SOLUTIONS FACTSHEET 2.1
Dedicated bus lanes

IN BRIEF
Separating buses from other vehicles in dedicated lanes protects them from traffic congestion and delays and improves the reliability of services. The smoother driving also saves fuel and makes buses a more appealing mode of travel during peak hours.

EXAMPLES
Dedicated bus lanes are highly visible and typically marked out. However, fully segregated bus lanes are sometimes appropriate (e.g. for counter flow lanes), though this does remove flexibility in use of the road space (such as for supporting roadworks). Bus lanes may also include access points to residential or industrial areas not available to normal traffic, thereby creating opportunities for new and more effective transport routes.

A bus lane could operate “full-time” or only during certain hours, such as on Mondays to Fridays between 07:00-09:30. Outside those hours, other vehicles can use the lane. Bus lanes typically allow access to emergency vehicles but may also be opened up to other modes which form part of a door-to-door sustainable transport journey – for example bicycles, motorcycles, taxis or even electric cars.

Cities may need to monitor the lanes to ensure that other drivers do not misuse them and enforce their status as bus-only lanes. They can do this through sample manual monitoring, CCTV or Automatic Number Plate Recognition (ANPR) systems.

RESULTS
Introducing dedicated bus lanes will have different results for cities depending on the local circumstances and variables. In some municipalities, they have improved journey times to the extent that the benefits (including other bus priority and traffic management measures) covered the cost of installation in just over a year. Other benefits include:

- Reduced fuel costs for buses, cars and other vehicles
- Time savings for travellers
- More reliable buses
- More passengers

Broken, damaged, vandalised, faded or worn signs and carriageway markings do not encourage compliance so cities should regularly inspect and maintain the service to ensure that benefits continue.

TECHNICAL AND FINANCIAL CONSIDERATIONS
Dedicated bus lanes are a very cost effective method for making services more reliable, certainly compared to light rail and rail. However, cities should take the needs of other road users into account through infrastructure audits, modelling and stakeholder engagement. Considerations include:
• Impact on car drivers (Is increased congestion from reduced road space acceptable? Is there a benefit for cars no longer being held up by buses stopping to collect/drop-off passengers in the same lane?)
• Impact on taxi and private hire vehicle journey times
• Impact on delivery vehicles (including access to the kerbside)
• Any increase in safety risk for cyclists or vulnerable road users

It is also important to understand whether introducing bus lanes improve journey times. Cities will need to consider the length of the route, the entrance and exit points of the lane, the number of bus stops on the way and existing and forecast traffic conditions. They should also conduct a cost-benefit analysis prior to implementation, with subsequent monitoring to understand the accuracy of projections, and apply the results to future decision-making.

POLICY/LEGISLATION
Cities should implement dedicated bus lanes alongside a package of complementary measures to enhance public transport. In many countries, it should be possible to trial a dedicated bus lane for a limited period (e.g. 18 months) to understand the potential impact better. National and/or regional legislation will apply when amending the public motorway.

INSTITUTIONS
The lead agency for this is usually the city (local transport authority) working in conjunction with local bus operators. National policy frameworks are important to ensuring consistency with schemes in other cities.

TRANSFERABILITY
Many cities in Europe and other parts of the world have implemented dedicated bus lanes and the solution can easily transfer to other cities. Relevant locations are cities with good public transport networks but high levels of congestion, which impede journey times. Cities that experience delays because of buses changing lanes, or because of buses holding up other vehicles when stopping to collect passengers, are also suitable locations.

Implementing the measure as part of a package of public transport improvements (such as new vehicles, smart ticketing, enhanced information, new fares, and improved frequency) is desirable for having a greater impact on improving the attractiveness of bus travel.
CASE STUDY: WARSAW’S BUS PRIORITY LANE (POLAND)

Context
To reduce traffic problems in Warsaw and make travelling by public transport easier, the city began looking for new solutions to improve local traffic conditions. In 2009, the city selected a main traffic corridor connecting the east and central districts as the focus for improvement. This was due to rising traffic numbers and increasing congestion along this route, especially during peak hours, which affected the ability of public transport services to operate efficiently.

In action
As a result, in September 2009 the city introduced a new bus priority lane. At the time, this was the longest bus lane in Warsaw, stretching 7 km in each direction. The bus lane covers the Trasa Łazienkowska area, which includes one of the city’s main three-lane artery roads, crosses the river Vistula and connects the city centre to the eastern edge. Now one of the three lanes in both directions of the Trasa Łazienkowska is a dedicated bus lane, and car traffic is restricted, by a combination of road signs and road markings.

After its installation, only buses could initially use the lane. However, 3 weeks later the city allowed licensed taxis to use the lane. To ease the congestion that inevitably occurred in the remaining two lanes, the city introduced two new bus services. The frequency of existing bus services using the route increased and encouraged more people to use public transport.

Results
Warsaw experienced strong resistance from car drivers when introducing the bus lane. However, it has strong support from public transport passengers. Over time, some drivers saw the benefits and are now public transport users themselves. Following an evaluation of the impacts of the bus lanes in November 2009, the most important benefits include:

- The number of bus travellers has significantly increased during all times of the day;
- The average speed of buses in both directions has increased (19% faster to the east city edge and 30% faster to city centre, with an average of 26 km/h in both directions, rising from an average 10 km/h before the bus lane was implemented;

Other advantages include more punctual public transport services, a better image of public transport among locals, faster response times for emergency vehicles, and improved traffic safety.
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