



TRANSPORT
SCOTLAND
CÒMHDHAIL ALBA

Delivering for all

A guide to managing freight transport
in Scotland's urban centres

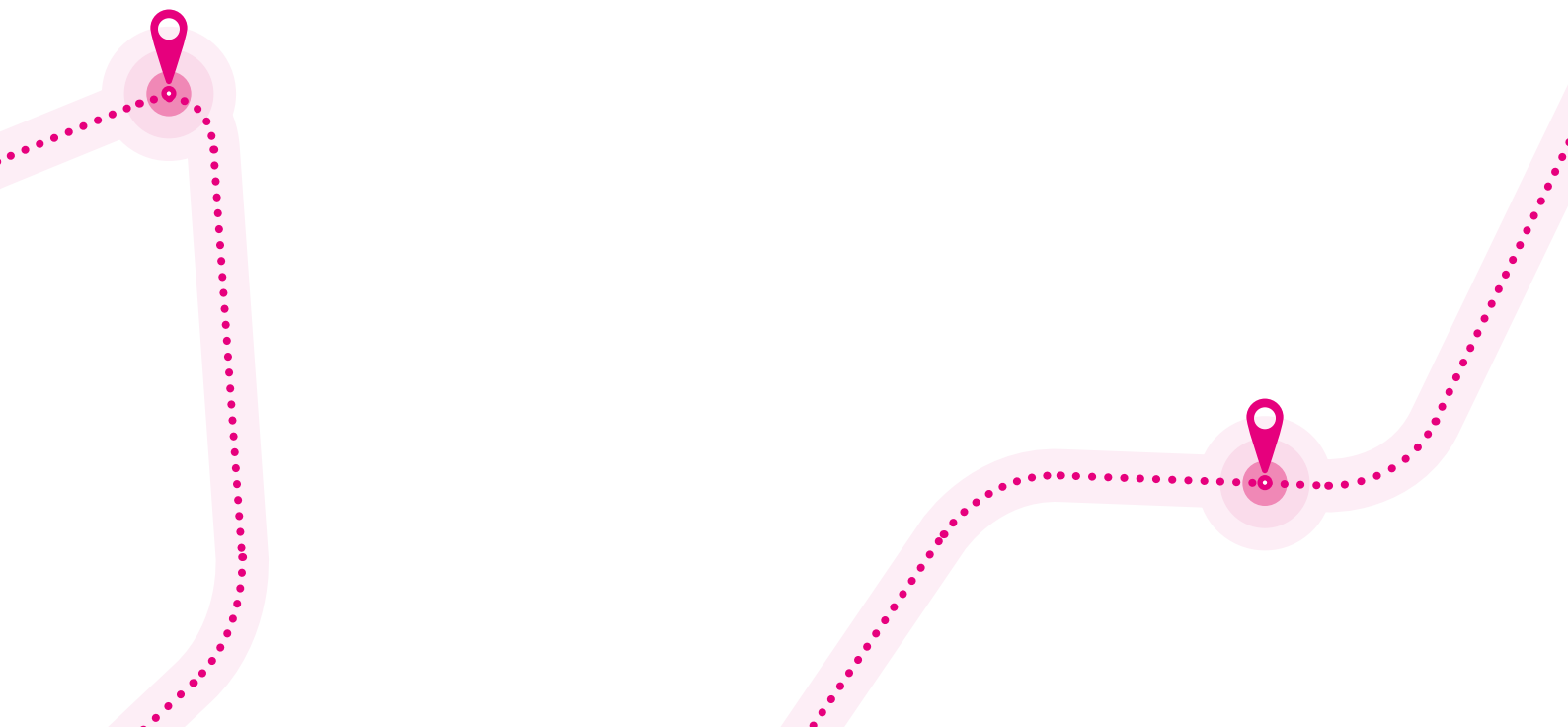
ScotFLAG Urban Freight Subgroup
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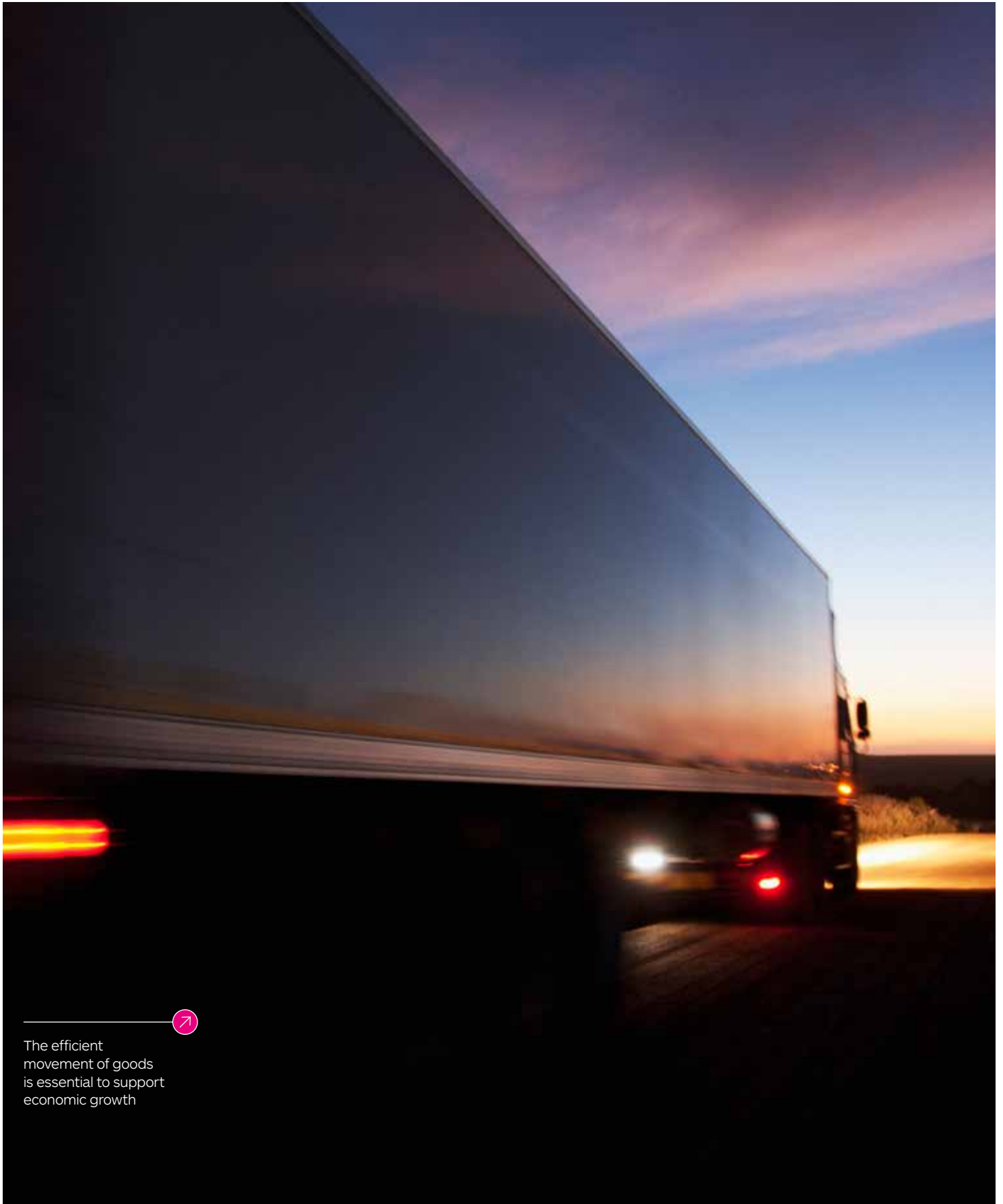
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The efficient movement of goods is essential to support economic growth



Our challenge is to enable the efficient and economic movement of goods in urban areas, whilst at the same time minimising its negative impacts.

Scotland's cities (and their regions) are growing. With this growth comes increasing demand for goods and services. The efficient movement of goods is essential to support economic growth and meet the needs and demands of people living, working and visiting, in urban areas.

But such transport movements also have costs – to congestion, to the environment, and to people (safety and noise).

Our challenge is to enable the efficient and economic movement of goods in urban areas, whilst at the same time minimising its negative impacts.

Urban freight transport and logistics involves many different stakeholders with many different interests, and all have a responsibility in helping to meet this challenge (e.g. local authorities, retailers, wholesalers, freight operators, developers, residents, shoppers and workers). Cooperation and collaboration between these stakeholders is needed to ensure we have urban freight transport systems that are commercially, environmentally and socially sustainable.

Urban freight transport is also very complex. The complexity means that there is no single, standard solution to tackling challenges: rather a range of options/actions stakeholders can take – the most productive of which will vary by location, and the specific freight transport challenges being addressed.

This Guidance aims to help local authorities, businesses and fleet operators choose what actions/interventions may work best for them by:

- ▶ Outlining the benefits, challenges and influencers of urban freight movements.
- ▶ Identifying roles and responsibilities of key organisations.
- ▶ Listing a range of possible options/actions.
- ▶ Sharing best practice and information from case studies.
- ▶ A flow chart to help with setting up a Freight Quality Partnership.
- ▶ A Delivery and Servicing Planning Toolkit.
- ▶ Contacts and useful links if you want to find out more.



Urban freight transport and logistics involves many different stakeholders with many different interests, and all have a responsibility in helping to meet this challenge...”

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FREIGHT IN THE CITY BENEFITS, IMPACTS AND INFLUENCERS



If Scotland's cities are the engines of our economy and its citizens the fuel, then freight transport is the oil needed to keep the engines running.

The efficient, and cost effective transportation of goods is essential, and **benefits** urban areas by:

- ▶ Supporting economic growth at a national, regional and local level.
- ▶ Servicing city centre commercial premises.
- ▶ Supporting wealth generating activity.
- ▶ Providing employment in its own right.
- ▶ Aiding competitiveness.
- ▶ Sustaining the lifestyles, and meeting expectations, of people.

But the transportation of goods brings **challenges**. In urban areas where space can be constrained, goods vehicles:

- ▶ Can both cause, and be the victims of, congestion.
- ▶ Cause environmental damage by impacting on air quality, and increased CO2 emissions.
- ▶ Pose increased risks for road safety – particularly where limited space is being shared with more vulnerable users such as cyclists and pedestrians.
- ▶ Cause noise disturbance to local residents.
- ▶ Incur costs for local authorities – signage, road surfaces etc.

What, why and how goods are moved in Scotland's urban areas vary, and is **influenced** by:

- ▶ The location and type of industries present.
- ▶ The supply chain structures of companies in these industries.
- ▶ The existing transport infrastructure.
- ▶ The location and extent of warehousing.
- ▶ The size and weight of goods vehicles permitted.
- ▶ Access and loading time restrictions.
- ▶ Road traffic conditions.
- ▶ Customer behaviour.

The quantity of goods that will be moved in, out and between our cities is likely to grow as our cities grow. The economic, environmental and social health of our urban centres depend on us finding ways to enable this movement to happen efficiently, whilst at the same time remove, mitigate or minimise its negative impacts.

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WHO IS INVOLVED?



Local Authorities influence how freight moves in the urban environment. They can influence change through:

- ▶ Vehicle access restrictions and low emission zones.
- ▶ Loading/unloading regulations.
- ▶ Signage and information provision.
- ▶ Enforcement.
- ▶ Traffic Management schemes.
- ▶ Infrastructure provision.
- ▶ Having freight distribution strategy in place for LA-generated goods movements.
- ▶ Effective communication and engagement with stakeholders across the supply chain.

Freight Transport Companies influence how freight moves in the urban environment. They can influence change through:

- ▶ Effective delivery planning.
- ▶ Load consolidation.
- ▶ Making deliveries outside peak hours.
- ▶ Improvements in fuel efficiency of vehicles.
- ▶ In-cab communications systems.
- ▶ Use of routing and scheduling software.
- ▶ Vehicle-type choice.
- ▶ Driver training.
- ▶ Effective communication and engagement with Local Authorities and customers.

Generators/Receivers of goods influence how freight moves in the urban environment. They can influence change through:

- ▶ Having efficient Delivery and Servicing Plans in place.
- ▶ Considering accepting deliveries outside peak hours.
- ▶ Collaborating with other businesses to consolidate deliveries.
- ▶ Communicating and working effectively with delivery companies to identify, and mitigate, local/location specific delivery risks and restrictions.
- ▶ Effective communication and engagement with Local Authority and freight transport provider(s).

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PLANNING FOR DELIVERIES BEST PRACTICE



Failure to anticipate the needs of freight vehicles can have impacts on traffic flow and people using the street including disabled pedestrians.

Many problems with deliveries can be avoided at the planning stage. This is especially important where traditional use is changing, for example proposals for new metro grocery stores, hotels and restaurants.

In Scotland, there are examples developers or planners giving insufficient consideration to freight issues. This has caused problems such as dangerous manoeuvres by freight vehicles in confined spaces and illegal parking both on the carriageway and pavements. Failure to anticipate the needs of freight vehicles can have impacts on traffic flow and people using the street including disabled pedestrians. To address this situation councils need to have policies which:

- ▶ Strongly encourage off-street loading via dedicated service yards or bays to the rear of the premises.
- ▶ Ensure that where there is no alternative to on street loading, this can be done safely and efficiently without obstructing pavements or blocking carriageways. A key factor is the proximity and availability of marked loading bays compatible with the likely size of delivery vehicle.
- ▶ Consider the acceptability impact of night deliveries, and how these can be managed.
- ▶ Ensure arrangements for deliveries are compatible with waste and recycling provisions, which may have their own access restrictions.

Planners need to seek advice from roads and transport officers on whether delivery pattern for the type of development is compatible with any current restrictions on loading bays. For example, many loading bays are not available during the morning and evening peak whilst being used as bus lanes.

If the existing provision of loading bays is inadequate consider whether consent can be conditional on the provision of new bays or variance of existing restrictions.

Work with groups such as freight quality partnerships, business improvement districts and traders associations to develop clear policies is essential. This is important as the delivery requirements of certain types of new business may be incompatible with maintaining the environmental quality and safety of certain streets. Planning authorities can play a positive role by identifying alternative uses with less demanding delivery requirements.

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DESIGNING STREET IMPROVEMENT PROJECTS



When planning and transport authorities are considering improvements to streets, such as new cycle lanes or access restrictions, consultation with businesses is essential.

When planning and transport authorities are considering improvements to streets, such as new cycle lanes, access restrictions, or low emission zones, consultation with businesses is essential. The loss of loading bays should be avoided, or acceptable alternatives provided. This will discourage illegal parking in cycle ways. As cycle ways offer a good unloading surface bollards may also be required to ensure loading bays are used, especially on busier streets.

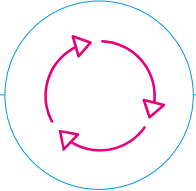
Designers need to provide flush surfaces and clear space will be needed to manoeuvre trolleys, pallets and cages. These features should already be in place for disabled users of the street. Beyond a few metres it isn't realistic to expect barrowing of goods over traditional cobbled streets. The noise impact of moving delivery equipment over uneven surfaces is also important to consider, especially if this is likely to be out of hours.

Where rear loading is unavailable, pedestrian areas may need to be designed to allow delivery access at certain times of the day. Any design that requires reversing in these areas should be avoided or supervised by a designated person with loading and health and safety experience. Clear and defensible space for pedestrians is also important. Surfaces should be designed to withstand future use by large trucks. The use of removable bollards is likely to be needed where time restrictions are in place. Signage and irregular enforcement may not provide a sufficient deterrent to delivery vehicles.

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WHAT CAN BE DONE?

The following table shows a list of options that can help improve how goods are moved in an urban environment.



Collaboration

Establish Freight Quality Partnership(s).

Use collaborative measures such as Business Improvement Districts to encourage development of shared freight services (e.g. for movement of waste) and encourage load consolidation.

More Information

[Guidance](#)

[Rose Street Case Study](#)



Communication

Ensure Goods Delivery Plans are included with Development/change of use Plans.

Ensure signs aimed at goods delivery vehicles are clear, consistent and up-to-date.

Consider developing and publishing preferred lorry routes for your area.

Provide accessible information/maps to operators to enable them to plan routes – covering loading and timing restriction, preferred freight routes, etc.

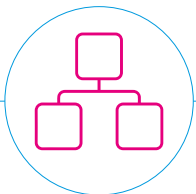
Ensure site reports, risk assessments, driver delivery notes and delivery plans are used and maintained when delivering goods.

Encourage drivers to make a note of any delivery problems and report back to traffic office.

[Delivery Planning Toolkit](#)

[Good Practice Guide on Urban Freight Transport \(Page 13\)](#)

[Freight Best Practice Urban Driving Guide](#)



Consolidation

Review delivery time regulations.

Consider establishing 'nearby delivery areas' – particularly for pedestrianized, shared space streets.

Review access and loading regulations.

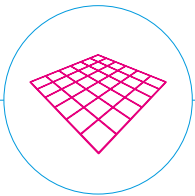
Consolidation (continued)

More Information

Use telematics, routing and scheduling software to consolidate loads and minimise travel in urban centres.

Encourage retiming of deliveries outside peak traffic hours.

Encourage/consider opportunities to develop urban consolidation centres.



Infrastructure

Review provision of (and enforcement of existing) on-street loading bays – particularly in areas subject to congestion.

Consider case for Lorry lanes – or allowing alternatively-fuelled goods vehicles access to bus lane.

Review Traffic Management Schemes.

Load bearing limits of road surfaces in delivery zones.

Introduce Low Emissions Zones



Vehicles

Review vehicle weight and size regulations.

Use alternatively fuelled vehicles.

Improve fuel efficiency of existing fleet.

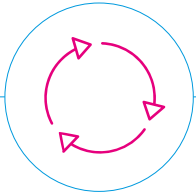
Explore potential for mode shift – rail, water, bicycle etc.

[Weights and Dimensions](#)

[Safe and Fuel Efficient Driving](#)

[Freight Grants](#)

One, a combination of some, or all of these may be suitable options to explore for your area, depending on the objectives you want to achieve.



Some examples are shown here:

Objectives

Gaining industry support.

Improving journey time reliability.

Assisting drivers and freight operators and reducing vehicle trips/kms.

Assisting at point of delivery/collection.

Reducing environmental/social impacts.

Management of shared space.

Contributing Mechanism

Freight Transport Partnerships

Telematics for urban goods transport
Signing
Urban freight information and maps
Road pricing
Retiming deliveries
Lorry/no car lanes

Telematics
Signing
Lorry routes
Simplifying/altering access restrictions
Urban freight information and maps
Consolidation centres

On-street loading bays
Nearby delivery areas
Urban consolidation centres
Goods delivery plans

Vehicle weight/type/size restrictions/standards
Access restrictions
Retimed deliveries
LEZ
Lorry lanes
Infrastructure improvements
Use of environmentally friendly vehicles
Enforcement
Future proofing – e.g. charging points

Scheme design – e.g. surface load factors
Signage
Retimed deliveries

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FREIGHT QUALITY PARTNERSHIPS (FQPS)

FQPs are a flexible stakeholder engagement model that can be set up to enable a collaborative approach to finding the most practical and acceptable solutions to goods delivery challenges in urban areas.

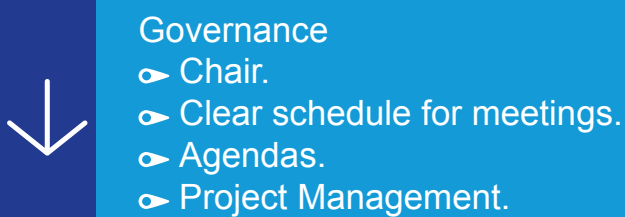
Managed well, FQPs can:

- ▶ Help foster mutual understanding.
- ▶ Help balance the needs of the freight transport industry and its customers to have timely and efficient delivery of freight, with the needs and concerns of other stakeholders.
- ▶ Provide a single contact point for early consultation on new policies and proposals, yet represent a large number of organisations.
- ▶ Provide an effective working forum in which to identify challenges and deliver solutions.
- ▶ Can be established at any level (street, business improvement area, LA, regional).
- ▶ Can be set up as a small focus/action group to address a single issue, or as a larger group with a wider remit, depending on objectives.
- ▶ Can be time-limited, or on-going.

To be effective, the FQP needs to:

- ▶ Include all key stakeholders with an interest in improving how goods are being moved in a particular area. Those to involve will vary, but may include road haulage representative, retailers, service providers, other road users and residents.
- ▶ Have a clear, and agreed remit, objectives and outputs.
- ▶ Have good governance arrangements.

FQP PROCESS



Monitoring

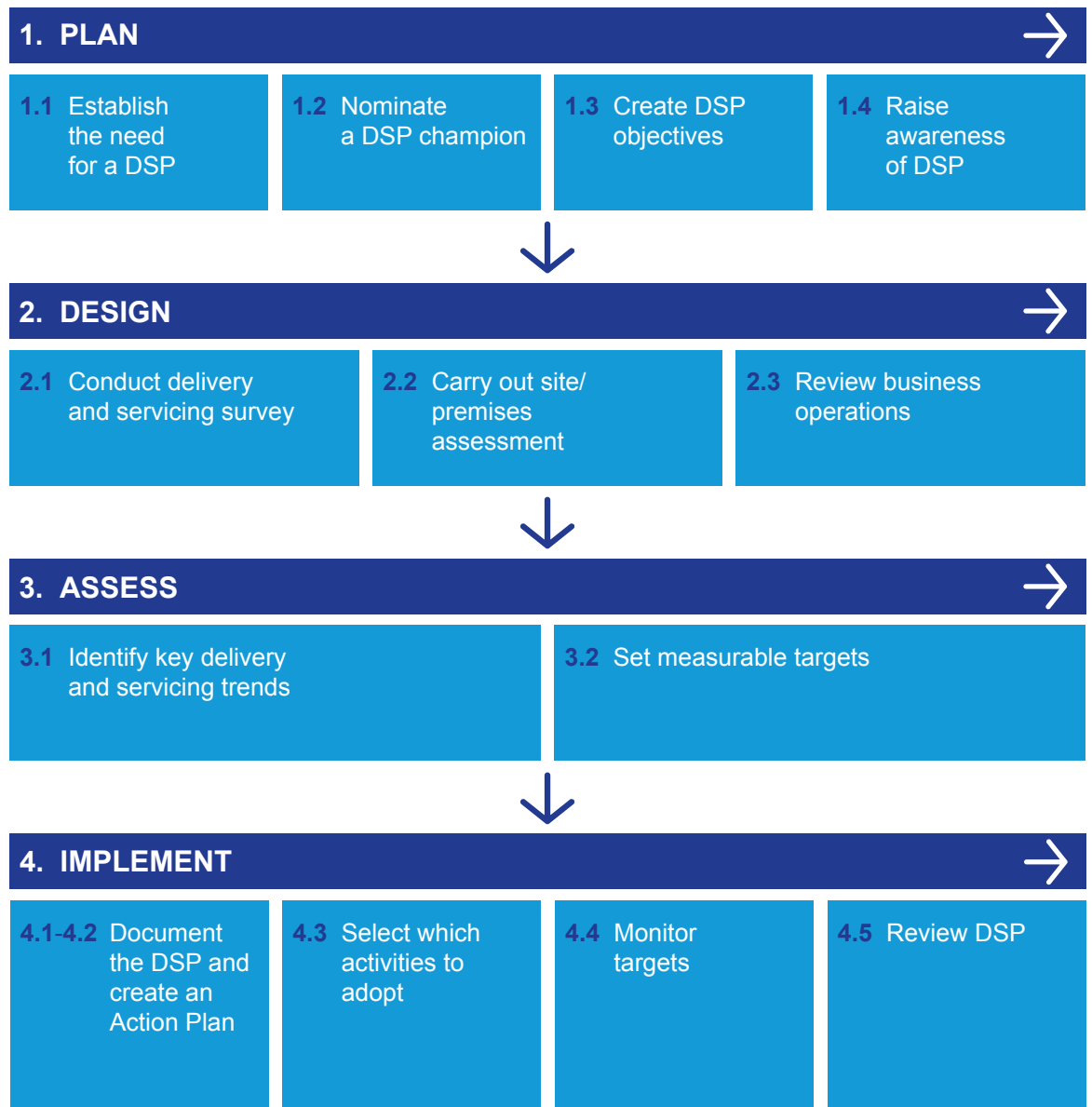
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DELIVERY AND SERVICING PLANNING (DSP) TOOLKIT

Transport for Greater Manchester have developed a **Delivery and Servicing Planning toolkit**.

The toolkit helps businesses identify opportunities to better manage deliveries and ensure supplies are delivered when they are needed.

Delivery and Servicing Planning Toolkit¹



¹ Delivery and Service Planning Toolkit. Improving efficiency, making savings – Transport for Greater Manchester

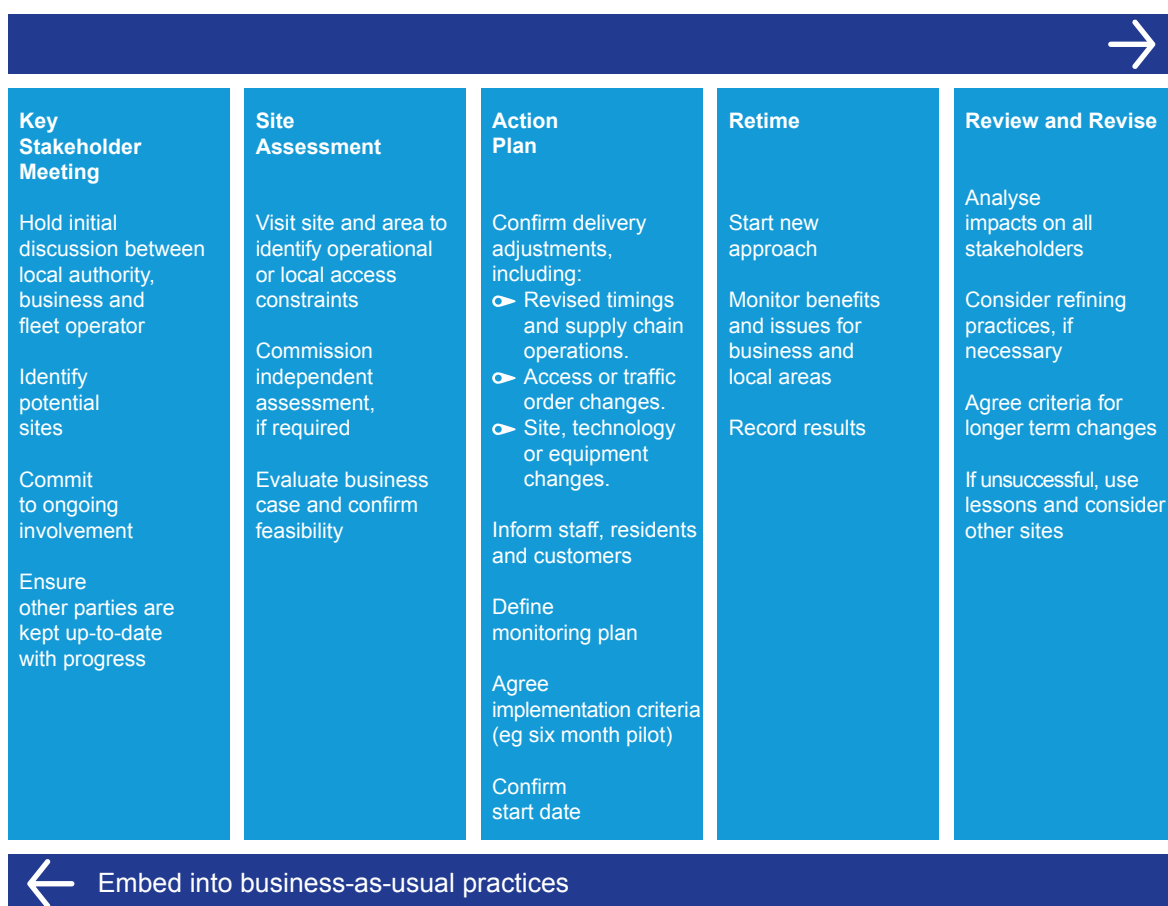
Retiming Deliveries²

The issues that affect retiming options vary depending on the type of delivery and the site involved. To get the timing right, it is essential to ensure the right people are involved in the process from the outset.

Early, candid conversations help everyone to understand each other's priorities and the mutual benefits of getting the timing right. Solutions can then be developed to meet everyone's objectives and issues can be ironed out as they arise.

The road to retiming process map below shows the importance of bringing stakeholders together early, while the following table explains who needs to be involved.

The following sections outline the benefits of retiming to each party and the main points to bear in mind.



² Getting the timing right, Making the most of quieter times for deliveries – Transport for London

The main parties and their key contributions are³:

Contribution	Local Authorities	Businesses	Fleet Operators
Identify opportunities to retime deliveries	✓	✓	✓
Provide area and site-specific information	✓	✓	
Provide routing, scheduling and delivery information			✓
Represent interests of local residents	✓	✓	
Review traffic orders and other restrictions	✓		
Review current and potential operations		✓	✓
Contribute to retiming action plans	✓	✓	✓
Implement changes to enable deliveries to be retimed	✓	✓	✓
Develop business case		✓	✓
Influence local transport strategy to encourage retimed deliveries	✓		

³ Getting the timing right, Making the most of quieter times for deliveries – Transport for London

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CASE STUDY ROSE STREET, EDINBURGH



Rose Street demonstrates the problems of managing change within a historic area. A key consideration is adapting to new types of businesses which have different delivery patterns, such as the daily requirements of more pubs and hotels.

Rose Street is a street under pressure, not least from deliveries competing with other uses over limited space. This presents a management challenge for businesses who must work around access restrictions. Meanwhile, the council must try and balance the needs of businesses with maintaining acceptable standards of environmental quality and safety.

Located at the heart of the Edinburgh world heritage area, the street and its lanes largely retain a pattern dating from the 17th century. Rose Street has an established frontage of pubs and small shops and narrow side lanes providing access to larger stores on Princes Street. The council pedestrianised the street in the 1970s and undertook public realm improvements in the 1990s. Since then the street has changed, with a shift towards hotel space and also more on street tables and chairs, whilst smaller independent stores have declined.

Delivery drivers face challenges accessing both the street to service smaller businesses and the lanes to supply larger stores. The street is technically pedestrianised with access limited to evening and early morning delivery windows where parking to drop of goods is permitted. However, access to the narrow lanes is allowed throughout the day. Delivery vehicles and pedestrians therefore share space for much of the day, including larger lorries and refuse vehicles ill-suited to manoeuvring into the narrow lanes. The movement of traffic has led to the street surface breaking up causing trip hazards.

The street is under greatest pressure in early mornings when delivery drivers attempt to gain access before the permitted delivery time end time. This leads to congestion due to insufficient room for vehicles to stop and manoeuvre. Conflicts with pedestrians are common, both with faster moving delivery vans and slowly moving HGVs, which can be dangerous when reversing. Management of vehicular movement happens informally, with some but not all of the larger delivery vehicles (three axle trucks) using banks men to guide movement.

The use of planters to slow vehicles and discourage through running by larger vehicles has largely failed, because drivers push them aside. Retractable bollards do protect the street, but require to be manually operated at the beginning and end of restriction times. When not in place restrictions are routinely ignored.

Rose Street demonstrates the problems of managing change within a historic area. A key consideration is adapting to new types of businesses which have different delivery patterns, such as the daily requirements of more pubs and hotels. The situation will only improve if all businesses work with the council to develop new ways of managing the street, which are sufficiently flexible, use new technology, protect pedestrians and where necessary allow for enforcement.

CASE STUDY

UNION SQUARE, ABERDEEN



The City Centre location supported planning policies aimed at improving the economic vitality of the City, but presented challenges in terms of access for deliveries and ensuring that goods could be supplied to the shops, restaurants and other premises.

Aberdeen's retail offering was greatly enhanced with the opening of a modern mall adjacent to the main bus and railway stations at Union Square in October 2009.

The City Centre location supported planning policies aimed at improving the economic vitality of the City, but presented challenges in terms of access for deliveries and ensuring that goods could be supplied to the shops, restaurants and other premises. The developer, Hammerson, proposed a dual-access solution incorporating two distinct servicing yards both separate from the main customer accesses and car parks.

Heavy Goods Vehicles can access dedicated unloading areas directly from the principal road network with internal access to store rooms and kitchens.



The solution works well, with most customers to the mall never noticing the service delivery vehicles – yet somehow there's always a ready supply of fresh food in the bars and restaurants, popcorn in the cinema and hard goods for sale in the shops.

CASE STUDY

BUCHANAN STREET, GLASGOW



Private cars are not allowed into the street

Buchanan Street in Glasgow city centre is the number one shopping destination in Scotland and second only to London in the UK.

It has a diverse range of local, national and international shops and links the two main shopping centres in Glasgow: Buchanan Galleries in the north and the St Enoch Centre in the south. The street is pedestrianised and benefits from high quality public realm materials.

It is crossed by Gordon Street which links the two main rail stations in the city whilst the city's subway is directly beneath the street which accommodates two subway stations.

It has a high pedestrian footfall at all times, however the dynamic changes throughout the day. During peak periods the demand is high with commuting footfall whilst at other times the demand is mainly from shopping, tourist and leisure. Footfall on Saturday and Sunday is particularly high.



Given its diverse shopping nature, it also has complex servicing requirements. Both Buchanan Galleries and the St Enoch Centre benefit from managed dedicated off-street service yards.

The vast majority of servicing for the main part of Buchanan Street takes place on-street. Servicing times are strictly controlled and are outwith the main shopping day. The majority of servicing takes place prior to 10am and consists of a range of vehicle types and sizes. A one way system helps reduce vehicle conflict and access onto the local network is via traffic signal controlled junctions.

During the day and evening the street is occupied by a number of pavement cafes supporting a vibrant night time economy. The timing of roadworks and building operations are strictly controlled to minimise disruption.

The space in Buchanan Street is a finite resource with a number of competing demands and a changing dynamic throughout each day. The current servicing and management system works well and helps ensure that the Buchanan Street and Glasgow is the number one shopping destination in Scotland.



The street is pedestrianised and benefits from high quality public realm materials

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