

# Cambridgeshire Autonomous Metro

## Dromos Concept Design



**CAMBRIDGESHIRE  
& PETERBOROUGH**  
COMBINED AUTHORITY

**JAMES PALMER**  
CAMBRIDGESHIRE &  
PETERBOROUGH MAYOR

Dromos

+

Priestman  
Goode

+

Buro  
Happold

+

Rider  
Levett  
Bucknall

# Presenting a system for the future



# The problem

## Old paradigm

### **Bundling & aggregation**

- Large vessels with multiple passengers
- Busy during peak time, empty off-peak
- High cost to run & impact on environment when empty
- Multiple stops slows journey time down

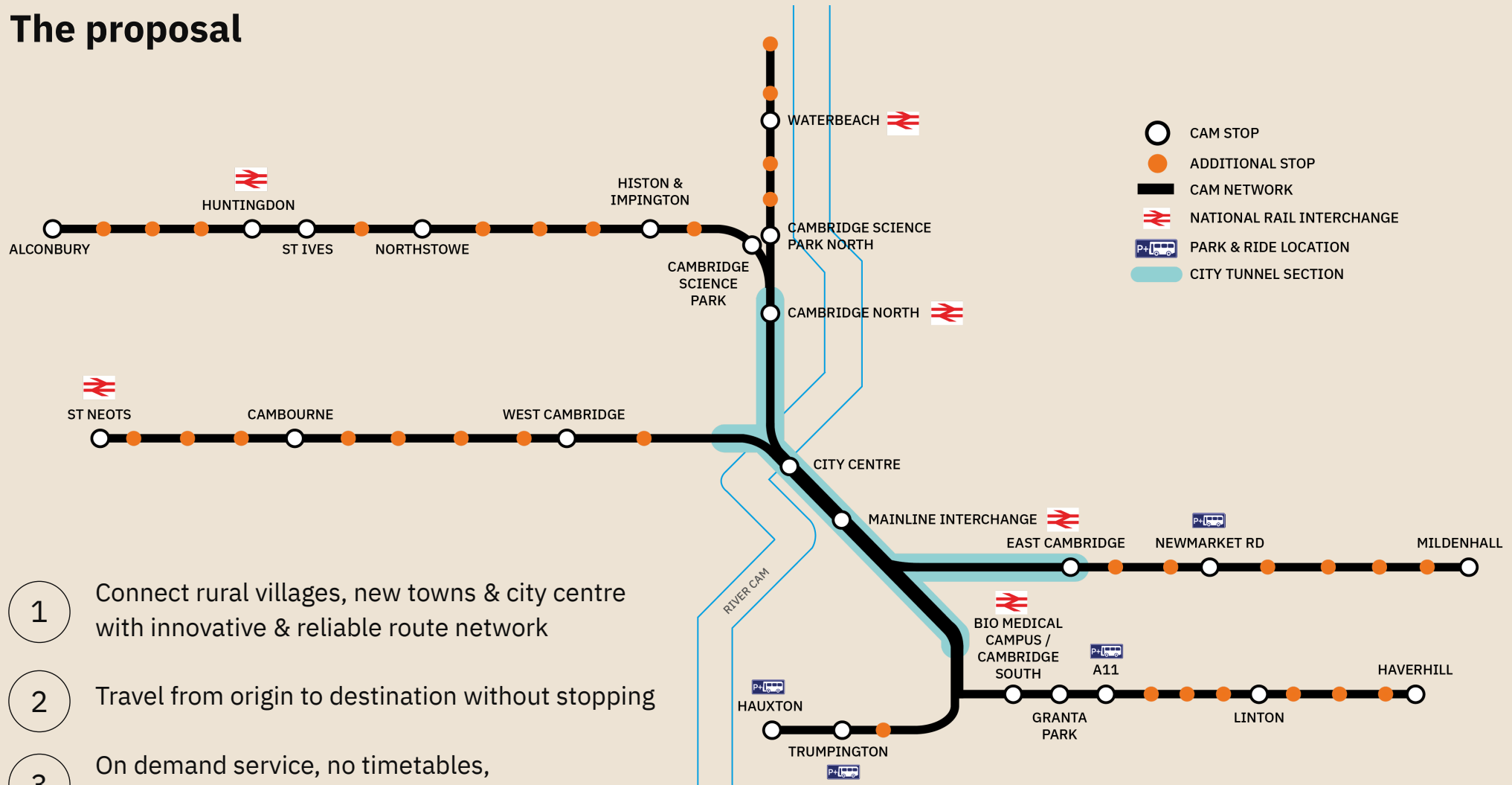
# The solution

## New paradigm

### **Fast drip-feed**

- Individual vehicles for each passenger or travel party
- On demand & high frequency if required
- Low cost when demand is low
- Direct to destination with no stops
- Short headways through autonomous driving

# The proposal



- 1 Connect rural villages, new towns & city centre with innovative & reliable route network
- 2 Travel from origin to destination without stopping
- 3 On demand service, no timetables, no delays, 24/7, 365 days a year



# The service

1

Flexible, lightweight, economical vehicles, travelling on dedicated network

2

Each passenger or travel party travels in their own vehicle – no sharing with strangers

3

Scalable capacity with 10,000 passengers per hour per Dromos lane. Multi-lane operation as required



# The journey



Request ride from  
your device or at stop



Navigate to  
nearest CAM stop



Approach first  
available vehicle



Present QR code  
to vehicle door



Get in, sit down,  
relax and press Start

# The stop experience



On demand, electric, autonomous vehicles



Dedicated lanes and infrastructure



Travel confident in complete safety



# The travel experience

- 1 Spacious & inviting
- 2 Considered & accessible
- 3 Panoramic views
- 4 Seamless connectivity
- 5 Convenient stowage solutions
- 6 Comfort in privacy



# Configured for personal requirement



## Personal vehicles

-

Your requirements met

-

Increased safety &  
reduced security risks  
with no crowding



## Secure transport

-

Flexible interior  
configurations

-

Travel safely out of town  
& back again



## Luggage stowage

-

Travel convenience &  
comfort with secure  
luggage stowage



## Logistics assistance

-

Local business support

-

Clean sustainable  
freight delivery



# Reliable service



**All weather  
operation**

(Regular service vehicles)



**Under 120 second  
wait times**



**24 hours a day  
7 days a week  
365 days a year**





# Improved journeys



**Journey direct to  
key destinations**



**Reduced road traffic**



**Minimal impact on  
existing infrastructure**



## Local convenience



**Multiple bays  
allow free flow of  
passengers**



**Integrated cycle  
storage**



**Minimal impact on  
existing infrastructure**



# Icon for the region Leading the world of autonomous transit



# The cost

CAM reference scheme estimates



**£3 - 4  
Billion**

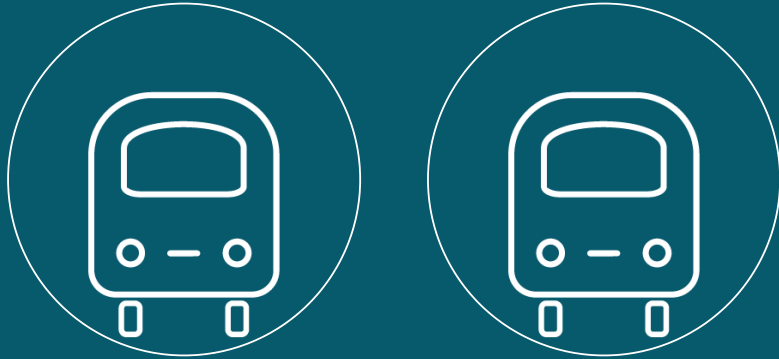
Dromos solution



**£1.5-2  
Billion**

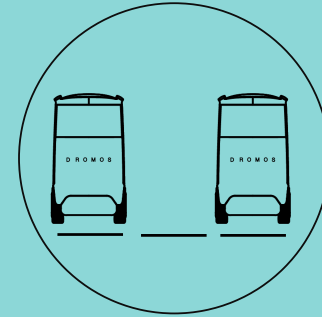
# The impact on the environment

CAM reference scheme estimates



**Twin tunnels**  
26km (2x 13km)

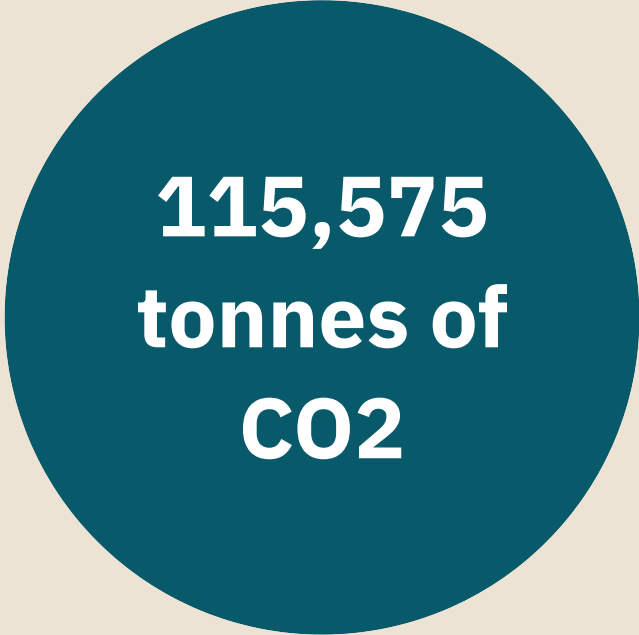
Dromos optimised tunnel



**Single tunnel**  
9km

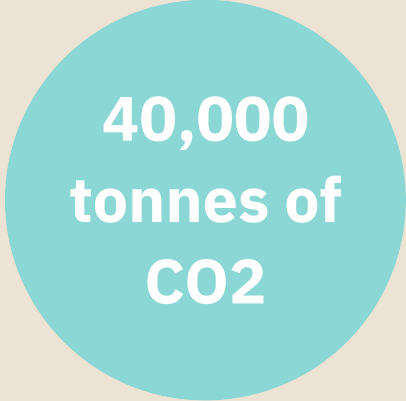
# The impact on the environment

CAM reference scheme estimates



**115,575  
tonnes of  
CO<sub>2</sub>**

Dromos optimised tunnel



**40,000  
tonnes of  
CO<sub>2</sub>**



# An award-winning and experienced team

## **Dromos Technologies**

develops autonomous network transit systems designed for high capacity urban passenger and freight traffic. Based in Munich, Dromos brings together the world's leading autonomous driving, automotive and mass transit know how to ring in the next paradigm shift in urban transportation.

[Dromos.network](https://dromos.network)

## **Buro Happold**

is an independent, international engineering practice that for over 40 years has become synonymous with the delivery of creative, value led building and city solutions for an ever changing world. Having worked on every continent, our clients include more than 90% of the world's leading architectural practices and we have collaborated with global organisations such as the United Nations, The World Bank and UNESCO. Through our global community of driven, world leading engineering and consulting professionals we deliver elegant solutions for buildings and cities that seek to address the major problems facing societies today.

[burohappold.com](https://burohappold.com)

## **PriestmanGoode**

is a design studio dedicated to designing a better future. The London and China based company specialises in human-centred design and improving customer experience on large scale projects in infrastructure, aviation, transport, hospitality and product design. Their work is used by millions of people around the world, every day.

[PriestmanGoode.com](https://PriestmanGoode.com)

## **Rider Levett Bucknall**

is an independent construction, property and management consultant, providing advice focused on the value quality and sustainability of the built environment. Worldwide the firm has over 3,600 staff operating from more than 120 offices. Its international reach ensures that it provides services in line with the latest innovations and examples of best practice, supporting expertise in a range of sectors including industrial and logistics, healthcare, commercial, education, sport, infrastructure, retail, and residential.

[rlb.com](https://rlb.com)