





A solution for Coventry (and other small to medium size cities)

Urban Very Light Rail





CO2 – Surface Transport -1990 – 2016

Biggest contributor to national and local emissions and has changed little in the last 30 years



Coventry City Council



Future Coventry

Increasing Coventry's attractiveness as a place to live, work and study









Cost of Trams

RLB Levett

Average £35m to £50m per km



TRANSPORT DESIGN

NGER

Theresa May announces £250 million for major Midland Metro extension and more

Nottingham's £570M tram extension opens

Edinburgh's tram system opens – £375m over budget and three years late

VL

VLR target cost £10m per km



INGEROP Inventing for tomorrow

TRANSPORT DESIGN



CWLEP



WEST MIDLANDS COMBINED AUTHORITY

Coventry & Warwickshire Covent

RLB Rider Levett Bucknall











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The Track



Innovation: resilient, long life, shallow and affordable trackform. Minimal excavation and laid over existing utilities to allow fast access for repairs





Urban VLR vs Light Rail



Coventry City Council

VLR opportunities

- Simplified depot
- Low cost vehicle
- Minimal utility diversions
- Reduced preliminaries
- No overhead catenary
- Reduced earthworks



Vehicle and Track Testing

Integrated Testing will be undertaken at the National Innovation Centre in Dudley



Aim is to investigate and prove:

- vehicle performance on gradients, cants, tight curves
- noise and vibration, track durability
- utility access, repair and maintenance
- drainage
- costs











The National Innovation Centre - Dudley 2020







Coventry & Warwickshire

CWLEP



The National Innovation Centre – Dudley 2021

WEST MIDI





VLR First Route and Beyond

- First Route Rail Station to City Centre to UHCW
- Network to connect city centre to strategic locations
- Link to HS2









TfWM Transport Modes

Infrastructure – Capacity & Network









UK Industrial Strategy: Four Grand Challenges

VLR will tackle 2 of the 4 grand challenges: Mobility and Clean Growth







Challenges

• Traditional Thinkers!







Challenges

• Aversion to Risk













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Challenges

Legislation and Processes

- TWAO
- NRSWA Diversionary Works code of practise
- Legislation to promote autonomous operation



New Roads and Street Works Act 1991

HIGHWAY AUTHORITIES AND UTILITIES COMMITTEE

MEASURES NECESSARY WHERE APPARATUS IS AFFECTED BY MAJOR WORKS (DIVERSIONARY WORKS)

A Code of Practice

Approved by the Secretary of State for Transport Under section 84 of the Act





Challenges

• National Policy Changes







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Thank you for Listening

RLB Rider Levett Buckna

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NDS

THE UNIVERSITY OF WARWICK

Any Questions?