

Bentley

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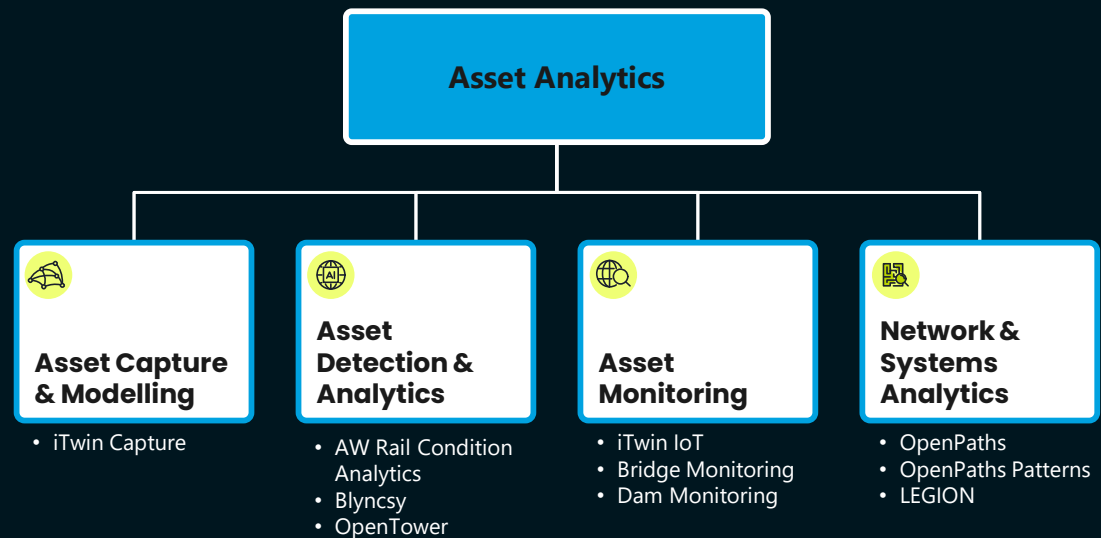
Illuminate
2025
Atlanta

Asset Analytics Vision

The vision of Bentley's Asset Analytics is to offer all infrastructure industries solutions that help understand the exact physical asset conditions and its context.

The vision of Bentley's Asset Analytics offering will be categorized into four distinct categories:

- » Asset Capture & Modeling
- » Asset Detection & Analytics
- » Asset Monitoring
- » Network & Systems Analytics





What is Blynscy

Blynscy helps cities and state Departments of Transportation automate their roadway maintenance and asset inventory activities, eliminating expensive manual inspections and allowing agencies to scale at a moment's notice.

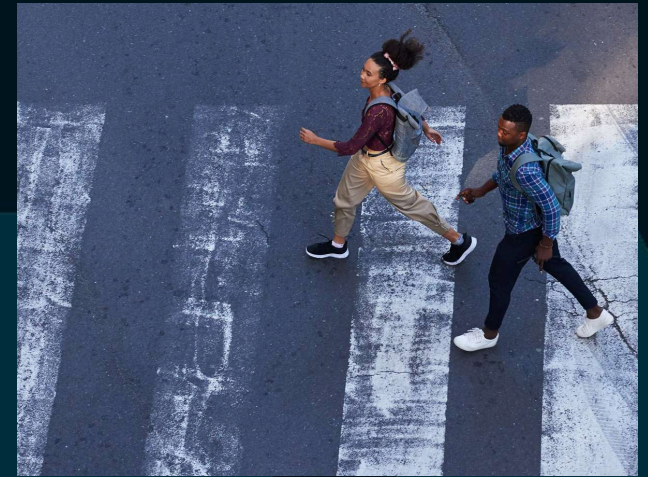


North Central Texas
Council of Governments



Why it Matters

- » Ensuring a safe road network for everyone who uses it. From drivers to autonomous vehicles, pedestrians to cyclists. Everyone deserves to be safe.
- » Manage every mile of pavement, not just the most traveled roads. Blynscsy allows you to more equitably maintain your streets.
- » Vulnerable road workers and crews need to be safe on the job. Blynscsy helps you maintain safe work zones with 24/7 remote monitoring and real-time alerts



Infrastructure Management Pain Points

1 Cost

Manual Inspections are costly, labor-intensive and time-consuming. LiDAR can be \$200+ per mile.

2 Data Acquisition/Analysis

Data and insights are unreliable and difficult to obtain. Data is fragmented from different sources

3 Systems

Existing systems are old and lack support, built for a single asset type. New service providers require new logins, dashboards. Data is fragmented.

4 Current Infrastructure

Existing infrastructure not designed to handle 21st century stresses (autonomous vehicles, heavier electric vehicles, more usage, weather)



Seeing Roadways Through AI



What is AI Vision?

» Upload and Validate

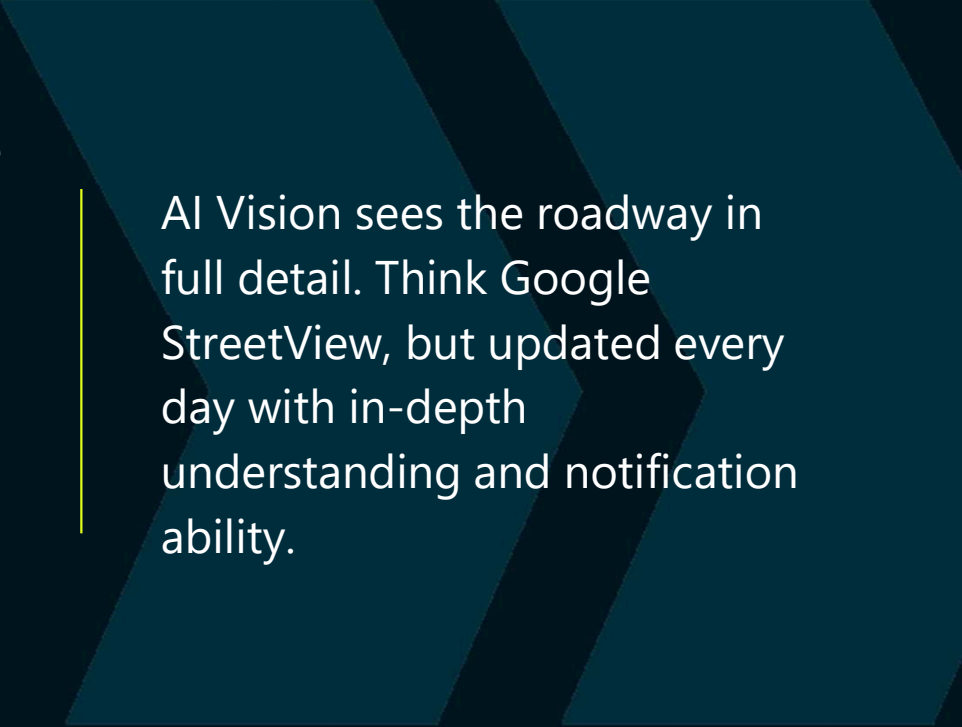
Imagery is collected through cameras that are already on and around your roadways

» Segment

Just like your eyes see the roadways as you drive, so does Blynco.

» Mask

Blynco highlights segments that are valuable to you and provides near real-time insights



AI Vision sees the roadway in full detail. Think Google StreetView, but updated every day with in-depth understanding and notification ability.

Where Does the Imagery Come From?

- » Connected dash cameras mounted in vehicles already driving the roads.
- » Blynscy currently has access to imagery from over 1,500,000 vehicles.
- » The dash camera market is growing 300% YoY in the U.S. These cameras are seeing and cataloging the roads in a way never possible before.

Passively. In depth.



What are you Seeing?

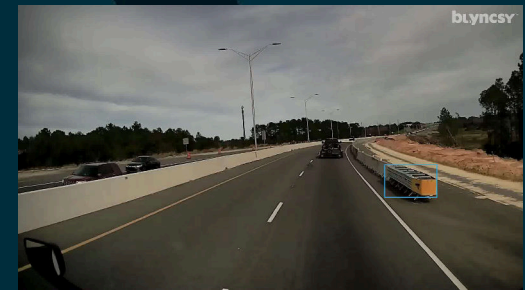
- » If you can see it, so can AI Vision
- » 400k+ daily active drivers, totaling over 17M miles of observed roadway in the US every day.
- » Detection models break the roadways down into individual elements.
- » Constantly updating imagery shows you what the roads look like today.
- » See the whole image without focusing on a specific element.



What Does Blynco Detect?

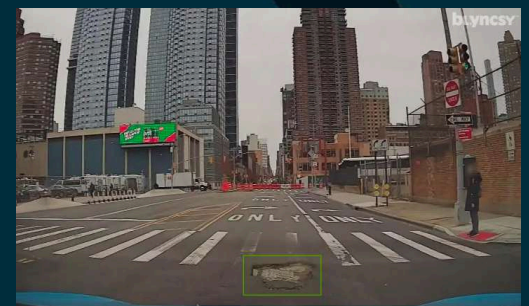
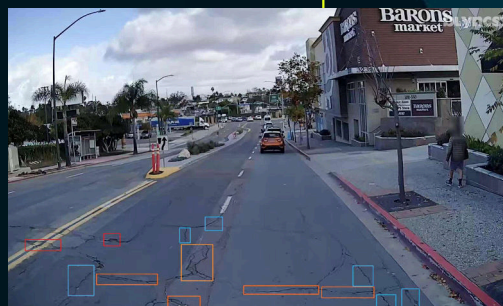
Safety Critical Assets

- » Guardrail Detection and Damage Assessment
- » Impact Attenuators & Cable Barriers
- » Paint Line Degradation & Roadway Striping
- » Active Transportation (Crosswalks, bike lanes, sidewalks, intersections)



Roadway Detections

- » Potholes and pavement cracking
- » Striping Retroreflectivity
- » PASER Scoring
- » Paint Degradation
- » Active Transportation



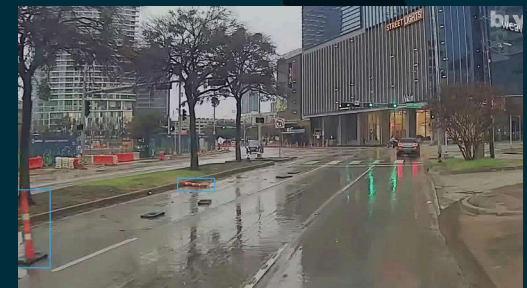
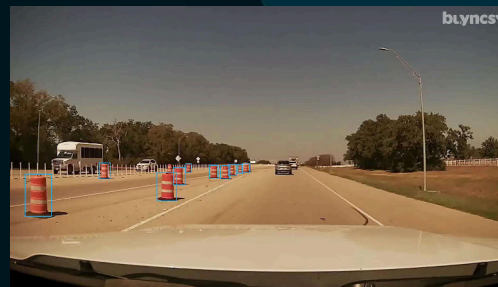
Sign Inventory

- » Sign Detection
- » MUTCD Classification
- » Sign Damage
- » Missing Signs



Work Zones

- » Barrel, Cone and Barricade Detection
- » Message Board and Arrow Signs
- » Remote Monitoring
- » MOT Actual vs Plan



Disaster Recovery

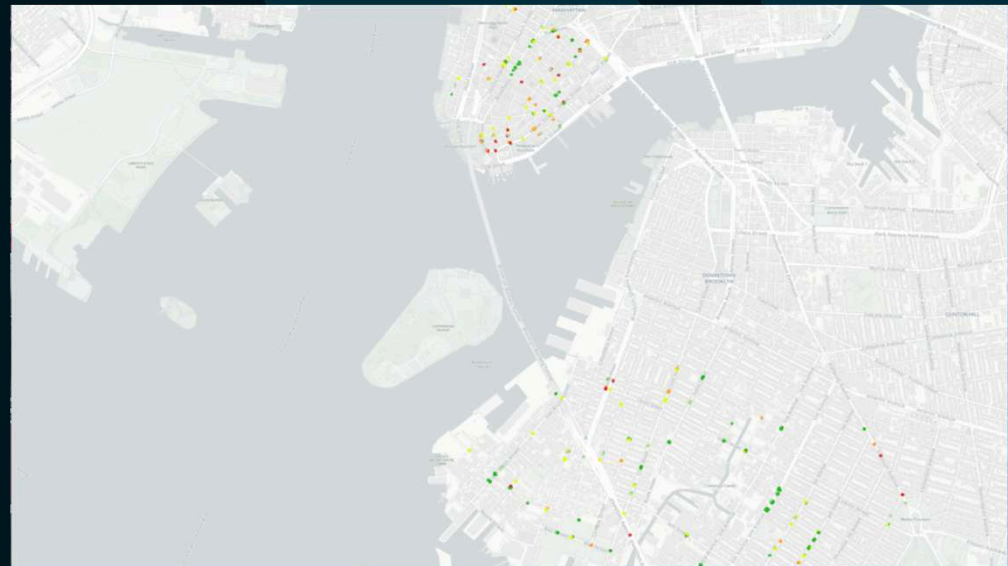
- » Blynscy can create a current base map of road conditions and assets.
- » Post-disaster change detection. Understand what assets are damaged or missing.
- » Quickly make repairs where they are needed.



Projects

New York City Department of Transportation

- » 6,300 miles of road and 1,600 crosswalks
- » Automate the inspection and analysis of crosswalk paint condition
- » Increase safety by identifying problem areas



Alaska Department of Transportation

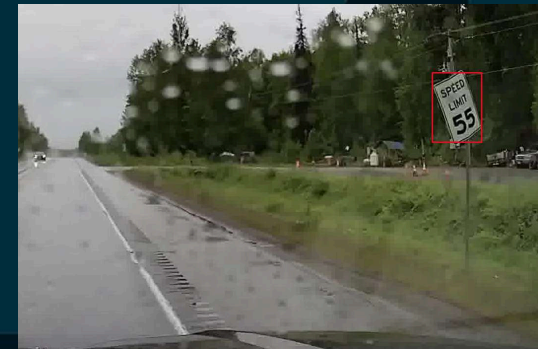
The Problems

- » Over 5,600 CLM of roads and highways
- » Ranks 34th in spending on transportation
- » Remote roads far from maintenance facilities
- » Weather-accelerated aging infrastructure



Blyncsy's Solution

- » Weekly assessments in Anchorage, Fairbanks, Juneau and other state highways
- » Detecting snow removal, street light outages, sign inventory, pavement conditions, and guardrail damage



City of Fort Worth

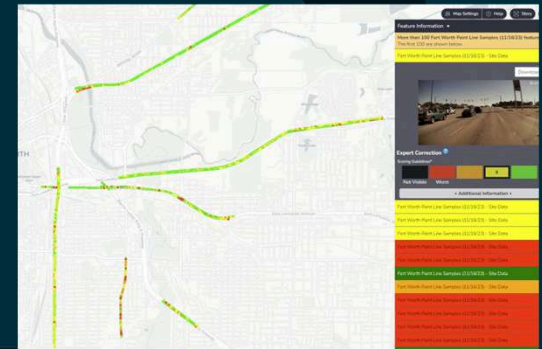
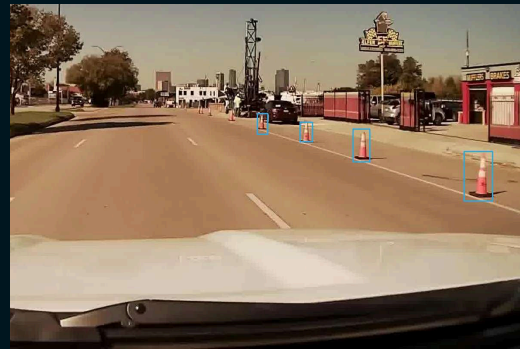
The Problems

- » Needed current data to plan and prioritize a city-wide striping program
- » Inefficient street lights and manual assessment was too expensive



Blynco's Solution

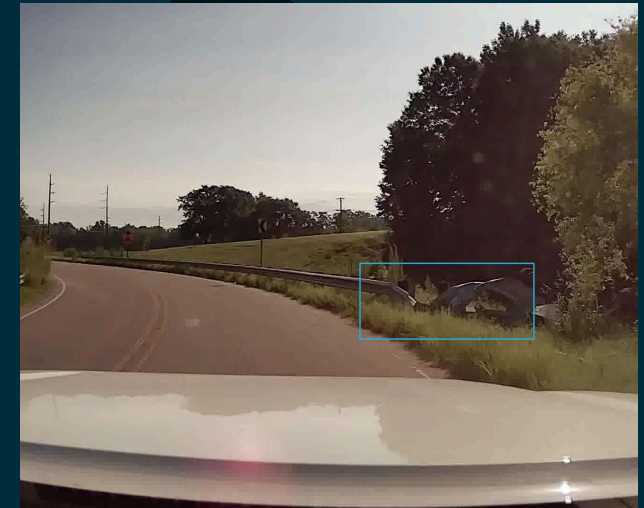
- » Automated detection and assessment of road signs, paint line visibility scoring, debris and work zone detection
- » Automated inventory of street lights with detection of malfunctions (on during day, off during night)



The Bottom Line

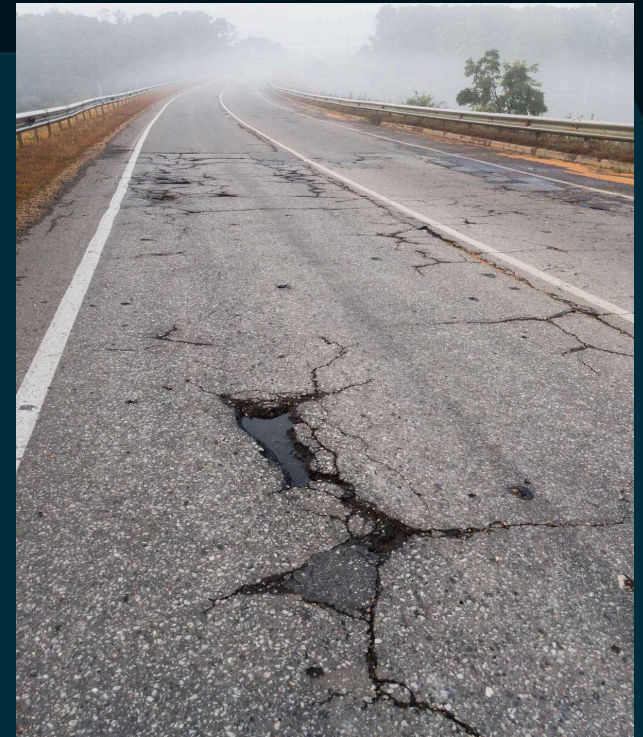
Remove Liability

- » Where does the liability fall?
- » How can you fix required repairs without knowing?
- » What about having documented ground truth one, two, or even three years after the fact.



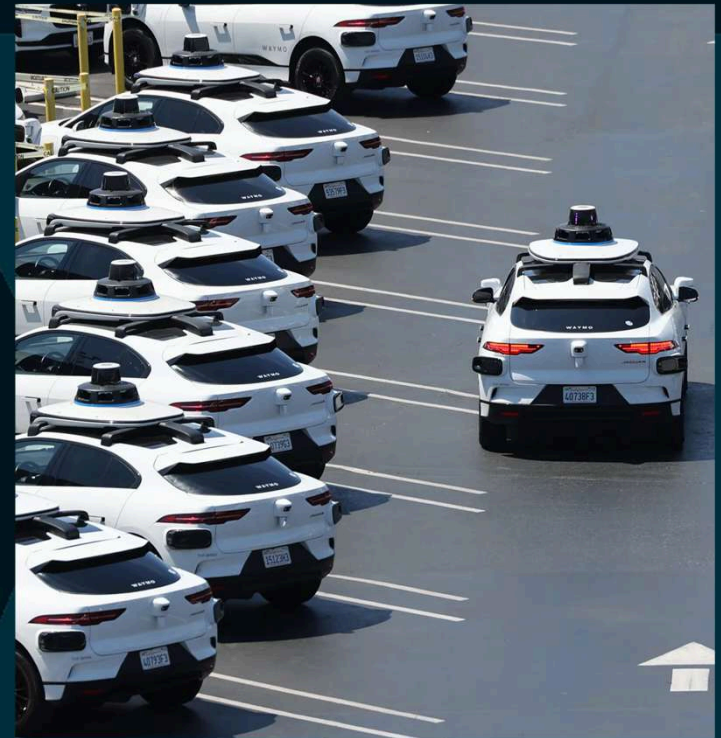
Savings Today

- » Free up time and resources
Allocate your most valuable resource, time, more efficiently. Know where you need your hardware.
- » Warranty claims
If you don't know you need to file a claim, you're missing out.
- » No upfront hardware costs
Camera network is already on the road, get the results without the initial costs associated with other solutions.



Support Autonomous Vehicle Expansion

- » Enhance Safety
Ensure autonomous vehicles can operate safely by helping agencies keep lane markings, signs and other assets in optimal condition.
- » Reduce Maintenance Costs
Autonomous vehicles have added weight, putting more wear and tear on pavement and road assets. Agencies can reduce repair costs by knowing what needs fixing more quickly.
- » Improve Public Trust
Trust hinges on the ability of autonomous vehicles to operate safely in even the most complex environments.





Thank you!

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