

**MAVEN (Managing Automated Vehicles Enhances Network)**

# **Cities and Connected Autonomy**

## **Gap Analysis**

**Ben Morris**

DG Cities, UK

MAVEN Final Event, 6<sup>th</sup> June, Helmond



MAVEN is funded by the EC Horizon 2020 Research and Innovation Framework Programme, under Grant Agreement No. 690727



# Introduction to the Gap Analysis for Cities

Where Cities  
are Now



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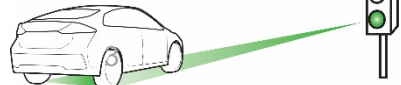


# Introduction to the Gap Analysis for Cities

Where Cities  
are Now

Ideal  
Future

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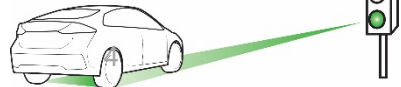
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# Introduction to the Gap Analysis for Cities



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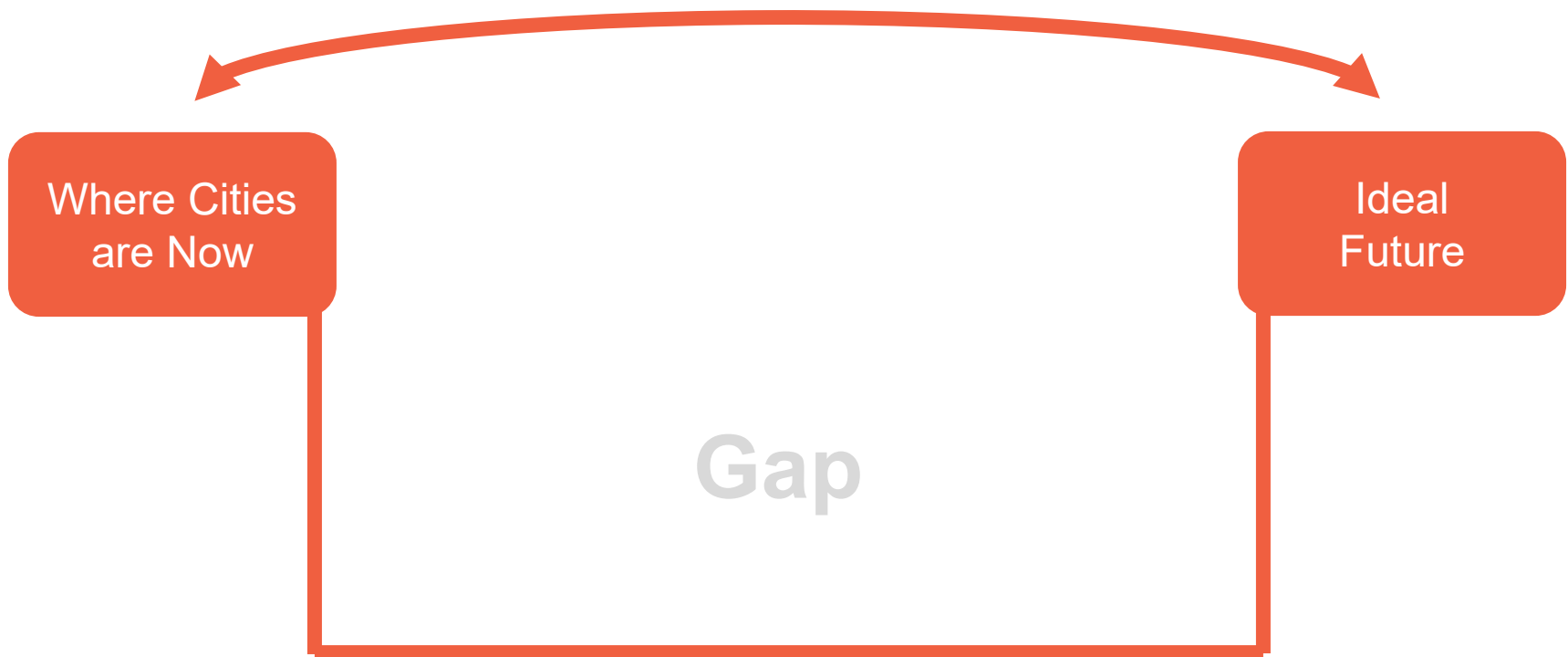


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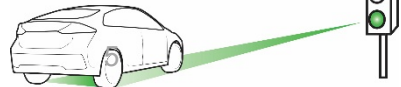


# Introduction to the Gap Analysis for Cities

## Transition Roadmap



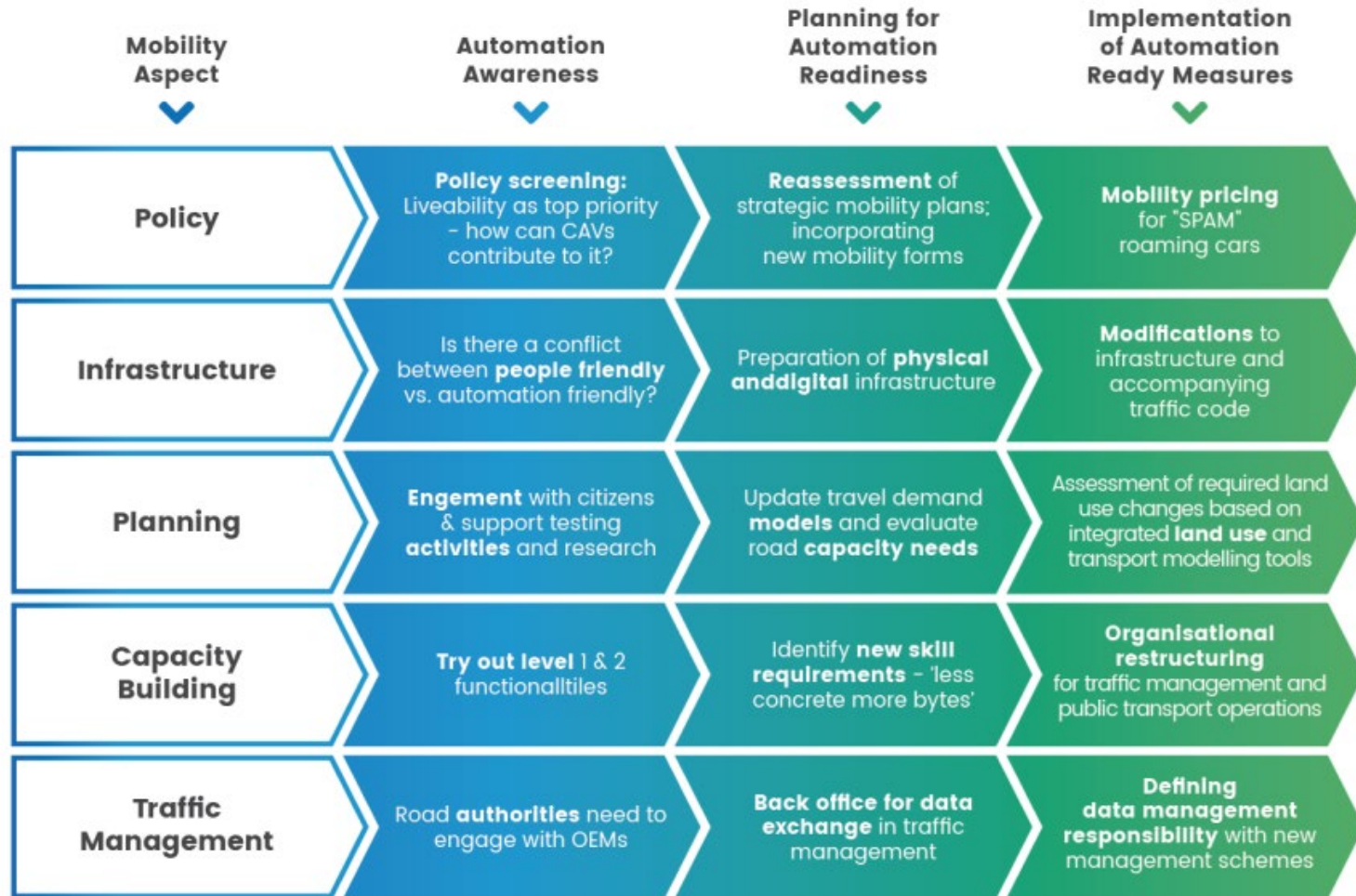
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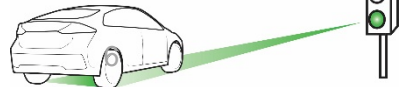
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# The CoEXist Framework



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# Grading System



Ready

Partial

Partially Ready



No Progress



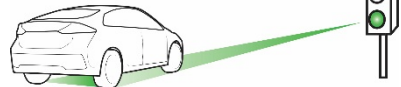
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# The CoEXist Framework Applied to Greenwich

Mobility Aspect	Automation Awareness	Planning for Automation Readiness	Implementation of Automation Ready Measures
Policy	✓	Partial	✗
Infrastructure	✓	✓	Partial
Planning	✓	Partial	✗
Capacity Planning	✓	✓	✗
Traffic Management	Partial	✗	✗

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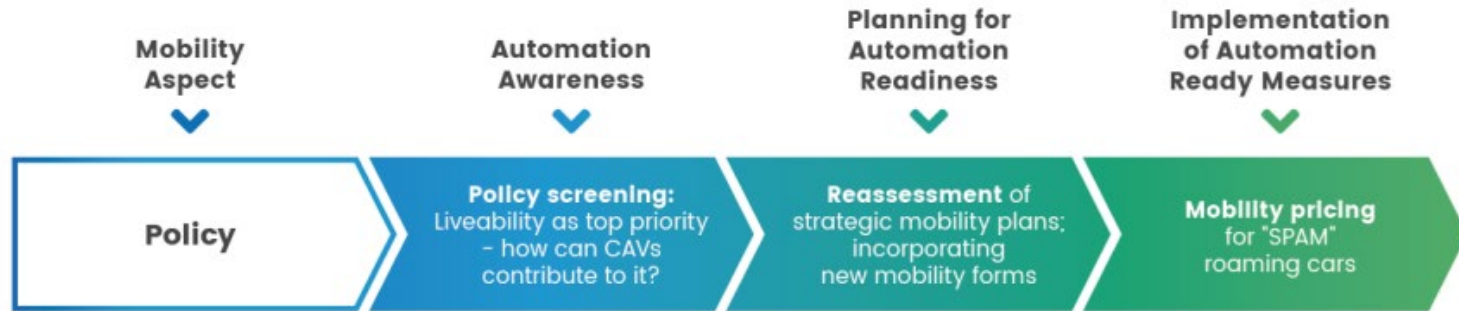


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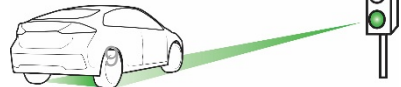




# Policy



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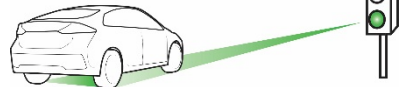
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# Policy Progress in Greenwich

Mobility Aspect	Automation Awareness	Planning for Automation Readiness	Implementation of Automation Ready Measures
Policy	✓	Partial	✗
Infrastructure	✓	✓	Partial
Planning	✓	Partial	✗
Capacity Planning	✓	✓	✗
Traffic Management	Partial	✗	✗

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# Policy Progress in Greenwich

**Policy** – CAVs are seen as an opportunity area to improve accessibility, use of space and air quality



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# Infrastructure

Mobility Aspect



Automation Awareness



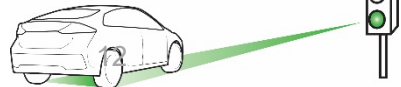
Planning for Automation Readiness



Implementation of Automation Ready Measures



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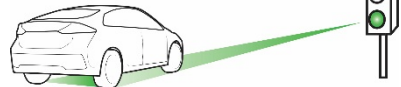
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# Infrastructure Progress in Greenwich

Mobility Aspect	Automation Awareness	Planning for Automation Readiness	Implementation of Automation Ready Measures
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Capacity Planning	✓	✓	✗
Traffic Management	Partial	✗	✗

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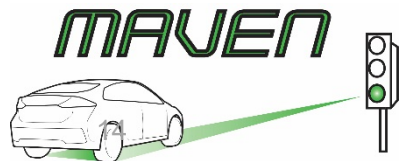
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# Infrastructure Progress in Greenwich

**Policy** – CAVs are seen as an opportunity area to improve accessibility, use of space and air quality

**Infrastructure** – Investment in CAV projects including Smart Mobility Living Lab



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# Planning

Mobility  
Aspect



Automation  
Awareness



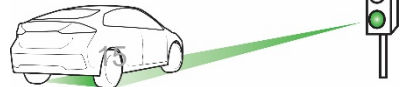
Planning for  
Automation  
Readiness



Implementation  
of Automation  
Ready Measures



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# Planning Progress in Greenwich

Mobility Aspect	Automation Awareness	Planning for Automation Readiness	Implementation of Automation Ready Measures
Policy	✓	Partial	✗
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Planning	✓	Partial	✗
Capacity Planning	✓	✓	✗
Traffic Management	Partial	✗	✗

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# How has Greenwich Made Progress?

**Policy** – CAVs are seen as an opportunity area to improve accessibility, use of space and air quality

**Infrastructure** – Investment in CAV projects including Smart Mobility Living Lab

**Planning** – Citizen engagement and some small scale modelling



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# Capacity Building

Mobility Aspect



Automation Awareness



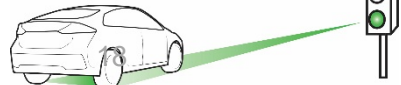
Planning for Automation Readiness



Implementation of Automation Ready Measures



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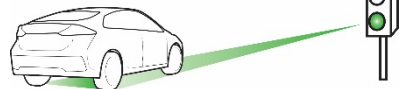
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# Capacity Building Progress in Greenwich

Mobility Aspect	Automation Awareness	Planning for Automation Readiness	Implementation of Automation Ready Measures
Policy	✓	Partial	✗
Infrastructure	✓	✓	Partial
Planning	✓	Partial	✗
<b>Capacity Planning</b>	✓	✓	✗
Traffic Management	Partial	✗	✗

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# Capacity Building Progress in Greenwich

**Policy** – CAVs are seen as an opportunity area to improve accessibility, use of space and air quality

**Infrastructure** – Investment in CAV projects including Smart Mobility Living Lab

**Planning** – Citizen engagement and some small scale modelling

**Capacity Building** - Greenwich created DG Cities to build capacity



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# Traffic Management

Mobility Aspect



Automation Awareness



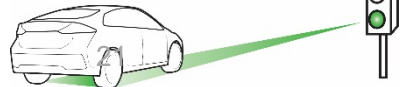
Planning for Automation Readiness



Implementation of Automation Ready Measures



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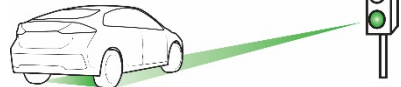
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# Traffic Management Progress in Greenwich

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Policy	✓	Partial	✗
Infrastructure	✓	✓	Partial
Planning	✓	Partial	✗
Capacity Planning	✓	✓	✗
<b>Traffic Management</b>	Partial	✗	✗

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# Traffic Management Progress in Greenwich

**Policy** – CAVs are seen as an opportunity area to improve accessibility, use of space and air quality

**Infrastructure** – Investment in CAV projects including Smart Mobility Living Lab

**Planning** – Citizen engagement and some small scale modelling

**Capacity Building** - Greenwich created DG Cities to build capacity

**Traffic Management** – Different in London with TfL more responsible than the boroughs



# Conclusions

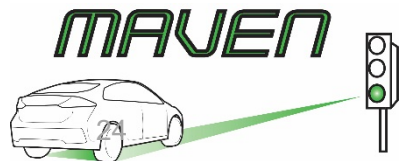
**Policy** – Variable awareness across cities

**Infrastructure** – Fibre, 5G and V2X deployment required

**Planning** – Engage citizens and enhance models

**Capacity Building** – Innovation teams, collaboration and best practice

**Traffic Management** – Validates need for Transition Roadmap



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*Thank you!*

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