DÁIL ÉIREANN

AN COMHCHOISTE UM IOMPAR, TURASÓIREACHT AGUS SPÓRT

JOINT COMMITTEE ON TRANSPORT, TOURISM AND SPORT

Dé Céadaoin, 21 Feabhra 2018 Wednesday, 21 February 2018

Tháinig an Comhchoiste le chéile ag 9.30 a.m.

The Joint Committee met at 9.30 a.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	Seanadóirí / Senators
Mick Barry,	John O'Mahony,
Imelda Munster,	Ned O'Sullivan.
Catherine Murphy,	
Noel Rock,	
Robert Troy.	

I láthair / In attendance: Deputies Michael Fitzmaurice, John Lahart, Hildegarde Naughton, Éamon Ó Cuív and Eamon Ryan and Senator Kevin Humphreys.

Teachta / Deputy Kevin O'Keeffe sa Chathaoir / in the Chair.

Business of Joint Committee

Vice Chairman: Apologies have been received from Senator Frank Feighan. The Cathaoirleach has been unavoidably delayed. Before we begin, I remind members to turn mobile telephones off completely or put them in silent mode.

The joint committee went into private session at 9.38 a.m. and resumed in public session at 9.46 a.m.

Vice Chairman: Before we begin, I remind members, witnesses and guests in the Visitors Gallery to turn off their mobile telephones. As agreed previously, we will now take correspondence in public session, before commencing the main business of the morning. No. 2018/221 is an email dated 8 February from the Secretary General of the Parliamentary Assembly of the Council of Europe, with recommendations and resolutions adopted by the Council, upon which it would like to receive a response from the committee. It is proposed to note the correspondence. Is that agreed? Agreed.

No. 2018/222 ABC is an email dated 15 February from Mr. Dónal Ó Brollacháin regarding Metro North. It is proposed to take the correspondence. Is that agreed? Agreed.

No. 2018/223 is a letter from Mr. David Franks dated 16 February, regarding issues raised by Mr. Padraic Moran. It is proposed to take the correspondence. Is that agreed? Agreed.

No. 2018/224 AB is an email dated 15 February from Mr. Barry Kenny of Irish Rail, forwarding studies undertaken by Iarnród Éireann for the National Transport Authority, NTA, concerning investment in station accessibility. This letter follows on from our previous meeting. It is proposed to note the correspondence. Is that agreed? Agreed.

No. 2018/225 is an email from the Embassy of Romania inquiring if the committee would meet the committee on education, science, youth and sport to discuss various issues on a day chosen by the joint committee. It is proposed to note the correspondence. Is that agreed? Agreed.

No. 2018/226 is an email from Mr. Padraic Moran regarding issues he has with Irish Rail. We have written to Irish Rail as requested, asking that they meet with Mr. Moran. I think he has replied to say that he will. It is proposed to note the correspondence. Is that agreed? Agreed.

No. 2018/227 is an email from the National Private Hire and Taxi Association regarding taxi drivers' view of a proposed plaza. It is proposed to discuss this correspondence later. Is that agreed? Agreed.

Correspondence No. 2018/228 is an email from Transport Infrastructure Ireland, TII, providing further information requested by the Joint Committee on Transport, Tourism and Sport on 24 January 2018. It is proposed to note the correspondence. Is that agreed? Agreed.

Chairman: Good morning ladies and gentlemen. The purpose of our meeting today is engagement with the designate chairpersons of public bodies. In this regard, I welcome Mr. Cormac O'Rourke, chair designate of Transport Infrastructure Ireland; Ms Cliona Cassidy, chairperson designate of the Marine Investigation Board; Mr. John Mullins, chairperson designate of the Port of Cork; and Mr. Maurice O'Gorman, chairperson designate of the Galway Harbour Company.

I draw the attention of witnesses to the fact that by virtue of section 17(2)(l) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of their evidence to the committee. However, if they are directed by the committee to cease giving evidence on a particular matter and they continue to so do, they are entitled thereafter only to a qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the House or an official either by name or in such a way as to make him or her identifiable.

I now invite Ms Cliona Cassidy to make her opening statement.

Ms Cliona Cassidy: I thank the Vice Chairman. I am very honoured by the proposal to extend my appointment as chairperson of the Marine Casualty Investigation Board, MCIB, for a further year and to have this opportunity to present my credentials to the committee this morning. I grew up and attended primary school in Saudi Arabia. I returned to Ireland for my secondary education and boarded at Rathdown School, Glenageary, County Dublin and subsequently at King's Hospital School, Palmerstown. I graduated with a bachelor's degree in business and legal studies from UCD in 1996. I completed a certificate in marketing and French and moved to the United Kingdom where I was employed by the British Potato Council in Oxford as an export marketing executive and subsequently as export manager. The British Potato Council is a semi-State body funded through levies from the potato industry. My main responsibility in those two roles was the management of external international consultants who assisted in the management of the public image of British seed and consumer potatoes through media management, trade shows, seed growth trials and Government relationships. Our target markets were mainly in Europe and the Middle East. I represented the British Potato Council on a number of committees, including the Department for the Environment, Food, and Rural Affairs export industry committee which facilitated the exchange of ideas and co-ordination of international activities for a diverse range of British food and cultural promotional bodies. I completed my employment in the British Potato Council in a consumer-marketing role promoting the industry to consumers in association with retailers and potato processors. In all of these roles I had budgetary responsibility, ensuring that limited resources were applied to gain the maximum or greatest result.

I moved back to Ireland and in 2005 I graduated from the Honorable Society of King's Inns with merit and was called to the Bar. I completed my practical training as a barrister while devilling in 2005 and 2006, first with Ms Caroline Cummings in criminal law and judicial review and then with Ms Marian Moylan and Ms Carrie Jane Canniffe in both family law and commercial law. I currently practice at the Bar and have a civil law practice based in Dublin. One of the cornerstones of the Irish Bar is the fact that barristers are independent, notwithstanding who they represent or have represented in the past. Over the past 12 years, my practice has included

judicial review proceedings where I have advised members of An Garda Síochána challenging the procedures in disciplinary investigations. I have also provided legal advice to the Chief State Solicitor's office on challenges by members of the Garda Síochána to decisions regarding disciplinary matters and the Garda compensation scheme. I regularly advise on contractual and negligence disputes and have represented injured persons and insurance companies in a range of personal injuries actions, including physical and psychological injuries. I have also advised clients on bullying and harassment claims and employment contract disputes. I have also managed a team of barristers in a large electronic discovery process for a commercial funds dispute. I was a member of the family Bar working group tasked with exploring the role of alternative dispute resolution in family disputes in December 2007. This included assisting in the drafting of a response to the report of Dr. Carol Coulter on the family law courts.

In 2008 I was appointed by the arbitration committee of the Bar Council to two working groups to assist in the preparations for the International Council for Commercial Arbitration, ICCA, conference and the young arbitration practitioners conference. The working groups were established to market and promote the involvement of practitioners in the conferences and to promote alternative dispute resolution in Ireland. Following an interview process I was selected by the arbitration committee to intern at the International Centre for Dispute Resolution, ICDR, in New York.

During my time at the Bar, I have taught law to a range of students who have varying levels of, and requirements for, legal knowledge. I currently tutor on the legal studies diploma course and the barrister-at-law degree course, which is a vocational course concentrating on practice and procedure. Both courses are provided in the Honorable Society of King's Inns. I have also developed and delivered a basic introduction to law course for final year engineering students in UCD.

My experience, while diverse, shows some of the key skills that are required in the role of chairperson of the Marine Casualty Investigation Board, MCIB, particularly objectivity, independence and a focus on fair procedures. As the committee knows, the MCIB was set up pursuant to the Merchant Shipping (Investigation of Marine Casualties) Act, 2000 and SI 276 of 2011, the European Communities (Merchant Shipping) (Investigation of Accidents) Regulations 2011. Its function is to carry out investigations of marine casualties involving Irish vessels or that take place in Irish waters. The result of those investigations is to ascertain the cause of the incident in order to enable the MCIB to make recommendations to the Minister, particularly safety recommendations. While the reports can, at times, make for difficult reading, the recommendations aim to assist in preventing the repetition of those incidents. The paramount focus of the MCIB is to assist in the promotion of a culture of safety in the water and on vessels. The assignment of blame or fault does not fall under the remit of the MCIB and it is important that this essential feature continues to be promoted. It is necessary for the efficient management of investigations that people interviewed in the course of it understand that the purpose is purely to ascertain the cause of the incident and not to assign blame or fault. This promotes openness, which could otherwise be a difficulty. It is important to keep in mind that with some incidents a whole village or community will have been touched by that incident. In that context, it is very important that we are seen as promoters of a safety culture.

A further key statutory provision is the independent nature of the MCIB, which enables it to address appropriate safety recommendations to the Department of Transport, Tourism and Sport where appropriate and if required. Independence in respect of a relationship with the industry is also important. I have no connection with the marine industry and in the five years

that I have been chairperson of the board, I have never been conflicted in a situation or unable to deal with a particular report..

I was appointed to the role of chairperson of the MCIB in January 2013 for a period of five years. In that time I have had the pleasure of working with dedicated members of the secretariat who underpin the work of the board and without whom we could not function. They are our only full-time employees. At the moment our secretary to the board is Ms Margaret Bell and she is supported by Ms Monica Quinn and Mr. Patrick Leonard. I have also had the pleasure of working with very committed members of the board. When I was originally appointed the board comprised two independent members, Mr. Brian Keane and Mr. Micheál Frain, as well as Mr. Brian Hogan, who is the chief surveyor and Mr. Jurgen Whyte, the nominee of the Secretary General of the Department. In 2016 and 2017 the two independent members completed their terms and we welcomed two new members on to the board, Ms Dorothea Dowling and Mr. Frank Cronin. Towards the end of 2017, Nigel Lindsay replaced Jurgen Whyte, after 12 years, as the nominee of the Secretary General of the Department of Transport, Tourism and Sport.

During my time as chairman of the MCIB we have made several changes to protect confidentiality, for example, through the anonymising of published reports, and to ensure the focus is on the safety recommendations. We underwent an audit by the European Maritime Safety Agency to assess the implementation of EU Directive 2009/18/EC, implemented in Ireland as SI No. 276 of 2011. We are undergoing preparations for the implementation of the general data protection regulation, GDPR. Obviously, we hold much data in respect of families and others involved in marine incidents. It is important our systems and processes protect personal information held in the MCIB as a structure.

The MCIB has a panel of investigators and knowledgeable board members. I see my continuing role as providing independent leadership and guidance to ensure fair procedures are followed in the course of investigations. The prompt and accurate publication of reports is essential to the work of the MCIB. It will remain a key focus of the agency's work into the future.

I thank the Chairman and the committee for their time and patience this morning. I look forward to continuing to ensure the MCIB is run in an efficient manner and the paramount requirement of safety in all waters in Ireland is promoted.

Mr. Cormac O'Rourke: I am honoured to have been nominated for a second term as chairperson of Transport Infrastructure Ireland, TII, by the Minister for Transport, Tourism and Sport, Deputy Ross. I thank the Chairman and committee members for the invitation this morning.

I grew up in Dalkey, County Dublin, and was educated in Scoil Lorcáin and Coláiste Eoin. Is Gaelscoileanna iad an dá scoil sin. Mar sin, más mian le baill an choiste ceisteanna a chur as Gaeilge, tá mé sásta iarracht a dhéanamh freagra a thabhairt orthu as Gaeilge. I studied engineering and business in UCD, graduating in 1980 with a BE and in 1985 with a Master's degree. I joined the ESB from college. I worked for five years as an engineer and received training in Switzerland and the UK. I was then promoted to run the section which performed economic analysis and efficiency studies in power stations. In 1987, I moved to KBC Bank NV's Irish subsidiary. I worked initially in corporate banking and international aircraft finance. In the early 1990s I was appointed as head of KBC's project finance operations in Europe, the Middle East and Africa. The team had 30 project financiers split between Dublin and Brussels and was responsible for several billion euro worth of project lending for infrastructure, energy and telecommunications. I worked on a large number of European road, tunnel and bridge proj-

ects. I was also involved in rail projects in the UK, Australia and the Benelux countries. The funding of these projects involved a myriad of financing structures, including public private partnerships, PPPs.

In 2000, I returned to ESB International as investment director and worked on major projects in Northern Ireland, Spain and Poland, where ESB was the investor. I am fortunate to have worked for a major semi-State, which has a disciplined and highly sophisticated approach to developing major infrastructure projects both in Ireland and abroad. In 2003, I moved to Goodbody Corporate Finance. Since then, I have advised many semi-State and private companies on mergers and acquisition in energy, infrastructure and health care, as well as strategy and fundraising.

When I was appointed as chairperson of the National Roads Authority, NRA, and the Railway Procurement Agency, RPA, in 2013, the most difficult challenge the organisations faced was the merger of the two entities to become TII. TII is now a single organisation in a single location with good cross-fertilisation of ideas between people with diverse engineering backgrounds. During the merger and afterwards, Luas cross city, Gort to Tuam, the N11 extension, Newlands Cross and other major and minor projects were completed. The staff of TII are to be commended on keeping their focus on delivering all these projects, while bedding in a new organisation.

At the time the merger was first mooted, the estimated savings were €3 million per annum. The actual outturn was approximately €10 million per annum. The largest savings have been in personnel numbers and premises. In terms of personnel, the savings have probably gone too far, particularly in terms of being able to undertake long-term planning. This is a matter on which we are engaging with the Department of Public Expenditure and Reform.

TII's mission is to provide high quality transport infrastructure and services, delivering a better quality of life and supporting economic growth. It is responsible for the Luas in Dublin, as well as 5,306 km of national roads. The Luas carries over 100,000 passengers per day, almost a third of the number of passengers carried by Dublin Bus. The national road network transports people, goods and services between the country's major cities, towns, airports and ports. It is fair to say that TII's activities impact on almost every citizen in the State.

The board of TII oversees an authority which directly employs approximately 260 people. TII also funds 11 national roads offices, NROs, with 200 local authority technical staff. The NROs' management of projects and local knowledge are invaluable. Larger PPP projects are managed directly by TII.

Since 2000, TII has moved from a developer of roads and light rail to become a major operations manager. Most operations are outsourced. In total, 1,250 km of high-speed motorways, motorway service areas and tunnels are operated by a combination of PPP concessionaires and specialist operators. TII manages all PPP procurement directly and outsources commercial operations such as the M50 eFlow, Dublin Port tunnel and Luas services. Overall, some 2,000 people are employed on the operations side, with over 1,000 employed on the construction of major road and rail projects last year. I have included a diagram with this presentation, which I hope gives an appreciation of the scale of TII's activities.

Safety is a key concern for all who work for TII. The board is acutely aware that building, operating and maintaining roads and light rail are inherently dangerous activities. Monitoring safety on sites and on roads and light rail operations is a key part of what we do.

Last year had the lowest number of road deaths since records began. While this is welcome, we must strive to do better. TII monitors accidents on the national road network using road traffic collision data collected by An Garda Síochána and validated by the Road Safety Authority, RSA. We try to prioritise improvements in areas where collisions are most prevalent. Further information is provided in the appendix to the written statement on our progress with safety schemes.

Luas safety is a key issue and a combination of education campaigns and red-light infringement cameras have improved our safety statistics. Luas safety statistics compare well internationally, but again we must do even better.

Congestion is clearly a growing problem. While I know that it is no comfort to those stuck in traffic jams or feeling squashed on the Luas, it is worth pointing out that congestion is a symptom of economic success. However, I believe that as a country we have consistently underestimated growth and have failed to plan for success. In the 20 years since the 1996 census, the population in Ireland rose by 1.1 million people. The national planning framework expects an additional 1 million people by 2040, essentially in 22 years. A recent ESRI report, however, indicated the population could increase by up to 1.1 million people by 2030, ten years before the national planning framework. TII is a looking again at the national transport model to see if we need to update it for these latest projections.

TII has conducted a detailed analysis of the chronic underspend on road maintenance. The results are stark. The annual spend on asset renewal of the national primary routes has been well short of the required investment level of €140 million per annum. Continued under-investment in pavement renewals for a period of 20 years will result in extensive repairs costing over €600 million per annum. This is more than twice as expensive in real terms and in no way represents value for money. I am grateful for the commitment from the Department that this funding gap will be phased out by 2020.

In 2016, the Irish Fiscal Advisory Council noted that depreciation on public infrastructure was approximately 2.1% - the same level as spending. A benign interpretation is that Ireland is standing still. In 2017, the World Economic Forum ranked Ireland as 38th in the world for infrastructure. Our National Competitiveness Council's analysis the same year stated that Ireland was spending less than the EU average on infrastructure. This means that as a country, we are going backwards compared with peer countries. When we consider the rapid growth in population, which is not the case in many European countries, Ireland is going backwards quite quickly compared with our peers. In its 2014 report on advanced economies, the IMF showed that spending an extra 1% of GDP on infrastructure leads to an immediate 0.4% increase in GDP with a permanent increase in GDP of 1.5% four years later. This information is not new. These results are almost identical to those produced by Professor John FitzGerald in the ESRI's medium-term review back in 2003. The ten-year national development plan published last Friday is very welcome and TII looks forward to playing its part in building out those projects we are tasked with.

A word of caution regarding the delivery of future infrastructure is probably appropriate. The board of TII is very concerned at the small number of major schemes that it has ready to go for planning or construction. Funding has not been provided during the recession to develop such schemes. The committee will be aware that a typical timeline for a major project is eight to 13 years from start to finish - assuming that there are no legal or planning challenges. Unfortunately, these challenges happen all too often in Ireland. TII is in the business of long-term planning and I welcome the indications that TII will be allocated funding to put more projects

through planning. The cost of planning permission is a small fraction of the cost of the project but it provides optionality value. Once planning permission is in place for a significant number of projects, they can be scheduled as and when money becomes available. Without planning in place, we and others may not be in a position to take up available funding. TII is actually delighted that this issue has been addressed comprehensively in the national development plan.

Whether a person needs to travel from Sandyford to the Dublin Institute of Technology at Grangegorman or between Limerick and Galway, our job in TII is to provide a safe and efficient user experience. We invest money on behalf of the taxpayer to enable access to jobs and for goods and services in the most efficient manner possible right throughout the country. I acknowledge and pay tribute to the leadership of Michael Nolan, CEO of TII, and his very strong management team. Theirs is a difficult and demanding job at the best of times and they do their job with commitment, dedication and good grace. On behalf of my fellow board members and TII, I can assure the committee that we will continue to work closely with the Oireachtas, the Department, the National Transport Authority and our local authority partners in meeting the transportation infrastructure needs of Ireland.

Vice Chairman: I call on Mr. John Mullins, chairman designate of the Port of Cork, to make his opening statement.

Mr. John Mullins: Tá mé an-sásta a bheith anseo maidin inniu chun cuntas Phort Chorcaí a thabhairt don choiste. I would like to make a brief presentation on the achievements of the Port of Cork in the five years since my previous appointment in March 2013 until 21 December 2017. I would like members to go through the document because it is in presentation format. I would like to present my credentials and vision for the Port of Cork at this session this morning. I stand before the committee seeking re-appointment to the position of chairman of the Port of Cork Company, PoCC, for a period of three years from 1 March. I will firstly introduce myself to the committee and then present the salient challenges and opportunities facing my intended stewardship of the board of the Port of Cork.

I was born in Cork nearly 50 years ago in 1968 in the south inner city to Patrick and Maureen Mullins. My father spent his life as a painter-decorator for Cork City Council and my mother was well occupied with five boys of which I am the eldest. I was educated in North Monastery primary and secondary schools and then went on to study electrical engineering in University College Cork. I completed a bachelor's degree in 1989 and was awarded graduate of the year in UCC in 1989. I also studied a master's degree in electrical engineering. In 1997, I graduated from the Smurfit Business School in UCD with a first-class honours MBA.

I started my career with ESB - Mr. O'Rourke is a former colleague of mine - and am very thankful for the very fine career foundation I received there. I worked as a senior consultant in PwC in London specialising in the communications, energy, water and transport division. In 2000, I returned to Ireland to work with ESB International where I worked with Mr. O'Rourke on projects in Poland and project managed and commercially negotiated ESB's largest external investment in Amorebieta in the Basque region of Spain. In 2002, I joined NTR and worked with all of the companies in the group - Toll Roads, Greenstar, Celtic Anglian Water, Bioverda and Airtricity. I left NTR in 2007 to take up the position of chief executive officer in Bord Gáis Eireann.

My time in Bord Gáis Eireann was immensely enjoyable and challenging. My period was marked by significant diversification of the company, in particular into electricity with the Big Switch. The company has since split in three and significant parts were privatised and now

trade as Centrica's Bord Gáis Energy and Brookfield Renewable Energy, which I am proud to say is now based in Cork and is the head of Brookfield's pension fund out of Cork for Europe, the Middle East and Africa.

Along with partners, I founded Amarenco Solar in 2013 and since then, we have grown the company to over 50 employees in Ireland, the UK and France. With partners, Amarenco has invested over €300 million in solar technology in France. I hope to invest well over €100 million in Ireland, primarily in the Cork region, by 2020. I am a fellow of Engineers Ireland and the Academy of Engineers of Ireland and hold board positions with Heneghan PR, Mainline Group and Wisetek. I am involved in the Cork Foundation, Anam Cara and Co-operation Ireland charities in the Cork region. I am a former president of the Cork Chamber of Commerce and received the title of *Chevalier de la Legion d'Honneur* in 2016 from the French President for services to French renewables.

I will deal with trade in the first instance. The Port of Cork has achieved throughput growth from 2013 to 2017 of over 10%. This is charted at the top of page 2 of the presentation. Regrettably, Lisheen Mine closed in 2015 leading to a 350,000-tonne reduction in throughput per annum which came through Tivoli in addition to a decline in Bantry tonnage in 2016. That was due to oil strategies in Zenith, which it took over from Phillips 66 in 2015. The total traffic volume is 10 million tonnes. We should be aware that the Port of Cork is responsible for about 20% of all the trade through ports in Ireland.

We have achieved significant growth with regard to financial performance over the five years. Turnover is now close to $\in 30$ million, while earnings before interest, taxes, depreciation and amortisation is about $\in 9.5$ billion and operating surplus and dividends paid to the Minister total *circa* $\in 3$ million. In fact, the dividends have increased by a factor of 60% in that period annually. Our operating surplus has moved from $\in 1.7$ million in 2013 to $\in 5.7$ million in 2017. The closure of Lisheen Mine resulted in a loss of about $\in 1$ million worth of annual revenue in 2016 and 2017. These five-year trends are graphed in figure 1 on page 3.

The port has achieved significant growth in container traffic in particular primarily because of the upturn in the economy. In particular, there is a lot of industry in the Cork region that exports but we also have quite an amount of importation for domestic consumption as well. Measured in 20 ft. equivalent units, TEUs, we have an increase of about 28% in the period from 2013 to 2017 in TEU trade. In addition, the container-handling facilities at the Ringaskiddy deepwater terminal were also improved to enable the Port of Cork and the global shipping company Maersk enable a direct deep-sea transatlantic service to Ireland from South America and Cuba every Saturday to deliver practically all Fyffes bananas and pineapples for this country. It used to go through Rotterdam and then come by short-sea service to here so it now comes directly to Ringaskiddy in the only Panamax size container ship that arrives in Ireland at any time.

The Port of Cork has achieved significant growth in the number of cruise line calls in Cork. When we started in 2013, there were 61 calls. This year, we will have 96. This is replicated right across the country in all harbours and ports. Progress has also been made with cruise line calls to Bantry. I am proud to say that we will have eight calls in Bantry in 2018 - a mixture of Glengarriff and Bantry port.

We have had significant capital additions, including the Ringaskiddy development advanced works, costing \in 9.7 million. Regarding Bantry inner harbour development, we completed a brand-new marina and leisure area and we upgraded the pier for all the fishing, aquaculture and leisure activities and for the operation of the ferry to Whiddy. This cost approximately \in 9

million. The development was launched in August 2017 in west Cork. We put a new Liebherr LMH 550 crane in Ringaskiddy in 2014, costing about €3.6 million. We implemented a new automatic truck gate system, primarily because of congestion in the Tivoli area. That is a critical issue. Considering that container traffic has grown by 28%, there is significant truck movement on the Tivoli and the lower road. That is one the main reasons we are moving down to Ringaskiddy with the container terminal. The Cobh cruise terminal has been upgraded. We are now able to take the largest cruise liners in the world because of the natural water depth in Cobh. The largest cruise ships, which have about 6,500 passengers, are expected to come to Cobh in the coming years. Surfacing works at the existing container terminal at Tivoli had to completed. We have purchased cargo handling equipment.

The limitations of the facilities in Tivoli, which facilities have served Cork well, concern water depth, the width for vessel swinging, and landside terminal capacity. These limitations require the relocation of the container business downstream to the lower harbour at Ringaskiddy, where the depth of water is approximately 13 m, as opposed to approximately 6 m at Tivoli. Maritime traders want to enter and exit the harbour as quickly as possible. This will reduce the carbon footprint in the context of cruising up the harbour into the river. All the goods will be dispatched at Ringaskiddy and thus there will be no cruising through Passage West and past Blackrock into Tivoli. The port redevelopment will be beneficial to the port, port customers, the city, the wider Cork community and the region.

Full planning permission for critical-infrastructure port redevelopment at Ringaskiddy was granted in May 2015 by An Bord Pleanála following an efficient strategic-infrastructure oral hearing in September 2014. Revised phase-1 amended planning permission was granted on 8 June 2017. The company has therefore achieved planning permission for phase 1 of the Ringaskiddy development, which includes an optimised 360 m single berth, a straddle carrier operating system, and a new maintenance building for straddle carriers. Phase 1 will see the port relocate its container business from the current city centre Tivoli location to a new facility at Ringaskiddy. Figure 2 of my submission illustrates the difficulty associated with turning a ship in the River Lee. Dredging to keep the River Lee going costs around €500,000 per year. That is a significant cost to the port of Cork. The Ringaskiddy phase 1 development will be operational by 2020 and will include an optimised 360 m single berth, a straddle carrier operating system and some new maintenance buildings.

At a European level, the port of Cork is included within the new TEN-T regulation as a "core" port on the North Sea-Mediterranean corridor, along with being identified as a tier-1 port in the 2013 national ports policy. In line with this TEN-T designation, the port has secured funding under the TEN-T and the Connecting Europe Facility grant aid schemes for its Ringaskiddy developments.

PoCC was successful in 2013 with its funding application made under the acceleration or facilitation for the implementation of TEN-T projects. Grant aid of 50%, amounting to €1.8 million, was made available to obtain statutory consents for the Ringaskiddy development, complete financial and economic appraisals, detailed designs and communication plans, and prepare tender documentation.

PoCC submitted an application for TEN-T transport section CEF funding to the European Commission's Directorate-General for Mobility and Transport during 2015 following Department of Transport ,Tourism and Sport endorsement. The European Commission notified PoCC on 29 June 2015 that it had decided to allocate €12.74 million − or 17.5% of the eligible expenditure - to fund the construction of the proposed Ringaskiddy development.

Unfortunately, the February 2016 application made under the Motorways of the Sea scheme, in partnership with Dublin Ferryport Terminals and Belfast Harbour authorities to try to secure EU funding assistance for ship-to-shore cranes, straddle carriers and the gate operating system was unsuccessful. Re-engagement with Europe on Brexit restructuring should be a policy priority so such applications will be positively viewed in the future.

In 2017 the company agreed a funding structure for the Ringaskiddy port redevelopment with the European Investment Bank, worth €30 million, with AIB, worth €30 million, and with the Irish Strategic Infrastructure Fund, worth €18 million. The company received the borrowing consent from the Ministers for Transport, Tourism and Sport and Public Expenditure and Reform on 14 December 2017 to proceed with the Ringaskiddy development. Legal documentation was then finalised, on 20 December 2017, in Dublin and the three facility agreements, the common terms agreement and the inter-creditor agreement were signed by all parties on that date. PoCC was then in a position to issue a letter of acceptance to BAM on 20 December 2017. We expect the commencement of works soon. It should be noted that we are engaged in a legal dispute with BAM as a contractor in this regard.

The Whitegate oil refinery accounts for over 55% of the port's overall cargo tonnage figures and accounts for 28% of the tonnage and goods income of PoCC. PoCC was very pleased to learn on 3 August 2016 that an agreement was reached with Irving Oil, a Canadian family-owned business, to purchase and secure the future of the Whitegate oil refinery. There were threats that it would close but we were very much part of the process of ensuring it would remain open.

The company entered into a joint venture with Lanber Holdings to purchase and redevelop Marino Point. Ownership of the joint venture company is split as follows: 60% Lanber Holdings and 40% PoCC. The purchase of Marino Point was completed on 2 June 2017. This site has lain fallow for the best part of 15 years. I refer to the old IFI site. There are significant specific projects intended for the site that will free up lands in the docklands of Cork for future infrastructural development.

On Bantry Bay port, the amalgamation and consolidation of the Bantry Bay Harbour Commissioners' assets with PoCC was completed on 1 January 2014, and a 100% subsidiary, Bantry Bay Port Company DAC, was created to manage the Bantry Bay operation. Following the unveiling of plans to develop Bantry Harbour in 2015, phase 1 of the Bantry inner harbour development, costing in the region of €9 million, was completed. The official opening ceremony of the Bantry marina development took place on 11 August 2017. Completion of the Bantry inner harbour blueways kayaking trail was completed in 2016. This trail is the first of its kind in Munster.

PoCC secured planning permission in December 2014 for upgrading the cruise-berthing facilities in Cobh as part of a cruise vision to accommodate the cruise vessels of the maximum size. This investment of €1.5 million allows us to take in those vessels.

In 2017, the company purchased a site on Lynch's Quay in Cobh, as tenant in common with Cork County Council, for the purpose of future development to accommodate tourist and cruise-ship traffic and particularly to provide a new ferry terminal for tourists to visit the Spike Island facility. It is also to provide incremental opportunities for two cruise liners to arrive at Cobh at the same time.

I am chairman of the pension fund in PoCC. I inherited a deficit in the fund. In May 2014,

we agreed with the Pensions Authority a funding programme to 2023 to make sure the definedbenefit pension fund stays whole, at a rate of at least 100%, for all past and present employees of the port.

In August 2017, PoCC welcomed to Cork a delegation from NextDecade Corporation, a liquefied natural gas, LNG, development company based in Houston, USA. NextDecade and PoCC had previously signed a memorandum of understanding to explore a joint development opportunity for a new floating storage regasification unit, FSRU, and associated LNG import terminal infrastructure in Ireland. NextDecade focused on one area within the harbour, west of Whitegate jetty, for this development. As an entry point into the Irish energy market, the port of Cork is an attractive location for an FSRU-based LNG import terminal. Surrounded by existing marine infrastructure and industrial facilities, the proposed site is less than 2 km from the Gas Networks Ireland grid at the Bord Gáis Energy plant in Whitegate.

Let me refer to the International Shipping Services Centre, or Cork city docklands. PoCC maintains its support for the Cork docklands redevelopment and intends playing a full role in ensuring that the development potential of the area is realised. PoCC management is in continual discussions with Cork City Council, assisted by the Department of Housing, Planning and Local Government, regarding the future operation of the city quays. The company is currently chairing a stakeholder group, including developers, the council, IDA and chamber of commerce, in proposing the concept of the international shipping services centre which would be, in the context of Brexit, an opportunity to provide back-office maritime, financial and IT support in the development of significant office blocks within the inner docklands area.

Following a detailed review of Ringaskiddy redevelopment funding and office options, the directors of PoCC decided that the Custom House property located at Custom House Quay in the centre of Cork docklands would be advertised on the open market for sale. One party expressed a keen interest in purchasing the property and the PoCC board of directors agreed to proceed with negotiations. An agreement for the sale of the Custom House to Tower Development Properties Limited – Time Square Construction and Development – was signed on 20 April 2017, subject to a number of conditions, including receipt of planning permission. Two buildings are listed. There are heritage clauses within the agreement to ensure the building will be open to the public and that there will be no changes internally or externally to the Custom House. It is appropriate for the port to have its people close to where it operates. That is the same in Dublin, Galway, Waterford and elsewhere in the country. We cannot be 20 km from where we operate. The reality is that this is an operational issue as much as a financial one for the company.

In anticipation of the future redevelopment of the Tivoli site, PoCC commissioned the Royal Institute of the Architects of Ireland to consider the potential future uses of this estate. The design review "New Perspective for Tivoli" was completed in early 2017. PoCC is satisfied that this review has created a series of innovative ideas for a site of 160 acres, demonstrating urban design based on brownfield regeneration projects in benchmark cities, and raised the potential of Tivoli among key stakeholders. The final draft document was presented to the Department of Housing, Planning and Local Government and the Irish Strategic Investment Fund in July 2017. The future redevelopment of the Tivoli estate has the potential to play a key role in the financial security of the Port of Cork Company. It will also be key in the population 2040 drive in Cork city and will also be a brand new village on the north side of the river.

On Tuesday, 16 January 2018, Brittany Ferries announced a new route direct from Ringaskiddy, Cork to Santander in Spain using a new ship, *MV Connemara*. The service will make

two return sailings a week and will be the first ever ferry service directly linking Ireland and Spain. This announcement came as Brittany Ferries celebrates its 40th year in Ireland. The popular Cork-Roscoff route opened on St. Patrick's Day in 1978 and has been serving Irish holidaymakers and haulage companies ever since. It has also brought millions of French passengers to Ireland, boosting the local and national economy. Discussions with Brittany Ferries this week indicate that the early bookings on that new ferry service are very strong.

The Port of Cork Company celebrated the 200th anniversary of Cork Harbour Commissioners in 2013 and published a book on the history of Cork Harbour Commissioners, *Portraiture of Cork Harbour Commissioners*. The Port of Cork Company and Cunard hosted a commemoration ceremony led by President Michael D. Higgins on 7 May 2015 in Cobh to mark the centenary of the sinking of the *RMS Lusitania* off the Cork coast. During this five-year period the Port of Cork Company has regarded constant engagement with key customers and stakeholders, including the local community, as a key priority. Additionally Port of Cork Company is identifying and planning for the challenges and opportunities associated with Brexit. Likewise, Port of Cork Company is considering the implications of the full implementation of the European port services directive.

The key strategic objectives for the next three years are: complete the Ringaskiddy redevelopment; produce a Marino Point master plan; move port operations from the river to the sea; emphasise efficiency of service to all customers; prepare a master plan for Tivoli; and continue to grow the business for the betterment of the south of Ireland and the State.

I thank the Ministers for Transport, Tourism and Sport I have worked with - the former Minister and now Taoiseach, Deputy Varadkar, the Minister, Deputy Donohoe, and the Minister, Deputy Ross. I thank all the staff in the Department. I thank the CEO, Mr. Brendan Keating, and all the staff at the Port of Cork Company who do a fabulous job for us every day.

Mr. Maurice O'Gorman: I thank the Chairman and members of the Joint Committee on Transport, Tourism and Sport for inviting me here today. I will start, as requested, by introducing myself and setting out my background as it relates to the role of chairperson of Galway Harbour Company. I thank the committee for letting me follow Cork.

My name is Maurice O'Gorman. I am married to Jacinta, and we have three wonderful children. I am applying for appointment as chairperson of Galway Harbour Company. I was first appointed as a director in October 2017. My career spans both the public sector and the private sector, predominantly in financial services. I graduated with a BA (Hons) in leadership and management and have obtained additional qualifications in business information and industry professional qualifications.

I started my career with the London Stock Exchange in the regulatory division. I undertook work for the exchange projects in various countries and trained at the SEC in the USA. My work took me to Saudi Arabia and in 1992 I joined the Central Bank in Riyadh reporting to the deputy governor with responsibility for capital market development. This work included the establishment of the regulatory framework, the stock exchange, the regulatory authority and large-scale infrastructure projects such as the King Abdullah Financial District, a 32 million sq. ft space in the centre of the city.

In 2006 I joined the National Commercial Bank and within the financial group I was a founder, chief operating officer and head of strategy of NCB Capital, which is an investment bank managing approximately €15 billion in assets. During my time in the Middle East, I was

an active member of the Irish Business Association, regularly welcoming Irish businesses and Ministers, and was an active member of the Global Irish Economic Forum.

I returned to Ireland full time in 2015 and focused on building our new house, which we are planning to move into within the next few weeks, and voluntary work. I currently hold the voluntary positions of president of Galway Chamber of Commerce, chairperson of the Galway City Innovation District and a board member of a special fund, NDRC@PorterShed GP Fund 1. I am also an unpaid non-executive board member of a technology company, called Altocloud.

Within the chamber I have been involved in various projects including preparing an economic development plan for Galway and various economic submissions including those on the national planning framework 2040. I was a founder and now chair the Galway City Innovation District, with the aim of supporting and nurturing start-up companies.

In September 2015, we started the renovation of the former Guinness storehouse owned by CIÉ and in April 2016 the PorterShed opened its doors to start-up companies. Since opening we have held over 300 events and welcomed 6,000 visitors including 23 international delegations. The PorterShed currently houses 32 companies employing over 100 people. Additionally over 100 jobs have been created by companies that have graduated from the PorterShed. In May 2017 in a joint venture with NDRC we launched the first accelerator programme outside of Dublin. Nine companies have thus far graduated. Our initial aim is to launch 30 companies over a 24-month period.

As part of my voluntary work I have developed strong links with our local authorities, NUIG, GMIT, IDA Ireland, Enterprise Ireland, Údarás na Gaeltachta and the Marine Institute.

Throughout its long history the Port of Galway has developed, thrived and changed, supporting the free movement of people, and the trade in goods and commodities, which is the basis for our prosperity. As travel and trade have changed over time, and as ships and their cargoes have developed in size, character and technology, so the nature of ports has changed, creating new opportunities for local and regional growth.

The need for safe harbours, with built defences interacting with and changing the natural environment, providing unimpeded access, with water deep enough for the largest vessels, still remains.

Revenue for the Galway Harbour Company has been trending upwards from a low in 2009. Pre-audit figures for 2017 show revenue in excess of €4 million and operating profits in excess of €800,000. Revenue is split fairly evenly between shipping, leasing and parking. The board and management will continue to focus on growth through improved competitiveness and investment.

An immediate priority in accordance with applicable legislation and the code of practice for the governance of State bodies will be the recruitment of a chief executive officer. Our incumbent CEO will be retiring on 1 March. Of equal priority is to ensure the smooth transition from State ownership to local authority ownership. The company has commenced working with the Department and the council management to undertake the due diligence required for an effective share transfer.

Good governance is an area in which I have been involved as both a regulator and as a practitioner. The goal of the board and management is to ensure that resources are directed in accordance with agreed policy, that there is sound decision making and that there is clear ac-

countability for the use of resources in order to achieve desired outcomes.

The planning application for the extension of the port is under consideration by An Bord Pleanála. The board of the Galway Harbour Company must ensure that the process is managed appropriately, in terms of cost and time. The board must ensure that there are plans in place to ensure continued operation of the port, subject to a successful or unsuccessful application. Assuming planning permission is granted, the Galway Harbour Company will need to prepare a funding model that attracts private-sector investors and lenders in order that the required capital is available and that the port operates profitably on an ongoing basis.

Sufficient resources will be required to ensure that contracts for the extension of the port are entered into in line with State procurement requirements, are managed appropriately to ensure value for the State and deliver the expected outcome.

As travel and trade have changed over time, and as ships and their cargoes have developed in size, character and technology, so the nature of ports has changed. This creates new opportunities and challenges for the Galway Harbour Company.

I take this opportunity to thank the outgoing chairperson, Mr. Paul Carey, for his dedication and commitment and to Mr. Eamon Bradshaw, the CEO, for the considerable work he has undertaken to develop and grow the Galway Harbour Company.

I am honoured to be designated as chairperson. I will do my utmost to meet the obligations of the role. I thank the committee for its time. I will do my best to answer any questions the committee may have.

Vice Chairman: We will now have a question-and-answer period. We will go on seniority, as regards party structure. I first call Senator O'Mahony.

Senator John O'Mahony: I thank the Cathaoirleach. Deputy Hildegarde Naughton will stand in for Senator Frank Feighan, if that is okay.

Vice Chairman: Is the Deputy okay with that?

Deputy Hildegarde Naughton: Yes.

Senator John O'Mahony: I will be very brief. I thank all of the witnesses for coming to the committee this morning and giving the presentations. From these presentations the witnesses have a great knowledge of what the challenges and opportunities are. On the face of it they seem very well equipped to take over the positions. I shall address each witness in the order of his or her presentation.

I shall turn first to Ms Cliona Cassidy. We only hear of the Marine Casualty Investigation Board in the context of tragic circumstances. Ms Cassidy emphasises the importance of independence and confidentiality and that the main role of the board is to identify causes and make recommendations. Has Ms Cassidy any role in seeing that those recommendations are actually implemented and what is the follow-on from those recommendations? Ms Cassidy has stated clearly that the board identifies cause and does not apportion blame. Where does the blame aspect of these cases come in? Is it a matter for An Garda Síochána? The board's reports are used by the people who do apportion blame. Am I correct in that?

Ms Cliona Cassidy: They can be. Once they are published our reports stand alone. They can be used in the courts system, by coroners, by families or by companies. We are very clear

that our statutory provision is to focus our investigations not on apportioning blame or fault. Notwithstanding this, we have a provision that if facts go to some indication that steps were not taken or processes or protocols were not followed that should have been then we must state this. The anonymising of our reports focuses on the fact that it is not the person involved at the time, it is ascertaining the cause of the incident and attempting to see whether or not any safety recommendations can be made to avoid it happening in the future. We do not have a role or statutory provision to allow the board to follow up the safety recommendations. If one looks at some of our previous reports, our safety recommendations tend to focus on matters such as requesting that marine notices be issued, for example to remind people of their obligations in the use of recreational craft and to not take alcohol on board prior to using fishing vessels. We direct safety recommendations to particular companies that may have been involved in an incident. We do not name the company but obviously the company is aware that the incident relates to it. We would recommend, for example, that the company review its navigation systems, its training procedures and its protocols in respect of man overboard procedures for fishing vessels. Many of these recommendations, even though they are directed, can be taken as general recommendations across the industry. If the board directs a safety recommendation to large cargo vessels to review their navigation systems and training around navigation systems, we hope that other large shipping fleets will also look at the recommendation, maybe take it on board and review their procedures and see if the report contains any element that may cause them concern. Many of our safety recommendations are directed towards the Department of Transport, Tourism and Sport and they include recommendations on issuing of marine notices. Where we believe that certain statutory provisions should be expanded we also recommend this. They are quite broad, but we do not have a role in following up on whether the recommendations are done. This is done by the individuals directed.

Senator John O'Mahony: I thank Ms Cassidy.

Vice Chairman: I ask Senator O'Mahony to give all his questions first as time is of the essence and I would like to allow other members in.

Senator John O'Mahony: Okay, that is not a problem. I will go through the four.

I shall now turn to Mr. Cormac O'Rourke of Transport Infrastructure Ireland. Mr. O'Rourke has said that the cutbacks, or savings as he puts it, were estimated at €3 million and they were up at €10 million. Mr. O'Rourke believes that it had gone too far. What practical effect has this had? Mr. O'Rourke said that it affects long-term planning. The report from last Friday was around long-term planning. Perhaps Mr. O'Rourke will expand on this.

My other question concerns an issue that I have raised previously. Obviously there are a lot of new projects in the pipeline now but Mr. O'Rourke seems to be quite critical of the lack of maintenance put in to the transport infrastructure. This is at variance with what the Minister might say. Will Mr. O'Rourke also expand on that?

The Port of Cork report is very comprehensive so I will not go in to any great detail. With regard to Brexit and transport, Mr. O'Rourke referred to TEN-T. This was designed based on the UK being part of the EU, which looks certain not to happen now. What effect will this have on the Port of Cork?

I thank Mr. O'Gorman for his presentation which explains how Galway Port is, obviously, in a different space. He refers to the pending planning permission and the funding model. The tier status of the port has been a critical issue, and will be going forward. Hopefully there will

be a positive result from the planning application. What is Mr. O'Gorman's view on what will happen next? Will it be more difficult to put the funding model in pace as a result of the tier status of the port?

Deputy Hildegarde Naughton: I thank the Vice Chairman for allowing me to come in on this question. I do not want to repeat any of Senator O'Mahony's questions. I thank the witnesses. I can see them all bringing significant experience to their roles.

I shall direct my questions to Mr. O'Gorman. Mr. O'Gorman is bringing a lot of previous experience to the role as president of Galway Chamber and in outlining an economic development plan for Galway. We are aware that the harbour and its development is key for Galway and the western region. It is of strategic importance. For too long the city of Galway has turned its back on the water; our waterways, the canals and the sea. As my colleague has said, the planning application for the extension of the harbour is under consideration by An Bord Pleanála. Will Mr. O'Gorman outline his vision on the potential for the development of Galway Port and what it can do for tourism, business, recreation and the marine sector, and what he would like to do in his role?

Deputy Robert Troy: I have a number of questions for all the chair designates. I welcome them all to the committee today. Three of the four are seeking reappointment. As part of the reappointment process could they confirm if they have had to apply through the independent Public Appointments Service? A new process was established a number of years ago through the independent Public Appointments Service. Did the chairpersons have to apply through that? Ms Cassidy said she had no experience of the marine when she was appointed in 2013. Did she feel that affected how she conducted her job and does she feel she has more experience and expertise having served as chairperson of the board for the past five years? She said one of the key roles of the board is to make safety recommendations in the marine area. During her time as board chairperson could she indicate how many recommendations she proposed to the Department of Transport, Tourism and Sport and how many of them were adopted?

Ms Cassidy said an audit of the Marine Casualty Investigation Board was carried out by the European Maritime Safety Agency during her term as chairperson but she did not share with us the findings of the audit. Were the findings positive or were issues of concern raised? If so, could she share them with me?

Mr. O'Rourke is chairperson designate of Transport Infrastructure Ireland, TII, and he too is seeking reappointment. He referred to the savings made following the merger of the NRA and the RPA, which is welcome. Increasing savings from €3 million to €10 million is very welcome.

The Luas is a relevant and current issue in the transport sphere. The Luas cross-city is a fabulous development in the capital's infrastructure involving significant investment of €370 million but it is causing major disruption. What level of engagement or interaction did TII have with the relevant stakeholders in terms of the proper planning for the roll-out of such key infrastructure in the capital city?

Mr. O'Rourke referred to the national planning framework up to 2040 and how we expect the population to increase by 1 million in the next 24 years. He also mentioned a recent ESRI report indicating that the population could increase by 1.1 million by 2030, which is much faster. It may be an unfair question but does he consider we are adequately prepared in the shorter term for such a major population increase in terms of transport infrastructure, be it roads

or light rail?

It was also mentioned by Mr. O'Rourke that in a discussion with his CEO he confirmed that due to a lack of funding provided to TII in the past five years it has not been in a position to plan for major structural investments, and because of that he suggests any major timeline will be eight to 13 years. Based on the ESRI report that the population will increase by 1.1 million by 2030 does he believe the capacity is there to roll out the infrastructural investment that is needed? Mr. O'Rourke referred to a lack of funding. I was recently part of a delegation that met with the EU Commission transport office and it informed us of the availability of the Juncker fund. Why has this country not applied for one cent of funding from that fund for public transport infrastructure? The lack of infrastructure is hindering our ability to invest. I think we are the second worst in Europe in terms of the level of investment we put into infrastructure.

Is there any update on the amount of money TII is spending on security in unopened motorway service stations? The CEO was before a committee in recent weeks and while I did not attend the meeting I heard that in excess of €1 million has already been spent on such security and that there is potential for the situation to continue for another 12 months.

Mr. Mullins gave a very comprehensive overview and outlined some very ambitious plans. There has been significant development and growth and that must be acknowledged and complimented. The national development plan refers to moving the Port of Cork. Could he elaborate a little further in terms of the timeframe and cost? Could he also speak about the current status of the sale of a building, which I understand is under dispute. He can correct me if I am wrong. I am not from Cork but I was contacted by a colleague on the issue. Is it called the Common Building?

Mr. John Mullins: It could be the Custom House.

Deputy Robert Troy: It was sold last year.

I had one other question. Mr. Mullins spoke about a delay in BAM commencing the construction work. Does he have any expectation for when the construction work will begin?

Mr. Mullins also referred to an application that was made in partnership with Dublin and Belfast harbours for EU funding. Is that TEN-T funding? Given that he was successful in a previous application for TEN-T funding, what was the rationale for the refusal of the recent application? Does he intend to seek such funding again?

Mr. Mullins said he is working towards the full implementation of the port service directive. The directive was adopted in 2013 for all the 360 odd TEN-T networks. How long will it take to implement the plan? Are there short, medium and long-term goals for the implementation of the plan?

Mr. O'Gorman is the only new incoming chairperson. Did he apply through the Public Appointments Service? What motivated him to apply? The other chairpersons before us are reapplying and they probably want to see out more development in their respective areas. He said the incumbent CEO is retiring on 1 March this year. Has the process to replace him commenced?

Deputy Imelda Munster: My first question is for Mr O'Rourke from TII. I see from the national development plan that there will be an increase in the reliance by the Government on PPPs for infrastructural projects in the future. As a manager of such contracts does he consider

PPPs to be best practice going forward, given that most countries are moving away from them? There is sufficient evidence to show that they do not offer value for money. I would welcome Mr. O'Rourke's opinion on that.

I wish to ask about the criteria for managing conflicts of interest at TII. Does Mr. O'Rourke consider his current position a conflict of interest with his position as chairperson of Transport Infrastructure Ireland, TII, given that he advises on infrastructure and Government? According to his curriculum vitae, Mr. O'Rourke advises Departments on procurement options. If he becomes the manager for the contracts, how would he manage that conflict of interest? Does he accept that there may be a conflict of interest there?

The witness also mentioned that savings in personnel have gone too far and may hamper long-term planning in the future. He has stated that TII is in the business of long-term planning. Is Mr. O'Rourke saying that TII is short-staffed? To what extent is it short-staffed? How will Mr. O'Rourke manage TII's objectives if there are not sufficient staff to plan? I refer to the funding gap that exists regarding roads maintenance. Has Mr. O'Rourke met the Minister on this issue and can he expand on that?

I have two other ceisteanna. Does TII have plans to ensure that new works or remedial works in cities and towns on the national roads feature wheelchair-accessible bus stops? We have been meeting disability groups of late and this issue has been flagged time and time again. While there appears to have been some movement on the issue, there does not seem to be any concerted effort or real plan. Can Mr. O'Rourke outline TII's plan for that in detail? If he does not have details, perhaps he could furnish the committee with that plan. I refer also to new motorway service stations. There is a need for changing rooms in these facilities, particularly for mobility-impaired persons who require a carer to be with them. Will TII insist that new service stations are fitted with changing rooms?

I also have a question concerning the Galway Harbour Company. Mr. O'Gorman said that he was in the process of planning for Brexit. What are the plans and at what stage are they?

Deputy Mick Barry: My first question is a question for Cormac O'Rourke and TII. It concerns the Cork-Limerick motorway that was signalled during the week as part of Project Ireland 2040. Can Mr. O'Rourke tell us whether that motorway will be built through a public private partnership and can he tell us whether it will be tolled? If he cannot give members a definitive answer, can he give them an indication as to the likely position?

I had a number of questions about facilities and services for people with disabilities but as those questions largely have been asked by Deputy Munster, I will await the replies to them with interest.

The next question is for the chairpersons designate of the ports and I will start with a quote stating:

This is a smash-and-grab raid, redolent of a bankrupt Government philosophy. It is one thing to consider selling off the family jewels when, at least, the householder would still have access to the house. To sell off the ports is akin to the householder selling off the driveway, porch and front door to the house, then having to pay for the right to use them to enter the house in the future.

The subject matter is clear and concerns the privatisation of the ports. What is interesting is the identity of the person who made that point. While one might think it was a member of

the national committee of my own party or something like that, it was actually Mr. Maritime himself, Mr. Tom MacSweeney. The witnesses should give their view to the committee on that particular quotation, which has a lot of substance to it.

My final question is for Mr. Mullins. It relates to the relocation of the port to Ringaskiddy. The commencement of the work, the provision of tax clearance certificates, the provision of evidence of insurance and the guarantee that the work is going to get done in time were all matters that came before the court two weeks ago. I believe they are due to be heard before the commercial court in July. The witness is aware that there is another controversy in Cork at the moment, surrounding a project for which a bid was placed by BAM. Initially, \in 20 million of State investment for that project was discussed. We are now contemplating a figure of \in 30 million or arguably \in 40 million, because apparently the State is being asked to provide so-called infrastructural support to the event centre, apart from another \in 10 million paid directly. These are two key projects in Cork for which this company won the tender. It turns out that for the event centre, an extra \in 10 million is being asked for, plus \in 10 million in infrastructure support. The costs for the ports run to an extra \in 12 million. I believe the firm told the commercial court that there was an arithmetic error when the tender was submitted.

In my opinion this is wholesale profiteering. Perhaps Mr. Mullins cannot go into the detail with a court case coming up but I am asking him to give us an idea, as the public have a right to know. What kind of delay this is likely to cause to the relocation?

Deputy Catherine Murphy: I have some questions for Mr. O'Rourke. Under the heading of efficiency, he said in his opening statement that congestion is a symptom of economic success. He qualified that by noting that we have failed to plan for success. There has not been a gigantic increase in the population of Dublin city centre. Over three censuses, the increase has only been 13%. Most of the movements are generated in County Dublin or in the outer counties. That is under the national spatial strategy. The national spatial strategy is still in place, and very large amounts of land are being rezoned as we sit here. We are now moving in another direction with the national planning framework. One must diagnose the problem correctly. Land use and transportation planning must be in sync with each other.

What input into the national planning framework did Mr. O'Rourke make concerning the transition between those two very different strategies? Growth has mainly been in the suburbs. I do not refer to Dublin only as one should consider the growth in Cork, which has mainly been in the suburbs and in Limerick, things are exactly the same. Galway has bucked the trend, in that it is more consolidated in the centre. There are, however, major traffic problems in that city which have not been properly planned for and solutions have not been developed in a timely way. What input did Mr. O'Rourke have into initiatives like the national planning framework? What transition arrangements did he discuss? For example, I would have thought the DART underground was a critical component in knitting in what has happened for the past 20 years and what will happen. That went all the way to railway order and then was pulled. Obviously it was a political decision that it was pulled. Would Mr. O'Rourke have prioritised that? We can see that the shared road space is causing all sorts of problems.

My next question is for Mr. Mullins on the Port of Cork. The Port of Cork is much bigger now and Mr. Mullins has described Cobh and Ringaskiddy. He spoke about there being future infrastructural development and I presume these are the locations he is mainly speaking about. What role will Cork harbour play in this? Will it have a central role? Who owns the land? It is very close to the city centre and is obviously a key location.

Can the Port of Galway succeed in the absence of transport solutions? Will investment be

attracted where there is an inability to move goods to the port? What is being done and what networking is happening on this aspect?

Deputy Michael Fitzmaurice: I thank the witnesses for their presentations. My first question is for Ms Cassidy. She stated the Marine Casualty Investigation Board can make various recommendations. From what I understand, they may or may not be adhered to. She has said recommendations can be made to owners but they do not seem to have a legal standing.

My next question is for Mr. Mullins. It is great to hear the Port of Cork has the capacity to deal with cruise liners with 8,500 people on them. Obviously it is a deep-sea port. What is the situation with the export of calves? I know there is difficulty down south with boats. Will he enlighten me on what the Port of Cork has done to help the agricultural sector, particularly in the export of Friesian calves to get them out of the country?

My next question is for Mr. O'Rourke and Mr. O'Gorman. I note Mr. O'Gorman spoke about the national planning framework. How important is it, because if we look at the new national plan, Galway Harbour Company is not in the TEN-T funding? This was the first thing I looked for when I was trying to do a deal on the programme for Government. It was said it would apply immediately. A statement was made here earlier to Mr. Mullins about the loss of TEN-T. Let us be clear that whether the British stay in or go out, TEN-T funding can be obtained even if a country is outside the EU because it has been done already.

It is great to see what the Port of Cork can do and we need to do it in Galway to be able to bring in the likes of those ships. It is a category two port. What do we need to do to bring it up to a category one port? How valuable would it be to put in place the TEN-T funding? An effort has been made on this but the planning debacle in Galway port has been going on and on. I wonder if we will ever get an answer. What has gone on is disgraceful. Am I correct that it has been going on for three years?

Mr. Maurice O'Gorman: Yes.

Deputy Michael Fitzmaurice: Where does Mr. O'Gorman see this going? We cannot keep waiting for a body to make a decision on infrastructure that is so crucial to the west of Ireland.

My next question is for Mr. O'Rourke. With the best will in the world, the Port of Galway has gone to planning and is doing as much as it can. Mr. O'Rourke is looking for reappointment. What is being done on this saga? For a port to survive and get better it needs infrastructure. The Galway outer ring road will take ten more years if we are being honest. Is that success or failure? In my opinion it is failure.

Mr. O'Rourke spoke about safety. Reviews were done on transport and speed limits throughout the country. Certain towns made submissions to the councils that were completely overruled by TII. They wanted to reduce the speed in those towns. The word we have got back very clearly from the councils, and we have seen what TII has said, is that it would not agree with reducing the speed at the entrance to some towns. I am astonished at this when we speak about safety. It was stated there were 500 km or 600 km where safety features would take priority, but these are dragging and decisions need to be made more quickly.

Can public private partnerships be done over 20, 25 or 30 years? What rate of interest is paid on them? Are design, build and operate contracts used? We are injecting a large amount of money into getting consultants to do all of this. I have seen a lot of building work done under design, build and operate contracts, which may cut costs. I looked at the new national planning

framework and the capital plan, and the N4 and N5 are in it and there is a bit between Longford and Mullingar. There is also the M20, which is welcome. There is vague mention of Tuam to Sligo. I do not know whether Letterkenny even exists at this stage. Why is there not a view that we try over the next ten to 15 years to bring our national routes to dual carriageway status at least? Why have we not even looked at an idea other countries have looked at, namely, the two and one with a mile of double lane where people can overtake and then a single lane where it may not be possible to put in the two lanes. Why have we not done more of this? If we travel in other countries we see it is done.

Will Mr. O'Gorman give his vision of where he sees the Port of Galway going? What help does he need from politicians? It is looking at the largest sea facing us. It is great that Foynes will be a deep-sea port and it is great to hear about the Port of Cork. They are opening up tourism to those places. Killybegs and Galway need to be brought up to this standard. What is Mr. O'Gorman's vision and where does he intend it to go? What funding will he put behind it?

Vice Chairman: There are many questions to be answered. Some members may have gone off track.

Ms Cliona Cassidy: I apologise for speaking out of turn earlier in the process. I will answer Deputy Fitzmaurice first. With regard to the safety recommendations, it is correct they are recommendations which may or may not be adhered to but they have been incorporated into the maritime safety strategy. They have been taken on board, we know, by particular companies in respect of recommendations that have been made and even by individual skippers and owners of vessels who have been involved in incidents. In these circumstances we do not have a stick to beat people with, and I am not sure that is an appropriate role for us. We are there to find the cause of an incident and develop the safety recommendations. The safety recommendations should be broad enough to allow individuals or organisations to make sure they are appropriate for their purposes and indicate how they need to change something or introduce procedures and protocols.

Deputy Robert Troy's first query was about the new process. No, I did not go through the new process for this appointment. The extension is only for one year. We were in the process of looking for a new chairman. Last year the board changed a lot. It is a five-member board and last year three members changed. In addition, the secretariat comprises three members and we had two new members. There are a number of challenges facing us in terms of a number of reports received and also the incoming general data protection regulation, GDPR. I made the offer to the Department that I would remain on for one year to allow for a staggered change in the board, rather than have wholesale changes, and my offer was accepted. I only sought an extra year in my appointment as chairperson designate.

Deputy Robert Troy asked whether my lack of experience affected my ability to do the job. I may not have provided the committee with sufficient information to enable members to understand the role of chairman. Obviously, I do not investigate any incident. We have a panel of investigators who are marine surveyors and engineers who are trained investigators. We provide them with training courses that allow them to investigate and prepare reports, of which the board has oversight. We come with the safety recommendations arising from investigations. It is not the case that I have no experience of maritime matters. As I have no connection with the maritime industry, I do not see myself as conflicted. In fact, my role is to ensure there are natural justice, fair and constitutional procedures in place for investigations and the manner in which they are undertaken and reported on. We also ensure we generate focused recommendations. My role does not have an awful lot to do with experience of the maritime industry or

investigations but more with the reporting element and ensuring there is independence, confidentiality and fair procedures in place.

Deputy Robert Troy asked how many safety recommendations had been directed towards the Department of Transport, Tourism and Sport. I do not have a specific number for him. The majority of our reports have, at least, one safety recommendation directed towards that Department.

Deputy Robert Troy: What type of report?

Ms Cliona Cassidy: My apologies. Each of the investigation reports includes safety recommendations, where appropriate. In the past five years there have been about two or three reports in which because of the nature of the incident involved no safety recommendation could be made. Other than that, there are usually between two and three safety recommendations made. The majority of the reports have included at least one recommendation directed towards the Department.

How many recommendations are adopted? They are incorporated into the maritime safety strategy launched between the Department of Agriculture, Food and the Marine and the Department of Transport, Tourism and Sport. We are aware that marine notices are often issued and that our recommendations are considered and taken on board in reviewing various areas, possibly including legislation. I cannot state categorically how many safety recommendations we have directed towards the Department of Transport, Tourism and Sport or how many have been adopted.

Deputy Robert Troy: Perhaps Ms Cassidy might revert to us with the number and how many have been adopted, which is critical. There is no point in the Marine Casualty Investigation Board making recommendations if the Department does not adopt them.

Ms Cliona Cassidy: As I said to Deputy Michael Fitzmaurice, we believe our statutory role is to make safety recommendations. We do not have the statutory power to assess whether our recommendations have been followed or adhered to, but I will revert to the committee on the matter.

The European Maritime Safety Agency carried out an assessment and made a number of recommendations. I undertake to come back to the committee on whether there are particular recommendations or findings and confidentiality on same. Overall the European Maritime Safety Agency was very positive about how we had implemented the directive in respect of Ireland's role.

Vice Chairman: How many investigations are carried out every year?

Ms Cliona Cassidy: It depends on the number of incidents. We operate on an on-call basis. In 2016 there were 15 incidents, of which nine involved fatalities. In 2017 there were five incidents on which we began reports and of which six involved fatalities. Our automatic reaction is to begin an investigation. There were one or two investigations that we commenced on a preliminary basis and it appeared that the fatalities had been due to natural causes. In such circumstances it is not appropriate for us to make safety recommendations or we would not be in a position to do so.

Mr. Cormac O'Rourke: As Senator John O'Mahony is not present, I shall first respond to the questions posed by Deputy Robet Troy.

Similar to Ms Cassidy, I was not appointed through the Public Appointments Service. It is a matter for the Minister to appoint members. I understand reappointments are made directly by the Minister.

On the question on savings, the original estimate of €3 million came from an bord snip nua, the group chaired by Mr. Colm McCarthy. It was he who suggested the merger of the Railway Procurement Agency and the National Roads Authority. Let us say €3 million is the baseline figure and compare it with the figure of €10 million. When the merger took place, there were just over 300 staff in the two organisations. We were in the depths of the financial crisis at the time and the employment control framework set the figure at 250. We have got the number down to 260 and the employment control framework has not been changed since. However, we can make business cases to the Department of Public Expenditure and Reform and have done so successfully for the appointment of staff outside the employment control framework.

I agree with the Deputy that the Luas cross-city service has caused major disruption in the city centre, which is regrettable. We had very significant engagement with the National Transport Authority and Dublin City Council. We had a public office on Dawson Street which was a drop-in centre and many people availed of the opportunity to make representations. There has, therefore, been extensive engagement. It is fair to say a lot of work was done before we started the process on what it would take to transit the city centre. Our original simulations showed a journey time from St. Stephen's Green to Broombridge of approximately 21 minutes. That was probably over-optimistic in optimising the sequencing of traffic lights, which is matter for Dublin City Council, rather than Transport Infrastructure Ireland. There are also issues with motorists' behaviour. In one well publicised case a Luas tram blocked O'Connell Bridge because a motorist had failed to clear a yellow box. The Garda is policing the yellow boxes at the junctions of Burgh Quay and O'Connell Bridge and Hawkins Street and Pearse Street. We hope motorists will change their behaviour over time and not enter yellow boxes unless they can clear them.

The other issue causing slower journey times is a temporary 10 km/h speed limit imposed by the Commission for Railway Regulation. This safety measure which we had not anticipated was introduced at the last moment. The speed limit on O'Connell Street equates to a slow jogging pace and is only a little faster than a reasonable walking pace - 6 km/h. We have realised the behaviour of pedestrians, cyclists and motorists improves over time. If we go back over the past 12 years, we will find that the number of people walking out in front of trams, the number of cyclists getting in the way of trams and the number of collisions between trams and motorists have reduced significantly and we are hopeful this will be repeated over time. We estimate that the journey time from St. Stephen's Green to Broombridge will reduce from the current 26 or 27 minutes to approximately 23 or 24 minutes. On the first day of operation the journey time was approximately 30 minutes. We are making progress, albeit slowly.

In terms of population increase, I am an engineer who has worked in finance, rather than as a demographer. As such, I am not qualified to comment on the projection models. The ESRI model was based on the 2016 census and I understand the national planning framework data were based on the 2011 census. We are examining what would be the effect of faster population growth. To assess journey times throughout the country, we need to drill down into small cell data, rather than the overall population.

As to whether we will have the capacity to roll out the major infrastructure, the short answer is yes. We will manage and can add additional staff. We also use outsourcing. If we do not have the ability to do design in-house, we will outsource it to consulting engineers.

I was surprised by Deputy Robert Troy's comment that we had not applied for the Juncker funds, as they are known. It is my understanding - I may be incorrect, but I will revert to the Deputy on the matter - that the bulk of the €20 billion made available for infrastructure was in debt. We received considerable support from the European Investment Bank for the M17-M18 and Luas cross-city projects. The bank was highly supportive at the time when the country was struggling to raise money on international markets.

Deputy Robert Troy: According to the European Commission, Ireland did not secure any transport funding from the new €500 billion fund announced last year. This was confirmed by the Transport Commissioner when he appeared before the joint committee. I did not make up my earlier statement.

Mr. Cormac O'Rourke: I am not suggesting for one moment that the Deputy did.

Deputy Robert Troy: European funding was secured from other sources, but no moneys have been received for transport from the Juncker funds, although we received some funding for primary care centres under the fund.

Mr. Cormac O'Rourke: I will look into the matter and revert to the Deputy on it.

I am not aware of the statistic that Ireland is the second worst in terms of expenditure on infrastructure. I am aware, however, that the World Bank and the International Monetary Fund have been critical of our level of expenditure on infrastructure. It is tricky for someone such as me to comment on these matters because, under the Roads Acts, I am precluded from criticising policy, while also being required to provide advice for the Government, the Department and the joint committee. No one has ever provided any guidance on how to deal with these conflicting instructions. The best I have managed, where policy is concerned, has been to try to put independent reputable research, where it is available, in the public domain. Members should be aware, however, that I am precluded from criticising or commenting on policy.

In terms of an update on the provision of service stations, we continue to spend €20,000 per month in securing the half-built stations, but I do not expect this to continue for a period of 12 months as we are in active discussions with the winning bidder. As members will be aware, we were held up by a court case which was eventually withdrawn. We hope we will be able to start construction in the next few months.

To respond to Deputy Imelda Munster, public private partnerships are complicated. The issue is that it is clearly more expensive to fund a project through a public private partnership. Deputy Michael Fitzmaurice asked what was the relative cost. Our most recent refinancing - the figure is in the public domain - shows that we refinanced the M17-M18 project at a rate of about 2.5% over 27 years. The comparable Government gilt rate at the time was approximately 1.5%. This means that there was an extra cost of 1%.

Deputy Michael Fitzmaurice: Under a public private partnership, will ownership of the road revert to the State at the end of the contract?

Mr. Cormac O'Rourke: Yes; there is no transfer of ownership under public private partnerships which are a licence to build, operate and return. The underlying legal ownership stays within the public sector.

Deputy Michael Fitzmaurice: If the State did not have money, would this be a way of achieving its objectives in a quicker timeframe?

Mr. Cormac O'Rourke: In the case of the M17-M18 project, it could not have been done because there was no fiscal space and we were in the midst of serious expenditure cuts. The cost-benefit analysis of the project was a multiple of four, in other words, the benefits equated to four times the cost. It was a very important project which was completed using a public private partnership and which could not have been undertaken at the time.

While the cost of funding under public private partnerships is clearly more expensive, they sometimes allow projects to proceed which would not otherwise be possible to do. They also include maintenance, which means that at the end of the 25 or 26 year operating period, the road is delivered as good as new. Roads in public ownership have not always been properly maintained and this must also be taken into account. The evidence from the United Kingdom, Australia and Canada is that in terms of cost overruns and delays, PPP projects have a better record than conventionally procured projects.

To answer the questions on value for money, it depends because there is no free lunch. If one is paying for something from the Government's budget for 25 years, it had better be a good project. That is what it comes down to. I quoted the IMF study of what good quality infrastructure delivers in terms of a return to the State. In those circumstances, it makes a great deal of sense to use PPPs if one cannot complete a project in another way. However, one must always strike a balance. It is another issue which is primarily one of policy. We do not decide to do something under a PPP, it is decided by the Minister and the Department. It is used across Europe as well as Australia and Canada, which are the other big users. It is a balance and I am not sure if we have landed on whether or not it represents good value for money.

Deputy Imelda Munster: I was looking for Mr. O'Rourke's opinion as the manager of the contracts. I know use of PPP is decided by policy but given that most other countries have moved away from their use, what is Mr. O'Rourke's view?

Mr. Cormac O'Rourke: A large number of PPPs are ongoing constantly. They happen in Germany, Spain -----

Deputy Imelda Munster: But there has been a tendency overall to move away from them. What is Mr. O'Rourke's opinion of the national planning framework having stated its intention to increase PPPs?

Mr. Cormac O'Rourke: I have not had much time to look at the national development plan. I thought the general view from the Department of Finance and the Department of Public Expenditure and Reform was to limit PPPs except where there is a possibility of income. That is the policy direction, as I understand it, but it has not come out finally to us. In terms of balance, if it can enable projects such as the M17 and M18 to occur at times when they would not otherwise, it represents a really good use of public money. There are other projects where it may be a little more nuanced.

Deputy Munster's question on conflicts of interest is a good one. I too have adopted the policy adopted by my predecessor where the first item of the agenda at meetings of the TII is conflicts of interest. In a country as small as ours, they do arise. I have never worked on road projects in Ireland, but as the Deputy pointed out, I do work a lot with other semi-State bodies. I have done work for the port of Cork and Mr. Mullins, for other ports, and for other semi-States. If there is a conflict of interest, the strict policy is that I remove myself, another board member takes over as chair, the item is discussed, I am called back in and told the result. The same applies to other board members in similar circumstances. I do not take part in, nor do I attend, the

discussion of any areas where I have a potential conflict of interest.

Deputy Imelda Munster: Were there many occasions where Mr. O'Rourke had to remove himself?

Mr. Cormac O'Rourke: I would guess perhaps three or four occasions in the last five years. It is not that frequent but it does occur. In terms of governance it is important that we recognise these things can happen.

Deputy Munster asked about savings on personnel. My only concern is that we have a limited range of projects. How we rank them is outlined in the appendix to my opening statement. We could probably make a case for having a greater number of projects under consideration but we do not have the personnel to do that at the moment. That was the concern I was expressing.

On the funding gap on maintenance which Deputy John O'Mahony also raised, the requirement is approximately \in 70 million for small maintenance projects, and is about \in 140 million in terms of capital maintenance, such as resurfacing. As the management team will have outlined to the committee last week, this year we are in receipt of about \in 36 million for small scale maintenance works which is not sufficient to do it. The capital maintenance figures have come back up from about \in 70 million to \in 100 million and the Minister has assured us we will meet both targets by 2020, which is welcome. I always worry about cutting maintenance at a time when money is in short supply. It does not always represent good value for money but it is not something we are in control of. The Oireachtas votes the different sub-headings that we have, and we live within those. We cannot transfer money from one sub-heading to another, it is just something we have to deal with.

On wheelchair accessibility at bus stops, the TII does not have any role in relation to bus stops, it is a matter for Bus Éireann, Dublin Bus and the NTA. However, we are looking at it in relation to Luas stops. We have a standard on wheelchair accessibility for the service stations we are in control of and are re-examining them in light of the committee's questions on the previous occasion to see if we can improve on it. We have certain standards, where there is internal and external access to the wheelchair facilities and the circulation space is definitely designed to accommodate wheelchair access. We will look again at mobility-impaired standards at the very best practice.

Deputy Imelda Munster: My question regarding service stations related to changing room facilities for people with mobility problems who required carers. Mr. O'Rourke's response was not definitive on that.

Mr. Cormac O'Rourke: Wheelchair access is to much larger bathrooms than the norm. We used particular standards and are re-examining them to see if they need to be enhanced. Does the Deputy mean child changing facilities?

Deputy Imelda Munster: No, more from a disabilities perspective.

Mr. Cormac O'Rourke: We have showering facilities. I am not sure if we have showering facilities for mobility impaired people. I will come back to the Deputy on that matter.

Deputy Imelda Munster: I wonder if Mr. O'Rourke would revert to me on that.

Mr. Cormac O'Rourke: Certainly, I will.

On Deputy Barry's question about the Cork-Limerick motorway, it is much too early. No

decision has been made on whether it will be funded by PPP or if it will be tolled. We are currently at the feasibility stage. It is a matter of policy and one that will go back to the Department for a decision, it will not be decided by us.

Deputy Catherine Murphy asked about congestion. As with everything related to roads, the answer is quite complicated. Traffic on motorways seems to grow much faster than the traffic elsewhere and seems to be driven primarily by GDP levels. The other national roads grow more slowly, and the national secondary roads do not grow either with GDP or GNP, they seem to track employment levels. We are trying to figure out in our modelling what is driving it, but there are different growth rates for the different roads. What is concerning about the M50, where there is much congestion, is that despite the congestion, it has continued to grow over the last 12 months at a level of 5% per annum.

Deputy Catherine Murphy: I was specifically referring to transition. Earlier, Mr. O'Rourke told one of the members that he was not a demographer, but one cannot ignore population. It is modelled in. There is an absence of other choices, such as public transport, so of course road congestion will grow because the alternatives are not being provided. I was specifically referring to items such as the DART underground, which would really give commuters a choice. I am shocked to hear that the national planning framework used the 2011 census when there is a more up-to-date census available. I am familiar with some of the growth rates outlined in the national spacial strategy. If one combines the three censuses of population, there is a pattern. Dublin city is growing by 13%, Dún Laoghaire by 13%, south Dublin by 28%, I think Fingal is 35%, Meath is 41%, Kildare 39%. That tells us that all the congestion is originating from the periphery.

Mr. Cormac O'Rourke: That is correct.

Deputy Catherine Murphy: How does one transition that in such a way that it does not create congestion? One provides a solution to the people who live in one area for getting to the city centre where they need to go. What I wanted to know was does the TII have an input into priorities such as DART underground which creates that transition and is a game changer. My point is that it is astonishing that it is not one of the priorities in that national planning framework.

Mr. Cormac O'Rourke: We have no input into DART underground. That part of the strategy falls within the remit of the National Transport Authority, NTA.

Deputy Catherine Murphy: Did that proceed all the way to railway order?

Mr. Cormac O'Rourke: It did.

Deputy Catherine Murphy: Was it not under the remit of the Transport Infrastructure Ireland at that point?

Mr. Cormac O'Rourke: No, TII did not have any involvement in the DART underground. It was a matter for CIE.

The Deputy is correct that in terms of transitioning, the solution to Dublin's traffic congestion is public transport. It is not, necessarily, major roads. We are doing a piece of work with the NTA on radial bus routes and radial BRT to see if we can reduce the levels of congestion on the M50. Currently, all routes go into the city such that if a person wants to go from UCD or Dundrum to the N7 or Citywest he or she has to go into town first and then outwards.

Deputy Catherine Murphy: In terms of Luas, should TII not have done that modelling first? When the Luas line was selected Dublin Bus indicated that College Green would be a problem. College Green is a problem such that we now need to look at it in retrospect. We have a fixation on working backwards from problems. I would welcome Mr. O'Rourke's thoughts on what as chairman of the TII he can do to ensure we are not always working backwards trying to solve problems.

Mr. Cormac O'Rourke: I am not trying to side-step the Deputy's question but the interaction between the buses and the Luas is a matter for the NTA and not the TII. We do not have any input in regard to buses. On the Luas, it is a high capacity public transport item. It is useful to rehearse some of the rules of thumb about public transport capacity. Buses can carry approximately 2,000 to 3,000 passengers per direction per hour. Bus rapid transit, BRT, can carry up to 4,000 per direction per hour. The Luas can carry up to 8,000 per direction per hour. The Luas should be able to carry three and half times the number of passengers carried by a bus on the same route and this should help congestion. In regard to metro, the number of passengers per direction per hour will be 15,000 to 20,000. I do not have similar data for the DART. These are the rules of thumb used internationally for planning. I think Dublin City Council and the National Transport Authority had a different plan for the College Green area but I do not think it worked. I do not know any more about it, other than what I read in the newspapers. The prioritisation of different modes of transport within Dublin is not within the remit of the TII. Rather, it is within the remit of the NTA. We do work closely with the NTA. For the Luas, it is our sanctioning authority. We propose the projects but they are sanctioned by the NTA. There is very close co-operation between both agencies. We are working with the NTA on the knockon effects for certain routes. I cannot say any more than that about the matter.

Deputy Fitzmaurice asked about the Galway outer ring road. I do not think it will be ten more years before it is provided. We are hoping to get the project to planning in the relatively near future. We have sought advice on the matter from the experts in the National Parks and Wildlife Service.

Deputy Michael Fitzmaurice: I understand it has not been forthcoming.

Mr. Cormac O'Rourke: We had some feedback from it recently. In terms of safety, speed limits are a reserve matter for the local authorities. I am not aware of any circumstances in which that is not the case.

Deputy Michael Fitzmaurice: According to a communication I received from Galway County Council it was overruled by Transport Infrastructure Ireland in relation to the setting of the speed limit in Ballygar. Councillors have told us that their hands are tied.

Mr. Cormac O'Rourke: As I said, speed limits is a reserve matter for the local authorities. I am not aware of the Ballygar situation but I will look into it. Safety tends to be our first priority. I am surprised that we would have overruled a speed limit. I will look into the matter and come back to the committee on it.

Deputy Eamon Ryan: May I ask a second question at this point?

Vice Chairman: I am sorry Deputy Ryan but we are running over time. I would like to raise the issue of potholes with Mr. O'Rourke but I will have to leave that to another day.

Mr. Cormac O'Rourke: Thank you. I appreciate that.

Vice Chairman: Had any of my colleagues had the information provided today by Mr. O'Rourke during a particular debate last week in the Dáil, the Minister, Deputy Ross, would have been under fire. I now invite Mr. Mullins to respond briefly to the questions relevant to Port of Cork.

Mr. John Mullins: Senator O'Mahony's question about Brexit is very relevant. I mentioned in my opening statement that we worked with Brittany Ferries on the development of a new route from Ringaskiddy to Santander via a new bridge - a motorway of the sea type route. We have been working hard for the past 15 months to get that up and running. The feedback so far is very positive. For example, previously the fishermen in Castletownbere would have travelled through the land bridge through the UK to the Parisian markets and the Madrid markets but they now have the option of getting to Santander in 26 hours and on to Madrid within four hours. This is part and parcel of the opportunity for aquaculture and agriculture to get to Spain and for Spanish operators to come to Ireland. We hope there will be more of this in the future. In regard to motorway of the seas routes, the reason we did not get finance for equipment upgrades in respect of the Dublin-Belfast-Cork route is because funding in that regard is subject to competition and at that particular time Brexit was not a real issue. It is now a real issue for Ireland in terms of our imports and exports. Over 90% of our product is exported through our ports. When Commissioner Hogan visited the port last month I raised with him the need for a public service obligation fund to support new motorways of the sea routes out of Ireland, whether from Dublin, Galway, Cork or Waterford, to France and continental markets such as Spain. If there is a hard Brexit and it leads to major queues in Holyhead or in Fishguard this will create an enormous issue for the supply chain. We need to undertake an audit nationally of the supply chain costs of a hard Brexit for our exporters and importers and to seek recognition in that regard from Europe.

Senator John O'Mahony: When the European Commissioner for Transport appeared before the committee she indicated that TEN-T was not due for review until 2020 but that that would probably change owing to changing circumstances from the Commission's point of view.

Mr. John Mullins: To be fair, the Commissioner did mention to me that that should be considered and that we should engage with Europe in that regard. In the vein of not understanding what Brexit currently looks like, if it hardens then there is a greater case for greater funding.

On Deputy Troy's question, I did not seek reappointment through the Public Appointments Service. I was asked if I would consider staying on for another three years and I agreed to do so. Given the infrastructural changes and projects in hand the view was that continuity would be useful. There had also been a number of board changes at that juncture.

In terms of timeframe, we expect to be in Ringaskiddy by 2020. The total cost of Marino Point and all infrastructures in Ringaskiddy is €90 million. We have full funding for that and I made that commentary in my deposition to the committee.

The Custom House is a fabulous building and warehouse which is dilapidated. It is in the heart of the city, the centrepoint of future docklands development. We already have cranes on Albert Quay, we expect more on Horgan's Quay and the Custom House Quay gives a full loop around the inner city where there are plans for significant development of office space etc.

In terms of the port services directive, we are mindful that we are both a regulator and a provider of services. The committee should be aware we are not the only towage service in Cork Port. The Doyle Shipping Group provides a service and we compete with it. Most of the

stevedoring in the port is done by the private sector.

In response to Deputy Barry's comment about privatisation. I will not give a Port of Cork view but a personal view, and I am well-travelled. National ports should be never privatised. They are too important to our infrastructure as an island. It would be inappropriate to privatise. In all of my utterances with the Department over five years there has never been an indication that would ever be considered.

In respect of the relocation to Ringaskiddy and the issue with BAM, we are in the High Court and I need to be very careful. I will say what is in the public domain, which was cited by Deputy Barry. After the offer was made to the Port of Cork in a fitting contract, European standard tender, it was claimed a mistake was made by a very large construction company. The port and I take the simple view that we were given an offer which we accepted and we want to make sure this port is built at the best price on behalf of the State. The figure of €12 million is not appropriate for us. On the legal advice we have been given we are taking it very seriously to the point that we have taken BAM to the High Court. We expect a hearing in July. Our door is open to the contractor to see if we can speed up that process. The impact of a year's delay will not be worth €12 million.

In response to Deputy Fitzmaurice, the agriculture sector is vitally important to our region, as the committee knows and the Vice Chairman is very much aware of it. We have regular interaction with the dairy sector in particular, with Dairygold, Glanbia, Kerry and Danone, which are big manufacturers. We have had to provide refrigerated capabilities on containers for transportation of proteins etc. That has been a big investment in the region. Warehousing is a big issue in the context of inventories for dairy and whey protein product. We are working with all the main providers on that. Livestock primarily goes through established roll-on roll-off routes. Our only current roll-on roll-off route operates during the summer to Roscoff. That will change with the Connemara ship to Santander also providing a year round link to Roscoff.

Vice Chairman: I thank Mr. Mullins. It would be remiss of me as a Cork man not to make some comments. I welcome the initiative on the Cork-Santander route. I was in Santander in my previous role as a member of a local authority and it was being talked about then. I commend Mr. Mullins and Mr. Keating on bringing it to fruition. That was very important. Mr. Mullins mentioned that 20% of national port activity goes through Cork. I would like him and Mr. Cormac O'Rourke, with whom he previously had a great working relationship, to get the infrastructure in place for access to Ringaskiddy and in respect of the Jack Lynch tunnel. It is important that road infrastructure is upgraded as fast as possible.

Mr. Maurice O'Gorman: In response to the question about access to finance, being designated under the national ports policy as a port of regional significance, we have limited access to State and EU funding but we have had several discussions with private investors about helping to develop the port. We believe the finance could be made available. To answer Deputy Barry, again there is no plan to sell the port. There would be no plan whatsoever to sell any part of it. The plan is to develop it on a build-operate-transfer basis.

I did apply through the Public Appointments Service, PAS. It was very good, very quick, much quicker than I thought it would be. The interview process was excellent. I have many people to thank for motivating me to apply but I will not go through the list. I was encouraged by people in Galway.

On planning for Brexit, I agree with Mr. Mullins that when there is a strategy and something

changes radically it is necessary to go back and reconsider ports policy to see how this impacts on all these issues, particularly ports because 90% of our goods come in and out by the ports. We definitely need to re-examine that. I understand from the Department that the scheduled review is not due to take place until 2021. It would be appropriate to review the ports.

In response to Deputy Murphy's question about traffic, I would say, having come here by taxi today, the problems in Galway are very limited compared to those in Dublin. It took an incredible length of time to get across a small part of the city this morning.

The plans for the port would be to move most of the freight by rail. There is a rail link adjacent to Ceannt Station. We plan to bring the railway line to the end of the port, parallel with the berths. Goods could be unloaded directly onto the freight trains and move off. We hope tourists coming in on cruise ships will walk across because the port is in the centre of Galway city and they could enter the medieval area there. Our plans are not for increased road traffic but we have drawn plans for a new road which could go out through Renmore and link up with the motorway. We could not build the road but we have drafted plans around that, should we see a need for increased traffic on it.

I agree with Deputy Fitzmaurice, Galway Port is a key part of infrastructure for Galway and for the west of Ireland. If we do not secure planning permission for it the port will decline because ships are getting bigger. The port can support ships of up to only 5,000 tonnes and many companies do not have ships of that size. We import petroleum and the petroleum shippers have said they want to scale up to 12,000 tonnes. If the port declines that will affect any future plans for aquaculture and anything to do with energy on the west coast. It is vitally important and we submitted our planning application in 2014. We have a long process ahead of us.

I hope I have responded to all the questions.

Deputy Michael Fitzmaurice: What about TEN-T?

Mr. Maurice O'Gorman: We cannot access TEN-T at present although one of our board members, Mr. Frank Greene, has had several meetings in Europe to see how we could access different EU funding which is not under TEN-T.

Mr. John Mullins: Deputy Catherine Murphy asked an important question about land. It was the only question she asked. We own Tivoli and the quays. We own Tivoli on behalf of the State. Our intention is to work with the National Pensions Reserve Fund to develop that to a point. We are not property developers but we want to maximise the value of that entity for the State. That is why we have six architectural designs put together for Tivoli for the future which will go out for stakeholder consultation. We are also working closely with the city council to examine how many dwellings we can put in that location. Some 3,000 to 4,000 houses and apartments could be built in Tivoli in a riverside setting.

Vice Chairman: Another group of witnesses have been waiting outside since 11 o'clock to address the committee. Members have 15 seconds to ask their questions. There are to be no deliberations. I am serious about that as the other witnesses are waiting.

Deputy Eamon Ryan: My question is for Mr. O'Rourke and if he cannot provide the information perhaps he would send me the written details. How many road projects does TII have ready to go to tender or are in the tender process? How many rail projects are ready to go to tender or are in the tender process? How many BusConnects projects are ready to go to tender or are in the tender process?

Deputy Éamon Ó Cuív: I welcome the chairpersons designate and particularly Maurice O'Gorman from Galway Harbour Company. My question is about Galway. How important is it that the harbour is not transferred to the local authority so we can pursue the aim of making it a national port, in view of the fact that there is no national port around the coast from Foynes to Dublin? Obviously, there are ports in the North but none in the Republic. That is the first question. The second question-----

Vice Chairman: Only one question please.

Deputy Éamon Ó Cuív: It is a quick one, and Deputy Eamon Ryan will love it.

Vice Chairman: Senator Ned O'Sullivan wants to ask his question.

Deputy Éamon Ó Cuív: If Galway Harbour Company proposes to have a port where many products will be transported in and out by rail, how important is reconnecting Athenry to Claremorris on the existing railway line to those plans?

Senator Ned O'Sullivan: Thank you for your indulgence, Vice Chairman, and I apologise for being late. I have a question for Mr. Mullins about Cork port. Does his board have plans to develop a liquefied natural gas, LNG, project, which was originally mooted to be established in my constituency of Kerry North?

Mr. Cormac O'Rourke: With regard to roads, there are seven projects with planning ready to go to tender, a number are in construction and quite a number of others are at pre-planning approval stage. There are no light rail projects ready to go to tender or, indeed, even ready to go for a railway order. Metro north should start the railway order process next year. Regarding BusConnects, it is not clear to me yet whether we or the NTA would be responsible, but I think it is the NTA. We have done work for the NTA on the BusConnects projects but we do not have any now of which I am aware. However, we have done design work for the NTA on at least two projects.

Mr. Maurice O'Gorman: In response to Deputy Ó Cuív, I met the Department about two weeks ago. That is the stated Government policy as issued in 2013 and it is anxious to see that it is implemented as quickly as possible. We are in that process and we are working with the city council now. We are going through the transfer. I do not see it as a major issue. It is similar to a shareholder register where one is moving from one named shareholder to another. It does not make a huge difference to us in terms of funding because we are not eligible for EU funding under the current policy. I have a good working relationship with the city manager and I have talked through this with him. I do not believe it is a big issue.

With regard to the line from Athenry to Claremorris, what Mayo has done for freight is fantastic. The fact it managed to keep freight open and is moving so many goods through rail freight after Irish Rail closed it down is excellent. If we could move more traffic by opening the Athenry to Claremorris line, so we could move goods from Claremorris to Athenry and on to Galway harbour, it would be excellent. It would be a great idea to re-open it.

Mr. John Mullins: In my deposition I stated that NextDecade Corporation approached the Port of Cork. It identified the port as a location for a floating storage regasification unit, which is a different form of technology from the technology proposed in Shannon LNG, which has been established for at least a decade at this point. Clearly, the opportunity for us is increased income and increased movements of ships to the tune of approximately 2 million tonnes, which would be a 20% increase in traffic. I have a knowledge of the gas sector and I have no doubt

those two projects will be competing projects. They are two different forms of technology. We are not involved in the development or the investment case. We are primarily a facilitator in the same way as Ballylongford at Shannon Foynes would be a facilitator for Shannon LNG.

Vice Chairman: I thank the witnesses for their deliberations and for their attendance at the meeting. After today's meeting they look to be secure for the future. We wish them the best. I will suspend the sitting until 12.30 p.m.

Sitting suspended at 12.18 p.m. and resumed at 12.30 p.m.

Traffic Management, Congestion and Public Safety at College Green, Dublin: Discussion

Vice Chairman: I apologise for the long delay. The purpose of the second session is to discuss the issue of traffic management, congestion and public safety at College Green, Dublin. The initiative has attracted much public comment since the commencement of Luas services in this area of the capital city and there has been much commentary on the issues of traffic management, congestion, public safety, overcrowding on the Luas and plans for a pedestrianised plaza on College Green.

I welcome Deputy Noel Rock, who is a new member of the committee. I also welcome our guests: Mr. Owen Keegan, chief executive officer, Dublin City Council; Mr. Brendan O'Brien, head of technical services; Mr Ray Coyne, chief executive officer, Dublin Bus; Mr. Peter Lunden-Welden, managing director, Transdev; Mr. Conor Faughnan, director of consumer affairs, AA Ireland; Mr. Barry Aldworth, AA Ireland; Mr. Joe Herron, president, Irish Taxi Federation; and Mr. Gerard Macken, chairman, Taxi Alliance of Ireland.

By virtue of section 17(2)(l) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of their evidence to the committee. However, if they are directed by it to cease giving evidence on a particular matter and continue to so do, they are entitled thereafter only to qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person or an entity by name or in such a way as to make him, her or it identifiable.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official, either by name or in such a way as to make him or her identifiable.

I call on Mr. Faughnan to make his opening statement.

Mr. Conor Faughnan: AA Ireland has grown from being Ireland's premier motoring organisation into one of its leading consumer service businesses. It provides emergency rescue services for people in the home and on the road, as well as insurance for more than 200,000 customers. It specialises in home, motor and travel insurance and attends in the region of 130,000 car breakdowns every year, 80% of which are fixed on the spot. It is also a campaigning organisation. From its heritage of representing motorists to its 21st century role, the AA researches and champions consumer needs. It employs 550 people across Ireland in its growing team. It has its headquarters in central Dublin where it has approximately 400 staff. It has been in the broader College Green area since its foundation more than 100 years ago.

The College Green traffic management issue has received a great deal of attention recently because of the opening of the Luas cross-city line in December. The arrival of Luas trams into the mix has revealed how unsustainable the arrangement is, but the traffic problems on College Green date back further than that. In June 2009 a rush hour ban on private cars using College Green was introduced. Almost a decade later we are still talking about traffic chaos at that location. The AA has made the point previously that it frustrates motorists when they find themselves being blamed by default for every planning and transport error, as if the sole cause of the city's problems was selfish motorists who are too snobby to use public transport. All of the evidence we have demonstrates that the opposite is the case. Given good public transport services, no motorist has to be forced to use them and no driver chooses Dublin traffic jams if he or she can avoid it. The "selfish lazy motorist" is a fiction; a pantomime villain that Dublin City Council and others choose to blame instead of addressing their own failings. The traffic problems on College Green deprive the council of that excuse. Cars have been gone for almost a decade, but the traffic jams are worse than ever. Bizarrely, the choice now seems to be to blame taxis, which does not make sense. There is no room for both buses and trams on College Green at current and future Luas frequencies. As the tram tracks are not going to be moved, the buses will have to. This needs to be done now or we will be complaining about delays for years to come. Provision of the College Green plaza will certainly require buses to be removed. This could have been foreseen and perhaps there are some justified criticisms in that regard, but that is not important; what is more important is getting it right for the future. Most citizens support the concept of the College Green plaza and when it happens, a change in the traffic arrangements will be required.

The primary users of the existing space are the five main transport modes: the Luas, Dublin Bus, taxi drivers, cyclists and pedestrians. The latter two are modes of transport we should encourage. In particular, cyclists have reported College Green as being problematic. In recent months taxi drivers have seen themselves being pushed into the firing line. A ban on the use of taxis in the area is being heralded as the solution, but we need to face reality. Taxis are public transport and are very important, especially for tourists and business visitors to the city. In any case, we do not believe the impact of taxis at that location is the primary cause of the problem. I repeat that we cannot accommodate buses and trams across the pinch point at Trinity College. The trams cannot move so the buses will have to move, even if Dublin Bus does not like it. Pushing the taxis out will make little or no difference. They will have to leave anyway when the pedestrianised plaza is introduced so they may as well get used to that idea now.

The AA has often spoken in praise of Dublin Bus and I will do so again on the record at this forum. It is the mainstay of our public transport system and the city would be lost without it. Dublin Bus is arguably under-respected and it is certainly under-funded. It deserves greater support. Even so, Dublin Bus must accept the reality that buses cannot stay on College Green. As it stands, too many routes pass through College Green and there is no good reason for that. Not everyone needs to get off a bus at Trinity College.

AA Roadwatch obviously observes traffic every day. One can see queues of buses waiting to access College Street during peak rush hour, from 8.20 a.m. to 9.20 a.m. It is not uncommon to see literally dozens of buses stuck in the queue with nowhere to go. College Street is also very vulnerable. It would not take much to block that location, causing tremendous delays to the buses and to the Luas. From wherever our fascination with as many bus routes as possible serving College Green came, we now need to move beyond it. We also need to think beyond the day-to-day commuter. We know we need to make public transport journey times better, especially for commuters. Important as that is, however, it is not the only measure of success

in a city and participants in the debate, including Dublin City Council, often seem to forget this. Too often the measure of success seems to be how many cars were forced out rather than how much business is brought in. Dublin needs to succeed not only for its commuters. Tourists are mentioned a lot but it is local people and local businesses who deserve more support. Dublin city's traders feel they have been ignored in this debate and I have some sympathy for them in that regard. Measures designed to make Dublin hostile to cars have been given disproportionate time and attention while measures to support Dublin's businesses do not get anything like the same amount of air time. Retail customer footfall has not recovered in the city's shopping streets since the financial crisis. It has fully recovered in places like Dundrum, Blanchardstown and Liffey Valley but not in the city centre. Grafton Street looks greatly diminished and is quite a distance from the prestige retail street it once was. When we are thinking about the commercial heart of our city, we need to think not only about transport - important as that is - but also about business and general commerce in the city centre. It would be of poor comfort to us all if we completely solved Dublin's traffic problems but in so doing we killed the commercial life at the heart of the city.

College Green is not the only traffic blackspot in Dublin. We need to take a more holistic view of transport in the city. We had major delays on the M50 again this morning, which is almost an everyday occurrence. We need to thoroughly review how we are managing transport and demand in Dublin city. In so doing, however, we must not take as our only measure of success how well we manage to make buses and Luas trams move. We must also remember why we want them to move and think about the commercial heart of the city.

Vice Chairman: I thank Mr. Faughnan. Before I ask our next guest to speak, I remind members and guests to turn off their mobile phones. I now call on Mr. Owen Keegan, chief executive of Dublin City Council.

Mr. Owen Keegan: I thank the Chairman. Dublin City Council, DCC, welcomes the opportunity to address the committee on the issue of traffic congestion at College Green. Since the launch of Luas Cross City, LCC, on 9 December 2017, there has been significant congestion at College Green which has impacted adversely on the journey times of buses and taxis travelling between O'Connell Street and Nassau Street and on roads that access this corridor, especially during the morning peak traffic period. In addition, during the initial weeks of LCC operation, in an effort to keep traffic moving, pedestrian priority at College Green was greatly reduced with the result that average pedestrian waiting times more than doubled.

The impact of the introduction of LCC on bus journey times for southbound buses travelling through College Green, that is, between O'Connell Street and Nassau Street, is set out in the paper submitted to the committee. If one takes the worst hour, between 9 a.m. and 10 a.m., we estimate that before the introduction of LCC that journey would have taken ten minutes on average but after its introduction the same journey was taking 23 minutes.

It is important to note that major traffic management changes were implemented in the city centre area by DCC prior to the launch of LCC on 9 December 2017 to facilitate its operation. These changes included the introduction of double bus lanes on stretches of the north and south quays, a ban on general traffic turning right from the north quays onto O'Connell Bridge and a range of junction and traffic signal changes. These changes had a positive impact on bus and taxi journey times.

It was always recognised by the council that College Green, which has only one lane in each direction, would not be able to accommodate the same number of buses and taxis following the

introduction on LCC. In order to address this issue, the council developed a separate proposal for a new civic plaza at College Green, which provides for the elimination of all traffic through College Green on an east-west axis. Under the proposal, the current complex sequence of traffic signals would be replaced with a single pedestrian crossing from the front entrance of Trinity College across to the new plaza. The plaza proposal would have allowed taxis to use the high quality north-south public transport corridor. In my paper I have given an example of the conflicting traffic movements on College Green that are the cause of the congestion problems. The council is of the view that the plaza proposal, with the elimination of east-west traffic, removes those traffic conflicts. The council is satisfied that the benefits of the plaza as a civic amenity for pedestrians and in terms of greatly improved bus, tram and taxi traffic flow on a north-south axis through College Green due to the elimination of conflicting traffic movements will far outweigh any negative impacts on those bus and taxi services which will have to divert as a consequence of the elimination of east—west axis traffic through College Green.

The College Green plaza proposal, including the associated traffic management arrangements, was submitted to An Bord Pleanála in May 2016. It had been anticipated that a decision on the proposal would have been made in advance of the opening of LCC. This would have allowed DCC to implement the required traffic management arrangements. Unfortunately, there have been delays in the planning process for the civic plaza development. I have included for member's information a detailed timeline of the planning process. In deference to the separate statutory procedure for the civic plaza proposal and mindful of the threat of legal proceedings from a city centre business group, DCC and the NTA held off making any other traffic changes pending progress on the plaza application. An oral hearing on the application, which had been scheduled for 9 January 2018 was postponed on 4 January 2018. Following this postponement, DCC and the NTA agreed to initiate measures to reduce the volume of traffic travelling through College Green in order to reduce the level of congestion and improve traffic flow.

On Monday 29 January 2018, eight bus routes, which previously travelled through College Green and College Street but did not stop there were re-routed and a further nine Xpresso routes were also re-routed away from that area. The combined effect of these changes has been to reduce the aforementioned 23-minute delay in the worst hour to a 16-minute delay, a significant improvement. While these measures have reduced journey times in the morning peak, it is very clear that a further reduction in the number of vehicles travelling through College Green is required, particularly given the need to accommodate higher frequency and longer LCC services. Following further consultation between DCC, the NTA and Dublin Bus it has been agreed that an additional ten bus services will be re-routed away from College Green, effective from Monday, 5 March. Those measures will be evaluated and if required, DCC will implement further measures in consultation with the relevant parties.

Vice Chairman: Thank you. I now call on Mr. Ray Coyne, chief executive of Dublin Bus, to make his opening statement.

Mr. Ray Coyne: I thank the Chairman and members of the committee for inviting me here today. In the past 18 months I have had the privilege of addressing this committee on Bus Átha Cliath's vision for public transport and on the accessibility of our services. I welcome the opportunity to engage with the committee on congestion and its impact on our city.

In October 2016 I outlined to the committee that an efficient public transport system is key to delivering positive economic and social development in our country and in the case of Dublin Bus, to Dublin and its hinterland in particular. An economically vibrant Dublin is also of benefit to the wider economy. In 2017 Dublin Bus carried 139 million customers. We achieved

this through strong growth in both our commercial and public service obligation, PSO, network of services. Dublin Bus customers account for 39% of all retail spend in Dublin city and 62% of all public transport users in Dublin are Dublin Bus customers. This demonstrates the importance of the bus as a mode of transport in delivering retail spend into the city centre. Creating an integrated, customer centric, well-functioning and efficient public transport network will assist in delivering economic benefits. This cannot be achieved in a congested city.

Congestion during the morning and evening peak commute times is a significant problem in Dublin. Our city's roads are not designed for large volumes of vehicular traffic. There are many users competing for the limited road space available, including private transport, public transport, cyclists, taxis, delivery vehicles and pedestrians. As economic growth continues, congestion levels will further increase unless significant mitigating measures are put in place. Congestion limits a city's ability to achieve its full potential in economic, environmental, social and cultural areas. Research by the Department of Transport, Tourism and Sport's economic and financial evaluation unit in 2017 estimated the cost of aggravated congestion across Ireland's transport system at €350 million per annum and forecasted this to rise to €2 billion per annum by 2033. This is not sustainable for transport operators, Government or the public.

Dublin is positioning itself as a modern European capital and a congested city does not fit with this vision. Our network speed at peak times is in the region of 14 km/h, with substantial variations on all public transport corridors. Despite the significant roll-out of quality bus corridors, private transport remains extremely competitive in terms of journey times to the city, and in many cases is faster than the bus.

A customer-centric public transport system must have, after safety, three basic fundamentals in place. These are frequency of service, reliability of service provision and competitive and consistent journey times. Thereafter, information and price are key for customers. Congestion is the main barrier to achieving all three fundamentals, while also negatively impacting on price.

One of the key advantages of bus transport is the ability to adapt and accommodate additional customer demand more quickly than other modes. This is due to the ease and speed at which Dublin Bus can adjust alignments in keeping with a changing, growing city. The bus network today is far removed from the network that existed prior to 2011 and will continue to evolve in 2018. Similarly, the road infrastructure and priority in the city has also significantly changed over the past two decades. These changes have provided tangible benefits for our customers through increased service levels and reduced subvention requirements, allowing for further reinvestment in service provision.

During the construction phase of Luas cross city, significant adjustments were made to the Dublin Bus network to minimise the impact on our customers and assist in the delivery of Luas cross city. As we transition from construction to operation, Dublin Bus continues to adjust services to benefit our customers, other public transport operators and the city as a whole.

In January 2018, following engagement with the National Transport Authority, NTA, and Dublin City Council, 17 bus routes were realigned to improve congestion levels in the College Green area. Following further engagement between parties and an assessment of current operations, Dublin Bus will realign a further eight routes away from College Green on 5 March, again to enhance the customer experience and to benefit other public transport users and the city.

Unfortunately the customer experience on some journeys continues to be impacted by congestion, which is not confined to College Green. Dublin Bus and the economy are growing strongly but it is vital that we do not leave this recovery at our bus stops and stations. Additional capacity introduced now will benefit our city in the long term and introduce new customers to public transport, mitigating the impact of congestion. This additional capacity must be matched with continuous improvements to on-street priority throughout the network. Failing that we will simply be moving congestion from one area to another, rather than what is intended by recent initiatives, which is improving the operating environment for all users of the city, from pedestrians and cyclists to public and private transport users.

Consistent service delivery in the areas of punctuality and reliability is required to deliver a multi-modal mobility solution for public transport in Ireland. An integrated network of services, information and payment will provide a platform to achieve significant increases in public transport use. A new bus route is proposed to connect Broombridge Luas and train station to Finglas, Ballycoolin and Tyrrelstown, providing alternative transport modes to our customers. The NTA continues to support public transport with increased service frequency at both peak and off-peak times added to our bus network since November 2017. These measures are vital steps in the bid to tackle the congestion currently affecting the city.

Some key decisions will be required to maximise the use of the finite road space in our capital city. Congestion has the potential to stagnate economic activity in the city now and over many years to come. Increasing the use of the public transport network is the best way to tackle congestion. The implementation of further measures that ensure public transport is a better alternative than the car would enhance our ability to tackle congestion. At a minimum, our public transport network speed at peak times must increase from approximately 14 km/h to at least 18 km/h. This will provide for a more efficient public transport network, delivering the key requirements of increased frequency, more reliable services and consistent and fast journey times. With the above improvement in journey times, significant efficiencies would be realised and reinvested in the network, effectively increasing fleet capacity within existing fleet resources. Underpinned by a commitment to multi-year funding, additional current and capital funding would also be required.

The significant challenges experienced in our operating environment have not reduced customer support for public transport. We have increased customer numbers on our services every year since 2013. In December 2017, Dublin Bus recorded double-digit growth on our services. We are already seeing strong growth in 2018 with 6% organic growth achieved in January. The introduction of bus priority measures on the north and south quays and the Rosie Hackett public transport bridge have contributed significantly to our growth figures. The NTA-sponsored Bus-Connects programme of work will see €750 million invested in the bus network for the greater Dublin area over the next five years, and I welcome the commitment from Government to support this project through the national development plan. BusConnects will significantly enhance the customer experience in the city in the short term, while providing long-term benefits. If all aspects of the NTA's BusConnects programme are implemented, it will have a beneficial impact on congestion levels.

In the fourth quarter of 2017, Kantar Millward Brown carried out customer satisfaction research on behalf of the NTA. Dublin Bus recorded the highest percentage of customers in the "very satisfied" category, at 54%, with a score of 92% satisfaction overall. This is a wonderful testament to our employees and our stakeholders, who continue to recognise the importance of the bus to the economy. It is also a strong reflection on our service delivery, aided by continu-

ous improvements to bus priority.

Dublin Bus will continue to assist key stakeholders as it seeks to reduce congestion in the city. College Green is one component of this and addressing one area does not readily solve other areas. Having a public transport system that is a better option than owning a car is a vision that is achievable and will enable our city to fulfil its potential in many diverse areas. These include enhanced urban living opportunities, reduced congestion, improved air quality and reduced noise pollution. It will enable the economy to prosper and provide a platform for a vibrant social and cultural city scene. It will increase the capacity to deliver people to and from the city with reduced road space, increase the pedestrian environment in the city and enhance the safety for all road users. Congestion is a barrier to achieving this vision.

The bus is the most flexible mode in delivering significant movement in public transport and will be with us for a long time. It has the potential to drive the growth in public transport in the short to medium term. This will lay the foundations to implement priority measures on key corridors with bus rapid transit, BRT, standards, increased frequency levels on corridors to continue customer growth, and provide the space for the implementation of further light and heavy rail over the medium to long term. Many initiatives announced in the national development plan, Project Ireland 2040, are aligned with this view. We must act now for the future.

Should the committee have any questions I would be happy to take them as they arise.

Mr. Peter Lunden-Welden: I thank the committee for its invitation to attend today. I am delighted to be here because I have been managing director of Transdev, the Luas operator, since June 2017. I have previous history with Luas and Dublin as I had a small part in the original Luas mobilisation team, as operations manager, back in 2004. I have spent the intervening years as chief executive officer of Seoul Metro in South Korea.

For the benefit of the committee members I would like to give you a brief overview of Luas and Transdev's involvement with it since the launch in 2004. Luas is a state-of-the-art light rail transit system that provides an accessible, attractive and unique mode of public transportation in Dublin. Transdev is contracted by the National Transport Authority and Transport Infrastructure Ireland, TII, to operate the Luas. The contractual arrangement within Luas effectively requires the NTA and TII to provide the infrastructure and the trams and Transdev to deliver the operation using these assets. Transdev is a worldwide organisation with expertise in operating transport systems, including light rail, metro, buses, shuttles and taxis. I wish to stress that we consider Luas in Dublin as one of our flagship light rail operations. Transdev has been operating Luas since the commencement of services in 2004 and successfully renewed the operating contract in 2014. In 2005, the first year of full operation, Luas carried approximately 22 million passengers. In 2017 Luas carried 37.6 million. This increase emphasises the remarkable success the light rail system has had in the Dublin area. In fact, there has been a further 16% increase in passengers from January 2017 to January 2018.

We believe light rail is an integral part of transportation in Dublin. Transport planning is critical to achieving growth in public transportation and crucial for the medium and long-term development of Dublin city. The definitive plan, design and construction of the College Green and how it is integrated within a functional Dublin city is not within Transdev's scope or control. Luas is only one factor of this complex equation and we work in partnership with all the city stakeholders, including Dublin Bus, NTA, TII and DCC, to achieve the optimal travel times around College Green and across the red and green Luas lines.

However, crossing Dublin city centre in a tram linking north to south is a transport option to be welcomed. The challenges that are being posed require some refinement and alignment for all stakeholders to address. While there remains some issues at present, I am convinced these issues can be addressed soon.

This concludes my short statement. I also am happy to take questions from the committee.

Vice Chairman: I thank Mr. Lunden-Welden. I now call Mr. Joe Herron, president of the Irish Taxi Drivers Federation.

Mr. Joe Herron: I thank the Chairman and the committee for the opportunity to speak. I will be brief.

It would appear to us that when any member of Dublin City Council speaks about the congestion at College Green, he or she seems to be of the opinion that the simple solution is to ban taxis and buses from the area. We believe this means that those who want to go east or west are not considered. There also are a considerable number of hotels and many other businesses that need to be accessed by taxis in the area on both sides of College Green.

It is grossly unfair to expect people using taxis to pay extra in both time and taxi fares to make a large diversion to get from, say, O'Connell Street to Dame Street or *vice versa*. They might try removing the buses from the area and allow taxis use it, as they are the only door-to-door service, and see how that would work. That is all I would have to say on the matter but I will certainly take any questions afterwards.

Vice Chairman: Does Mr. Gerard Macken want to make a comment?

Mr. Gerard Macken: Yes, a short one. I thank the Chairman and committee for inviting me here.

Our group, working in conjunction with the Tiománaí Tacsaí na hÉireann, TTnH, the DTA and Dublin Airport taxi association, has had numerous meetings with Dublin City Council and the national authority in respect of College Green. At our last meeting, we were promised an impact study on taxis within the city area. The Lord Mayor, plus Mr. Brendan O'Brien and Mr. Dick Brady from Dublin City Council, were in attendance.

We looked at the proposal to reintroduce the left-hand turn onto Dawson Street because at present we have to take an alternative route off Dawson Street, onto Molesworth Street, Lincoln Place and down onto Pearse Street. Taxis are part of the National Transport Authority. We have to run a meter and give a fair account of our fares by taking the shortest possible route. We are serving the hotels within the area and we need the shortest route to do so. I am available to take any questions.

Vice Chairman: Members are conscious of the procedure. The first to lead off for the Oireachtas Members is Deputy Rock.

Deputy Noel Rock: I did not realise I was leading off but I am delighted to do so.

Vice Chairman: Deputy Rock is a star leading the Oireachtas.

Deputy Noel Rock: That remains the case all right. I thank the Vice Chairman for his warm welcome to the committee as well.

First, I welcome the witnesses today. This issue of congestion at College Green is probably the most discussed issue right now in Dublin and I hope the proposals that were announced last night will go some way towards improving it.

My first question is for Mr. Keegan. His presentation here shows some data on the recent changes that have taken place with the 18 bus routes that were rerouted. It shows a decrease in the amount of time, particularly in the 9 a.m. to 10 a.m. time slot. Has Mr. Keegan any projections on what changes to the timings will be made as a consequence of the further ten reroutings that were announced last night?

Vice Chairman: We will take a round of questions first.

Deputy Noel Rock: Pardon me. I am used to the Committee of Public Accounts format, where we go back and forth. My apologies. Is it that the Vice Chairman wants to take a round of questions?

Vice Chairman: Yes.

Deputy Noel Rock: Okay. No problem at all.

Vice Chairman: Has Deputy Rock more questions?

Deputy Noel Rock: I do indeed. Is Mr. Keegan of the view that the reroutings will make the requisite difference or that further changes will be required in the future? Can he provide the committee with the data subsequent to the first week of operation? I believe it comes into effect on 5 March. I would be interested, as I imagine would other members of the committee and, indeed, other Dublin Deputies, in seeing those data. I have other questions but will we stick with Mr. Keegan for now?

Vice Chairman: We can take them all.

Deputy Noel Rock: I have a few for Mr. Ray Coyne as well. Mr. Coyne mentioned the 40L bus routes, which is of interest to my constituency and to me. I am probably in a unique position in that I am the only Deputy who takes Dublin Bus every day to get to work. In fact, the No. 11 handily drops me right outside the door and despite going through College Green, is a great service. The 40L bus route has been mooted for a little while. I, first, became aware of it in December and campaigned for it before that. Do we have an indication as to when it will be introduced, what the exact route will be, what the frequency of the service will be and how it will be promoted? I am conscious that sometimes new routes - this one will be beneficial and will be exactly what we want to see, which is integrated public transport between Dublin Bus and Transdev which is great - are not promoted correctly and die on their feet. I am not saying that is the recent experience but certainly in the past, that has happened. I would be curious to hear about the promotion piece in particular as well and when it will be introduced because we could be promoting it right here and right now if we had a date for introduction.

The city centre fare was abolished recently. What was the rationale behind that? We may come back later to Mr. Coyne's own views on whether the rerouting of ten buses at College Green will make a substantive difference to the experience there.

Finally, for Transdev, I seek Mr. Lunden-Welden's views on what has been proposed in the Project Ireland 2040 plan regarding the potential expansion of the operations, in particular to Finglas, which I understand is to be the prioritised line of the four potential expanded lines. I

would be curious to hear whether Transdev has ongoing consultation with the NTA in that regard.

Similarly, what are Transdev's views on O'Connell Street and the Luas operations there? With regard to the current operation, it goes down Marlborough Street-----

Vice Chairman: May I interrupt Deputy Rock for a second? He is going through the whole Dublin plan but the focus of this meeting is the issue of College Green.

Deputy Noel Rock: This last question links to that, to be fair. To get the optimum operation out of the Luas across College Green, I note many trams are practically empty going south from Marlborough Street. Pedestrians, when they are getting off Dublin Bus services on O'Connell Street, do not have sight of the tram stops, the real-time information and when a Luas is coming. One would not necessarily walk down to Marlborough Street speculatively to get on a tram and then have to walk back to get a bus. What are Mr. Lunden-Welden's thoughts on whether there should be real-time signs installed on O'Connell Street to get the most out of College Green? Right now, there is congestion on College Green but we may not be getting the optimum number of passengers going south. I have certainly noticed that and I imagine the data bear it out as well. There is a great deal of congestion going north, and also southbound from Dawson Street, but maybe overall Luas overcrowding is a topic for another day.

Finally, I wish to hear Mr. Lunden-Welden's thoughts on the proposed changes that have been made by Dublin Bus and whether Transdev feels that this will go some way to addressing the congestion at College Green.

Senator John O'Mahony: I will be brief and will defer to all of my colleagues, who are probably affected by this seven days a week. I want to give the outside perspective on some of the points that have been made.

It looks like more planning or agreement should have gone into this in advance rather than now. I will ask everybody a global question. Is it possible to tinker with this in some way to solve it or is a more dramatic intervention needed? Second, listening to what the two taxi representatives said, it is reasonable that they would be able to service hotels and so on in that area. In other words, can a solution be got without major alterations to what the witnesses are talking about or are these just teething problems?

Vice Chairman: I call Deputy Catherine Murphy.

Deputy Catherine Murphy: The focus of attention is College Green, and we are talking about the possibility of moving bus routes. Some of them have been redirected already. I looked at the figure for the number of buses and the areas from where they are originating and they include Monkstown, Dún Laoghaire, Bray, Ashtown, Clondalkin, Dundrum, Lucan, Blanchardstown, Malahide, Balbriggan, Swords, Leixlip, Maynooth and Celbridge. Some of them are city speeds. That tells us that it is not just buses that are being discommoded; it is people.

Part of the reason some of the termini were selected was because there is an inadequate amount of kerb space for buses in the city, so people have got used to this route across city. As far as I can recall, when the Luas line was being selected, Dublin Bus had a lot to say about this being a potential problem for it. This is not a teething problem, therefore; it is something that was foreseen.

What modelling are the various organisations doing, even at this late stage, to do it not just on a piecemeal basis but to examine the likely scenarios if some of the buses are redirected? It is very difficult for people to get used to different routes. They will be fixed on a public transport route. They select it because it gets them to their destination, and the destination is not always a terminus; sometimes it is somewhere in between. That discommoding of a very large population that, generally, is on the periphery of the city is likely to lose market share for Dublin Bus. What modelling is being done to deal with that?

Going back to the Dublin transportation initiative, Luas would have been part of that, but so also would other initiatives, for example, the DART underground. In the provision of public transport, is there surface room for what we need if those type of alternatives to public transport are not provided?

With regard to Dublin City Council, Dublin is our capital city. I represent Kildare North, but I am a Dubliner who has gone in the other direction. I do not have anything negative to say about Dublin, but there is a mindset that is about looking at the city centre as though it is a functional area as opposed to it being a capital city that has, whether we like it or not, a sizeable amount of the population in the greater Dublin area that requires to be taken into account when changes in the city centre are being considered. What networking is done with regard to the greater Dublin area? The College Green issue definitely translates as though it is a city centre issue but if we are to discommoding people, we are discommoding people who are travelling into the city rather than people who are living in it. What networking is done to consider people from outside of the functional area of Dublin?

Vice Chairman: I will call Deputy John Lahart who will be followed by Deputy Eamon Ryan.

Deputy John Lahart: I warmly welcome all the attendees. I appreciate them giving their time here and the contributions they have made. There is no action without an equal and opposite reaction is a dictum that can be applied to this issue, but we have to live with it. We have to be practical in terms of what has happened. In many ways, in terms of what has been happening in recent months and also the witnesses' presentations today, for Dublin Bus and the taxi drivers it is a little bit like a variation of the prodigal son. Taxis and Dublin Bus, and I thank them on behalf of Dubliners for keeping the city moving, particularly in the midst of all the Luas cross city construction, have been the loyal, hard-working labourers serving in the vineyard for the past 40 years. Luas is the new kid on the block. It has a big advantage. It has rails in the ground and it is not going anywhere, and that is reflected in the contributions. I warmly welcome Luas and Luas cross city. Luas cross city is the only immovable force; it is the only immovable object. We have to accept that everybody else will have to be flexible because Luas is not going anywhere. Ultimately, despite all the criticisms that have been made of it, any new transport initiative will have to be given a period of time to bed in. I believe everybody accepts that, but I have questions for Transdev Ireland. It is solving some of the problems with real time and so on, so I will give it the benefit of the doubt on that. Passenger safety is a real concern, as is overcrowding. The witnesses might address that briefly.

I do not know, but I accept Mr. Owen Keegan's bona fides as chief executive officer of Dublin City Council on this issue. It is an elected body that has decided to pedestrianise a plaza that is part of the centre traffic spine of the city. I accept that is what it intends to do, and I believe we have to bite the bullet on that. We cannot have a lot of public transport moving through that space if it is to be a pedestrian plaza. I am sorry for the clichés, but we cannot make an omelette without breaking eggs. I am assuming there are things that can be done, and that need

to be done, to alleviate the situation for taxi drivers in the context of that. One of those is that taxis, which are an essential part of public transport, ought to have access to some of the bus corridors to which they do not currently have access. I have noticed that in terms of some of the routes taxi drivers have to take around the core of the city, the amount they add to a fare is considerable. For example, their inability to access the bus corridor on St. Stephen's Green does not make much sense to me. There are a number of things that need to be done regarding public transport.

For Dublin Bus, the witnesses are all disparate voices here. When did they all last meet together as a group to discuss this issue, or did they meet? Has the Minister for Transport, Tourism and Sport called them and all the other stakeholders in to discuss it and to hear their individual views, not just on the plaza issue but the Luas cross city issue? Where are the representatives of the Garda traffic corps, which has an essential role to play in this, particularly in the bedding in of the Luas?

The central spine of Dublin Bus has been taken away. As Deputy Catherine Murphy said, Dublin Bus is serving the people who are not served by Luas, DART or trains whose landing points and terminal points when they come into the city are getting further away from where they used to be able to locate and get off. There are certain issues on which we have to make decisions. Luas cross city is here. It is immovable, so everything else will have to work around it in terms of transport solutions. The longer trams are longer because they have bigger capacity. It is too late now, but what particular consideration was given to the fact that O'Connell Bridge is 45 m long and the trams are 55 m long? The tram will always have its way but, as far as I understand, at peak time the tram will cross the bridge every three minutes. It takes 50 seconds to 90 seconds to cross the bridge and it must clear it, which leaves a minute and a half for taxis, bikes, commercial vehicles, buses and everyone else coming up and down the quays. The city manager must provide us with some kind of insight into this. If 300 buses are taken out of College Green every hour, 3,000 every day, where will they go? We do not want this patchwork quilt of responses. This is not directed at the chief executive. He is only part of the strategy, and I accept that. It may take a little time - for example, six months - to come up with an overall master plan. A point I made yesterday is that the transport map of Dublin is being rewritten and redrawn before our eyes and this cannot be done in a patchwork way; it must be done in a comprehensive way. The witnesses may have to take some time to do this in order that they and all other stakeholders come together, except Luas because it is immovable and everything now must work around it. Luas is in a very happy position and it is justified because of its passenger-carrying capacity, but Dublin Bus's passenger-carrying capacity is significantly in excess of that of Luas.

My big bugbear is that there is no one person accountable, elected or appointed who can pull all these voices together in one room. The Minister for Transport, Tourism and Sport can, but there is no Dublin authority that can pull together every single one of the witnesses' organisations as stakeholders in this debate. They will have to be pulled together regularly over the next year or so in order to thrash this out, sort it out and come up with a solution. This is not London. We do not have an underground. I hugely, wholeheartedly welcome Luas cross-city but I am thinking of the emasculation of taxis and Dublin Bus from the spine of the city. Anyone could have seen that this was coming. Again, this is not aimed at Mr. Keegan. He is just part of the tapestry of solutions. The National Transport Authority is not represented here today even though it is the responsible body. I think Dublin Bus is getting the brunt of all this and sucking up an awful lot in this process. In fairness to Dublin Bus, it is adapting, but someone must pull all this together. Dublin Bus cannot be penalised regarding all the big gaps of the population of

Dublin that are not served by rail of whatever variety. Dublin City Council is just in charge of the city, and this is impacting the suburbs and the other four Dublin local authority areas. No one has a big plan. No one even has a big plan as to how to devise a big plan. Dubliners and Dublin commuters deserve much better than this. We need someone to pull ideas together and come up with a vision that everyone can buy into.

I have a question directed at Transdev. It concerns serious overcrowding and security. Does Mr. Lunden-Welden agree with the notion of public transport police, particularly regarding the city centre, because the kind of passenger-carrying capacity Transdev has? I have one final question on behalf of all the shift workers who either come into the city to work or live in the city and go out into the suburbs to work. They rely after a particular time exclusively either on their own cars or on taxis to get themselves to work. Does Transdev have any plans regarding Luas cross-city to expand the hours to serve an increasingly mobile population?

Vice Chairman: Before I move on to Deputy Ryan, to clarify, the NTA was not invited. This was an oversight following a previous discussion as to who should be invited. I just wish to excuse the NTA. In fairness, it is not its fault a representative is not here.

Deputy John Lahart: The biggest beast has been left out of the conversation, but I thank the Chairman for his clarification.

Vice Chairman: I am only Vice Chairman, but-----

Deputy John Lahart: I accept that.

Deputy Eamon Ryan: Deputy Catherine Murphy and I soldiered together on the Dublin transport advisory committee in the mid-1990s.

Deputy Catherine Murphy: The early 1990s.

Deputy Eamon Ryan: We have been talking about this subject since. I was very involved in the Platform for Change plan in the late 1990s and early 2000s, up to 2001. I remember with such clarity discussing the options and coming down on the metro because of the clear modelling which showed that if we did not do so, we would not be able to make the numbers work and would have bus jams on D'Olier Street, and, hey presto, we now have bus jams on D'Olier Street. This is not new but we must sort it out now big time and quickly.

I commend Mr. Conor Faughnan. I agree with the simple analysis he gave. He said one cannot accommodate the buses and trams across the pinch point at Trinity College. The trams cannot move so the buses will have to. It is a tough reality, but he hit the nail on the head when he said that. I wish to ask three questions, if I may, and I appreciate the opportunity to contribute. First, I agree with what was said about Dublin Bus. I am not surprised about what Mr. Coyne said about Dublin Bus's customer satisfaction ratings because that is my experience of talking to friends, family and others. Dublin Bus services have improved. The Wi-Fi services, the real-time information, just the overall service in Dublin Bus is good in very difficult circumstances, and we commend the company on that. However, I have a real concern. We had the chairman of TII before the committee earlier. I know TII is not in charge of the BusConnects project but, informally chatting to him afterwards, we kind of agreed nothing seems to be happening. Where are we in delivering the big BusConnects project, which might help us to ramp up and improve Dublin Bus services? When can we expect them to go to tender and come into operation?

Second, regarding light rail, I know my colleague, Deputy Catherine Martin, was asking for a representative of Transdev to come before the committee so I am very glad Mr. Lunden-Welden was able to come today to respond to these questions. I have two immediate questions. I am a light rail customer and, like so many customers on the green line, I now face a situation whereby three, four or five trams pass by before I can get on one. It is like the Tokyo underground at present at Milltown, Beechwood, Windy Arbour and any of the other stations. We are squeezing on like the Tokyo underground. In the old days there were photos of people pushing passengers onto the trains. That is what we need. In these circumstances, what is Mr. Lunden-Welden's advice to someone in a wheelchair who is looking to access light rail on pretty much any Luas service, particularly at peak hour on any inbound or outbound train? We heard from Dublin Bus of the concern about public transport speeds being 40 km/h. I was talking this morning to a friend who goes from Broombridge to Adelaide Road every day, a perfect customer for Luas cross city. He says he is quicker walking from Broombridge to Adelaide Road. I am interested to know Luas's times, particularly because Mr. Keegan said in his presentation that we may have to look at losing some of the priority for Luas in the city centre. Given it is so slow, it seems, and the current situation, I am interested in Mr. Lunden-Welden's views on losing priority in terms of Luas's speeds.

Finally, I know Dublin City Council is hampered here because it is operating within the constraints given that we did not proceed as we should have done with the metro. I agree fully with what was said earlier about the need for a mayor for Dublin. My experience of those 25 years - I do not know about Deputy Murphy's - is that inevitably there was inter-agency rivalry and too many different authorities. We really need someone to pull this together. I am very interested to hear from Mr. Keegan some specific details on cycling because I am also a cyclist. Who designed the cycling elements of this scheme? It is not just College Green; what has happened in Stephen's Green is a travesty for cyclists and a missed opportunity to provide all sorts of counter-flow and other measures. I have several friends who, particularly at College Green, have come off their bicycles, some with broken arms, others with various other injuries. I myself have cycled on College Green. I am a very experienced cyclist, very comfortable on streets and very well able to cycle in Dublin but I am terrified coming from Pearse Street direction going right up Dame Street. It is incredible that anyone designed that facility with cyclists in mind. Cycling is part of the solution here. The experience we have had when we put in high-quality cycling corridors, like along the Grand Canal, is, I understand, an almost immediate 50% increase in the cycling numbers. The answer to this problem we have of how to get everyone into the city and around is surely to provide the key cycling networks we need such as the Liffey Valley cycle route. The canal cycle route has been upgraded further and works have been carried out on the College Green plaza. Does Mr. Keegan have the necessary funding to make this happen? Does he have the necessary staff resources, the design teams and the in-house expertise to address the fact that cyclists are completely forgotten about in the Dublin transport system? We are the most vulnerable but are being left behind and this has to stop. Dublin can and should be a brilliant cycling city and there is huge pent-up demand for someone brave enough to create a safe space on our streets.

If we followed Mr. Conor Faughnan's advice and did what the city council has always planned to do, which is to do the plaza with the introduction of the cross-city Luas on College Green, is there a preferred route? Has a decision been made as to whether the reorientation of buses would mean using Parliament Street, Christchurch or Westland Row? I know that Dublin Bus has to ensure that this works with BusConnects but I think it can do so, given the priority afforded to buses on the quays. Where is the alternative north-south crossing point in the city centre? Garrett FitzGerald was right that Trinity College presents a fundamental problem in the

middle of the city and limits the scope for crossings. How do we cross over if we do not cross College Green?

Deputy Robert Troy: I apologise to witnesses for being absent for the past few minutes but we were accepting a petition relating to a minimum passing distance for cyclists of 1.5 m. Cycling can play a huge role in preventing congestion. The number of people who cycle in our capital city has doubled in the past two years but the funding allocated by the Department for cycling projects has decreased by almost 50%. I am interested in what Mr. Keegan has to say about the capacity to roll out a greater cycling infrastructure in the capital.

Mr. Faughnan was right that congestion is not exclusive to the Luas crossover although it has compounded the congestion problem. Congestion has been getting worse in recent years and there has been a lack of preparedness on the part of key stakeholders in regard to the crossover. We are failing our citizens miserably and robbing them of their lives as they are spending more and more time commuting to and from work. It affects other local authority areas in Dublin and not just the city centre, and it also affects areas such as my own constituency of Longford-Westmeath. People are now getting up at 5.30 a.m. to come to work in the city and they do not get home until after 7.30 p.m. or 8 p.m. They do not get to see their children getting up in the morning and they do not get to put them to bed in the evening.

Mr. Keegan said he had hoped that An Bord Pleanála would have made a decision on the College Green crossover before the opening of the cross-city line but why had Dublin City Council not submitted its application in plenty of time, to enable it to get a decision? Instead, it lived on a wing and a prayer and it hoped that An Bord Pleanála would reply in time. This is a massive investment of public money in infrastructure in the capital city. Mr. Keegan also said he did not have responsibility for the rerouting of buses and that is correct, as the NTA has that responsibility. There is a lack of joined-up thinking and it is not okay for one arm of the State to blame another arm of the State for the fact that this has not been done. Planning permission was submitted for the Luas cross-city in 2010, almost eight years ago, and it did not come up overnight like a mushroom. I am sure the plans were prepared many years in advance of 2010 but we have not responded correctly at all. In correspondence sent to us two days ago, eight additional bus routes were referred to as being rerouted but last night the news stated that ten were being rerouted. It appears that it is being made up as we go along. Why was it eight on Monday but ten on Tuesday evening?

There is a finite amount of road space in the area of which we are speaking. Is a decision going to be taken? Some €380 million's worth of tracks are in the ground and are not going to be taken up. What is the overarching plan to deal with this? One third of Dublin Bus traffic goes through this area. That is one third of the 140 million passengers who use the service on an annual basis. Is the plan to remove buses altogether from the area? If it is, let us be upfront and honest with people about it.

Dublin Bus is agile and has the ability to respond. Can Mr. Coyne tell us how many additional buses there have been in the fleet in recent years? It was said that there were 100 but my understanding is that a significant percentage of those are replacement buses and not new buses. What do the witnesses think about the possibility of the establishment of one body with overall responsibility for traffic management in our capital city? It is not good enough for one side to blame the other and to shift the responsibility to someone else and it does not wash with the general public.

I welcome the two taxi representatives. They have a pivotal role to play, particularly for

the business community visiting Dublin and for tourists, who may not be aware of the various public transport options and hail a taxi because they have confidence that the taxi can get them to their destination with relative ease. How do they think this issue can be addressed?

Vice Chairman: For information, Mr. Faughnan has had to leave.

Mr. Barry Aldworth: Dublin needs the establishment of one body to handle these decisions. Congestion in Dublin has been getting worse for a long time. It is not new and one factor has been the tendency to blame motorists and then get into infighting about what to do next. Having one body responsible for it seems to be the logical way forward and needs to be scoped out.

On alternatives for Dublin Bus, Parliament Street is a potential example. Use of Suffolk Street could work with a little re-engineering, if we are willing to make that investment. What needs to be assessed is the number of Dublin Bus services which pass by Trinity College Dublin and within 500 m of O'Connell Bridge. We then need to weigh the number of services passing these destinations with the number of passengers who actually get off buses at these stops. To anyone looking at the city, nearly every bus passes these destinations but not every passenger gets off at one of these stops. We need to assess what routes need to pass through the area and remove those that do not need to do so. That is the only viable solution.

Mr. Owen Keegan: We will certainly be happy to provide detailed data showing the impact of the recently announced set of changes. The council's position is that we had anticipated this. We have drawn up a plan which we are still confident will deal with it, namely, the plaza plan. There is a planning process and it took us some time to get the council to agree to it, as there were many objections to it. We underestimated how long it would take to get it through the planning approval process. We thought a period of six months would have been more than adequate, but that did not turn out to be the case and we are where we are. As I said, as we had anticipated this, accordingly, we prepared a plan which we believed would deal with it.

We are not banning all public transport, buses or taxis, from College Green. We are banning east-west traffic and reinforcing the north-south axis for all modes of public transport. We believe that by removing the conflicts associated with catering for east-west traffic, it will work for all modes. We can send the committee details of this. In developing the plaza plan we believe it will work for all modes. It will be possible to service all hotels in the area. Taxis can access close to College Green. They cannot pass through College Green, east-west, but they can certainly get close, almost as close as Foster Place. We believe the plan caters adequately for all modes.

It is important to appreciate that there is no solution that would allow the successful operation of the Luas without some impact on the other modes. We are also dealing with other sustainable modes as cars have long gone. We do not like to discommode bus passengers or taxi users. However, there is a bigger prize in ensuring the successful operation of the Luas. That is why we developed a proposal which allows for the successful operation of the Luas with the minimum inconvenience to other modes.

The plaza plan proposal has been held up. In the meantime, we are working well with Dublin Bus and the National Transport Authority, NTA, to address the congestion issue. There was no intent on my part to blame the NTA. It was just a factual statement. We have been working closely with the NTA and Dublin Bus on the changes needed to deal with the congestion issue. If further changes are required, we will work with the other bodies affected.

We are conscious of the role of the city centre in the use of transportation services which originate in outer areas. Getting the city centre working is important for everybody. It is just as important for routes which commence outside the city council area.

A technical issue was raised as to why taxis were not given access to St. Stephen's Green. The legal position is that we cannot give access to contraflow bus services such as the one on St. Stephen's Green. We would welcome if the position was reviewed. However, that is the legal position and the arrangement in which we must operate.

We are committed to improving cycling infrastructure. The cycle elements associated with the Luas cross-city line were designed by Transport Infrastructure Ireland, TII, and clearly there are issues with them. A solution mooted was that we ban cyclists, but we held up against it. We will have to revisit elements of it because it is not satisfactory. We have sought to improve the position on College Green by introducing a new two-way cycle track.

Our difficulty with funding is getting political support at council level. We were delayed in providing a cycle route on the north quays because we could not get the agreement of members to bring forward a scheme. We have approved a cycle route from Clontarf to the city centre, but members are seeking independent legal advice to stop it. We are running into political difficulties in getting the council's support. We are enthused about cycling and realise the contribution it makes. It is the fastest growing mode of transport in the city and we are keen to support it.

Mr. Brendan O'Brien: On the time savings that will be made with the additional measures, the original measures removed 60 buses at peak hours and saved 20% in journey times. We anticipate that they it will probably save another 10% to 15% in journey times.

All Dublin Bus data are shared in real time with Dublin City Council which has a dedicated team of four people who work on bus routes. Once a week we meet representatives of Dublin Bus to review all of the data accumulatesd from the whole of the city to see where there are particular pinch points and where change may be needed. According to these data, we will implement some changes. An example of how it worked was on the north and south quays. The data analysis showed that was the single worst route for Dublin Bus in the city and a plan was drawn up to deal with it. We are grateful for the way we work with Dublin Bus in that regard.

Once a week we also meet Transdev to go through particular issues which arise throughout the entire Luas network. We regularly meet the NTA, Dublin Bus and TII, particularly to discuss the College Green aspect. This afternoon I am due to meet TII again. That shows the level of co-operation. Every single vehicle in the Dublin Bus fleet transmits information to the city council every 20 seconds on where it is, if it is at a stop, the route it is serving and if there is congestion. We use data analysis to track what is happening. Dublin Bus also has dedicated staff working on the issue.

The particular proposal to introduce a plaza in the College Green area was examined in both the NTA's eastern regional model and by microsimulation. The latter also took into account cycling and so on in the area. The reason there is such emphasis on College Green is the number of routes which currently pass through it. We submitted to An Bord Pleanála a list of routes for Dublin Bus, as well as other bus services, and proposals for how they could run through Winetavern Street, Parliament Street, with additional routes on Dawson Street and the use of Westland Row.

Deputy John Lahart: What is involved in a microsimulation model?

Mr. Brendan O'Brien: Normally, when carrying out modelling work one is looking at demand, complex land-use and census data. A microsimulation model tries to model each car and individual vehicle in a network. It is much more of a visual tool.

Deputy John Lahart: That is what I thought it was. What was the outcome of the microsimulation for College Green?

Mr. Brendan O'Brien: We looked at the original layout of College Green and the microsimulation model predicted a 1 km queue of traffic that would pass through it. As Mr. Keegan said, we are not removing all the traffic and public transport from College Green. We will not remove all the buses. The tram tracks will provide a high quality, fast public transport route for trams, buses and taxis. When we looked at that, that gave us a higher capacity for buses along that alignment than is currently proposed under the College Green plaza plan. This provides a good solution.

Deputy Catherine Murphy: Presumably, the modelling that was done for the selection of the cross city route highlighted a significant conflict with bus services. How was that factored in afterwards in other plans?

Mr. Brendan O'Brien: Many things have changed in College Green even since 2009 when we introduced the first bus corridor. The number of cyclists through the area increased startlingly and the number of taxis also increased significantly. For example, 1,200 cyclists pass through College Green during the peak hour. The space available has always been a problem in the location. There was a comment on how cycling was factored into the development of the Luas cross city line. Cycling was factored in by developing a two-way cycle track outside the Bank of Ireland to allow cyclists to safely pass through the area. Ultimately, we hope that will tie in through the plaza and up towards Dame Street. That was a specific response to the number of cyclists tripling since the original plans for Luas were drawn up.

Deputy Eamon Ryan: As difficult is the current scenario is, I would hate for us to move in a direction where cycling was banned in the city centre. That would be a disaster for the city on so many fronts. We should aim to triple those numbers again. There should be 3,000, 4,000 or 5,000 cyclists in the area if we go for it. There must be engineering solutions where, for example, cyclists coming from O'Connell Street could go down Westmoreland Street without the crossover manoeuvre where they go up Dame Street on the two-way cycle track through College Green. I would be concerned if the message coming out of this is that the solution to this is to ban cycling in Dublin.

Mr. Owen Keegan: The message we were making clear is that the city council has resisted a suggestion that we should just ban cycling to address the safety issues. As we did with the two-way cycle track, we have to examine measures to address particular issues for cyclists and we are committed to doing that.

Deputy John Lahart: Did Mr. O'Brien micro-model O'Connell Bridge and the quays post-Luas cross city impact?

Mr. Brendan O'Brien: We did modelling work on O'Connell Bridge. When we looked at the north and south quays and implemented public transport measures in August, we introduced two specific measures. One was a bus priority measure by which we could control the volume of general traffic that made it to Bachelors Walk to give priority to public transport. The second measure, which was the key one, was the introduction of a right turn ban on cars turning on to

O'Connell Bridge. That was designed to allow public transport to smoothly flow through that area. The Deputy is correct that there was an issue with the longer trams and the Luas crossing smoothly from the south side to the north side without stopping on the bridge and interfering with traffic. When we looked at maintaining the current traffic flow, it simply was not going to work. Introducing those measures has alleviated many of the concerns. Now that the longer trams are starting to go into service, we have worked through how we make sure they go across the bridge but we have to put in an important caveat, which is that there is shared running. The Luas does not have its own dedicated space on O'Connell Bridge; it shares with other modes of transport. If a bus or a taxi is stopped in front of a tram and does not allow it to proceed, the tram from time to time will block the south quays or if that happens on the Rosie Hackett Bridge, it will block the north quays. We have tried to minimise that by placing the emphasis on public transport and reducing the volume of traffic entering the D'Olier Street-College Green area.

Vice Chairman: According to what Mr. O'Brien said, the city council ignored the consequences of 55 m Luas trams. It seems to be saying that all transport modes should be set aside to facilitate the longer trams. Could it not have waited another year or more until more appropriate traffic control measures were in place in the city? I gather from what Mr. O'Brien said that longer trams in the city centre were to be facilitated at all costs at the expense of buses, taxies and even cyclists. Could the council not have held off since it could see a problem coming?

Mr. Brendan O'Brien: The initial measures we took were in two particular areas where the tram cannot fit on bridges. The tram cannot stop on O'Connell Bridge or the Rosie Hackett Bridge without blocking either the south or north quays and, therefore, our response, which we put in place last August, was to make sure that public transport could move. The stated objective we had at the time was to remove some of the bottlenecks for public transport in the area and to make sure that the introduction of the tram on O'Connell Bridge did not cause problems for public transport on the north and south quays. Those measures have been successful. Originally, we had examined whether we needed to remove cars from Bachelors Walk completely but we did not do that. They can still travel down Eden Quay and the south quays. We, therefore, took appropriate measures to safeguard public transport in the area.

The other aspect of this is cycling and we have always steadfastly said, as Mr. Keegan pointed out, that we need to accommodate cycling in the city centre because that is the growth mode currently. The measure we took, particularly on the north and south quays, to introduce more public transport priority assisted cyclists in large numbers. The figures for the number of people cycling on the quays versus those using other transport modes show that to be the correct case.

Chairman: I call Mr. Coyne.

Mr. Ray Coyne: I will take the questions as they were raised. There were a couple of key drivers in the decision made last year to abolish the city centre fare. One was the value of the Leap card. The city centre fare was not there when the card was introduced and that gives significant value to our customers, with discounts for more than 25% versus cash fares. There is capping as well and many free journeys are gained by regular users. The rationale, therefore, for a city centre fare is significantly diminished.

We have also embarked with the NTA over the past five years on a fare simplification programme with a view to the long term. We are improving services and making it easier for customers to understand. The complexity of fares was a significant barrier and we set out on

a programme of reducing complexity and removing the city centre fare was part of that. The final issue in this regard is the removal of the ten buses. Mr. O'Brien addressed that in terms of the expected improvements but some of the changes - northwards of 30% on some alignments - will be monitored over the coming weeks but we expect to see similar improvements.

I do not have the specifics on the 40L route. We have a planning framework for new services. The proposal is moving along through the framework with the NTA and, therefore, I am not at liberty to give the final alignment. The frequency is in or around a 30-minute headway, which would be matching in with the Broombridge Luas end. As for marketing, we will be lending our expertise to the National Transport Authority, NTA, to do that. We have a significant team in our marketing department that has significant knowledge and expertise in the direct marketing of bus routes, and we use a lot of social media in that area. It has proven to be successful in the past and we will make sure that is done in this area as well.

The College Green area was raised a number of times and it has been discussed for many years. It is a key area of Dublin city. It is a transit corridor. My predecessors 20 years ago were probably arguing the same point I am arguing, namely, that it is a transit corridor in Dublin city, people are transported to that area and they then disperse. Not everybody travelling into the city gets off a bus at College Green and has a two-minute walk to their office or to the retail store or leisure facility to which they wish to go. They may have significant walk distances. If the College Green bus gate was removed, the walk distances involved for commuters could be excessive. The Trinity College area was mentioned. The next access point would be a long way down Westland Row and if people want to get to Grafton Street, Nassau Street, Stephen's Green North and such areas, it can be a long distance to walk.

Dublin Bus has been engaged in planning with Dublin City Council and the NTA. As was rightly stated, we knew this was coming down the tracks. In 2011, Dublin Bus implemented the largest network redesign in Europe. Some Deputies may recall that at that time we removed on-street termini from the city centre. If we consider the Luas alignment that is in place now and the previous termini for bus routes in the city centre, it is what it is. Parnell Street West, Parnell Street East, Parnell Street North, Marlborough Street, Hawkins Street, Pearse Street, Fleet Street and Aston Quay used to be bus termini but they are no longer are. That was done in 2011. The reason it was done then was that we were undertaking the largest network review in Europe and we said we would plan for the future and the Luas cross city project was to happen. We thought there was no point in coming back in 2017 and being asked that as we knew this was happening, why did we not make the changes? Consequently, we made those changes. The network we have today is totally different from what was there previously.

The College Green bus gate is the single biggest benefit to bus users in the city over the past 20 years. There are complementary bus lanes throughout the city which are welcome, but that bus gate is a massive boost to public transport. I commend the councillors at the time on implementing that bus gate. Many bus lanes operate from 7 a.m. to 7 p.m. during which time priority is given to buses but that period needs to be extended. We need to get more people using buses. Bus lanes giving buses priority need to operate for a longer period. The College Green bus gate facilitated a network review and our growth of having up to 139 million customers.

We need bus priority, reliability, punctual consistent journey times and to bring customers where they want to go. It is not where the bus wants to go but where customers want to go. If we can get that working in our city centre, that would be brilliant. We need to realign our services around that. However, at this point in time there are not many alternatives. That is why it is such a complex area. We discuss this with Dublin City Council and the NTA and we have

not been found wanting in our readiness to adjust our services. In January we adjusted 17 services and we will adjust ten services on 5 March. We will monitor that and if there are further requirements, we will do what is best for our customers but also what is best for the city. We are so vital to the economic vibrancy of the city that we need to make sure that is maintained. We do not want a city where buses can all the priority in the world but nobody is travelling into the city on the buses because the shops are closing. We are very conscious of our role in ensuring that the economy in Dublin city is vibrant and continues to progress. The College Green bus gate has been in place for 20 years because it is such a key area in the city and the confines around it. We in Dublin Bus have shown our willingness to move and preplan, which we have done during the last eight years, and we will continue to do that bearing in mind the interests of our customers, the city and all our stakeholders.

Deputy Catherine Murphy: Mr. Coyne mentioned that there are not many alternatives but what alternatives are there?

Mr. Ray Coyne: Deputy Eamon Ryan asked a question on area. If we consider route buses travel in the city, and Deputy Ryan mentioned a wide area of Dublin city from which people travel into the city.

People travelling from Blanchardstown in the city benefit from the College Green bus gate. Many people do not use it but the consistency of the bus journey time benefits them as they are travelling in from further out of the city. The consistency of the journey time and the fact that it is not variable also makes our services more frequent. We used to have 40-minute spikes but the College Green bus gate wiped much of that out in its early phases. If we were to remove the College Green bus gate, the next location, as essentially it involves crossing the Liffey, would be Parliament Street, which is the next bridge. I would not consider Parliament Street having regard to how it operates today. From a planning point of view, there is traffic on Parliament Street, there is a bridge and this turn and that turn but we would need to examine it to ascertain what would be possible in that context. In its current state it is not a suitable alternative because one cannot turn left off the quays on to Parliament Street. Buses go through College Green to go up George's Street, but if the route was down the quays, I believe the next left-hand turn would be down at Church Street and how would buses get back to go up George's Street? As we view it, Parliament Street is one side while the other side is essentially Westland Row at the back of Trinity College. Those are the two edges of it but many people are travelling north of that and consequently, one must try to get the buses back there. If we were to send people down to Bridge Street and then send them back into town, that would not be suitable. There is the issue of our customers' experience but there is also the matter of a responsibility for the economy of the city. We need to attract customers on to buses and to bring them into the city centre for work, retail purposes and social and cultural life. If we were to make the restrictions so stark that it turns people away, we would end up with increasingly fewer people using public transport. That would be a downward spiral. I would suggest Parliament Street is the next closest alternative and it would need significant adjustments in traffic movement within those areas.

I do not believe it is a zero-sum game. College Green is a multi-modal area at present and I am sure it will remain so after whatever decisions are made and it should remain so. I am not speaking only in the context of buses and the Luas. It is not the case that if there were zero-sum buses, the problem would be solved. We need to consider wider issues. We are not the only provider operating in that area along with the Luas. There are many vehicle movements in it and that needs to be taken into account in any future decisions. We have been consistent on that, particularly since 2016. We have advocated for a multi-modal approach. We know the city

certainly is not about Dublin Bus but from my perspective, it is about having integrated public transport. That is what we need to work towards. It is complex. If there was an easy resolution, it probably would have been addressed 20 years ago but it is complex. A significant portion of the economy in Dublin city is at stake. Therefore, moving buses tomorrow from that area is not an option for the economy. Buses can move anywhere but in terms of maintaining public transport and contributing to the economy, buses are crucial and we need to consider that.

I thank Deputy Ryan for his kind comments, which are a great reflection on all our employees. I will make sure that is fed back to our employees. They do tremendous work in delivering our services bearing in mind we have had a significant increase in passenger numbers.

The BusConnects plan is an NTA programme of work funded by the Government. It comprises a suite of nine initiatives, some of which will be long term with regard to integrated ticketing, cashless ticketing, account based ticketing and fare simplification, which I mentioned earlier. We are progressing some of those issues as we proceed. Significant infrastructural improvements are required, including park-and-ride sites and significant interchange in areas. The NTA is working on that. Dublin Bus will feed in its expertise into that. We have a long history of expertise in managing, planning and implementing bus networks, which have brought ancillary benefits for our customers. We will feed our views to the NTA. One of the earliest indicators in this respect is that BusConnects provides for increased frequency and increased service levels. We have been adding buses to our routes during the last year. During the past three years, we have added north of 20% to services. BusConnects will be part of that. We have started to introduce the services. There is a network redesign in BusConnects and we did the largest one in Europe in 2011. We are feeding our information into the NTA. At present, it is in charge of this and is leading it. I understand there will be a consultation period, which will commence in the second quarter of this year. That will be a full redesign of the total bus network in Dublin. We have significant experience of doing it successfully and we will feed that into the NTA. I believe the public consultation will take place in the second quarter. Initiatives are occurring in the background, but we will put a BusConnects brand on that at a later stage.

Deputy Eamon Ryan: We already know the cross-city BRT plans for Tallaght and UCD have been agreed. How many of those are ready to go to tender?

Mr. Ray Coyne: I cannot answer that question because the NTA has responsibility for that. I would not be in a position to answer that.

Deputy Eamon Ryan: Mr. Coyne must know.

Mr. Ray Coyne: No. We are focused on-----

Deputy Eamon Ryan: Mr. Coyne does not know.

Mr. Ray Coyne: ----the public tendering aspect.

Deputy Eamon Ryan: When representatives of TII appeared before the committee, I asked them how many rail-based or bus-based projects it had ready to go to tender and the answer was zero. It has loads of road projects; we build roads with no problem. When it comes to transport projects we do not seem to be able to do it. Those projects would provide cross-city connectivity. Blanchardstown is one of them. When I talk to people behind the scenes, I get no sense of progress. We need to make political decisions. The block may be on the political side where people are not willing to make the tough calls on how we allocate road space. I get the sense that, at a political level, that is not happening and so it is not happening for the consumer

at the end. If we are not going to tender, it means we are not getting something for four or five years because it takes two or three years even after the tender process to get it done. Therefore, it could take five or six years.

Deputy John Lahart: May I ask a supplementary question on that? A particular type of bus is obviously required for those rapid routes. Has the NTA or TII flagged to Dublin Bus that the NTA will provide funding for the purchase of those specialised buses - they are essentially trams on rubber wheels - to serve those rapid routes? Has Dublin Bus been given a timeline as to when they might be supplied for the first such route to come into operation?

Vice Chairman: I ask Deputy Lahart to turn off his phone.

Mr. Ray Coyne: Decision on tendering rests with the NTA. My statement referred to bus rapid transit priority; that is not to say bus rapid transit will be introduced. Last week's National Development Plan shows significant adjustments, giving priority to Luas and the electrification of train services. I am not sure that bus rapid transit is in there. That is not to say it is not possible to get bus rapid transit priority on corridors.

No bus rapid transit vehicles have been procured. It was originally intended to be introduced by this stage. Dublin Bus has a contract to 2019. It is not referred to in that contract for services. Any buses can be operated on a bus rapid transit system; it is not a closed system. However, for truly effective bus rapid transit, they would be five-door single-deck 60 m buses.

Deputy John Lahart: They will not be crossing O'Connell Bridge I hope.

Mr. Ray Coyne: We would operate them anywhere but in that area, given the discussion this morning.

There is significant work ongoing with the NTA on increased priority on bus corridors. We have 14 corridors coming into the city centre. We have had tremendous benefits on them. In fairness hard decisions have been made. We can look to recent improvements in Drumcondra where there was a compulsory purchase order on land. BusConnects provides a huge amount of that and it is necessary. What was done on the Stillorgan Road 20 years ago is the exemplar. There was a lot of angst about the plans at that time. At that time we got success and we were able to point to that success and deliver it to other areas because people were afraid of what may or may not be. At the time Parliament Street had the only bus lane in the city. We now have a huge number of bus lanes.

The NTA is designing to increase the standards of our current QBCs and to add new QBCs. An example of that would be stop lines right up to traffic lights, instead of allowing cars to filter in and out because that delays the progress of buses. We will get increased stop lines and we will get increased infrastructure access around the alignments. Off-street ticketing could be pursued. The NTA is working on them. They are well advanced on them. As I do not work in the NTA, I do not have the specific answers. I am sure the NTA would be happy to feed in that information. I know it is well advanced on the corridors.

We feed in our information from a bus operation and customer experience point of view. That is part of BusConnects. I know it is very well advanced. The bus network design probably will be the first explicit thing customers will see, allowing them to say, "This is BusConnects. Now I can see some tangible changes." That will be the consultation period. I assure the Deputy that there is significant planning on it. Regarding BusConnects, there is no intention to introduce radical changes in areas where there are planned infrastructure changes; that may or

may not happen. It will operate in tandem. I cannot give specifics on the-----

Deputy Catherine Murphy: As Dublin Bus will be tendering for some of these routes, it will be watching that. When will it need to do some work, including buying----

Deputy Noel Rock: Chairman, I think it may be worthwhile to have a dedicated discussion to this. It is somewhat unfair on a Dublin Bus witness to be answering questions that are more relevant to the NTA.

Vice Chairman: I agree.

Deputy Catherine Murphy: However, Dublin Bus will be tendering.

Mr. Ray Coyne: We will be tendering for routes, so-----

Deputy Catherine Murphy: I am a committee member as well, by the way.

Mr. Ray Coyne: If the NTA put routes out to tender, Dublin Bus will make a decision as to whether it should tender for them. We also operate a direct-award contract. At present 100% of our services are direct award, outside our commercial services. An integrated network requires just that - integration. We would be strong advocates that a direct-award contract provides the integration required. We have increased our bus fleet by more than 20% in recent years. We have done that within our direct-award contract. Any decision to tender further bus routes is out of the hands of Dublin Bus; it is a Government decision and a policy decision of the NTA. Dublin Bus will make a decision at the time as to whether it would tender from that point of view.

Deputy Troy made a fair comment - eight changed to ten. We made the decision the other day that we could change another two routes; there are only two trips on them, but nonetheless it comes out as two routes. I knew I would be asked the question today. It is certainly not that we were making it up. We just made the decision that we could possibly do another two and decided to go after that. That shows Dublin Bus is progressive in making adjustments to assist in addressing the congestion in the city. If it gave that impression, I am sorry it did. It is certainly not that we are making it up. As I said, since 2011 we have been planning route realignments related to Luas cross-city. We will look at route realignments over the next week and in the following two weeks. We will continue to do that.

I hope I have explained about the traffic through the area. The Deputy correctly mentioned that one third of Dublin Bus customers use the area directly. It is correct to say that not everybody gets off in the area, but everybody who travels through College Green in a bus benefits significantly from the priority it gives. Some 82 million customers would benefit, but directly approximately 20 million customers benefit every single day from College Green.

On the 20% increase, by the end of March this year we will have added approximately 40 buses to our fleet. All our vehicles are procured by the NTA; we do not fund any of our vehicles. We have an ideal replacement cycle of replacing a bus every 12 years, given its economic value lifetime cycle. Therefore, one twelfth of our fleet should be replaced every year to be most efficient. That equates to nearly 100 buses. Any growth will require extra buses. Between last year and now we have added about 40 buses to the network. The NTA funded 102, of which 62 would have been replacement vehicles for older vehicles that went out of the system. We get significant benefits from them and they show on our customer experience numbers. The Deputy mentioned Wi-Fi. We also have USB charging points. Every bus is wheelchair accessible. They have Euro 6-standard engines. Replacing a 16-year old bus with one that meets the

Euro 6 standard has a significant impact on the environment. In addition the vehicles are much nicer inside, which also attracts customers.

Deputy Robert Troy: While I appreciate that, I was just trying to ascertain the additional capacity Dublin Bus has, as opposed to simply replacement buses. Of course, it makes economic sense and it is brilliant that the buses would be replaced.

Mr. Ray Coyne: We have added approximately 40 from October last year to March of this year.

Deputy Robert Troy: Is that October 2015?

Mr. Ray Coyne: It is October 2017. There is a significant increase in services. We have changed approximately 22 routes this year, outside of those related to College Green and that has increased capacity. Deputy Lahart will be familiar with the No.15 route, for example, which now has one of the strongest frequencies in the city, with a bus every four minutes at peak times. There has been a significant increase in the number of vehicles that have been put into services there. We have also introduced additional vehicles because as congestion returns, buses are slower in completing their journeys. Some vehicles are added because of congestion or longer journey times while others are deployed to increase capacity. There are also some routes that are faster and we can take vehicles off them and reallocate them. I can send on the figures for growth over the past five years to the Deputy.

Deputy Robert Troy: I thank the witness.

Vice Chairman: To get back to the College Green issue, did Dublin Bus envisage this problem coming down the track, in the context of the initial planning discussions by Dublin City Council and the Department eight years ago? Apart from discommoding commuters and shoppers, is Dublin Bus incurring additional costs as a result of the relocation of route pick-up points?

Mr. Ray Coyne: In terms of College Green and the Luas, we would have been engaging with DCC and the NTA for a long number of years. We knew that adding a Luas into the mix on College Green would mean that adjustments would be required. We knew that and have made significant adjustments to our services. As with all things, one plans but one does not know exactly what will happen. The network that is there today is radically different from what was there previously. We moved a lot of services during 2011 and 2012. We also reduced the totality of our network by 20%, which would have had a significant impact on the bus levels going through. We moved services away from College Green a number of years ago during the construction phase of LCC; they have been permanently moved and no longer exist. At this stage, we have moved close to 30% of vehicles through the area. We have moved a significant amount but there may be a requirement to move some more. We will consider that, if necessary. It is very difficult to see into the future but we did make a lot of changes. I would also point out that January and February are traditionally the worst months for congestion in the city. There will be a natural easing of traffic congestion in the city as we head into March, April and May. What we have now is the worst of the worst but we have seen significant improvements in recent weeks. Bus operators plan all of the time and we have moved routes, both before and since the introduction of LCC. We will move more if we need to and Dublin City Council is making adjustments too. Between all of us, we will very quickly get to a situation where we have a workable solution.

Vice Chairman: Thank you. We will now move on to Mr. Peter Lunden-Welden from Transdev.

Mr. Peter Lunden-Welden: I thank the committee members for their questions. As a foreigner who is here for the first time, it is a little strange for me to be appearing in the parliament of a foreign country, even though I feel very much at home in Ireland and in Dublin.

The first question I was asked was about my views on the extension of the Luas to Finglas and whether there had been any consultations with the NTA on same. Transdev has been operating here since 2004 and in partnership with various Government bodies has supplied four extensions to the network so far. All of these extensions have been enormously successful and have widely exceeded passenger number expectations. If the Government and the NTA decides to go further with plans for new Luas extensions, we will support it as we have always done to date. At the moment there is no consultation taking place because it is too early in the process. I would love to see an extension to Finglas but any programme of building new tramways will take some time.

I was also asked about Dublin Bus changes and my colleague from Dublin Bus has already spoken a lot about the process involved. Since I came here and prior to the opening of LCC, Dublin Bus and Transdev have worked very closely, not only at senior level but also and especially at control room level. We have had an exchange of operators in an effort to understand each other's problems. We have built up a lot of personal relationships between staff at Dublin Bus and Luas in recent months and that has created a better situation than would have been the case otherwise. Regarding the detailed question as to whether we could have a Passenger Information Display, PID, on O'Connell Street directing people to Marlborough Street, I will forward that to Transport Infrastructure Ireland, TII, which is the responsible body for that kind of infrastructural implementation. With the three minute headway we have, which is five minutes off-peak, more people will go over to Marlborough Street to take the Luas. Today the number of passengers going from St. Stephen's Green to Parnell Street is almost double what we anticipated for this stage of the operation. A few trams can even be full all the way to Parnell Street or to Upper O'Connell Street.

Senator O'Mahony and Deputy Catherine Murphy asked whether work is ongoing on this. As my colleague from DCC has said, we are meeting on a regular basis, discussing and going into great detail. Transdev staff, together with DCC staff are looking at each signal to determine if we can make improvements for all modes of public transport, including taxis. We are not looking at this only from the perspective of Luas or Dublin Bus but in terms of how to improve the situation for everyone. We have a common interest in terms of moving commuters as quickly as possible.

Deputy Lahart asked a lot of questions about congestion. Since the opening of LCC the number of passengers on the green line has increased by 24%, while on the Luas system as a whole we have seen an increase of 16%. This is evidence of the success of the Luas. Whatever we put in place in terms of Luas services, it seems it will not meet the demand. If we increase the number of trams, the demand will be even higher. As members are aware, we are introducing seven new trams all of which will be in service by the first week in May. The next step after that would be to extend the existing 26 trams, depending on the political process in this House, to become 55 m trams. The third step would be to buy another eight trams. My prediction, however, is that none of that will solve the congestion problems because with all of that will come even higher demand for Luas services, especially with the ongoing development in the Brides Glen area, for example. I was very pleased when I saw that the Government is planning

to introduce a metro system. The plan that was launched last week included the addition of metro north which will also serve the southern part of the city.

Reference was made to O'Connell Bridge, which is 40 m long and to our 55 m trams and in that context I can share a snapshot of today with the committee. No tram, whether 40 m or 55 m long, stopped the cars, when they had the green light, from crossing the bridge. When the cars had the green light, the trams also had a green light to move out of the yellow box. Even though the trams are longer, as my colleague from DCC explained, the way the signals are handled is such that the trams are signalled to proceed and get out of the way of the traffic. Of course, in the context of rush hour traffic, there will be situations where a tram is blocking the traffic but that happens for all modes of transport. Due to the complexity and intensity of the traffic at rush hour, there will be incidents where some mode of transport will block other modes.

I was also asked if we can extend our hours of operation. As a private operator, if such a request was made by the NTA, I would immediately change the roster and hire new staff to support it. The operating hours of Dublin Bus and the Luas are the same and calculated on the needs of service users. In many countries night services are operated, but in others they are not because it is believed taxis are an adequate alterative during night hours.

On overcrowding and access to the Luas for wheelchair users at peak hours, I cannot deny that it is a problem. As a mode of transport the Luas is very popular. Demand for the service is very high, but it is fully accessible to disabled people. Where we are notified in advance by wheelchair users of their intention to travel on the Luas, we try to support them, in the first instance by providing them with time slots for when there is less congestion and, second, assistance to enter a tram.

The issue of Luas travel times through College Green was discussed previously. My only reflection is that since the service was launched in December 2017, travel times have improved by three to four minutes. Following completion of the work proposed by Dublin City Council, they will improve further.

Deputy Robert Troy asked for my opinion on having one body with overall responsibility for public transport. As an operator, I am happy to work with those who have a mandate to make decisions on public transportation. I have no problem working with TII, the NTA, Dublin Bus or Dublin City Council. In 2004 there was much conflict between bodies in this area, but today there is a greater understanding of the need for them to work together. I regularly meet all of the stakeholders to try to solve problems. For me, what is important is not whether oversight of the area should be the responsibility of one or several bodies but that we solve the problems in order that people can get to work and so on.

Deputy Robert Troy: In many of big the cities across Europe there are restricted delivery hours. As a motorist, I regularly see delivery vans parked in bus lanes and on double yellow lines, which contributes significantly to congestion. I would welcome the views of all of the delegates on whether deliveries should be restricted, particularly in Dublin, to off-peak hours or at night time.

Vice Chairman: I will ask Mr. Herron to respond to earlier questions first.

Mr. Joe Herron: The Irish Taxi Drivers Federation, in association with the Taxi Alliance Ireland and other representative bodies, presented the National Transport Authority with an alternative east-west and west-east route, in other words, through the College Green area from

Dame Street to O'Connell Street and *vice versa*. While it was not dismissed out of hand, it was dismissed as not being acceptable. We believe insufficient consideration was given to this proposal. As I said, as taxis provide a door-to-door service, they need access to all areas. The idea that they would have only access to what is described as "very close to" is not good enough. It is not acceptable that a taxi driver would be expected to drop a passenger at College Green, leaving him or her to make the remainder of his or her journey on foot to, say, the Shelbourne Hotel, the Westbury Hotel or Grafton plaza.

When Deputy Catherine Murphy mentioned the Dublin transportation initiative, I was reminded that the Irish Taxi Drivers Federation had been presented with a plan for the number of cars that would use Dublin city streets in the following five years. The projections were exceeded in one year. As we do not know what the future will bring in Dublin, when decisions are being made on transport issues, each provider of transport must be given the opportunity to engage in that regard. It is not good enough that such decisions are made either individually by Dublin City Council or the National Transport Authority or both organisations together. There must be widespread consultation on these matters into the future.

Vice Chairman: I thank Mr. Herron for his response and invite Mr. Macken to respond.

Mr. Gerard Macken: On quality bus corridors, the Drumcondra bus corridor, to and from the city, is a complete mess at peak times owing to illegal parking, including for deliveries. There is major congestion along the route from Quinn's pub to Dorset Street as traffic enforcement along bus lanes is non-existent. While the installation of a traffic monitoring system in the area has been mentioned, I understand legislation is needed to allow for its installation. There is, therefore, no quality bus corridor to the city centre. Often three or four buses end up trapped behind each other because a car or other vehicle is parked illegally in the bus lane.

On the plan for the College Green plaza, one of the alternative routes proposed by Taxi Alliance Ireland was Anglesea Street to Fleet Street to Westmoreland Street. If legislation is not introduce soon to regulate rickshaws, taxis will drop passengers off on the plaza where rickshaws will pick them them up. That is a joke, but the Minister does not appear to be interested in addressing the issue. People in wheelchairs and others who have trouble in getting around need to be dropped off at the door at their destination. If no alternative routes are provided for taxis, if a taxi picks up a passenger who wants to go to Fairview, Malahide or Howth, he or she will have drive to Winetavern Street, travel down the quays and across O'Connell Bridge, which is not acceptable. I have not heard of any alternative today to enable taxis to move around the city. When the plaza is finished, taxi drivers will be permitted to turn left from Dawson Street onto Nassau Street, but currently if they pick up a passenger on Dawson Street and need to get to Pearse Street, they have to travel via Molesworth Street, South Frederick Street and Nassau Street. They are constantly getting it in the neck because these issues are not being addressed. We have an awful lot of concerns. We put in all these objections and have heard absolutely nothing back. Yes, we would love to be part of everyone's joined-up thinking because an awful lot of the time the taxi industry has to go knocking on doors to get in and get our points across. We are an integral part of the city in that we are a door-to-door service. We cannot say to tourists that where they want to go is only around the corner, and the hotels need us. I do not think anyone has even thought of the app companies. If someone presses an app on South Great George's Street and wants a taxi on Westmoreland Street or the other side of the plaza, people will just cancel jobs. There are the despatch operators as well. A lot of thinking needs to go into the question of how we will get to the customers within the city centre, and I have not heard any alternatives whatsoever today for the taxi industry.

Vice Chairman: Does anyone wish to answer Deputy Troy's question? I call Mr. Coyne.

Mr. Ray Coyne: I touched on this earlier. I mentioned the timed bus lanes. Dublin Bus's view is that the hours of bus lanes need to be extended. We are engaging with the NTA now on introducing some 24-hour services in 2018. This will require bus lane priority because not everyone is out of the city by 7 o'clock, Monday to Friday. We need that extended. There has been huge investment in the city over the past 20 years in bus lanes and massive benefits. There will always be a pinch point somewhere, but we see continuous improvement. We have improved the services over the past 15 years, in particular with the roll-out of QBCs. Some 139 million customers benefited from the priority afforded this year and, as I mentioned earlier, there is customer satisfaction of 92% among those 139 million customers. As part of BusConnects there are next-generation bus corridors. This is what I was alluding to earlier when I referred to stop lines up to the traffic lights. QBCs are not a closed system. There will be significant increases in priority, and QBCs will come through over the next number of years, but what we need is consistency in being able to access the city and keep our journey times consistent. Deliveries, wherever and whenever they are made, need to be done where they do not impact the customer experience and the reliability of the bus service.

Vice Chairman: Deputy Rock wanted to ask one final question.

Deputy Noel Rock: I thank the Vice Chairman for indulging me. Something occurred to me in the course of the conversation, particularly regarding bus rapid transit and whether or not it might be introduced. One of the current policies of the council on which we have a lot of correspondence - and I would appreciate it if Mr. Keegan might undertake a commitment to review it - is that in the areas where BRT is currently proposed, whether or not it happens and when it happens being another debate, traffic projects are not getting permission from Dublin City Council to proceed. I refer to road augmentations and other changes. In particular I am thinking of Swords Road, Drumcondra Road, etc. In one instance I have a project on my desk which I think the NTA is willing to fund. Dublin City Council has been sent this correspondence and the council regularly comes back to me saying it will not contemplate any changes to arrangements on that stretch - this case is on Swords Road specifically - as long as the bus rapid transit plans are still pending. I would appreciate a review of this approach.

Mr. Owen Keegan: We do not want to compromise the potential of bus rapid transit by allowing any development that would be inconsistent with it. I do not know the specifics of the case to which the Deputy refers, but our general policy is that we are not prepared to allow any prospective development that would be potentially inconsistent with the future provision of a higher level of priority.

Deputy Noel Rock: The way it is working now does not allow for any prospective development, full stop.

Mr. Owen Keegan: I would be happy to review any individual case, but the policy is well-intended, that is, that we do not want to allow development if we will be coming back in a few years to compulsorily acquire it and knock it down to allow a full bus lane. That is the thinking behind the policy. I am happy to review any particular case, but-----

Deputy Noel Rock: That is understandable, but I presume if the NTA is willing to fund itself, it would view it as compatible with its own developments in the future as well.

Mr. Owen Keegan: I am happy to review any individual case if the Deputy brings it to my

intention.

Deputy Noel Rock: I appreciate that. I will send the details to Mr. Keegan.

Vice Chairman: Does Mr. Coyne wish to make a comment?

Mr. Ray Coyne: Regarding leaving corridors open, I agree with the council's position. While the next-generation bus corridors are not called BRT, they will give priority levels and frequency levels that are close to BRT, so it is BRT in all but name. They need to be preserved for future development.

Vice Chairman: I do not think we have resolved the issue but I hope we will get many questions answered and get the answers out there in the public domain. I thank our witnesses for being here and for their most informative presentations. I must also thank them for their patience in waiting. We went over time on the previous session. With that, the meeting is now concluded.

The joint committee adjourned at 2.45 p.m. until 9.30 a.m. on Wednesday, 7 March 2018.