



**Resilient Urban Development
Saint Vincent and the Grenadines**

Urban Transportation Planning

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Technical Workshop for Arnos Vale and Kingstown

March 20 – 21, 2019 | NIS Building | Kingstown, SVG

Outline

1. Key points from Day 1
2. What is the role of transport in urban regeneration?
3. What are the opportunities for Kingstown?

1

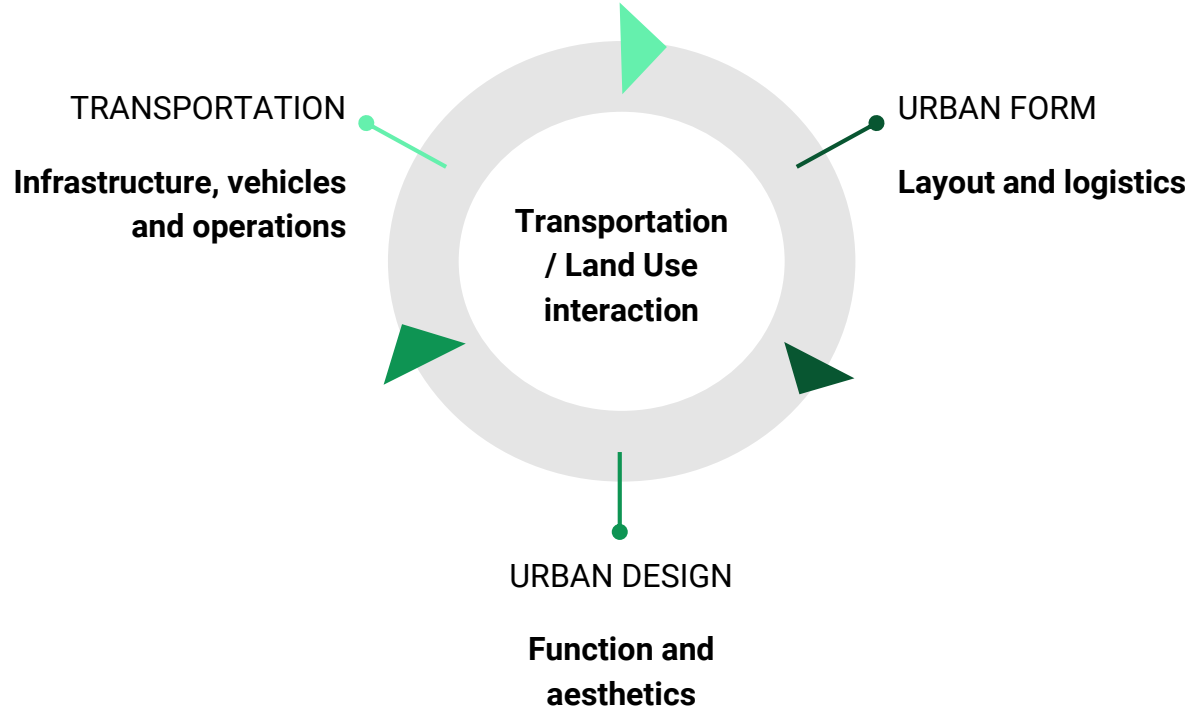
Key points from Day 1

Transportation planning is the practice of balancing demand for and supply of transportation resources, for the present and the future.

The cycle

Urban form and urban design can support and inform transportation decisions.

Transportation decisions can also support and inform urban form and urban design.



Techniques

Demand management techniques

- Localise
- Incentivise/Disincentivise
- Virtualise
- Educate

Supply management techniques

- **Build**
- **Buy**
- **Organise**
- **Prioritise**

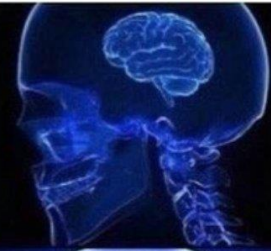
2

What is the role of transport in urban regeneration?

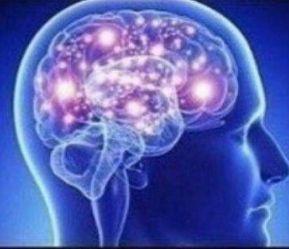
Thinking big

- Don't get stuck on symptoms
- Don't think only of driving
- Don't be bound by the city limits
- Don't think of the system as fixed

Congestion
and Parking



Access and
Mobility



Networks
and Options



Proximity
and Place





Infrastructure (Streets and public spaces)



Existing: 60km/h



Reconstruction: 40km/h

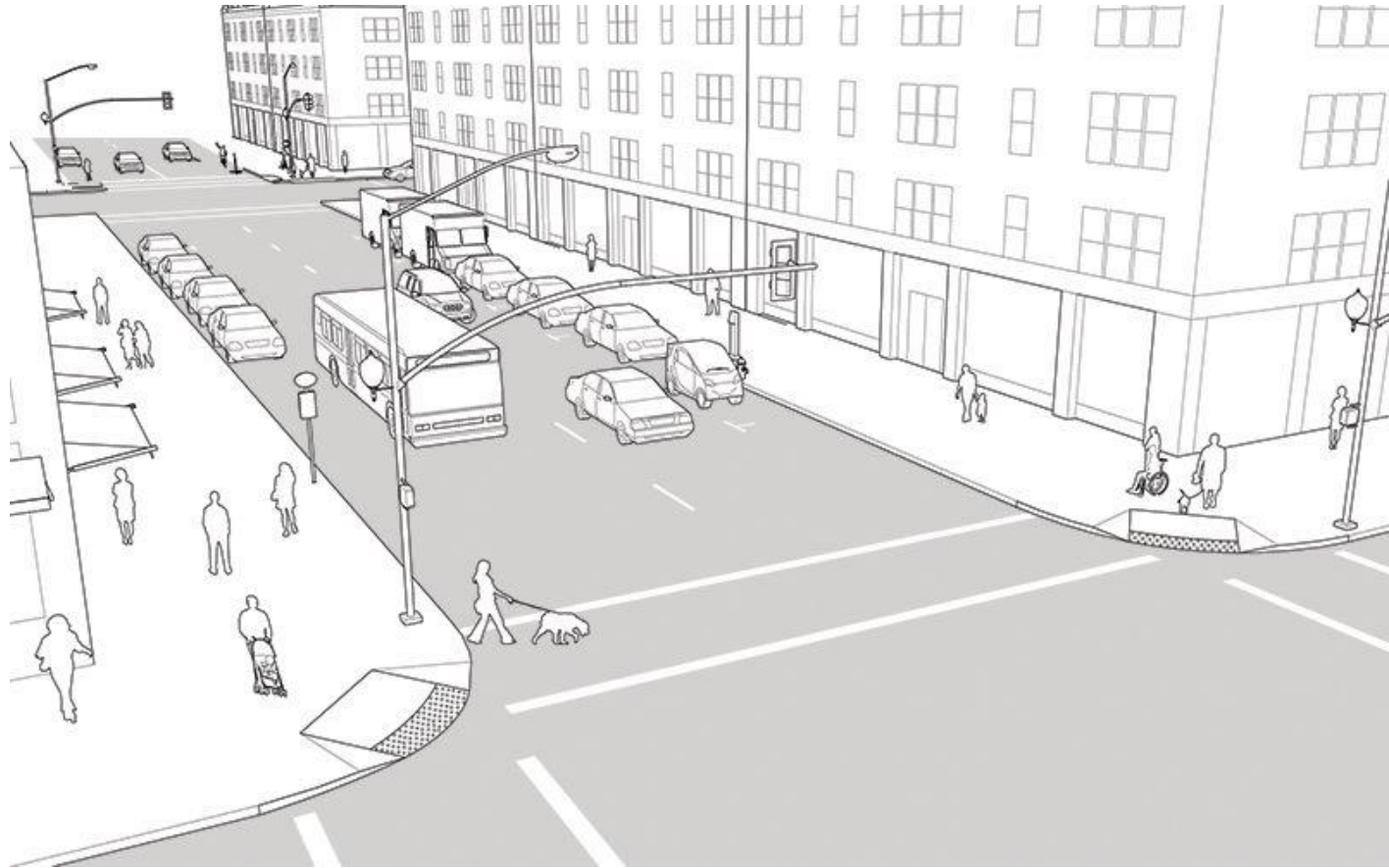


- Invite Street Activity
- Change Street Geometry
- Create Cycle Facilities
- Add Seating
- Add or Improve Pedestrian Crossings
- Add Energy-Efficient Lighting
- Improve Signals
- Enhance Enforcement
- Organize Transit
- Integrate Public Artwork
- Connect Walking Networks
- Upgrade Materials
- Reduce Speed Limits
- Add Green Infrastructure
- Provide Street Furniture
- Include Wayfinding
- Activate Ground Floors
- Provide Climate Protection

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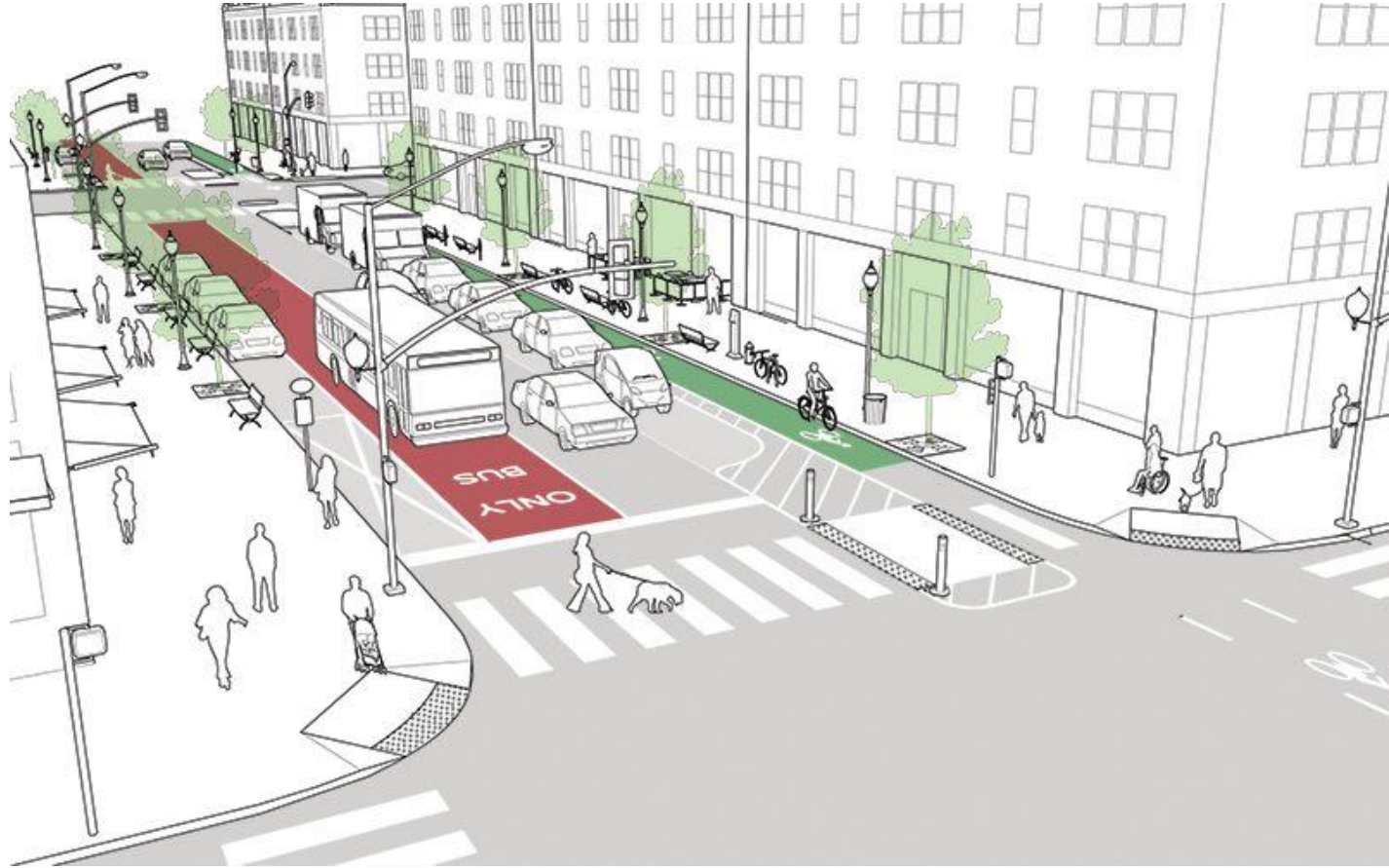
Existing

Existing conditions demonstrate how traditional design elements have had an adverse impact on how people experience the streetscape.



Interim

Striping and low-cost materials can realize the benefits of a full reconstruction in the short term, while allowing a city to test and adjust a proposed redesign.



Reconstruction

Full capital reconstructions can take 5–10 years. A complete upgrade might include new drainage and stormwater management provisions, raised bikeways, wider sidewalks, and traffic calming elements.



Strøget, Copenhagen

Intervention: Pedestrianisation

Location: Central Copenhagen, Denmark


Length: 1.15 km (0.7 mi)

Right-of-Way: 10–12 m

Context: Mixed-use
(Residential/Commercial)




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Vehicles

(Densifying, electrifying, shrinking and de-
motorising)



Densify



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Electrify



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Shrink



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De-motorise



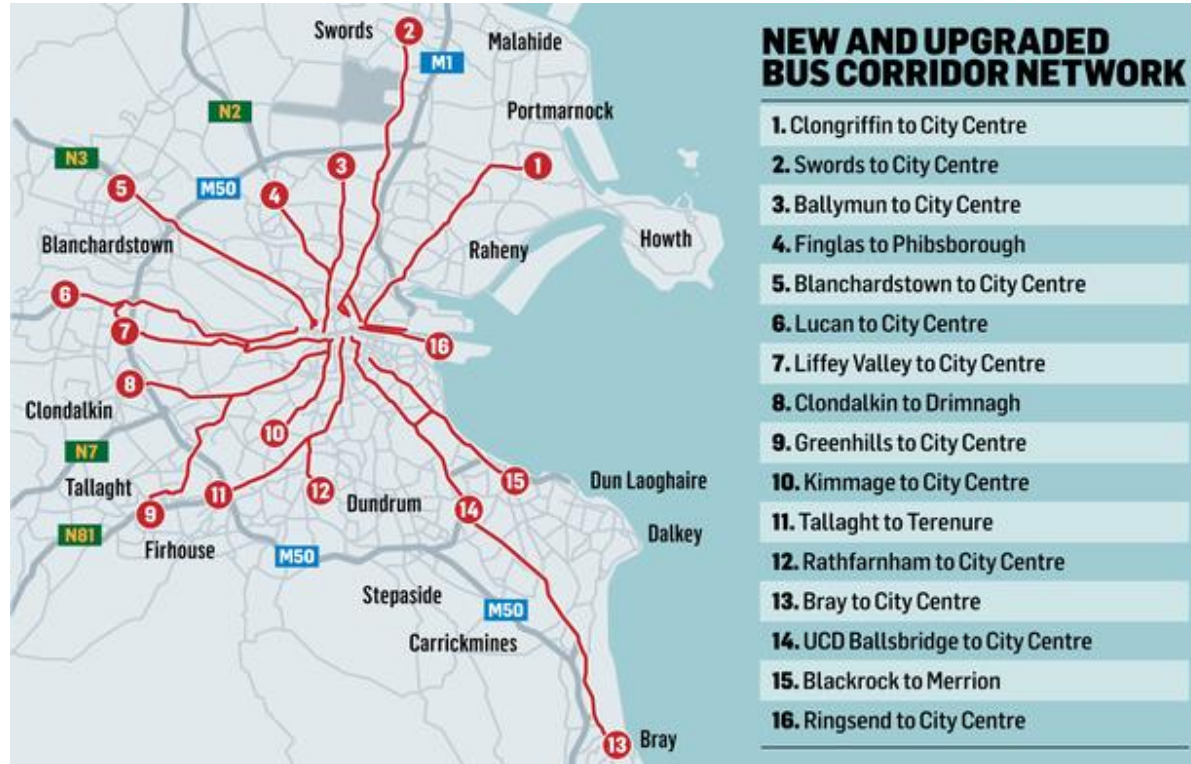
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Dublin Bus Connects

Intervention: Increased and improved public transportation service

Location: Dublin and suburbs, Ireland

Changes: improved routing, increased frequency, better connections with other transport services, revised fare structure, bus lanes, bus stops/shelters, improved information



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Operations (A better balance)

Regulation and administration

Traffic management

Parking management

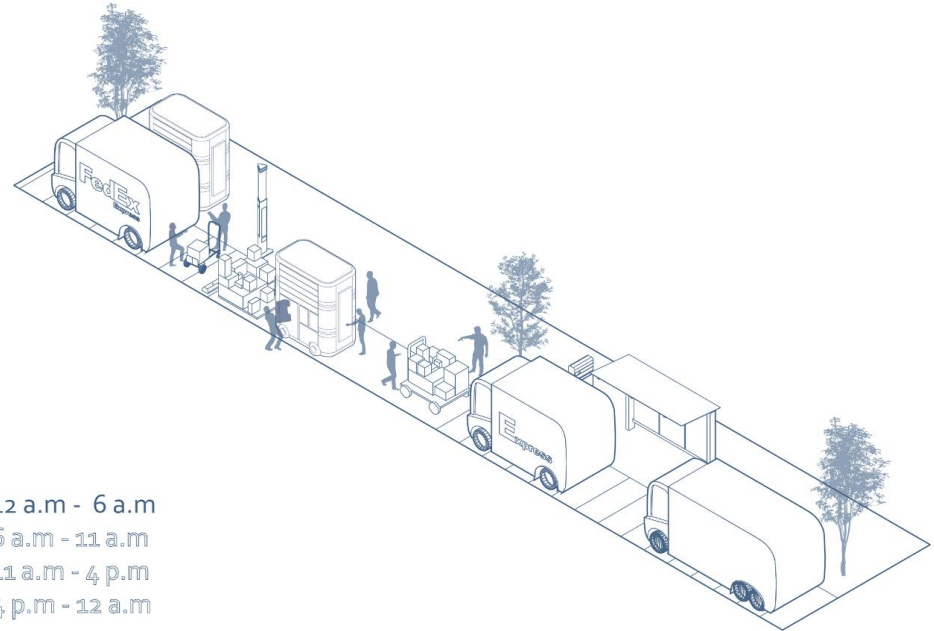
Time and day restrictions

Vehicle type restrictions

Speed restrictions

Real-time information

Dynamic wayfinding



London Congestion Charge Zone

Intervention: Road pricing

Location: Central London

Hours: Mon-Fri 7 AM - 6 PM

Special circumstances: discounts and exemptions available for certain categories

Cost: £11.50/day in advance £14/day next day

Payment: online/telephone

Enforcement: Fixed penalty notice



3

What are the opportunities for Kingstown?

System assessment: what do we have?

The Unique Demand Profile (UDP)

1. Topography (constraints)
2. Development (demand)
3. Infrastructure (supply)

Topography

- Constrained in size by the mountains and the sea
- 'Greater Kingstown' is a mountainous region
- Rivers (North River and South River) flowing through at each end of the city
- Green spaces outside of the city centre/CBD



Development

- Cruise ship terminal
- Ferry terminal
- Cargo port project
- 9 Steps
- Government/administrative offices
- Commercial retail and food/beverage activity
- Street vending
- Traditional architectural details
- Little to no direct access to waterfront



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Infrastructure

- Private cars
- Private buses
- Two-lane mountain roads, little to no room for widening
- Bus Terminus in Kingstown
- Arcades
- Parking lots and on-street parking



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What are the possible transport interventions?



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Thank you!



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