

Transport Planning and Development



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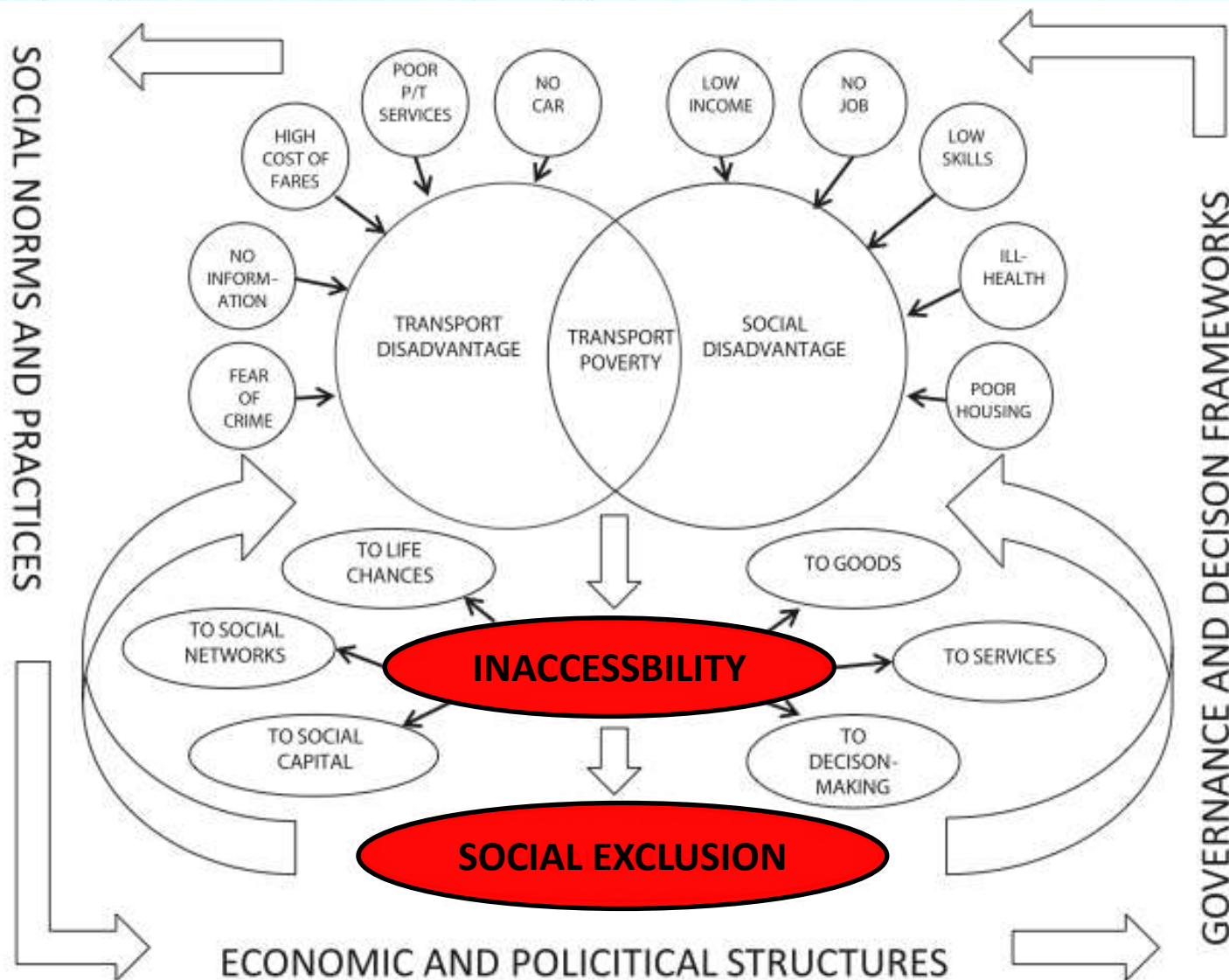
‘together we build a better future’

Outline



- Introduction
- Key concepts
- Assessment techniques
- Key Policy measures (Transport and Development)
- Conclusion

Introduction



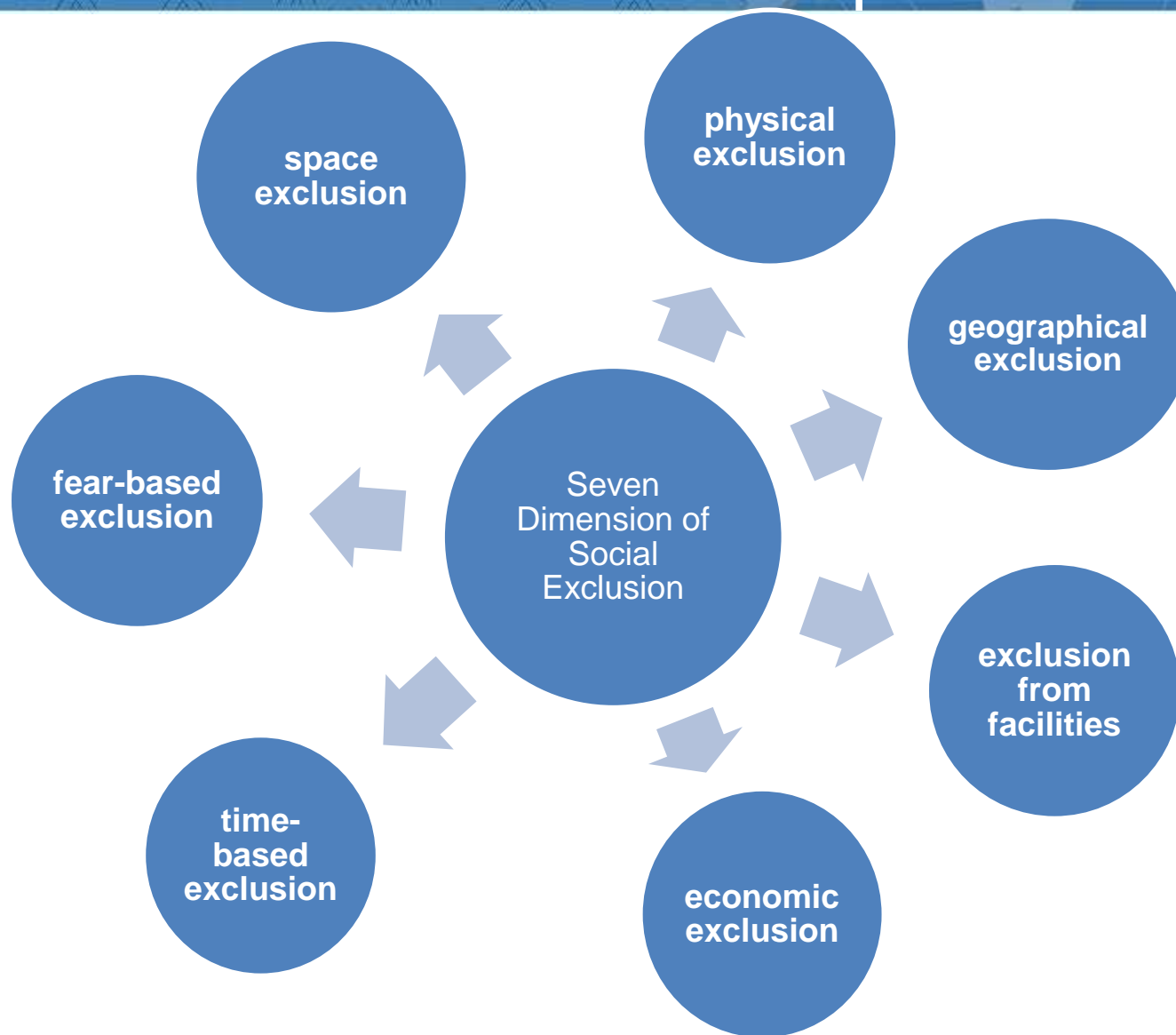


- **Social exclusion**

“is a process, which causes individuals or groups, who are geographically resident in a society, not to participate in the normal activities of citizens in that society.”

Paradigm Shift from mobility planning to Accessible Planning approach

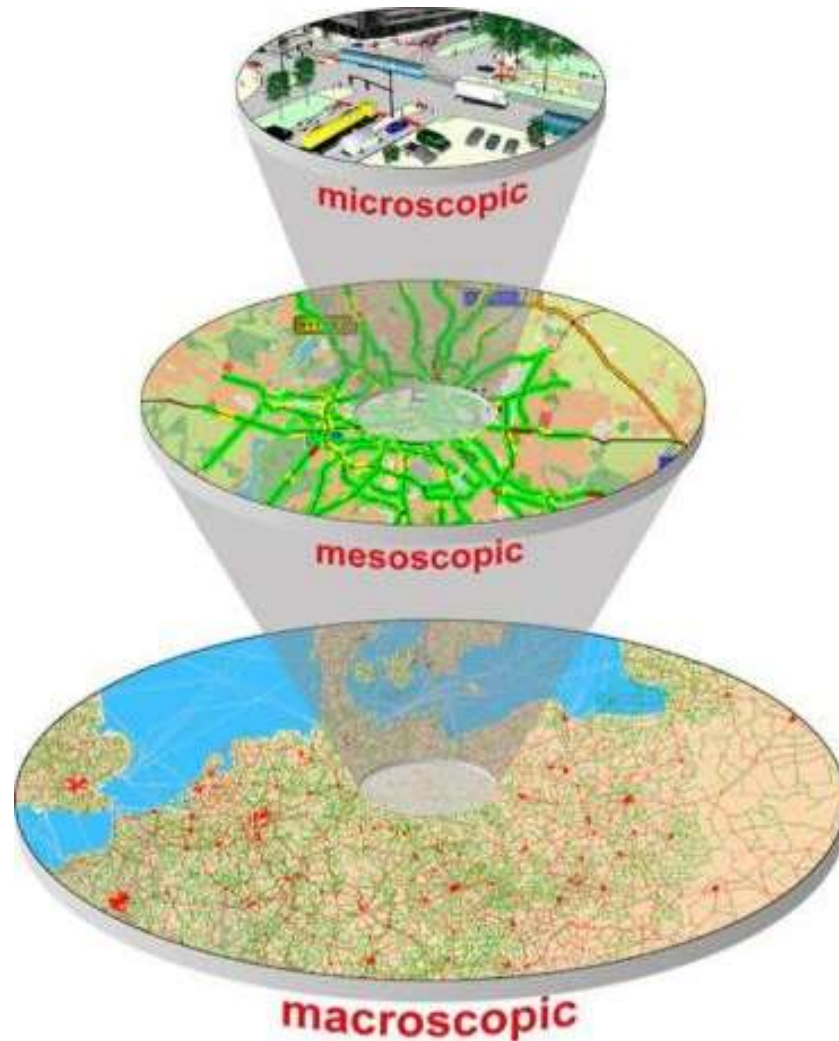
Seven categories of sources of exclusion connected to transport:



Accessibility Assessment Technique



- Transport Planning occurs at many different levels



- Accessibility planning
- Mobility planning
- Transport is a Separate sector of the economy
- Improvement of transport is justified only if serves other purpose
- Each mode of Transport cannot be planned separate

Distinguishing between Accessibility And Mobility



- **'Traffic'**: in this perspective vehicle movement and speed are beneficial; congestion or inadequate roads are seen as the problem.
- **'Mobility Planning'**: in this perspective it is the efficient movement of people and goods that is seen as beneficial or as they key aim of policy. This is much wiser than a traffic focus because at least it helps move attention to more efficient ways of moving people and goods. This would put a high priority on collective modes of transport (eg buses, rail).
- **'Accessibility'** or an 'access focus': In this perspective it is the ability to REACH opportunities that is beneficial, not movement itself. In remote rural contexts gaining access to services, goods and contacts will often require a lot of mobility. However, in many urban contexts accessibility might involve very short trips. Policy to enhance accessibility might actually require that we reduce traffic or even reduce the need to travel (or reduce mobility).



“Mobility” refers to the movement of people and goods. This recognizes both automobile and transit modes, but still assumes that movement is an end in itself, rather than a means to an end. It tends to give little consideration to nonmotorized modes or land use factors affecting accessibility.

- A mobility perspective defines transportation problems in terms of constraints on physical movement,
- Favours solutions that increase motor vehicle system capacity and speed, including road and parking facility improvements, transit and ridesharing improvements, high-speed train, aviation and intermodal connections.
- It gives little consideration to walking and cycling except where they provide access to motorized modes, since they represent a small portion of person-miles.



Accessibility (or just access) refers to the ability to reach desired goods, services, activities and destinations (collectively called opportunities). Access is the ultimate policy goal of most transportation, except a small portion of travel in which movement is an end in itself (jogging, horseback riding, pleasure drives), with no destination.

- This perspective assumes that there may be many ways of improving transportation, including improved mobility, improved land use accessibility (which reduce the distance between destinations), or improved mobility substitutes such as telecommunications or delivery services.
- Accessibility reflects both mobility (people's ability to travel) and land use patterns (the location of activities). This perspective gives greater consideration to non-motorized modes and accessible land use patterns.
- Accessibility tends to be optimized with multi-modal transportation and more compact, mixed-use, walkable communities, which reduces the amount of travel required to reach destinations.

Assessment Transport Accessibility



Access is relatively difficult to measure because it can be affected by so many factors. For example, access to employment is affected by the location of suitable jobs, the quality and cost of travel.

Transport Accessibility is evaluated based on the time required to reach opportunities.

- **Several methods have been proposed/used essentially based on:**
 - **Analytical calculations of the accessibility of people to “opportunities” (work, facilities/services, leisure)**
 - Numerous accessibility measures/indicators exist. Specialized GIS-based software available (Accession by Basemap),
 - **Household surveys on the mobility problems faced by interviewees.**

UK DfT Accessibility Indicators



% of a) pupils of compulsory school age; b) pupils of compulsory school age in receipt of free school meals within 15 and 30 minutes of a primary school and 20 and 40 minutes of a secondary school by public transport

% of 16-19 year olds within 30 and 60 minutes of a further education establishment by public transport

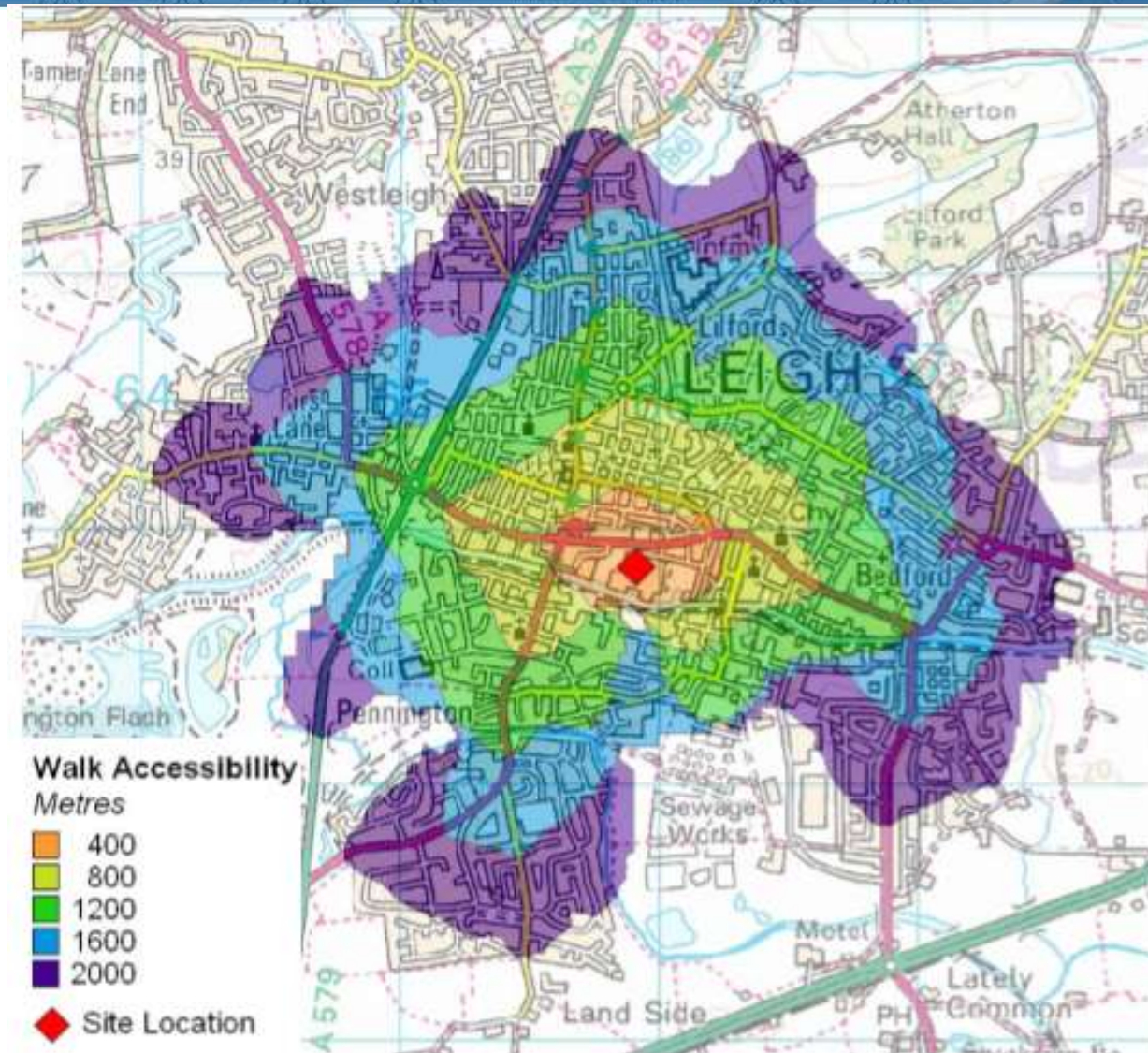
% of a) people of working age (16-74); b) people in receipt of jobseekers' allowance within 20 and 40 minutes of work by public transport

% of a) households b) households without access to a car within 30 and 60 minutes of a hospital by public transport

% of a) households b) households without access to a car within 15 and 30 minutes of a general practitioner by public transport

% of a) households; b) households without access to a car within 15 and 30 minutes of a major shopping area by public transport

Walking Accessibility Indicator



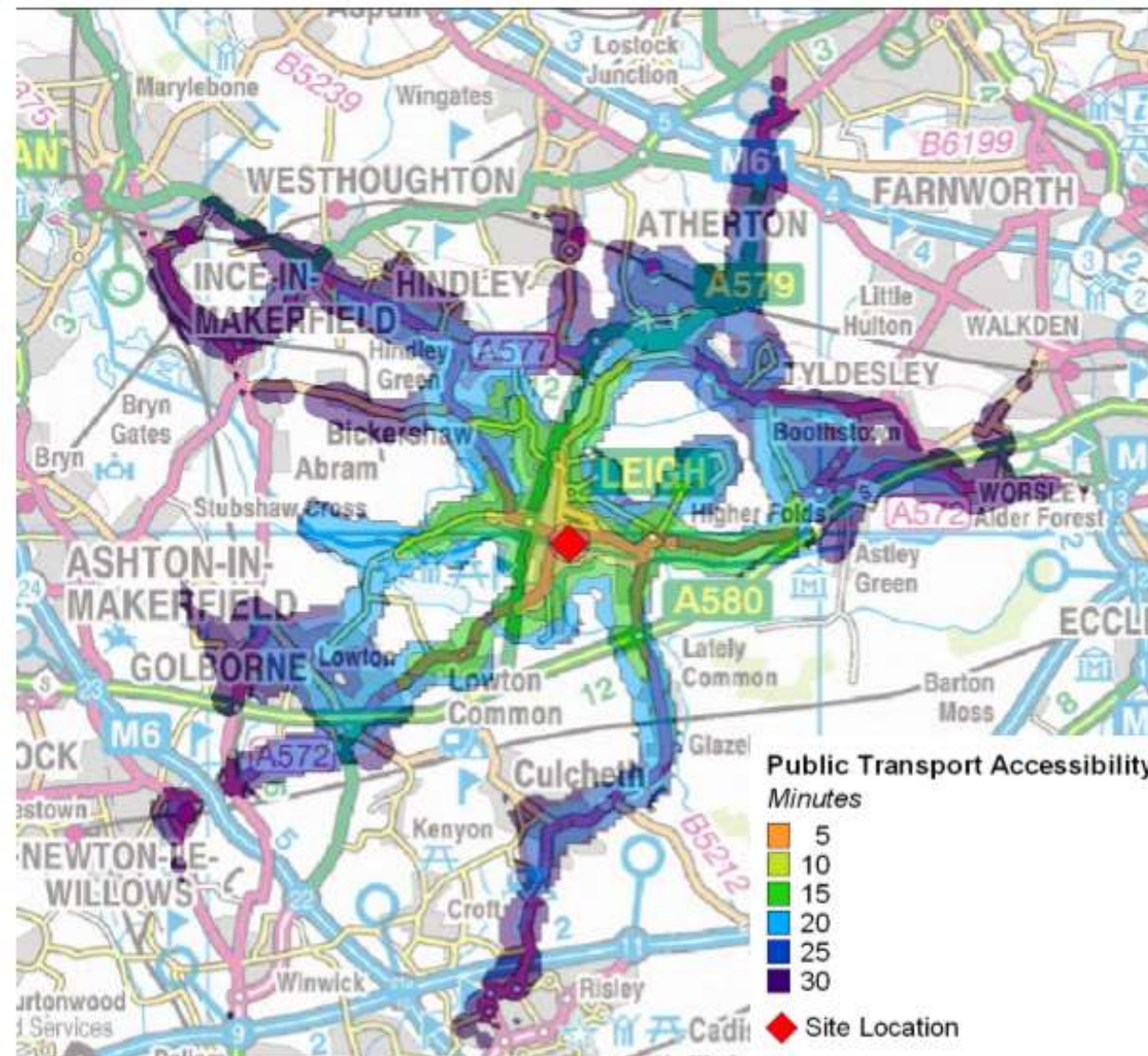
Proportion of people within 2km of a

- School,
- hospital,
- paved road
- Markets
- etc

Public Transport Accessibility Indicator



Highlights Areas inaccessible by public transport (Buses)



Key Policy Measures Based on Accessibility Planning



- Set Accessibility benchmark indicators
- Make private sector to contributions
- Local authorities to implement the policy
- Assess development based on transport Accessibility

Transport Assessment Transport Modelling in 3D



Stage 1 - Assessing the Travel Characteristics of a Development

Stage 2 - Influencing Travel to the Development

Stage 3 - Assessing the Travel Characteristics of a Development

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- Transport-related social exclusion clearly underpin transportation planning – mainly from the UK, Australia, and Canada.
- Accessibility is the ultimate goal of most transportation
- Therefore, access is an ultimate policy goal of most transportation



THANK YOU

For your attention!

شكرا والسلام عليكم

