

Mobility Hubs



Delivering up to 50 multi-modal mobility hubs across Plymouth including:

- Electric bikes
- Electric cargo bikes
- Electric vehicle car club
- Electric vehicle charging points

Supported via the Transforming Cities Fund

Objectives

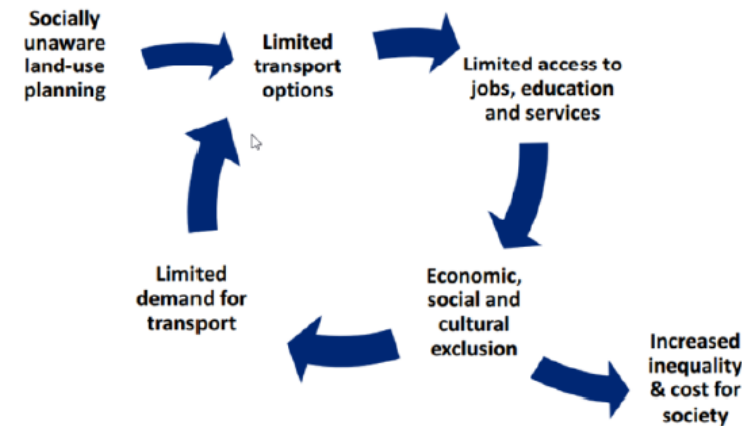


- Improve air quality
- Encourage active travel
- Reduce congestion
- Reduce carbon dioxide emissions
- Improve mobility opportunities in low income neighbourhoods
- Improve access and connectivity to employment, education, health and leisure facilities

Breaking the cycle

Mobility poverty

Impacts



Rupprecht Consulting, Endurance 2015

Social prescriptions enabling GPs to offer patients electric bike hire membership for 6 months to help improve their health and fitness

Visibility & accessibility



- A unified look throughout the network
- Clear signage
- Disabled access
- Safe
- Open visible areas
- Well lit
- CCTV



Mobility As A Service



- Mobility As A Service app
- Journey planning information
- Ticketing
- Ease of switching modes
- Including public transport

Stakeholder input



- Internal discussions with all departments and officers who will have an interest in the design and functioning of the mobility hubs
- Engagement with residents, businesses and other local stakeholders will commence in February 2021

Principles of Universal Design



We are considering using the following principles to help guide the design of the Mobility Hubs and the Mobility As A Service app.

Principle 1: Equitable Use

The design is useful and marketable to people with diverse abilities:

- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b. Avoid segregating or stigmatizing any users.
- 1c. Provisions for privacy, security, and safety should be equally available to all users.
- 1d. Make the design appealing to all users.

Principles of Universal Design



Principle 2: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities:

- 2a. Provide choice in methods of use.
- 2b. Accommodate right- or left-handed access and use.
- 2c. Facilitate the user's accuracy and precision.
- 2d. Provide adaptability to the user's pace.

Principles of Universal Design



Principle 3: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level:

- 3a. Eliminate unnecessary complexity.
- 3b. Be consistent with user expectations and intuition.
- 3c. Accommodate a wide range of literacy and language skills.
- 3d. Arrange information consistent with its importance.
- 3e. Provide effective prompting and feedback during and after task completion.

Principles of Universal Design



Principle 4: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities:

- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b. Provide adequate contrast between essential information and its surroundings.
- 4c. Maximize "legibility" of essential information.
- 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

Principles of Universal Design



Principle 5: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions:

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b. Provide warnings of hazards and errors.
- 5c. Provide fail safe features.
- 5d. Discourage unconscious action in tasks that require vigilance.

Principles of Universal Design



Principle 6: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue:

- 6a. Allow user to maintain a neutral body position.
- 6b. Use reasonable operating forces.
- 6c. Minimize repetitive actions.
- 6d. Minimize sustained physical effort.

Principles of Universal Design



Principle 7: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility:

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.

Next steps



- Concept design
- Site selection
- Mobility As A Service app scoping
- Engagement with residents, businesses and other local stakeholders will commence in February 2021

If there is someone that you think we need to involve in the design, construction, or operation of the Mobility Hubs, please check with them that they know about the initiative and if needed put them in touch with: john.green@plymouth.gov.uk

Questions



- Thank you