right-of-Way Asset Management

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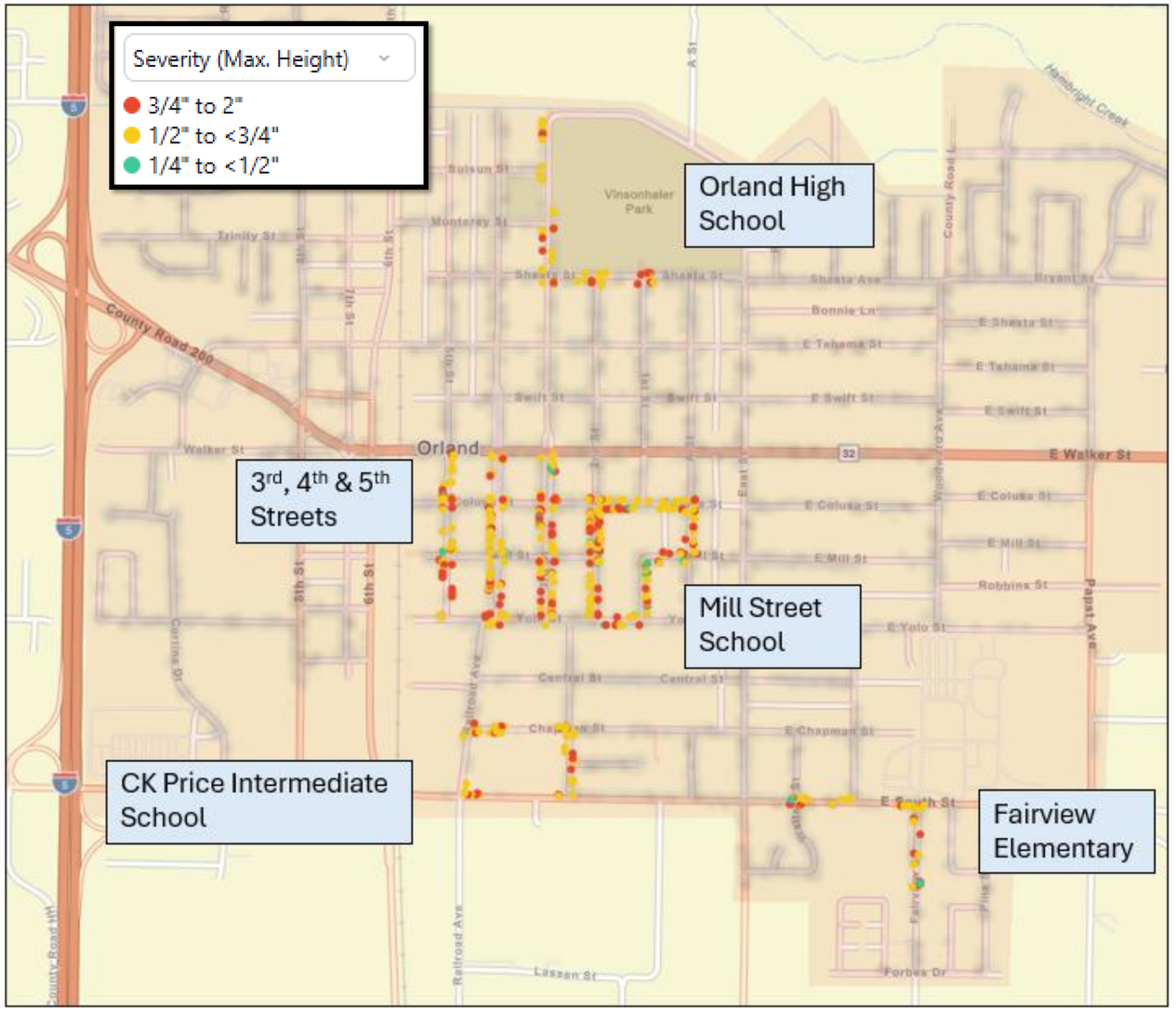
Project Area & Scope

Scope of Project

- Uplifts 1/2 inch and above
- Path of Travel
- Center Seam
- Planter Strip
- Curb Transitions

Phase 1, Target Areas:



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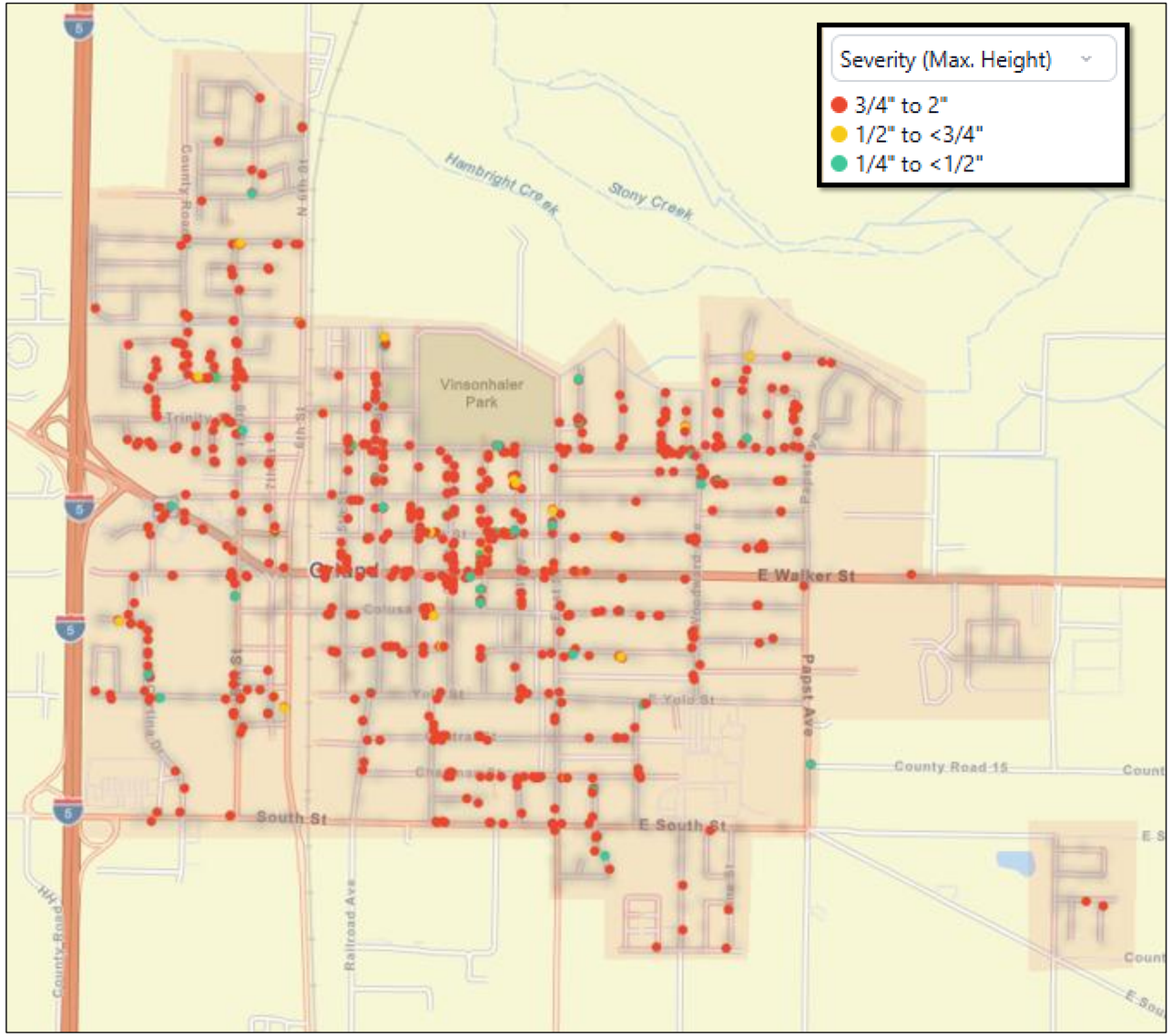
Project Area & Scope

Scope of Project

- Primarily 3/4 inch and above
- Path of Travel
- Center Seam

Phase 2, City-wide, non-Target Areas:



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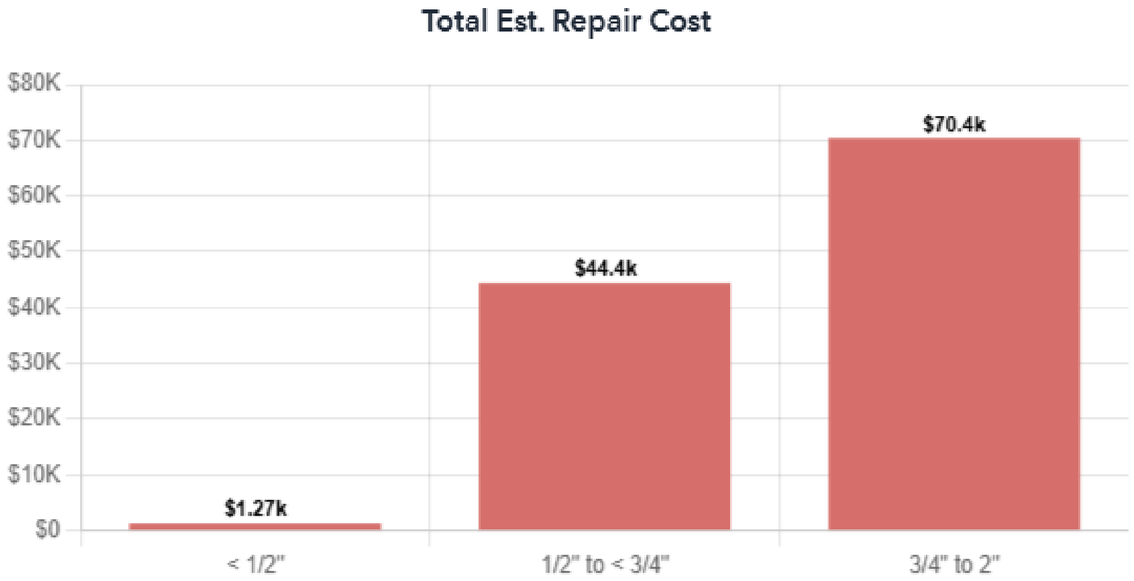
Repair Cost Proposal

Phase 1, Target Areas

Repairs
584 Offsets
134 Addresses

Sidewalk Miles Covered
59.26

Cost
Total $116,067.72
Per Repair (avg.) $198.75

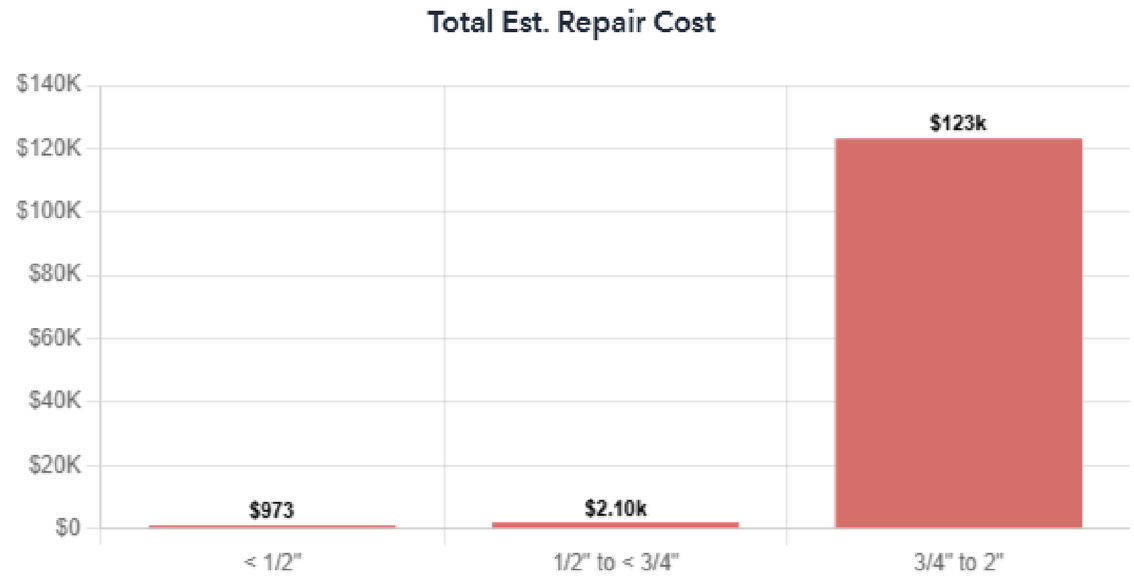


Phase 2, City-wide, non-Target Areas

Repairs
852 Offsets
438 Addresses

Sidewalk Miles Covered
59.26

Cost
Total $126,360.34
Per Repair (avg.) $148.31



Total cost for both phases: **$242,428.06**
(plus, ~$58K contingency for growth in past 2.5 years)

Example Before & After Project Photographs

Before

After

Before

After

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Savings

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DASHBOARD • OFFSETS
Analytics | Savings | Reporting

City of Orland
7/28/26, 12:14 PM

Print × Close

Savings provided by PCC (Concrete Shaving) vs. R&R (Concrete Removal and Replacement)

Calculation Details

Dataset

Total 13,861 • **Displayed** 1,436

Active filters for displayed assets (1,436):

Tag 3 Phase 2- City-Wide non Target Areas | Phase 1 - Target Areas

Office Notes (Blanks) | Review with City | Remove? SUNKEN ASPHALT | OBSTACLE | OBSTACLE - GRASS | Remove? | ? | ? LOOSE CONCRETE | ? LIFT AT ASPHALT | R&R | Lely Park Building

As a member of the U.S. Green Building Council (USGBC), PCC is proud to significantly reduce the impact of sidewalk repairs on the environment.

Cost (estimated)

Calculation Details:

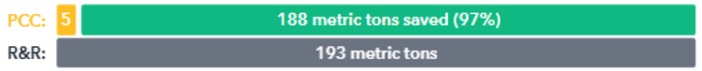
- If R&Red, **Offsets** of up to 5 ft of length **on Sidewalks** ("SWs") would each require to R&R one SW panel of 5 ft * 5 ft = **25 SqFt**.
- If R&Red, **Offsets** of any length **on curbs** (or gutters) would each **require** to **R&R the curb** (or gutter) by the same length.
- The R&R cost would be:
  - **$15/SqFt** for SW panels
  - **$75/Linear Foot** for curbs (or gutters)

Concrete Disposal (estimated)

Calculation Details:

- Same first two assumptions as for "Cost Savings".
- SW concrete panels are **4 inches thick** on average.
- Curbs / gutters contain **1 cubic foot** of concrete **per linear foot**.
- Concrete weights **~140 lbs. per cubic foot**.
- PCC requires the disposal of **~6.87 lbs. of concrete per InFt**. Note that PCC recycles most concrete removed while shaving.
- One truck load allows the disposal of **~20 US tons** of concrete.

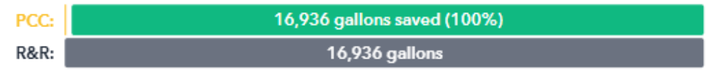
CO_2 Emission (estimated)



Calculation Details:

- Same assumptions as for "Cost Savings" and "Concrete Disposal".
- The manufacturing of 1 US ton of concrete emits **~0.16 metric tons "mt" of CO_2** (equivalent to 180kg of CO_2 per mt of concrete) - see details at wikipedia.org/wiki/Environmental_impact_of_concrete
- Other trucking and gas hypotheses with smaller effects on calc.
- US passenger vehicles emit **~4.6 mt of CO_2** per year on average.
- Commercial airplanes emit **~0.25 kg of CO_2** per person per mile on average.
- A tree absorbs **~50 lbs. of CO_2 per year** on average, or **~1 US ton of CO_2 over its lifetime** (~40 years).

Water Usage (estimated)



Calculation Details:

- Same assumptions as for "Cost Savings" and "Concrete Disposal".
- Mixing concrete requires **~15 gal.** of water per US ton of concrete.
- The amount of water required to manufacture cement for R&R is often very significant but varies and is not included in this calculation.
- In contrast, PCC (concrete shaving) **requires no water**.
- An average U.S. household uses **~300 gallons of water per day**.
- An average backyard swimming pool holds **~15,000 gallons of water**.

Trees at Risk (estimated)

Calculation Details:

- **R&Rs may require the removal of nearby trees,** due to root growth.
- PCC allows to **save those trees** that do not require any SW R&Rs nearby.

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Risk & ADA Management

01 **Inspection & Repair Records**

02 **Dates & Time Stamped**

03 **Before & After Photos**

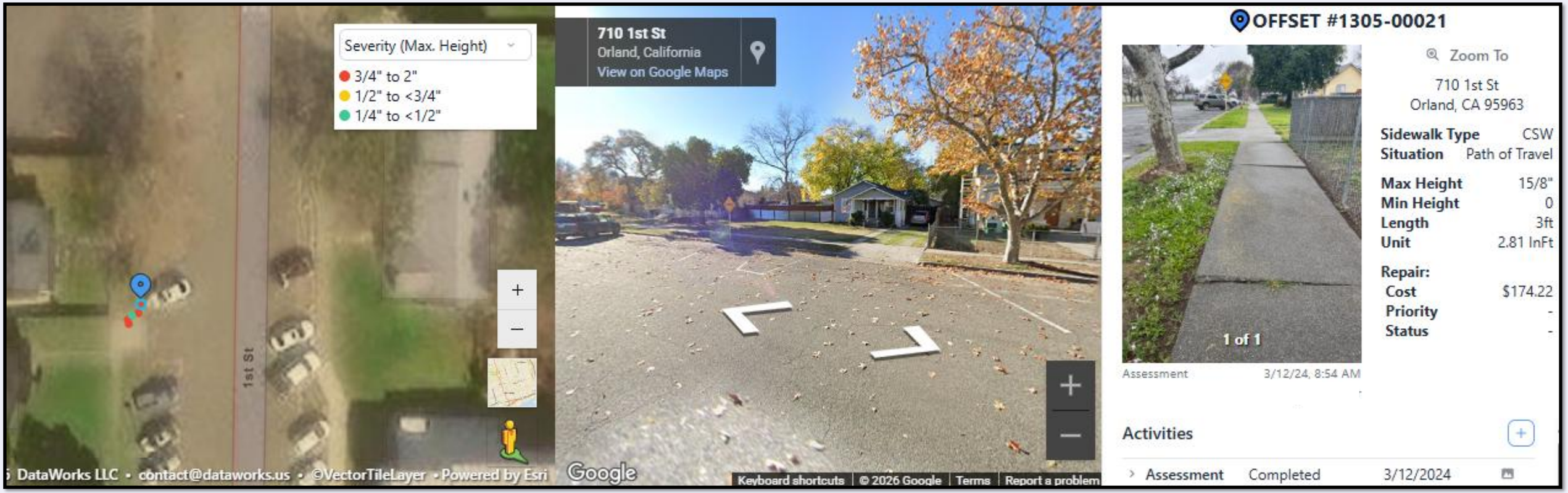
04 **Mapped Repairs**

05 **Searchable Database**

06 **Reports Ready for Export**

Power by dataworks software

DataWorks
Right-of-Way Asset Management



Benefits of PCC Sidewalk Assessment & Slicing

- Improves Public Safety

  Identifies and removes trip hazards, creating safer walking paths for residents, seniors, and people with disabilities.

- Cost-Effective Repairs

  80% less expensive than full sidewalk replacement, allowing cities to repair more locations within the same budget.

- Fast, Low-Disruption Repairs

  Most hazards are corrected in minutes, with no large construction zones or long sidewalk closures

- Improves ADA Compliance

  Removes vertical offsets and improves accessibility to meet ADA pedestrian pathway standards.

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- Reduces Liability Risk

  Proactive repairs reduce trip-and-fall claims and demonstrate responsible infrastructure management.

- Environmentally Sustainable

  Avoids concrete demolition, reducing CO_2 emissions, waste, trucking, and construction impacts.

- Preserves Urban Trees

  Corrects root-related sidewalk lifts without cutting roots or removing trees.

- Data-Driven Infrastructure Management

  Digital sidewalk assessments help cities prioritize repairs and plan long-term maintenance.