

# DISRUPTION MANAGEMENT (PLANNED) – TRANSPORT NETWORK

<b>Key lessons learnt</b>	Every project will have a negative impact on the network and the wider community through its construction phase. Disruption Management should be planned and considered fully within the project development stage.
<b>Author</b>	Sydney Coordination Office   Transport for NSW
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## Introduction

During the delivery of any project / program incorporating new infrastructure or changes to transport services, there will inevitably be an element of **planned disruption** that needs to be considered. This note considers any type of project / program (transport project or non-transport project) that has an impact on the transport network.

Disruption to the Transport network can include impacts to;

- ▶ People – any mode, such as pedestrian, cycling, train, bus, ferry, light rail and vehicles (or a combination of a number modes), or
- ▶ Goods – freight movements may be road, rail, sea or air based, regional or metropolitan, freight, which could be containerised, heavy truck movements, waste management, last mile deliveries as well as services (such as post, couriers, tradespeople etc.).

As our population increases, our transport and freight networks are subject to significant growth and increased demand in the future. Any disruption management planning must therefore consider both the amount and timing of the growth in order to fully understand these impacts.

## Disruption: What/ When/ Who

During the planning stage of a project, including the development of Business Cases, there are a range of factors that need to be considered upfront in order to effectively plan for and manage any disruption to the transport network. These include;

- ▶ Understand what disruption will be created by your project / program
  - How is the movement of people and goods impacted?

- What is the cumulative impact of the disruption of your project / program along with other projects?
- Have you considered any indirect disruption i.e. railway station upgrade may impact various transport customers (train, bus, interchanges, pedestrians, cyclists, kiss and ride) as well as supporting functions such as depots, bus layover sites as well as impacts to property owners/ tenants?
- ▶ Understand when your disruption will take effect – time of day (e.g. AM or PM peak), day of week (e.g. weekend or weekday), time of month, month of year (e.g. school holidays), during special events (e.g. New Year's Eve, City to Surf, Football Grand Final);
  - Can you adjust your program to minimise disruption?
  - How long will the network be disrupted?
- ▶ Understand who is impacted by your project / program and any potential disruption
  - Who are your impacted stakeholders?
  - Do you understand how your project / program is affecting ALL stakeholders?
  - Have you developed a stakeholder engagement plan?
- ▶ Scale of disruption
  - What level of disruption is acceptable and can it be managed?
- ▶ Managing unexpected disruption (contingency Planning)
  - What plans do you have in place for continuity of service?
- ▶ What plans are in place for and recovery to the transport network recovery?
- ▶ What impacts are there on surrounding land uses?
  - Construction can generate impacts such as noise, dust, light over and above what normally exists in

the environment. Where this exceeds accepted tolerances, intervention may be required.

- In activity centres especially, changes to movement patterns can affect access to businesses. This can include incidental access, such as from reduced foot traffic or visibility from the street.
- The ability to access sites, both commercial and residential can change due to the removal of parking, Loading Zones or the introduction of No Stopping zones.

## Phases of Disruption

Projects should not only plan adequately and make provision for disruption, but also ensure that any disruption is monitored. This will allow plans to be adjusted where required.

### ► Planning for disruption

- Expected and potential disruption impacts should be fully understood as part of the planning phase of any project / program, including mitigation strategies which should be factored in to the tender and contract pricing.
- Disruption planning and impacts should be refined whilst considering constructability / phasing and sequencing of a project.
- Impacted stakeholders (including transport network users) and interested parties should be engaged and made aware of any impending disruption and what it means to them BEFORE it impacts them. Early and ongoing engagement with Stakeholders will ensure that impacts are fully understood and factored into project delivery plans and budgets. This may require the development of policy, including consultation with government and sensitive stakeholders, for financial assistance or resident relocation in limited, tightly defined cases. In other cases an active approach towards precinct activation can help ameliorate impacts.
- Developing network monitoring and management strategies may need to be put in place to ensure the network is able to respond to changes in demand.

### ► During the disruption

- Disruption plans during the project delivery phase may need to be changed / updated and be flexible in order to address any unforeseen / cumulative impacts.

- Understand what the different phases of disruption are throughout the construction delivery period.
- Ensure that the needs of affected Stakeholders (network users) are considered and met during the disruption (e.g. clear direction and controls in place during a temporary road closure for installation of a crane could affect local access for residents or could impact access routes to a hospital Emergency Department if working near a hospital).
- Ongoing liaison with affected businesses and residents in accordance with the pre-established financial assistance policy. Where appropriate, delivery of an ongoing program of activation to promote footfall into the disrupted precinct and mitigate construction impacts such as reduced visibility through measures such as wayfinding signage.
- Proactively manage the network and optimise its performance during the period of disruption to minimise impacts to customers, which may require:
  - > The establishment of proactive network monitoring to proactively manage performance in real-time; such as Transport's Joint Operations Centre, or dedicated field staff working with the Transport Management Centre and RMS.
  - > Delivery of regulatory changes to parts of the network, such as Clearways or Tow Away Zones.
  - > Ongoing or ad-hoc on the ground monitoring and response to incidents to protect the safety, integrity and function of the transport network.
  - > Ongoing liaison and engagement with customers to provide practical assistance throughout the disruption period, noting that for some changes, the cohorts of disrupted customers may change (eg, school or university intake periods).

### ► Project Handover / Into Service

- Need to consider how disruption to stakeholders (network users) is managed when the project is complete and being transitioned into operation e.g. opening a new motorway on-ramp will require appropriate plans for impacted drivers so that they are aware of new traffic arrangement – this may include impacts to bus services and bus passengers that could be affected by that change too.

## Disruption to Drive Change

Disruption often provides an opportunity to drive change. Little change occurs when there is a comfortable status quo. A certain level of disruption to the movement of people or goods over the course of a project can lead to a successful change of culture, activity that over the course of a project becomes embedded and is sustained after the project's completion.

Over the course of a project customers and operators can be encouraged to consider what the end solution looks like and how they will deal with it. Throughout the disruptive period there is an opportunity to invest in and foster change that may otherwise be difficult to otherwise implement.

## How are you going to communicate about disruption?

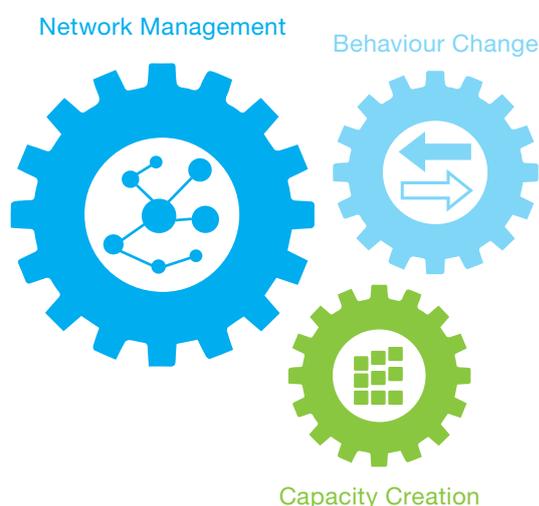
There are many varying channels that can be used for disruption messaging. The appropriate method will depend on the type of project / program being delivered, as well as the type extent, length and impact of the disruption. Options may include:

- Media – TV, Web
- Social media – Linked in / Facebook, geo-targeted messaging
- Advertising – electronic, newspaper, billboard, office lobby screens
- Signage / wayfinding – temporary, Variable Messaging signage (VMS)
- Programs for engagement with key Stakeholder groups e.g. Residents, Businesses
- Dedicated customer service staff – e.g. pink shirts
- Letterbox drop
- Key messaging for staff
- Business Intermediaries – Councils, Chambers,
- Develop Travel Action Plans
- Other things to consider;
  - > non English speaking stakeholders
  - > Stakeholders who are indirectly impacted
- ▶ The approach taken can vary and should be tailored to the disruption's impact. This might include the deployment of physical or human resources to assist customers on the ground or us

## Other things to consider during a period of disruption to the Transport Network?

- ▶ **Cost / Benefits** – Have you considered all of the potential costs / benefits associated with the disruption in your project?
- ▶ **Opportunities** – Have you identified any additional large or small scale opportunities that may be realised as a consequence of the disruption caused by your project? (e.g. reconsider/ redesign the bus network in a particular region at the same time as disruption to support an increase in public transport mode shift)
- ▶ **Travel Demand Management** – In order to respond to any potential disruption, have you got the right balance between network management, capacity creation and behaviour change in both the disrupted and end state of your project?

## Integrated approach to Travel Demand Management



## Construction Pedestrian and Traffic Management Plan (CPTMP)

### Draft condition to provide CPTMP

- *The applicant shall prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with stakeholders. The CPTMP needs to specify, but not be limited to, the following:*
  - > *Location of proposed work zone;*
  - > *Size and type of vehicle, including swept path analysis;*
  - > *Details of any road closures;*
  - > *Haulage routes including marshalling area/s and operation;*
  - > *Proposed location of the crane;*
  - > *Construction vehicle access arrangements;*
  - > *Proposed construction hours;*
  - > *Estimated number of construction vehicle movements, including measures to reduce the number of movements during peak traffic periods;*
  - > *Construction program;*
  - > *Consultation strategy for liaison with surrounding stakeholders;*
  - > *Any potential impacts to general traffic, cyclists, pedestrians and light rail and bus services, including special event buses, within the vicinity of the site from construction vehicles during the construction of the proposed works;*
  - > *Cumulative construction impacts of projects including the [adjacent projects]. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the road network;*
  - > *Measures to avoid construction worker vehicle movements within the vicinity of the precinct, including any off-site construction worker parking location/s away from the precinct and operation; and*
  - > *Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP.*

## Road Occupancy Licence

If you need to apply for a Road Occupancy Licence to conduct activities like fixing pot holes, building, or construction work that is likely to have an impact on the operations of an arterial road (for example, closure of a traffic lane), you can do this online using the Online Planned Incident System (OPLINC).

<https://www.service.nsw.gov.au/transaction/apply-road-occupancy-licence>

### ► About the author:

The Sydney Coordination Office was established to oversee traffic and transport impacts during Sydney's transformation including various major transport projects and private property redevelopments