

## **SUBMISSION TO NTA ON TRANSPORT STRATEGY FOR GREATER DUBLIN AREA 2016 - 2035**

### **Summary:**

In the short term, priority needs to be development of BRT, and enhancing bus services to all parts of the city that are not served by rail. This would have greater benefits than DART expansion, for example. Longer term, at least one of the major underground projects will be needed, mainly because there is not enough street capacity to cater for all transport needs in addition to "civic space" needs. Decision on major projects should be based on best cost/benefit return on investment. Focus should not be exclusively on major infrastructure projects, but on delivery of quality transport to all citizens in the urban area of Dublin city and surrounding towns.

### **General observations:**

The transport strategy for Greater Dublin for the next 20 years will be a key component in how the city develops, how jobs are created, and how people retain mobility. It also has to take account of environmental factors, both within the city, and as part of our global responsibilities.

Overall the plan is very worthy but it is not clear if it will have the funding required given the type of economic forecasts current now and the scale of the challenge likely to emerge from this. A successful economy in Dublin is essential for growth of the Irish economy and investments needed to sustain mobility in Dublin are national investments with national benefits. Healthy efficient economic growth in Dublin is an essential component of national economic growth.

Strategy sets out a lot of very acceptable objectives over the 20 years. There is a good balance and weighting for public transport and sustainable modes so all this is to be welcomed.

The attractiveness of the private car is difficult to challenge, yet sustainable development of our city demands that we provide public transport options to as many of its citizens as we can, in a way that will persuade people use them by choice.

Quality public transport does not have to be on rails. It does not necessarily demand huge investment. It does not have to be frequent, and won't be to many communities, as long as there is a consistent, reliable and easy-to-understand product.

The DART interconnector is essentially a national project for integration of the whole rail network and needs to be looked at as such. Benefit is broader than Dublin area. It brings benefit to rail users from all parts of the country, for access to Dublin city centre, to Dublin suburbs, and to other rail services. We would encourage delivery of a revised interconnector within the timeframe of this plan.

The draft strategy document has an over-emphasis on certain criteria for assessing and ranking project priorities. Capacity by mode criteria are mentioned frequently. Yet these are not written in stone. BRT, for example, can carry far more passengers per hour than suggested. The document should rely more on economic criteria (including qualitative community and environmental benefits), with projects ranked by return on investment, and those with greatest return getting priority.

Delivering good public transport for the greater Dublin area needs to focus on the total population needs. This includes all living within the urban area and major outlying towns. There should be a clear objective to provide quality public transport to all citizens within these urban areas. Point noted in 3.2.6 that large parts of GDA are not viable for public transport is relevant for rural areas and small villages only. In order to facilitate good use of public transport, future housing and other development should be focused as much as possible close to rail and other high quality transport services.

There is an argument that much of the currently planned, and long-term planned initiatives will improve transport quality for those who already have better transport, while those who don't have such high quality will not benefit much at all. For example, focusing on improvements to existing rail corridors, where there is already good transport provision, rather than focusing on delivering better quality transport to those whose service is not so good, seems misplaced. The point made in 1.1.5 about Luas CrossCity and Phoenix Park Tunnel "not enough to engender a significant mode shift" is an acknowledgement of this argument.

If sustainable school transport is to be tackled then the only way it can be done is with a bus-based school transport system in urban areas. Walking and cycling are only part of the solution, as distances are often too long.

There is little mention of freight or deliveries but this is crucial in considering the city centre and providing for efficient orbital movement. Plans for deliveries and waste removal need to be built in to the transport projects, rather than looking for solutions when the project is done.

Talk of demand management on the m50 is a concern, as this will just spill traffic onto parallel roads causing massive congestion. Continued heavy car dependence for these types of movements will just have to be faced up to and the Leinster orbital and eastern bypass will need to come back onto the agenda seriously. These will also be important in terms of continued good port accessibility and reasonable freight movement speeds without the excessive delays which are happening now.

One concern is that the demand projections seem very modest. A 25% increase in travel demand between 2011 and 2035 amounts to no more than 1% a year. This is low by historic standards, and seems low for the future, given the likely continued predominance of the Dublin region in Irish economic and population development.

Encouragement to use public transport should be focused on off-peak as much as peak travel. This makes the public transport more sustainable financially, while giving environmental benefits through less traffic. Additional incentives to move some journeys from peak to off-peak would reduce congestion and reduce capital expenditure required.

The report needs to have more quantitative data to support the argumentation, including:

Costs and benefits of options

Demand analysis by mode

Current growth by mode and extrapolation of these trends

Current and short term growth potential in system capacity by mode

### **Metro North and DART Underground**

It is clear that at least one of these projects will need to go ahead in the long term, and preferably both within the 20 year horizon. There is not enough scope on city streets to accommodate all the transport needs, in addition to space for living city (wider footpaths etc), so major transport developments need to be underground. An additional advantage of this is delivery of higher speeds, with more time-saving benefits to users, and lower operating costs. Key issue will be timing, based on affordability, and economic case. Each project should be subject to a rigorous cost/benefit analysis, with public debate on the economic merits of each.

If it comes to prioritising one over the other, or to choosing which should happen first, there is no obvious winner. Metro North would provide a fast, high capacity north/south link, which benefits mobility across the city very significantly. It also has value in providing a rail link to Dublin Airport, which would give speedy access to key locations in city centre.

DART Underground has a broader national benefit, giving more integration for longer distance travellers, including those from outside the Greater Dublin Area. It needs to be considered in a broader context than Dublin Area strategy.

Either or both of these projects are favoured over additional on street Luas in city centre. There is not enough street space to accommodate more tramlines, given requirements for other users, including bus services required for parts of the city not served by rail.

These projects, if developed, need to be planned for the long-term. Adding stations and/or lengthening platforms, would be more difficult once built, so best to get it right first time (rather than the M50 scenario).

### **Bus Rapid Transit (BRT)**

BRT gets some, but not a lot, of mention in the strategy. It appears that there is some commitment to deliver, but it is not highlighted in the way that some high profile rail projects are.

Given funding constraints, low population density, high car ownership, it is clear that BRT is a far more practical way of delivering high quality public transport to a large section of the Dublin region population. It is also low risk, with most of the capital cost transferable in the event that it is not successful.

Some comments in relation to how this might be best developed: there is still a public perception that this is just a bus dressed up in a different way. Some public awareness is needed on the concept, and how it can deliver a quality service to the same standard as light rail recognise that BRT, either on its own or in combination with conventional buses, can deliver significantly higher volumes of passengers per hour than has been assumed in studies to date as BRT is primarily a concept built around vehicles with high standee capacity, it is clearly more acceptable to users over shorter distances. BRT should initially be prioritised on shorter routes to test its effectiveness and acceptability following on from that point, we need to accept that, in the context of longer distances in Dublin commuting, many users will regard access to a seat as important. Therefore, use of conventional buses, including double deck buses and coaches, along BRT corridors needs to be part of the solution BRT has by far the greatest potential for delivering high quality public transport to all parts of Dublin city. For this reason, and due its low capital cost per km, it should be prioritised in the short term The value of the Port Tunnel, especially for Airport access, is noted in 3.3.7. Port Tunnel services are likely to continue to be more attractive than BRT for end to end traffic between city centre and Swords as well as Airport.

It should be noted that BRT cost per km is expected to be between 25% and 33% of light rail costs for same distance. It is also worth noting that each of the five proposed BRT lines is expected to have demand well in excess of demand for Cabra Luas, thereby confirming that more people and more journeys can be facilitated at a fraction of the cost.

### **Conventional bus services**

A 20 year strategy is not just about major construction projects. It is about how we use our resources to best effect to achieve the aims of increasing public transport use and reducing dependence on private car.

Bus will continue to be the main public transport mode in Dublin, so it needs to get most attention. We cannot deliver rail service or even BRT to all parts of the city and surroundings, so we need to put great emphasis into delivery of high quality bus services, and selling the benefits to potential users, who would have a negative image of bus transport, and who would currently not consider bus as an option.

Agree with (3.6) "improvements needed to quality of public transport and how it is perceived".

Bus services have improved considerably, but not enough to persuade those with access to a car that it is a serious contender as a choice.

Benefits have come from RTPI, College Green bus corridor, consistent "clockface" products. Public awareness of these improvements is still not high.

Much needs to be done to deliver service as per product, with strong incentives/penalties (as with Luas) and a culture that puts delivery of service first priority, while maintaining standards, professionalism and good practice. Environmental benefit of newer buses is substantial, again public awareness is low. The idea of the polluting Diesel compared to clean electric tram is a thing of the past as bus emissions are now so low.

Increase in cycling can have a negative effect on bus speeds where road space is shared. This is an argument for separating cyclists from bus corridors and bus lanes

Agreed that pinch points have a major impact on attractiveness of bus (3.2.3) and eliminating them must be a strong imperative

It will never be possible to increase public transport share in corridors with no rail service to the same level as those with rail. However, with policies focused on the things that make a bus service high quality we can go a long way there.

### **Development of the Strategy**

Drogheda corridor - It is hard to see what is the value in investing in electrification of the line to Balbriggan. DART is not necessary for a capacity increase. Capacity increase can be delivered with Diesel trains. The quality of the service (comfort, reliability etc) on the Drogheda line is excellent. What is missing is off-peak frequency. This can be resolved, and patronage increased, by greater utilisation of the existing assets allocated to this line.

Due distance and customer expectations, current DART stock are not suitable for this line. It needs different stock specification to DART, with e.g. toilets, higher seat backs, also better seat/standee ratio.

Electric trains are at their most efficient when stations are closer together.

Note the following distances between stations:

Connolly to Malahide average - 1.6km

Connolly to Maynooth average - 2.4km

Malahide to Rush & Lusk average - 4 km

Rush & Lusk to Balbriggan average - 6.5km

This indicates that there would be greater efficiencies in promoting DART to Maynooth. DART should not be extended to Balbriggan unless as part of a committed DART Underground, and then only with new rolling stock specified for longer runs. It may be worthwhile extending DART to Donabate (or at most Rush & Lusk) as a benefit would be to give a turn back location off the mainline (either third platform or siding north of the station), which would give greater flexibility and reliability of scheduling than Malahide can.

Lucan corridor - the case for Luas to Lucan does not appear to be strong. This is one example of where analysis of demand, and theoretical capacity by

mode, seem to be determining the case for investment. It is clear that with Chapelizod bypass, bus priority on the Quays and in Lucan area, express buses and BRT would be fine in terms of capacity and of service quality.

In the event that Luas was built for Lucan, it should share city route with existing Red Line, as this corridor is underutilised, and other corridors are required for bus. This would also save investment cost and disruption to scarce city centre space.

Luas extensions - extensions to existing Luas lines make more sense, and are likely to show a better return in a cost/benefit analysis. Extension from Broombridge to Finglas would increase the use of what will be an under-utilised line. Extension east from Point is also supported, as is Luas to Bray, all these subject to a business case that ranks them higher than alternative use of money.

BRT - the momentum for BRT in Dublin within the next two to three years needs to be pushed. BRT is more suitable for shorter journeys, and that is where the investment and service delivery should start. With hindsight, it is clear that Swords was not the best route for initiating this concept, due to expectations generated of Metro to Swords impacted on public acceptability long distance, with many end to end services as express using Port Tunnel. These services would continue to be more attractive than BRT due high seat ratio

The proposed Swords BRT should be developed as planned from Santry/Northwood to St. Stephen's Green, and continued to Belfield, with possible extension to Stillorgan/Foxrock.

The Clongriffin to Tallaght line should also be developed soon, with full northside to Clongriffin and southside as far as Rathfarnham being priority. These routes are not only shorter, but would have loading distributed more throughout their length, resulting in relatively short standing journeys.

Blanchardstown needs to be considered more carefully, as again journey times are long, most boardings would be in Blanchardstown, and there would be customer resistance to high standee capacity. There is also a drawback in that the BRT is planned to not serve the city centre. Blanchardstown BRT would most likely need to be augmented by end to end express conventional buses in peak.

As with other modes, BRT plans must be subject to cost/benefit analysis. However, it is clear that with lower capital costs, and greater flexibility, BRT will produce a higher return on investment than on street trams. Cost/benefit also needs to take account of impact on non-users, as well as users. BRT should be more positive in this context, as the corridor can be used by other buses, and feed can be taken from off the BRT network. Light rail on street, especially in city centre, has a negative impact on other public transport users, due displacement of bus routes and stops.

## **Transport services and integration**

The services aspect of this strategy is critical. Ultimately, the quality of service to customers is about understanding their needs, and planning and delivering service to meet that need. Public transport in Dublin will continue to be mainly bus based, therefore attention to bus services is most important for optimising public transport usage in Dublin. Getting best value out of our bus services is as much about product planning and delivery as about infrastructure. We need to focus on product planning and delivery as much as on the major projects.

Key to encouraging use of buses is waiting time and journey time. Journey time has improved on many corridors with bus lanes, and is quite competitive with car at least at certain times of day. Waiting time is a function of frequency and/or product, and reliability.

Luas works on a "frequency" basis, so if tram is every 8 minutes, then longest waiting time should be 8 minutes and average should be 4 minutes. This approach will not work with buses, because due to limited demand on most routes, frequency is not strong enough for "turn up and go".

Report in 6.1 refers to "high frequency" bus routes at those with 10 minute peak frequency and 15 - 20 minute off-peak frequency. This is not "high frequency". High frequency is when the service is frequent enough that most people are happy to turn up and go. Frequencies on Dublin's bus routes are such that a timetable is necessary, and waiting time can be minimised by using a timetable (planned departure time) in conjunction with RTP1.

The standard operating pattern for buses in other European countries is for consistent timetables, at same time past the hour, with stop specific timetables. Customers would know to the minute what time their bus is due at their stop, thereby reducing their waiting time to a minimum. This works for any frequency from every 10 minutes to hourly. We could make use of bus services far more attractive if we could reduce waiting times by applying similar operating systems to the norm in other cities, accompanied by a promotional campaign that makes potential users aware.

Integration, and indeed meeting customer needs, is being hampered by inadequate bus stops in city centre. Distances between stops is too long, and buses are not connecting with each other, or with Luas, as a result. This needs an audit of space available, and how to maximise use of it.

We should be wary of any plans that require interchange for access to city centre. Interchange will work in city centre for access from one suburb to another, but enforced interchange (either within mode or between modes) for access to/from city centre is likely to encounter strong consumer resistance. For that reason, shuttle commuter train to Greystones (6.3) is not a good idea. Transfer is not customer friendly. There are issues with interchange, stock quality of DART, crowding on the DARTs that connect etc. Trying to enforce this would encourage more people to use their car, or express buses, rather than trains. We need to plan on all commuter services accessing city centre.

Similarly, we should not plan on feeder buses to Luas or BRT. Let the market decide, through services must be retained if that is customer preference.

Bus fares (6.4) - need to discourage/eliminate driver interaction by getting most if not all fares onto standard fare, with "tag on" remotely from driver. Tag off is not practical nor customer friendly for buses and should not be pursued. Fare structure should encourage more period tickets rather than singles.

More off street bus terminal space is needed. Cross-city is not practical for very long routes, and basic facilities are also needed. There are more long distance routes than Busaras can accommodate, while private sector routes and longer Dublin Bus routes also need to be accommodated. Plans for bus terminals at rail stations (e.g. Connolly) are encouraged, while city centre land in Strand St. should also be developed.

There is scope for smaller vehicle public transport on a fixed route, no pre-booking basis, for small communities. Pre-booking is not practical, nor does it meet user needs.