Detecting Cyclist in Dublin City

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Dublin City – Cycling

Cordon Count

Cycling increased 2.33 to 5.72%
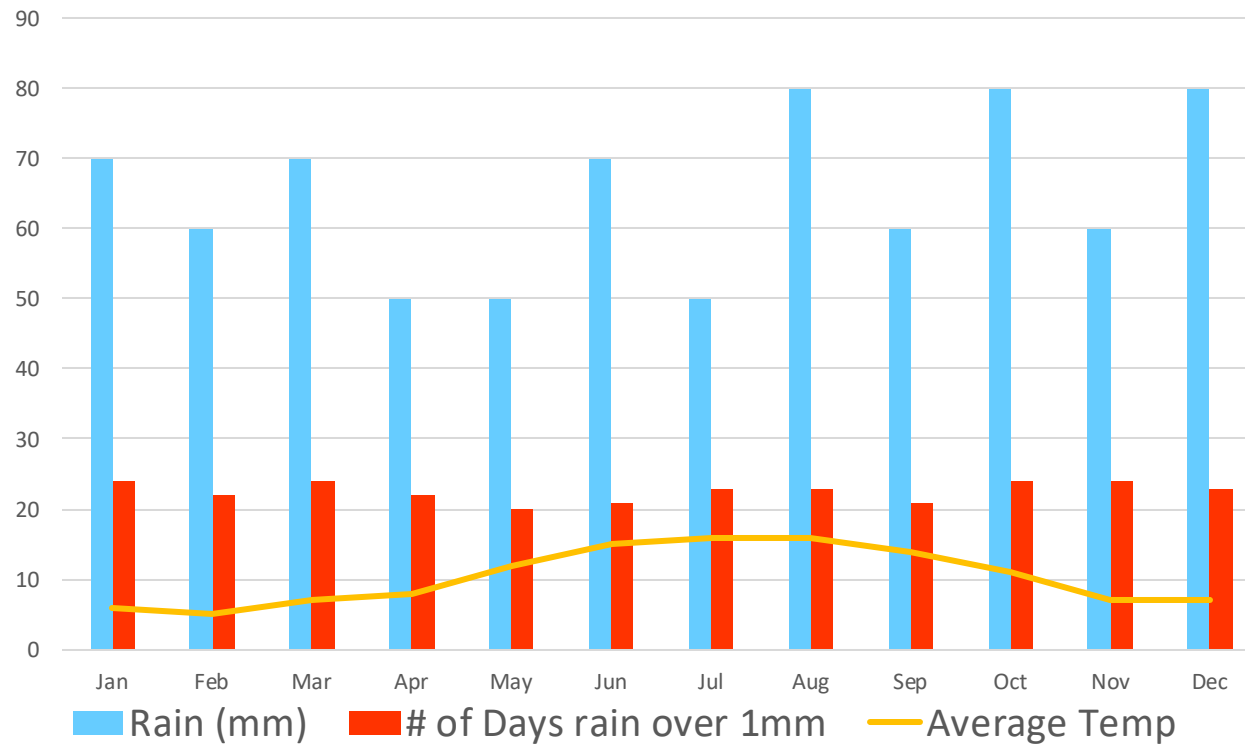
Challenges

People's perception in relation to Cycling in Dublin

- Weather
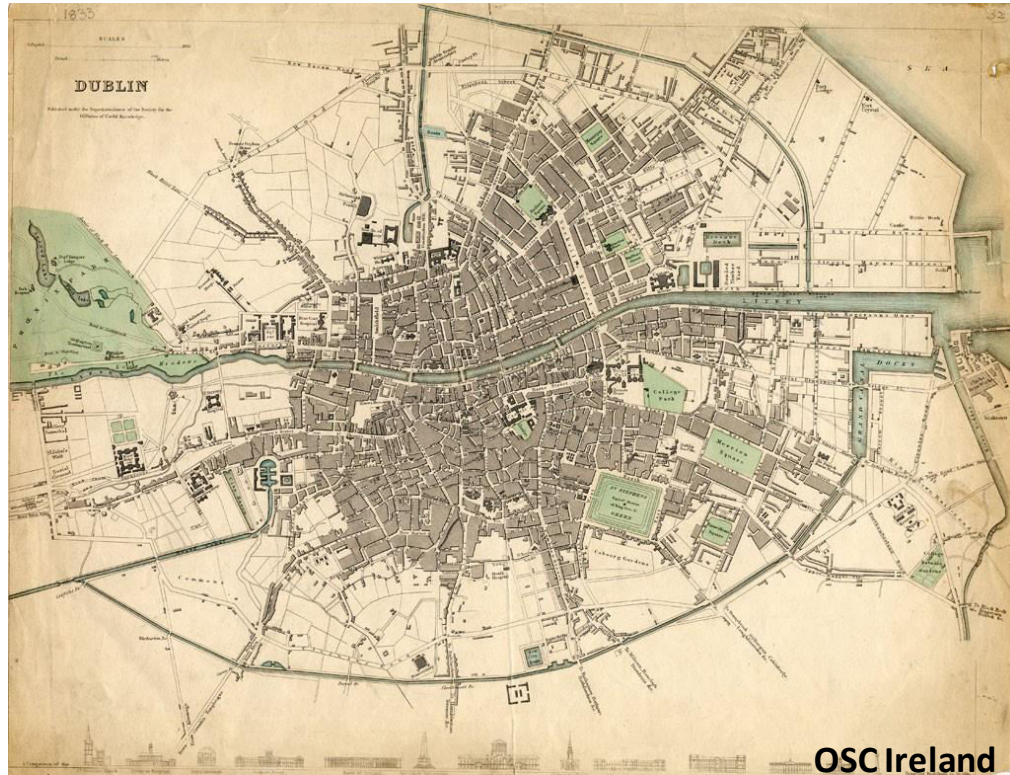
- Safety

Dublin City – Weather

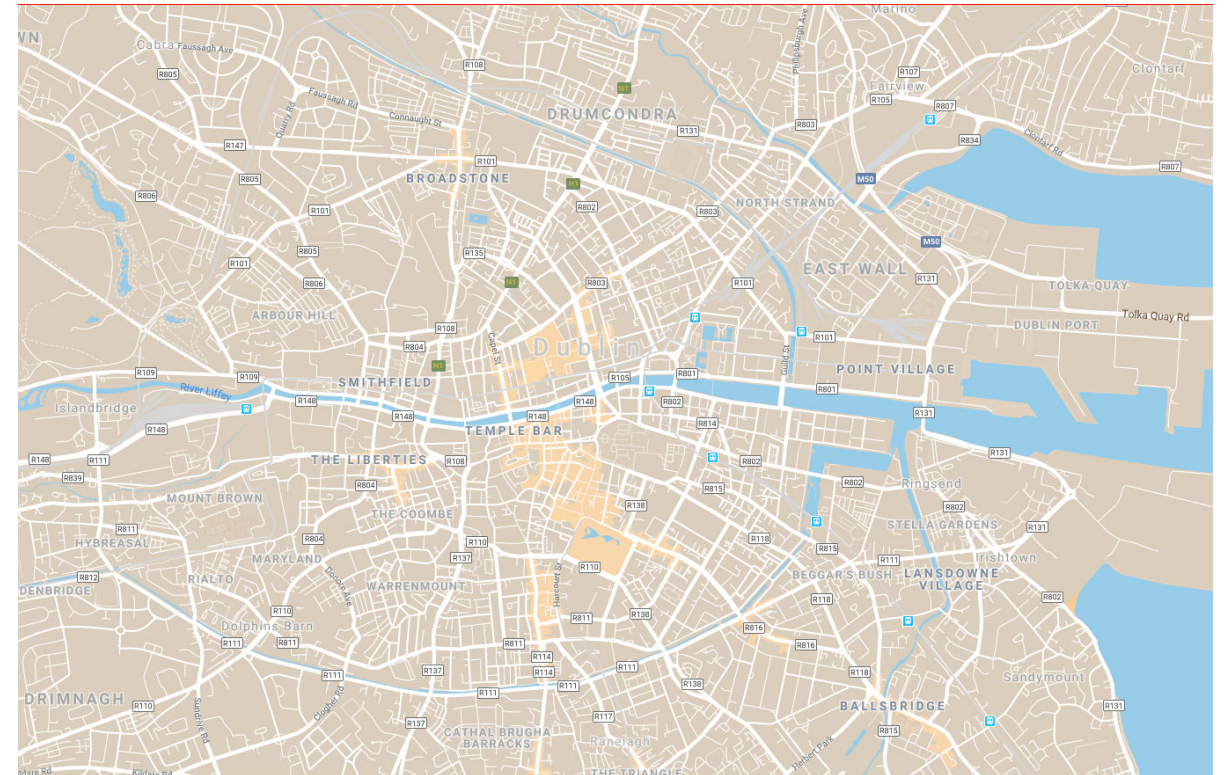## 4 Seasons in One Day

It's Grand – Just buy a rain coat

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Dublin City – Layout

Georgian Dublin

OSC Ireland

Modern Dublin

Modern City – A mixture of a medieval city with georgian quarters

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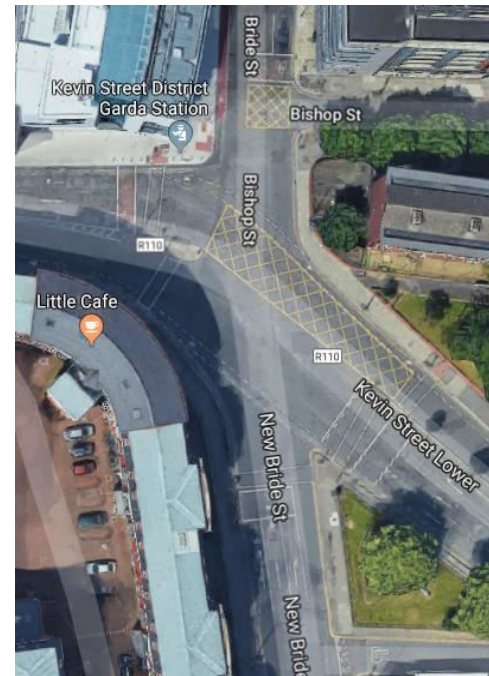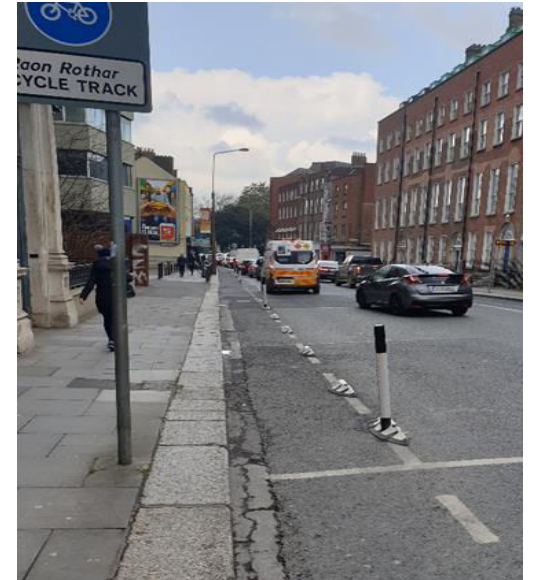Dublin City Council

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Lane layout

Junction Geometry

- Varying junction design and crossing width

- Mainly on road cycle lanes

- Small but increasing number of segregated routes

On Road cycle track with minimum segregation

Irregular junction design - Large crossing width through junction

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Traffic Management

Traffic Control Centre

- SCATS – Over 850 Sites in Dublin and surrounding areas

- Adjusts signal timings in response detector demands
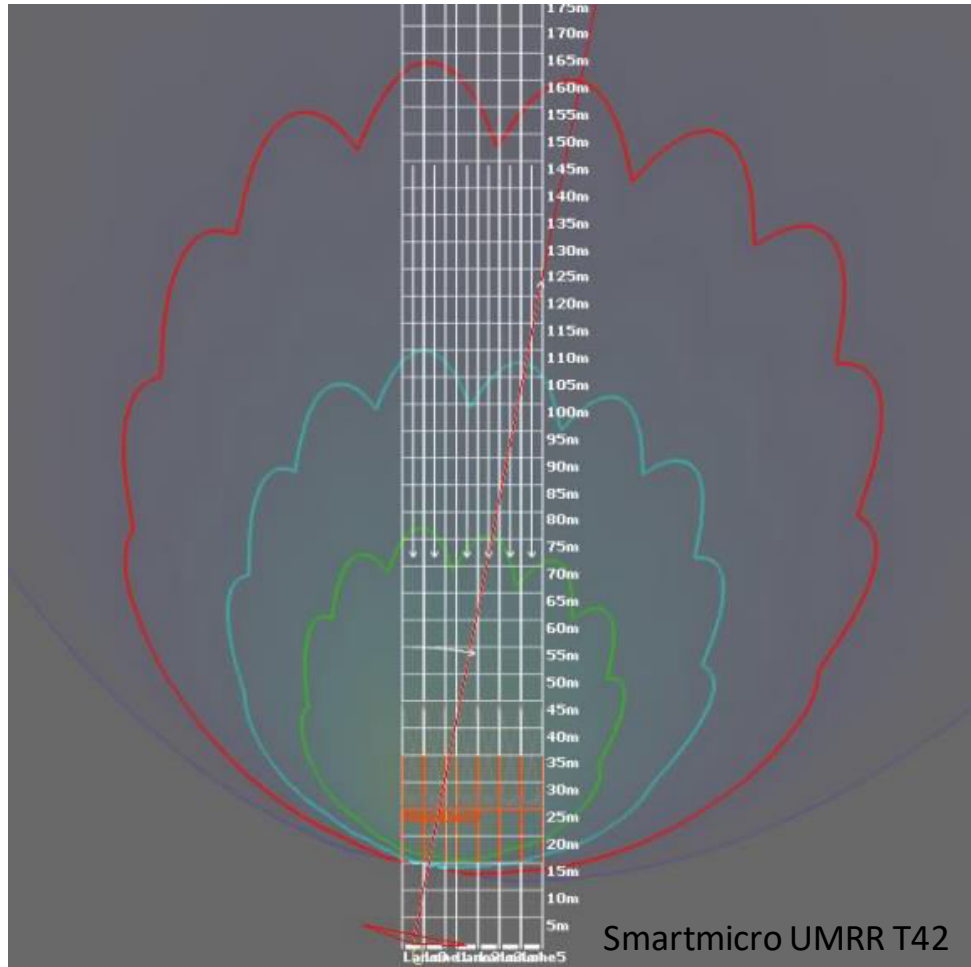
- But not all bicycles are detected
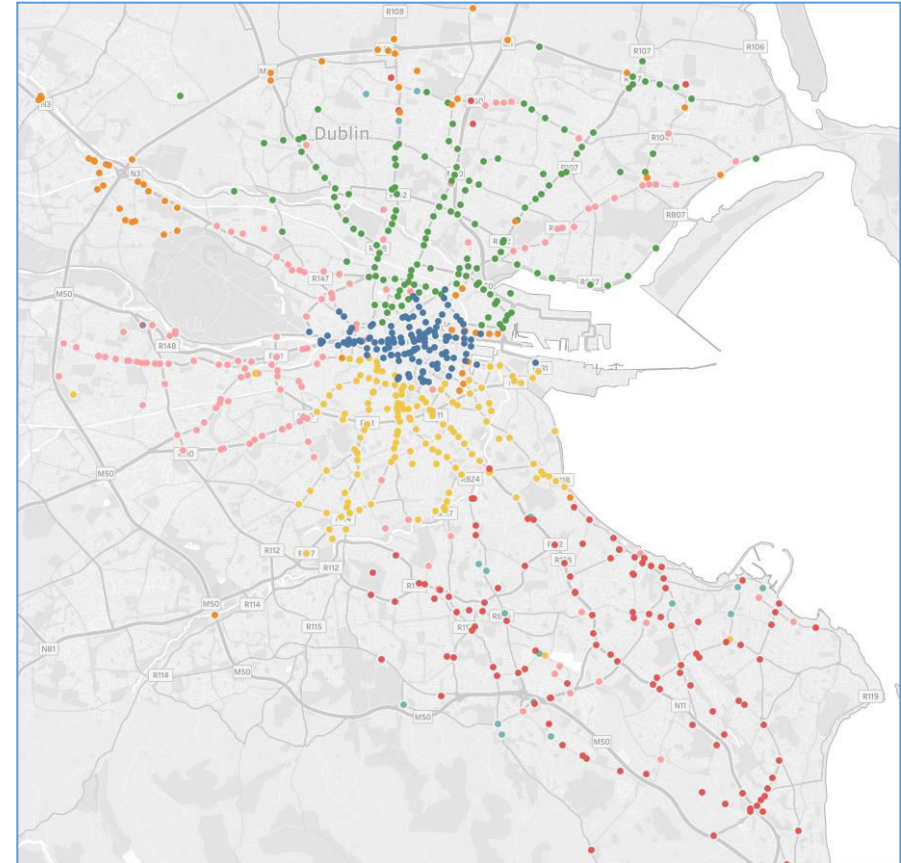
Challenges for Cycle Detection

Reliable Detection of Cyclists

- Accurate detection and classification

- Reliability

- Cycle lanes in shared areas

Smart Micro Technology

Smartmicro UMRR T42

Project Objectives

- Registering cyclist as the approach

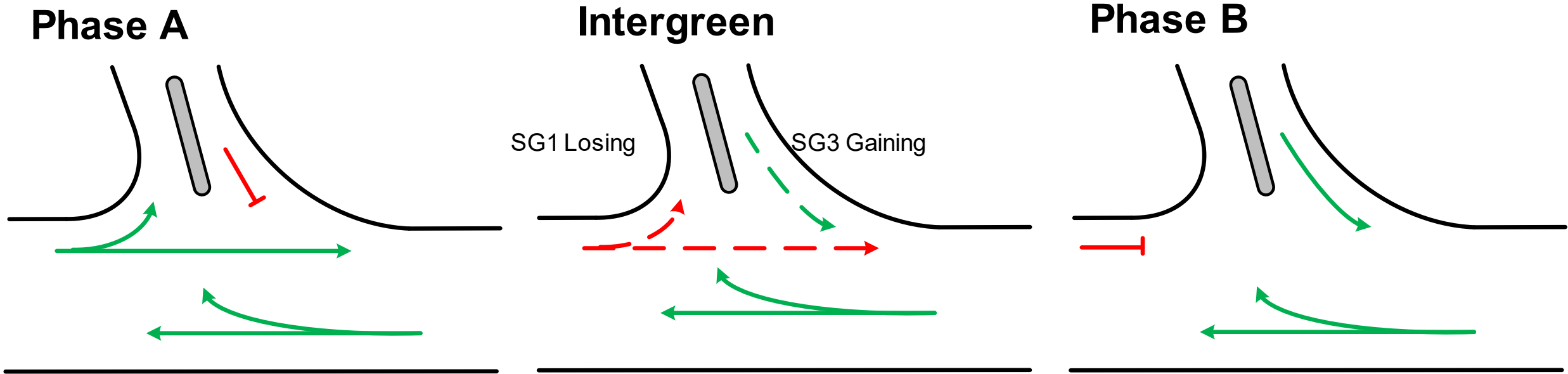- Extension of the minimum green time

- Allow extra time to clear

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Site Installation

Conyngham Road and Exiting the Phoenix Park

Signal Operation

Phase A · Intergreen · Phase B

SG1 Losing · SG3 Gaining

- Vehicle Intergreen

3 Seconds	5 Seconds

- Cyclist Intergreen –Using the Smart Micro device

3 Seconds	9 Seconds

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Video of Smart Micro Unit

Short Video of the Unit Operating

Results – Morning Peak

Conyngham Road

- 156 Cyclist Detected

- 9 All Red increased

Exiting the Phoenix Park

- 161 Cyclist Detected

- 10 All Red increased

Morning Peak 8.30 to 9.30

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Thank You and enjoy your trip to Dublin

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