Implementation strategies: implementation planning

Lesson

Learning Objectives

Over the next course you will learn how to:

- **Develop supporting measures through an option generating tool**

- **Build a spatial clustering and temporal sequencing of measures (implementation timeline)**

Implementation strategy concept

- **Part A: Implementation Planning** – a recommended process for planning measure implementation in a sequential series of four steps, to produce a list of core measure packages, an implementation timeline and a spatial overview of implementation. Combined, these elements form an Implementation Plan.
- **Part B: Implementation Management** – a flexible set of organisational approaches for managing measure implementation.
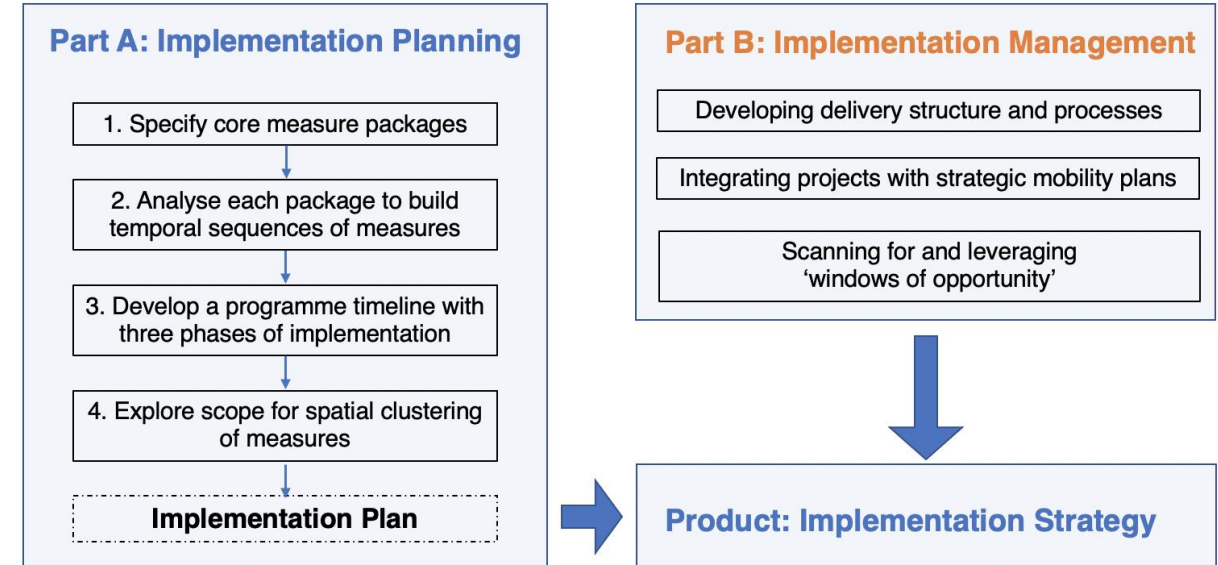
The **end product is an Implementation Strategy,** with the core contents of the Implementation Plan produced through the Part A process, complemented by potential description of approaches drawing on Part B.

Part A: Implementation Planning

1. Specify core measure packages

2. Analyse each package to build temporal sequences of measures

3. Develop a programme timeline with three phases of implementation

4. Explore scope for spatial clustering of measures

Implementation Plan

Part B: Implementation Management

Developing delivery structure and processes

Integrating projects with strategic mobility plans

Scanning for and leveraging 'windows of opportunity'

Product: Implementation Strategy

Step 1: Specifying core measure packages

The first step of developing an Implementation Strategy is to specify the measures to be implemented as holistic packages of the most important 'core' measures and 'supporting' measures that provide positive synergies or make the implementation of the core measure technically/practically feasible

Step 1 involves three activities:

- Defining individual core measures
- Identifying supporting measures
- Finalising core measure packages

1.1. Defining individual core measures

> A core measure is one of the 'key' or most significant urban mobility measures to be implemented in a city.
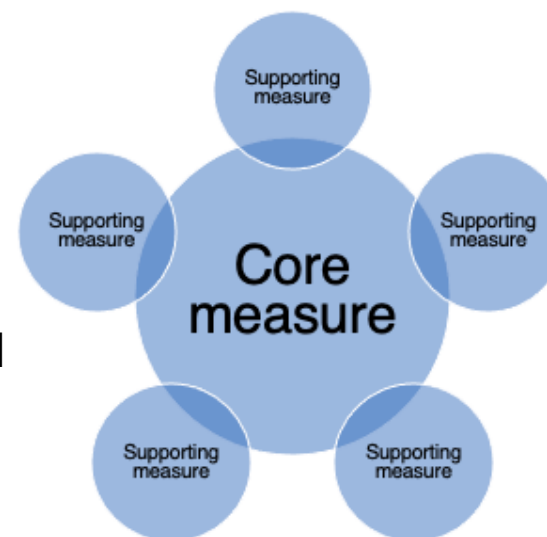
If a city has developed a SUMP, measures will already have been subject to careful consideration and described in some detail to enable appraisal, and then incorporated into integrated measure packages seeking to provide a balanced mix of measure. Thus, where a SUMP already exists, then the core measures for an Implementation Strategy can simply be defined by analysing what the 'key' measures are within finalised measure packages (defined in Step 7 of the SUMP cycle) – cities will have an intuitive feel for what the most significant planned interventions are.

Most 'core' measures are likely to benefit from the introduction of a number of 'supporting' measures that make implementation technically/feasible possible, or that provide positive synergies by enhancing the effectiveness of core measures

In order to identify synergies, a matrix was developed within SUMP PLUS that can enable cities to brainstorm by following a used and tested methodology. The rows of the matrix describe four types of policy measures (physical, pricing, regulation and information) and the columns six areas of implementation (from public/collective transport to land use and public space).
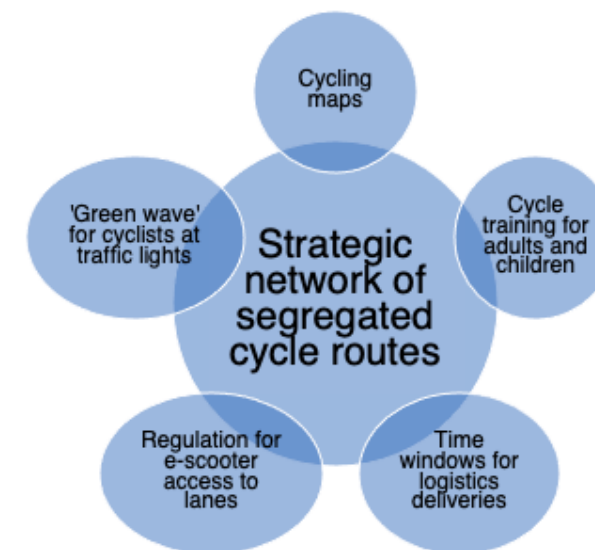
Example

Core measure: Bus with High Level of Service

Components of 'core' measure
Potential 'supporting' measures

TYPE OF MEASURE	CORE MEASURE	SUPPORTING MEASURES				
	Public/ Collective transport	Walking/ Cycling/ Micro-mobility	Private vehicle ownership/use	Urban Freight and Logistics	Traffic/Kerbside Management	Land Use and Public Space
Physical (infrastructure, operations)	• Bus lanes and signal priority • Bus shelters and seating • CCTV to improve on-board safety	• Improved infrastructure in bus stop catchment area; • Safer crossings to stops	• Park & Ride provision at key stops/interchanges	• E- lockers at major bus interchange	• Kerb build-outs and raised platforms at bus stops to enhance boarding	• Concentrate development around major interchanges • New public spaces
Pricing (fares, charges, incentives)	• Payment system with pre-boarding or quick on-board payment				• Higher parking charges in the city centre	
Regulation (space, time, type)	• Electric vehicles • Low-floor buses	• Designate cycle and e-scooter parking spaces close to bus stops	• Designate city centre as ultra-low emission zone	• Time windows for kerbside goods deliveries along routes	• Camera-based enforcement of bus lanes • Restrict parking along bus corridors	• Planning for provision of health and library services close to bus interchanges
Information (ICT-enabled, marketing)	• Dedicated website • Real-time information displays at bus stops	• On-street signage to bus stops	• Campaign targeting car commuters to switch to bus	• Awareness campaign about bus lane rules		

1.3. Finalise core measure packages

To complete Step 1, an overview description – for example, a list – of core measure packages can be assembled. In line with the general structure in the table below, this includes several core measure packages, each consisting of one core measure and several supporting measures (following the example of the table before…)

Core measure package	Core measure component	Supporting measures
Package 1 – Improving public transport infrastructure [short description]	Core measure component 1: Bus lanes and signal priority Core measure component 2: Bus shelters and seating Core measure component 3: Real time information and ticketing Etc…	Supporting measure 1.A: Safer crossings at stops Supporting measure 1.B: Designated e-scooters and shared mobility parking spaces near public transport stops Supporting measure 1.C: E-lockers at major bus interchanges Supporting measure 1.D: On street signage Etc…

Once the set of core measure packages has been defined, the next step is to determine how implementation will be phased over time. This is referred to as 'temporal sequencing' – in what order, measures and other actions will be taken.

There are two factors to take into account for measure sequencing:

- *Pre-requisites that make measure implementation possible*: actions that have to be taken before other actions – 'what comes first' due to interdependencies

- *Strategic and pragmatic considerations* for 'what comes first'

Pre-requisites include both supporting measures (physical, pricing, regulatory, or information) and enabling actions (institutional, financial) that need to be implemented *prior to* implementation of a core measure.

- **Physical pre-requisites**, e.g. the need to widen a road to in order to implement a bus priority lane without removing general traffic capacity; or, to install electric charging points before encouraging local EV purchase. Some of these pre-requisites will include *supporting measures* identified within Step 1.

- Ensuring adequate **enforcement mechanisms** are in place for measures involving regulations, e.g. camera-based enforcement being available prior to implementation of bus priority lanes or speed limits.

- **Enabling actions** are actions that are necessary to enable implementation of policies, but are not measures in themselves. This includes actions to affect **institutional change** (e.g. new institutional capacities, modified institutional frameworks, acquiring new local powers) or **secure financial resources** through new funding and financing mechanisms.

In addition to the effectiveness-related considerations discussed above, measure sequencing can also be approached from a strategic and pragmatic perspective. Core and supporting measures can be analysed by considering the following factors:

- **Measure Maturity Level** – how mature is the measure (next slide)?
- **Cost of implementation** – is the measure potentially low-cost or inherently expensive? This includes considering whether initial implementation using temporary, low-cost materials is possible and appropriate (see section 3.3.4) and in general, trying to be creative in the face of resource constraints.
- **Feasible speed of implementation** – how quickly can the measure be implemented?
- **Reversibility and adaptability**– how reversible or adaptable is the measure, once implemented? Can the measure be implemented as a temporary intervention (e.g. trial/pilot) or does it require relatively permanent intervention? Is it a measure that can be implemented with 'no regrets', or may it potentially create a path-dependency?
- **Public acceptability** – how controversial is the measure, is there sufficient political momentum for the measure to be implemented?

Components of temporal sequencing
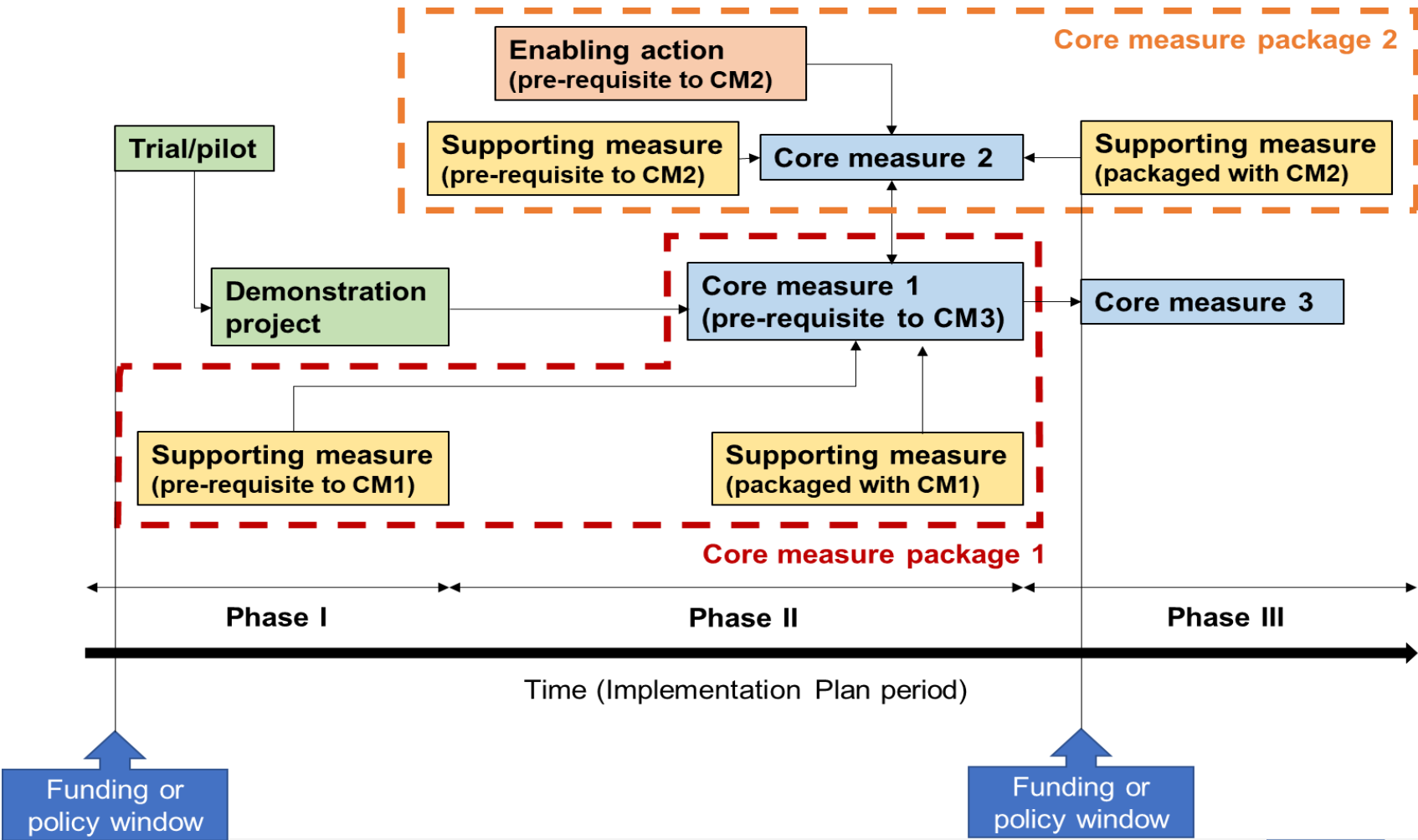
# Indicative timing for each core measure package

Once the three factors described above have been considered, an indicative timeline for each core measure package can be constructed. This will need to be adjusted once the implementation of this package is considered in relation to other core packages within the Implementation Plan. Information could be collated within an Excel spreadsheet, e.g. using Gantt charts to indicate sequencing.

Measures that are implemented first, because they are:

➢ Low Maturity Level – testing novel measures
➢ Low cost / resources are available
➢ Quick to implement: do not involve permanent infrastructure or construction (e.g. regulatory, information measures)
➢ Reversible and adaptable, thus not requiring extensive appraisal
➢ Can be implemented through temporary intervention (trial/pilot)
➢ Have a higher level of public acceptability

Measures that are implemented later, because they are:

➢ High Maturity Level – refinement, further appraisal has created confidence
➢ Expensive / resources not available
➢ Slow to implement: involve infrastructure and construction
➢ Non-reversible, at least not easily; cannot be implemented through temporary intervention
➢ Have lower levels of public acceptability, so momentum must be built

**Sequence of implementation**   **Time**
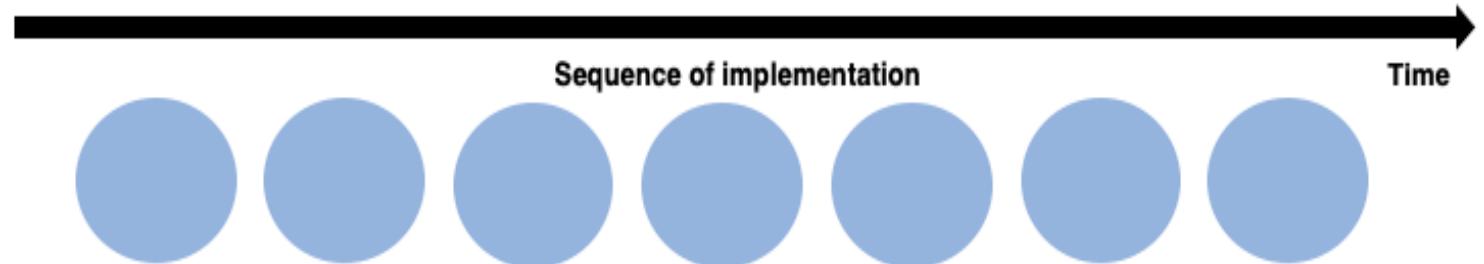
Step 3: Develop a programme timeline with three phases of implementation

Across the programme of core measure packages, we divide the 5 to 10-year implementation period into three phases

- **Quick wins & experimentation** – an initial, shorter phase where momentum starts to be built through 'quick wins', and of testing new solutions/refining measure design through trials. This will include pre-requisites and smaller supporting measures that are quick to implement. Activities to prepare for Phase II will also need to be undertaken, e.g. planning of major projects.

- **Build & upscale** – a 'middle', longer phase where larger-scale (typically 'core') measures and investments, that have taken more time to prepare for, are implemented, including physical construction of infrastructure. During this phase, measures that were tested in Phase I are either integrated into core measure design or upscaled. Momentum continues to build, as significant new travel options are made available to people in the city. Implementation of 'quick win' measures may continue, if available.

- **Consolidate & leverage –** a final phase, where the focus is on consolidating what has been achieved through further enhancing effectiveness of measures, including synergistic supporting measures. This includes in particular information-oriented measures seeking to promote new infrastructure and services implemented in Phase II. The momentum that has been built is leveraged to implement measures that were controversial initially. Towards the end of the period, built-up momentum allows for a push towards a more radical change in policy, resulting in achievement of an ambitious policy milestone or interim target.
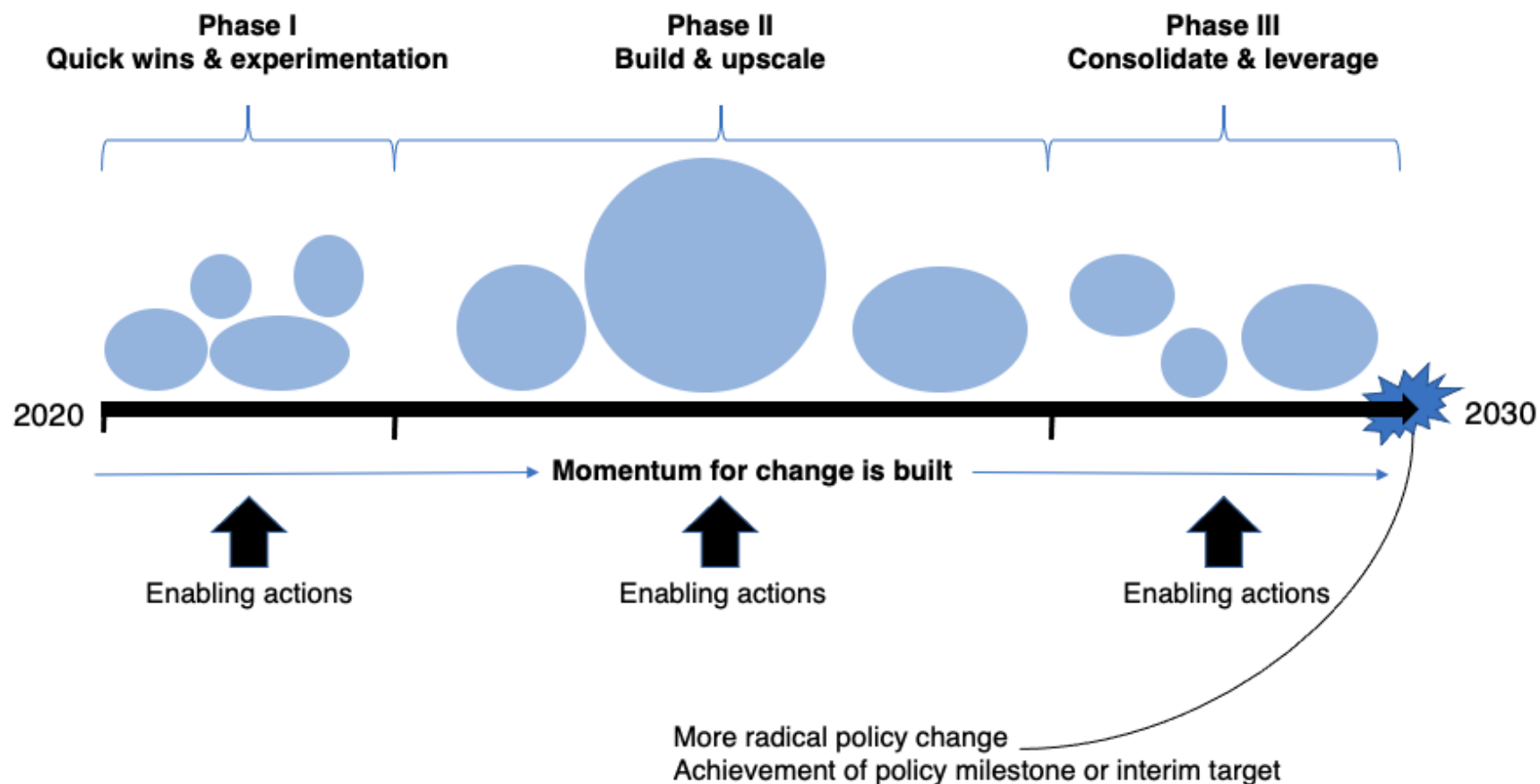
Step 4: Explore scope for spatial clustering of measures

Once implementation has been planned over a time period, a further step is to explore implementation in relation to urban space, by considering the scope for spatial clustering of different measures. A cluster means a group of similar things positioned or occurring closely together. Spatial clustering will definitely apply to a core measure and its supporting measures, but clustering of different core measures might also be relevant. The spatial clustering in this section is designed to promote a space-based thinking approach in order to organise existing or possible measures. Spatial considerations should be taken into account also at the beginning of the analysis of any transport related measure.
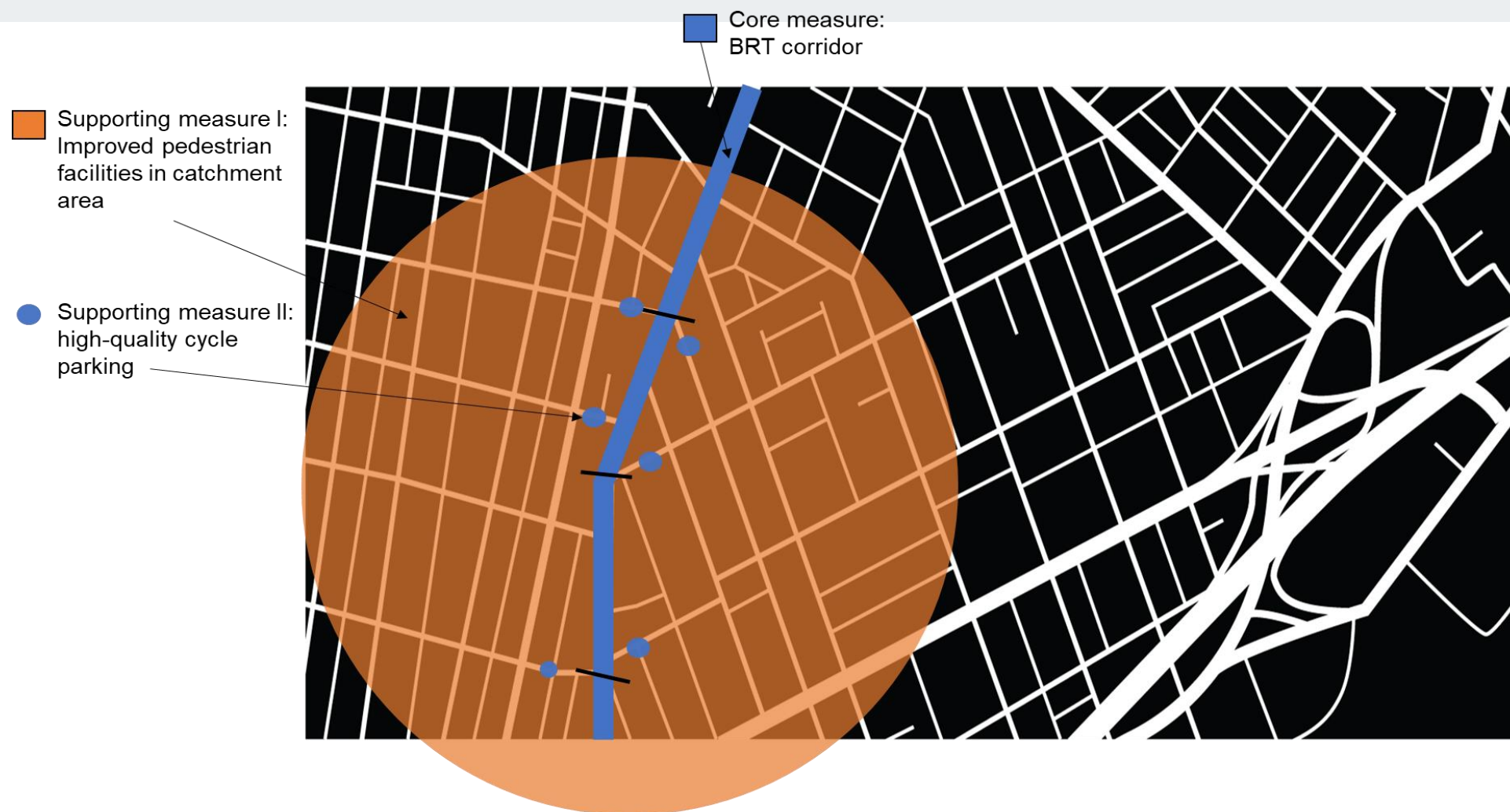
Some measures naturally apply across a whole administrative area (e.g. revised fare tariffs for public transport), but most are implemented in specific areas, even where they are planned as part of an extensive programme.

There are four spatial aspects to consider:

- What are the appropriate spatial units for implementation?
- How are priority areas for implementation selected?
- What benefits can be derived from spatial clustering of measures?
- How to manage spatial roll-out, over time?

Spatial clustering – the concept

Core measure:
BRT corridor

Supporting measure I:
Improved pedestrian
facilities in catchment
area

Supporting measure II:
high-quality cycle
parking

The type of spatial unit used for implementation will depend on the type of core measure, but relevant units include (see Figure 6.15):
- Networks: for rail, bus or cycle infrastructure
- Corridors: e.g. for bus priority schemes or 'green waves' for smoothing traffic flow
- Zones, usually based on technical criteria, to address a specific problem: controlled parking or low emission zones, low speed limit zones

For example, for a core measure of bus service upgrades, this could be achieved through a network approach, a corridor approach; or by focusing on introducing low-emission vehicles within a particular zone.

Networks

Zones

Corridors

Neighbourhood
(Barcelona superblock)

Neighbourhood
(Walthamstow, London)

Acupuncture spots
(Design for London – 100 Public Spaces)

Other types of spatial approaches include:

- Neighbourhoods: for community-level initiatives, such as the Barcelona 'superblocks', or low-traffic neighbourhoods (e.g. Walthamstow 'Mini-Holland' in London)

- 'Acupuncture' spots: small interventions dotted around a city, such as the development of public spaces through dispersed intervention, 'shaving off' vehicle road space for reallocation to public life. Examples include Design for London's 100 Public Spaces programme and the New York City Department of Transportation's Public Plaza Program.

Networks

Zones

Corridors

Neighbourhood
(Barcelona superblock)

Neighbourhood
(Walthamstow, London)

Acupuncture spots
(Design for London – 100 Public Spaces)

Creating a visual overview of implementation: integrating temporal and spatial dimensions: Creating a series of maps and diagrams that provide a clear visual overview of what areas of the city, or using what spatial units, your measures will be implemented, will add value to your Implementation Strategy. It will be particularly useful to provide a **clear picture of how the Implementation Plan will be rolled out, over time.**

The end product of the Part A process is an Implementation Plan, containing:

- a list of core measure packages
- an implementation timeline
- a spatial overview of implementation