

The City of Dublin is a vibrant and growing community. Growing so much, in fact, that there's an increase in people, which inevitably leads to more traffic. While this isn't necessarily a problem, as Dublin's roads and infrastructure can handle an increase in cars, the City of Dublin is always looking to enhance safety, especially in and around school zones.

It was a happy coincidence when DENSO, the world's second largest mobility supplier, was looking for a site to test their latest connected vehicle project. DENSO has an office in the heart of Dublin and understands the innovations Dublin is already undertaking as part of Connected Dublin and The Beta District. It made sense to choose Dublin for the test project. Connected Dublin along with two DENSO partners, DERQ, and NoTraffic, worked to track traffic and pedestrian patterns within The Beta District. This is the type of research and development that is putting Dublin and its partners in The Beta District on the global stage.



The Challenge.

DENSO wanted to implement smart mobility technology to enhance the safety of Dublin's streets. It is part of the city's Connected Dublin mission to leverage technology to improve lives, drives, safety and experiences.

"This is not technology used to ticket people. It is used to collect data so we can make decisions and upgrades that will match, correct and make sense with the type of things happening on our streets. We already enjoy a relatively low crash environment, but anything we can do to improve this we're going to try."



Jeannie Willis

Director of Transportation and Mobility, City of Dublin



Our Approach

In 2019, DENSO and the City of Dublin announced the Smart Mobility Ecosystem, designed to enhance transportation for the residents of Dublin. The project uses smart mobility technology in the form of wireless devices, cloud computing and a network of sensors, cameras and data to track various factors at five prominent intersections, plus a roundabout and the main driveway that leads to the Emerald Campus STEM school in Dublin.

The data collected is completely anonymous (with no identifiable license plates or faces) and filtered through the <u>DERQ</u> dashboard to gain safety insights at these key intersections. There is also a <u>NoTraffic</u> dashboard, which provides a deeper understanding of traffic and signal operations in Dublin.



What's Being Tracked



Traffic counts



Turning unit counts



Pedestrians



Cyclists



Crash near misses



The Outcomes

Since its inception, the information gathered from the connected vehicle project has helped the city make adjustments like signal changes, to improve safe driving behaviors.

Real-world research leads to real results with Connected Dublin, located in The Beta District. Red tape and roadblocks are replaced with partnership, green lights, and possibility.

MONITORING SAMPLE / DAY OCT. 5, 2022

6

⊕ Intersections

80,667

Vehicles

153

Pedestrians

Key Outcomes

- Data collected and analyzed in this project has strengthened DENSO's advanced driver assistance systems (ADAS) and safety technologies.
- Dublin has been able to better understand traffic flows, pedestrian movements and driving behavior locally.
- Collaborations like this will play important roles in advancing technologies and help further protect everyone on and around roadways, whether in urban, suburban or rural areas.

About Connected Dublin

Connected Dublin is a living lab within The Beta District. The Beta District is a high-tech region that stretches northwest along US 33 from Columbus, Ohio through Franklin, Union and Logan counties. It is overseen by a collaborative council of governments, which includes <u>Dublin</u>, <u>Marysville</u>, <u>Union County</u> and the <u>Marysville-Union County Port Authority</u>. The Beta District offers an ecosystem of smart infrastructure and living labs where leaders in all industry sectors can tap into resources and collaborate on groundbreaking projects.

