

UKTRAM

SWOT Analysis Covid-19 Recovery

Recovery Strengths, Weaknesses, Opportunities and Threats (SWOT analysis) for light rail.

1) Passenger Service - Maintaining social distancing

Strengths

People are now very familiar with the requirements and the majority comply. The response phase means the transport sector knows what measures are required to maintain social distancing, procedures are in place.

Weaknesses

Will people be as accepting of social distancing on public transport as they have been in supermarkets etc.

Uncertainty from the Government as to whether the two metre distance will continue to apply as lock down lifts and who it will apply to

If schools return, for example, it is unlikely that young children will be required to socially distance (family groups push out the separation space required by others) – what message does that send to adults?

Lack of certainty as to how social distancing will be enforced and by whom.

Lack of capacity in the transport network to enable social distancing as more people begin to travel – both on vehicles and in waiting environments (including interchanges and tramstops). Potential need for queue marshalling at the busiest stops and interchanges plus additional highway space to accommodate this. Tramstops are typically part of the pavement.

Open access – no barriers or gates.

Ability to manage the interface with other businesses trying to social distance (for example retail next to tramstops) as queues form off tramstops.

Vehicles will reach loading capacity long before they reach their destination leaving many behind. Potential social inclusion issues as outer suburbs can access vehicles but inner city communities cannot.

Public transport not seen as safe.

Opportunities

would unlock some, but not extensive, capacity in the networks.

Promotion of walking and cycling as a way to stay healthy and maintain social distance whilst retaining some of the positives in terms of air quality/public realm. (Easies capacity but increases cost per mile). Reduction in road traffic in favour of space towards walking and cycling.

If the distance were to be

reduced to, e.g. 1m, this

Threats

Social distancing remains until a vaccine is found – at least 18 months.

People get fatigued with following the guidelines and standards start to slip.

Further lockdowns as a result of people not following advice. Weak enforcement measures.

Possibility that transport bodies will be blamed if vehicles become crowded or perceived to be unsafe.

People turn to their cars in the short term and may never return to public transport.

How can social distancing be enforced in 'Open networks'? Commercial viability of operating light rail if loading capacities and journey times are limited.

Not enough vehicles or staff to meet demand with social distancing in place.

Promotion and awareness raising of enhanced cleaning regimes in place	If road space is reallocated towards walking and cycling to support social distancing, will there be sufficient space for public transport. Lack of highway space to support socially distanced queuing and the
on the network.	free movement of pedestrians and other road users.
	Cost per passenger mile increases so greater supplementary funding required.

2) Passenger Service - Mask wearing

Strengths

Mask wearing seems to be gaining acceptance across Europe.

The public appear to favour this approach. It appears to have political support.

Weaknesses

Uncertainty on what, if any, protection is actually provided with layman use. Disposal – soiled contaminated Light Rail vehicles, tramstops and surrounding areas. Potentially unsustainable levels of manufactured supplies. Those that are available might need to prioritised to key workers.

Supply of masks, will it be a duty on the individual to wear one or the transport provider? Cost of a mask may be close to average fare.

Opportunities

Could mandatory mask wearing reduce social distancing and thereby free up more capacity?

Could help passengers feel more protected on public transport and more willing to use it.

Could transport authorities manufacture their own masks?

If masks were mandatory would there be an obligation on government to ensure that there are sufficient supplies.

Simple face covering would be far more accessible and ease any supply chain constraints.

Branded face masks could help with journey tracking data – bi-modal travel etc.

Threats

Ambiguous guidelines.

How will mask wearing be enforced? Will transport undertakings be required to provide masks for passengers who don't have them?

If required generic guidance on how to refuse travel to those not wearing masks on open networks? Or reminder of the requirement rather than refusal. Potential for increased levels of assault and abuse. How can masks be mandated for staff? Mask wearing increases the onset of fatigue. Mask wearing may hinder normal fatigue controls. Huge volumes would be needed.

Comfort of staff having to wear masks all day.

Potential safety risk to Conductors as mask conceals potential criminal activity. Increased risk of conflict between passengers if persons do not wear a mask.

3) Passenger service - Hand Sanitiser (Dispensers)

Strengths Endorsed as best preventative measure to control infection. High level of passenger and staff confidence. In line with very well published control measures.	Weaknesses Limited supplies. Bespoke dispensers required for either Tramstop or tram fitting. Are suitable anchorage points available? Would permanent modifications to infrastructure and vehicles be required?
Opportunities Hits two birds with one stone (Passenger and Staff). Always present so could be used as 'conflict diffuser'.	Threats Could be used by substance abusers to feed habit. Shortage of supplies as demand again increases. Could become a valuable commodity (Theft). Replenishment of 'In-Service' supplies could become too demanding without additional staff resources.

4) Relaxing Lock Down - SECTOR BY SECTOR (with social distancing)

A) Nurseries, schools, colleges, universities

Strengths

Primary school children more likely to be able to walk/scoot/cycle to school. Colleges and universities well set up for remote learning and also, when they do return, follow less rigid timetables serving to spread demand through the day. Many HE students likely to have moved back home, reducing demand on city centres and transport networks.

Opportunities

If staggered/reduced school hours help spread peaks and reduce burden on capacity.

If children are not required to socially distance at school dedicated school services with normal loading capacities? Promote the need for segregated services. Promote walking/cycling/scooting to school, particularly for younger children.

Continue to encourage working from home

Continue to encourage working from home to enable parents to respond to flexible school days (given there is no need to trip chain onto a commute).

Weaknesses

Younger children will be required to be accompanied on journeys. Siblings may go to different schools.

If staggered hours etc are implemented there could be difficulty in predicting demand if these are not communicated effectively. Children swallow capacity on a Light Rail Vehicle. Large groups travel together. In many cases no peer control.

Threats

If educational establishments return enmasse there will be return to morning and evening peaks and temptation for parents to return to corresponding commuting patterns.

Unruly behaviour. Opens up crime channels (e.g. county lines) with limited ability to police.

Capacity, capacity, capacity

Staff availability if there is a staggered approach which means some year groups return but others do not.

Reduction in revenue generation

B) Retail

Strengths

Will be important in getting the economy going. Established and familiar mechanisms for maintaining social distancing. People have been relatively accepting of the need to shop for essentials only and may find it easier to continue habits.

Weaknesses

Uncertainty as to which shops (type/size) will be open when and what message this sends to people about the journeys they can make.

Lack of space on pavements etc to enable people to safely social distance as they attempt to use shops.

Unclear position from Government around what leisure trips are permitted.

Purchased goods take up space (but may assist with distancing).

Opportunities

Stagger opening hours/days to spread the peak.

Develop new ticketing products (e.g. carnets) that support people to travel on only a few days a week or in irregular patterns and encourage travel outside of busy times (e.g. booked slots). Continue to encourage people to work from home in order to reduce pressure on transport networks and

city centre shops.
Encouraging people to use their local shops, ones that they can walk or cycle to, message of supporting local businesses and economies – 'shop local'.
Reallocation of road space in city centres to pedestrians and cyclists to enable more social distancing.
Move OAP/vulnerable specific supermarket opening to a nonpeak time such as 10am-11am (7-

Threats

People may begin travelling further to city centres etc. just to go shopping particularly if they lack amenities on their doorsteps.

Could people gravitate to more large out of town shopping centres which they can easily reach by car and which have plenty of space to socially distance? Implications for sustainability. *Privileged car owners*.

If shops reopen, people will want to use them and assume that this is ok. There is an implication that trips for leisure/non-essential items are now allowed. Public transport may not have the capacity to meet demand and, if it cannot, people will turn to their cars. If shops return to their usual opening hours and days staff will need to commute at peak times to reach them and shoppers will be encouraged to adopt similar patterns. Capacity on the public transport network could struggle to meet demand. Clash with school openings and diversion to school journey.

Shopping centre owners look to encourage footfall but overemphasis private car use as opposed to public transport

C) Manufacturing/construction

8am not ideal)

Strengths

Would be a boost for the economy. Help with supply of PPE/face coverings. Could help transport infrastructure projects get underway/resume. Enable building/ maintenance works to take place whilst places are quiet.	In the midst of restart/recovery, will transport authorities have the bandwidth to manage infrastructure projects or bid for new ones?
Opportunities Could encourage government spending on transport	Threats Construction vehicles on the road at a time with service constraints. Increased demand for public transport,

Weaknesses

infrastructure/innovation projects to	Construction industry require further PPE that is then not
stimulate the economy.	available for transport providers or users.

D) Bars, restaurants, cinemas, leisure

Strengths	Weaknesses
Cinemas may find it easier. Multiplexes	Patrons dispersing at the same time.
have plenty of room.	Leisure crowds more difficult manage.
Larger restaurants offering booked, sit	Staff resources diverted from peak running
down meals could accommodate social	(whatever that may be)
distancing.	Social distancing is hard to enforce on
	inebriated groups.
Opportunities	Threats
Opportunities Resumption of night time economy would	Threats Would promote leisure trips.
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Resumption of night time economy would	Would promote leisure trips.
Resumption of night time economy would benefit leisure travel.	Would promote leisure trips. Unruly passengers after a night out ignoring
Resumption of night time economy would benefit leisure travel. Seems unlikely that purely drinking	Would promote leisure trips. Unruly passengers after a night out ignoring social distancing placing staff and other

E) Office based workers

Strengths Home working habits well established. Many workplaces supportive of new arrangements.	Weaknesses People may be keen to return to the office and see people again. Schools returning would make this a possibility for more workers. Home working fatigue. Unclear as to impact home working has had on productivity.
Opportunities Reduce demand on transport networks when working from home. Where office presence is needed, encourage staggered working times, alternate days etc to spread peak. Develop new ticketing products (e.g. carnets) that support people to travel on only a few days a week or in irregular patterns and encourage travel outside of busy times (e.g. booked slots).	Threats Weak messaging around the need to work from home – will people start drifting back? Workplaces could begin pressurising staff to return. Lack of incentives/instructions to employers to change the way they work in terms of continuing to support home working or staggering hours/staff. Return to travel demand peaks that the network is ill equipped to respond to whilst social distancing is in force. Homeworking starts to be the norm impacting on revenues.

5) Light Rail Maintenance Activities - Maintaining social distancing

Strengths

Because maintainers currently operate shift patterns there is the flexibility to keep staff split and therefore reduce numbers at work at any one time.

Many of the maintenance tasks have continued to be carried out through this period as numbers required tend to be on the low side and so this process should not alter greatly.

The majority of organisations provide parking with most staff using private vehicles to travel to work so this should reduce the risk of social distancing.

A number of the tasks do not require major parts or materials and most organisations tend to carry reasonable stock levels

If passenger numbers remain low then not all Rolling Stock vehicles may not be required for service. This would allow greater maintenance and renewal opportunities.

There would be greater justification for moving staff to night shifts which may provide greater opportunity for tasks that can only be carried out at this time.

Any work that requires extended shut down periods to the service would normally affect passengers and revenue so the impact of doing this now would be less.

Weekend working could be introduced to increase productivity and reduce numbers of staff in at any one time and release vehicles and track for increased (over and above normal) service demand.

Weaknesses

If social distancing remains this could restrict movements of staff as there may not be enough vehicles to accommodate the size of teams required some tasks.

If staff levels return to full this will increase the risk of interaction in communal areas such as mess rooms and toilets.

Because many task are carried out in Urbanised locations social distancing will become more of a challenge when passenger numbers increase.

If staff are asked to return and Schools do not this may pose some challenges for child care?

During this period some competencies may have been required to be renewed and this could cause a back log when staff return.

Opportunities

If passenger numbers remain low then not all Rolling Stock vehicles may not be required for service. This would allow

Threats

Maintainers may have been forced to adjust maintenance levels and may find that in fact they have an unprecedented backlog.

Many of the task are dependent on the ability to source materials and part, if the supply

greater maintenance and renewal opportunities.

There would be greater justification for moving staff to night shifts which may provide greater opportunity for tasks that can only be carried out at this time.

Any work that requires extended shut down periods to the service would normally affect passengers and revenue so the impact of doing this now would be less.

Maintainers may have been forced to adjust maintenance levels and may find that in fact they were carry out unnecessary work before Covid 19. This could be used as evidence to streamline activities going forward and free up time for task which otherwise may have been contacted out.

Weekend working could be introduced to increase productivity and reduce numbers of staff in at any one time and release vehicles and track for increased (over and above normal) service demand.

In line with Network Rail and some of its contractors there is the option of introducing a "Covid Marshal" where several workers are required, to enforce social distancing.

chain is not fully functioning then the ability to carry out some tasks may not be possible.

Once the furlough period has come to end operators may not be in a position to bring back all the staff, this could potentially import risk in terms of lower levels of maintenance.

Shared, food halls.

With ongoing uncertainty staff could choose to leave to go do something else.

Staff moral could be affected given the effect on the business and ongoing uncertainty.

Staff may not wish to return to work until they are certain they are safe.

Increase in interaction could lead to more cases of Corona and prolonged staff sickness

Staff numbers could drop very quickly as a result of infection outbreak.

Some staff may not wish to return to work and take unpaid leave which would further deplete resources.

6) Light Rail Maintenance Activities - Mask wearing

Strengths

Working in face masks is not alien to many Maintenance staff so this should not be a huge issue.

Early indications are that other forms of face protection are just as effective so masks may not be required.

Weaknesses

Because of the nature of some task masks are not likely to last long or become easily soiled so replacement may need to be frequent.

Opportunities

If the government issues this as guidance it might give employees more confidence of their protection and encourage them back to work if unsure.

Threats

Mask are issued initially and then supply dries up which may lead to a refusal to interact with colleagues.

periods.		uggestions that masks can virus and in fact hold it for
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7) Light Rail Maintenance Activities – Hand sanitiser

Weaknesses	
Many current staff are mobile so would be required to have a none-static dispenser.	
This could require individual handle of the receptacle potentially increasing transmission.	
Gloves are an everyday part of PPE so it not likely that sanitiser will be applied frequently	
Threats	
If supplies ran out this may prompt a refusal to continue to work due to a perceived increase in risk	

8) Light Rail (Restarting Operations) – Maintaining Social Distancing

Strengths	Weaknesses
	Ramping up services increases the need
Practiced method of control for reduced	for greater space for key tasks.
service provision.	Peak service 'run-out' may need to be
	staggered and achieving full peak service
Most challenges previously identified and	will take longer to start and finish.
controls put in place.	Additional resources required where
	Control Centres deal with staff, equipment
	and maintenance coordination.
	Amending local roster arrangements
	Re-planning to stagger break times to
	ensure uncrowded rest spaces.
	Limiting numbers of employees in staff
	areas, offices, canteens and changing
	rooms etc. Restricted access to offices
	space.
	Delays to services as access to communal
	welfare facilities becomes a problem
	Sign on areas not designed for long ques.
	What happens in the wider world will be
	expected in areas that previously were
	considered 'Fire Fighting' centres.

Opportunities

Good early engagement with trade unions and staff representatives.

Everyone in it together comradery Sight of a return to normality.

Threats

Fatigue and other fitness for duty checks could become less effective.

Conflict over office space as access to bespoke equipment becomes necessary (loading new timetables etc.)

Dealing with typical light rail incidents. 'Policing' company policies e.g. welfare facilities.

Identifying and auctioning competency slips.

9) Light Rail Restarting Operations - Mask Wearing

Strengths

Could mandatory mask wearing reduce social distancing and thereby free up more capacity in facilities?

Trade Unions and other staff representatives have been publicly chasing this requirement.

Branded face masks could help with Company Policy (distancing and 'policing').

Weaknesses

Uncertainty on what, if any, protection is actually provided with layman use. Disposal – soiled contaminated Light Rail vehicles, tramstops and surrounding areas. Potentially unsustainable levels of manufactured supplies. Those that are available might need to prioritised to other key workers.

Supply of masks, will it be a duty on the individual to wear one or the transport provider? Cost of a mask may be close to average fare.

Uncomfortable for an average 8 hour shift of constant use.

Non-public facing (e.g. Control Centre staff may resist). Can wearing face masks be mandated and enforced.

Opportunities

Good early engagement with trade unions and staff representatives.

Everyone in it together comradery

Sight of a return to normality.

Threats

Fatigue control measures could be compromised.

Not enough research on the impacts on fatigue from wearing masks in driving environment.

Conflict between staff that 'brake the rules'.

'Policing' company policies e.g. welfare facilities.

Identifying and auctioning competency slips

10) Light Rail Restarting Operations - Hand Sanitisers

St	ren	at	ths

Endorsed as best preventative measure to control infection.

High level of passenger and staff confidence.

In line with very well published control measures.

Should not be too difficult to identify places to install dispensers at key locations.

Weaknesses

Limited supplies.

Bespoke dispensers required for either personal issue or in-cab fitment. Are suitable anchorage points available? Would permanent modifications to infrastructure and vehicles be required? Unknown level of quantities required. Companies hoarding supplies at the detriment of others.

Opportunities

Hits two birds with one stone (Passenger and Staff).

Always present so could be used as 'conflict diffuser'.

Threats

Shortage of supplies as demand again increases.

Could become a valuable commodity (Theft).

Replenishment of 'In-Service' supplies could become too demanding without additional staff resources.

