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THE BUSINESS OF ROADS DEVELOPMENT





CONGESTION IS NOW A MAJOR PROBLEM IN OUR CITIES AND TOWNS BUT SOLUTIONS - LIKE THE DUBLIN PORT TUNNEL - ARE A LONG TIME COMING. WE LOOK AT ALL SIDES OF THE TRAFFIC DEBATE WITH CONTRIBUTIONS FROM GOVERNMENT, THE GREEN PARTY, THE DTO, THE AA, THE IRISH ROAD HAULIERS AND OTHERS.



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WELCOME

We are all to blame – but few of us would admit it. If we didn't insist on driving everywhere, even on the shortest journey, then congestion in our towns and cities would be that little bit less of a problem.

But who seriously thinks of their role in increasing traffic jams as they sit and fume on the M50 or contemplate the Dunkettle roundabout in Cork? It is always someone else's fault, or more particularly, the local authority or the National Roads Authority or the Government is to blame.

Yet our love affair with the car lies at the heart of the issue. Certainly the State, through its various agents, can build more motorways and dual-carriageways and eliminate bottlenecks but is more tarmacadam over green fields really the answer?

Thanks to our phenomenal economic success congestion is now a major issue in Ireland and that is why we decided that the subject should be given special treatment in the fourth edition of *Roads Ireland*. Just as we explored the issue of road safety in our last edition, we feel we can make a contribution to the congestion debate this time.

We have the views of the Minister for Transport, the Dublin Transportation Office, the AA, Dublin city centre business, the hauliers, the Green Party, the Dublin Cycling Campaign, taxi drivers and the Galway and London experiences.

Real solutions are somewhat uncertain, however, but maybe the incoming Government following the General Election will have some new suggestions to the problem.

Also in this edition we detail three events of importance to roads development in Ireland: the recently announced National Development Plan, the National Roads Programme and the Local Roads Programme.

In this issue we are introducing a new item: Case Study. This will give extensive detail of a significant transport project which has been recently announced or completed and open to the public. The Ennis By-pass is the first such project to be looked at.

Once more we hope that you will find something of interest in *Roads Ireland*

Tony O'Brien, *Editor*

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Local Roads get €600 Million

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FOREWORD

Congestion in our towns and cities is a symptom of the country's economic success, but what is the cure, asks Roads Ireland Editor, Tony O'Brien

t is, perhaps, one of the most obvious symptoms of our economic well-being that the number of private cars – and other vehicles – on our roads has spiralled to extraordinary numbers over the past decade or so. Where once most homes were one-car families, there can now be two or three parked outside.

As our wealth grows, and more and more young people can fulfill an understandable desire to own their own car in a much shorter time period than for previous generations, so it naturally follows that our roads – from motorways and dual-carriageways to main roads and country roads – have become clogged as more and more vehicles compete for the same space.

Our preference for owning a house with front and back gardens has also contributed through urban sprawl along with one-off housing in the countryside. And, of course, the original purpose of the M50 as a by-pass of Dublin city centre has long faded into history as it simply became a feeder route to massive shopping and other commercial developments.

As is also the Irish habit, we have firstly ignored the problem and then, when at last we recognize that there may be a problem, we take ages to find a solution. We have committees, consultants, reports and studies while, at the same time, the people who opposed the roads developments in the first place are happy to

chant "we told you so" as opposed to proposing real and meaningful solutions.

And so we find ourselves in a situation where the M50 has to be widened to three lanes and where the traffic light-controlled signals at the exit and entry points are to be eliminated. All welcome but, really far too late and could have been avoided had the right design decisions been made at the start.

I recall being taken on a tour of the emerging M50 route many years ago by a senior engineer with National Tolls Roads who literally pointed out where the design faults were and where the later problems would be. He mentioned the design of the on-off ramps in particular, a decision taken by an earlier Government in an extremely short-sighted cost-cutting measure and which is now being repaired at a much higher cost.

London has come up with its controversial Congestion Charge – which only recently has been extended to a wider area – and there are claims of success for the levy. Would it work here, are there other solutions, would a better public transport system make a difference?

This issue of *Roads Ireland* has Congestion as its core topic with many interesting contributions from a variety of sources. All we need now are real solutions.

Tony O'Brien

Editor





THE ANSWER TO CONGESTION?

Increased investment in public transport will play a major part in tackling the capital's congestion, declares Transport Minister, Martin Cullen TD.

fundamental aim of Transport 21, the Government's investment plan for transport from 2006 to 2015, is to transform the public transport system in the Greater Dublin Area (GDA) in order to cater for expansion in the area, to meet ever increasing demands for services and to provide an attractive alternative for commuters to the private car.

This is an economy that is working and a country that is at work. More and more people are on the move and people deserve the best possible services. A total of over €14 billion has been provided under Transport 21 to develop for Dublin two Metro lines, seven Luas lines and an expanded DART and suburban rail system. In addition, bus capacity will increase by 60 per cent and the Quality Bus Corridor (QBCs) network in Dublin will be doubled.

The target is to have 375 million passenger journeys on public transport in 2015 as against about 200 million at present. A key element of Transport 21 will be to put in place an integrated system that provides easy access to public transport for commuters.

There are 11 QBCs in operation in the Greater Dublin Area at present. The current length of QBCs in the GDA comes to 139km. There are also a further 20km of non-QBC corridors with bus priority measures. I have committed to doubling the number of QBCs by making €599 million available to the Traffic Management Grants scheme over the period 2006-2015.

The bus will continue to play a crucial role in the capital's public transport system. It is not a question of bus or rail but of using both modes to complement each other



effectively to maximise the passenger carrying capacity and availability of public transport. Buses, in particular, will be used to meet the immediate and short-term capacity requirements for additional public transport in Dublin while other infrastructure is being put in place.

A congestion charge will only be considered when many of the Transport 21 projects have been completed and attractive alternatives in the form of public transport, cycling and walking are in place."

Funding has been given to Dublin Bus and Bus Éireann for an additional 100 buses and 160 buses respectively and these will be gradually introduced into service over the coming months, to deal with the immediate capacity demand.

Two Metro lines are planned, Metro North and Metro West. Metro North will provide a high-speed link between Dublin city centre, Dublin airport and the developing residential areas in north county Dublin. Major progress was made on this project in 2006. Metro West, which began public consultation recently, will start at Tallaght moving through Clondalkin, Liffey Valley and Blanchardstown linking with Metro North at Ballymun.

The two Luas lines carried 22 million passengers in 2005, its first full year of operation, and 26 million passengers in 2006. They have been a great success both at peak and off-peak times, showing the public appetite for high quality public transport. Transport 21 will fund seven new Luas light rail projects. Six of these will link to, and extend, the existing two lines. The seventh will be a new line from the outer suburb of Lucan to the city and linking with the Metro, suburban rail and other light rail lines along the way.

There is already an extensive suburban rail system in the Greater Dublin Area. Capacity has been greatly increased in recent years, but the scope for further expansion of services is severely restricted by the present cross-city rail infrastructure, which limits the number of available train paths and station slots available.

Transport 21 will eliminate this problem through a number of major projects. Firstly, a new rail station opened recently in Dublin's Docklands, close to the city centre, which will allow new services by-pass the congested central area. Secondly, additional capacity will be provided on the routes into Heuston Station by increasing the tracks from two to four along the Kildare route to Hazelhatch, thus providing separate corridors for commuter and intercity services. Thirdly, and perhaps most importantly, a new interconnector rail tunnel from Heuston Station to the Docklands area of Dublin will be constructed.

This interconnector tunnel is a vital backbone of an integrated public transport system for Dublin and key to optimising the benefits to be delivered through other elements of Transport 21. It will facilitate the extension of the DART to suburban commuter lines to areas such as Kildare, Maynooth and Navan.

By 2015, when the transport infrastructure funded under Transport 21 is completed and fully operational, a four-fold increase in DART and suburban rail passenger numbers to 100 million per annum is expected. In addition, it is also anticipated that 100 million passengers will travel on the Luas light rail network and Metro lines.

The National Roads Authority exceeded its own 2006 targets and, by the end of the year, had completed 16 projects with a combined length of over 100 kilometres and commenced a further 11 new projects with total length of 197 kilometres.

In the medium term, the current phase (Phase 1) of the M50 upgrade works will be completed in mid-2008 and barrier free tolling at West Link will be in place in 2008. These measures will greatly improve traffic flow on the M50 in a period of less than two years.

Demand management will play a key part in solving the congestion problems in urban areas. However, the specific measures associated with demand management, such as a congestion charge, will only be considered when many of the Transport 21 projects have been completed and attractive alternatives in the form of public transport, cycling and walking are in place.

ROADSIDES

M3 ON THE GO

Contracts for the construction of the controversial M3 motorway in Co Meath have been signed by SIAC Ferrovial and the National Roads Authority. It is expected that the total cost of the PPP project will be €900 million, making it the country's most expensive motorway projects to date.

The M3 has been highly controversial because it passes close to the historic Hill of Tara. As a result, it has been the subject of a lengthy planning and legal battle, including drawing criticism from international archaeologists and historians. Meath County Council and the NRA mounted a major campaign to answer the archaeological issues and fought several battles in the courts.

Siac Ferrovial, an Irish-Spanish consortium trading of Eurolink, has commenced preparatory works. Construction of the 60 km motorway, and some 50 kms of ancillary roads, will now get underway Eurolink was also the successful bidder/operator for the Kinnegad-Kilcock M4 motorway.

The M3 route - which will be tolled - commences at Clonee on the border between Dublin and Meath with link roads to Dunboyne, Dunshaughlin, Navan and Kells. It joins the existing N3 north of Kells near the border between Meath and Cavan.



A QUALITY OF LIFE ISSUE

Traffic congestion is now so bad in Dublin and elsewhere that it is having a significant impact on our quality of life, suggests John Henry, CEO of the Dublin Transportation Office.

ravel by car on the open road, in light traffic, can be relaxed and even enjoyable. The effort of driving in such conditions is not demanding; keeping alert is the main task. As traffic on the road increases, more vigilance is required and we change from a relaxed state to one of increasing tension. When traffic volumes exceed the safe threshold of 1,800 vehicles per hour per traffic lane (two seconds between vehicles) the driving effort increases dramatically because of the additional nervous energy required to cope with the increased risk of traveling at less than safe distances between vehicles.

We generally perceive traffic congestion as a "stop go" traffic situation, but the onset of congestion actually occurs when we cross this two second safety threshold. From that point onwards the driving experience becomes increasingly stressful and this stress has a negative effect on our quality of life. We do not always perceive this impact because it grows imperceptibly and we take it as the norm.

On some of our busier roads, traffic volumes of up to 2,200 vehicles per lane per hour are common. This is equivalent to a 1.6 second headway between vehicles, and while this may not seem much less than the safety limit, the multiple pile-ups that are not uncommon can be the result.

Traffic congestion has a much wider impact on our quality of life when the time we spend travelling every day is factored in. Twenty years ago the time spent traveling to and from work, for most of us in the Dublin area, was less than one hour. While the main roads suffered from some congestion at that time, our exposure to congestion was not too extreme. Today the peak traffic period has increased from one hour to three hours so the impact on our lives has grown dramatically. We need to look at this change in life conditions to register the impact this is having on our quality of life today.

We have two basic survival requirements – time to sleep and time to eat. If these consume nine hours of a typical

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CONTRACT SURFACING

SPORTS SURFACES

FORTRESS WALLING

ROOFTILES

PAVING

WALLING

FORTICRETE MASONRY

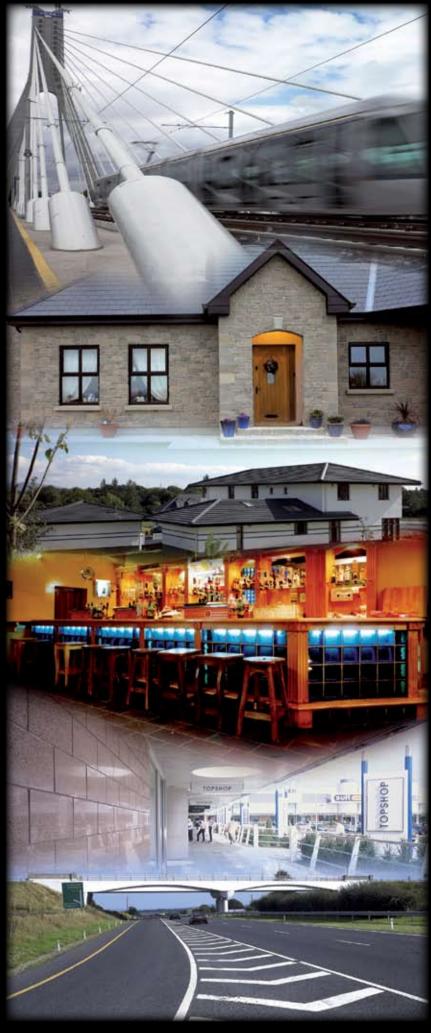
CLAY AND CONCRETE BRICK

GLASS BLOCK

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day, we have a balance of fifteen productive hours to provide for these requirements. Taking eight hours as the normal productive working day and one hour as the desirable maximum for travel we have about six hours for ourselves, for our family and friends and for time to think and play and to enrich our lives. If travel time erodes this "free time" by two hours or more (as is becoming the norm for many people today) what we are left with is little more personal time than our caveman ancestors had to enrich their lives.

How did we arrive at this unfortunate situation? We are quick to look back at the past with a 20-20 vision and be critical of decisions and actions of our leaders that today appear less than optimal. I have a different view. We are where we are today not by the mistakes we made in the past but by the "unforeseen consequences of good intentions".

In the early part of the 20th century Dublin was a small compact, accessible city. Walking, cycling and public transport by tram made movement easy. Urban density was relatively high but like many cities at the time, living conditions in some areas were extremely poor.

About this time the "Garden City" land-use planning movement evolved in Britain and elsewhere as a solution to the slum problem. This promoted the relocation of people to low-density residential development on greenfield sites where space and fresh air would eliminate health problems and poor living conditions. We adopted this new approach and while it achieved its objective of improving living conditions, it also initiated urban sprawl - an unforeseen consequence of a good intention!

The initial movement to the "inner suburbs" was successful. Dublin city remained accessible from these new areas and the policy was successful. However, the means of travel began to change then and with it the future shape of the city.

The "motor bus" arrived and gave public transport operators a flexible and less costly alternative to the tram. The extensive tram system that Dublin had in the early part of the 20th century was gradually dismantled and by the end of the '40s was no more. At the same time, the numbers of private motorcars in Dublin was gradually increasing and the car became a much sought-after acquisition.

For most of the last century the car was a status symbol, a sign of prosperity and because of the increased mobility it allowed, was considered a superior way to travel. In the early days this was true: there was no traffic congestion and the privileged car owners had the freedom of the city. However, an unforeseen consequence of this gradual change in transport systems was that it accommodated and,

in fact, promoted further urban sprawl. There were now two complementary drivers of urban sprawl – low-density development and flexible "go everywhere" transport systems.

By the end of the century Dublin had become dependent on the car and is now dominated by it. A key factor encouraging this dominance, particularly over the past 20 years, was increased prosperity thanks to dramatic economic growth. Car ownership levels soared and the lack of investment in high quality public transport systems over the past 50 years left the city unprepared for the huge increase in car numbers. Fortunately, the growing problem was recognised in the early 1990s and steps were taken to address the situation.

The first major shift in transport policy was the *Dublin Transportation Initiative* (DTI) launched by Government in 1990. This re-established the importance of public transport as a means of tackling growing traffic congestion and improving the quality of life for citizens. The DTI published its policy document in 1994 and this was adopted by Government in 1995. The DTI set out a 20 year transport strategy, an initial five-year implementation programme and a mechanism for monitoring, co-ordinating and updating the strategy. This is where Luas began and this is where the Dublin Transportation Office (DTO) was born.

In 2001 the DTO published the first update of the DTI transport strategy in a document titled "A Platform for Change." This was the most comprehensive transport strategy ever developed for Dublin and set out the public transport system Dublin required and the complementary measures necessary to transform Dublin from a city grinding to a halt, to a modern European city where Quality of Life was top of the agenda.

In 2005, the Government launched *Transport 21*, a major funding programme to improve the national transport systems, and in the Dublin area to provide funding for the implementation of the first phase of the DTO's strategy.

We will still have to endure severe traffic congestion for some years to come because major transport infrastructure cannot be provided over-night, but a threshold has been crossed. Luas has demonstrated what can be done. The Dublin Metro system is coming, public transport is in the ascendancy and this, together with the land-use and car restraint measures that must follow, will allow Dublin to transform itself into a vibrant place where we live, work and enjoy our leisure time. Ultimately, if we have courage and persevere, we can remove the trauma of traffic congestion and provide the Quality of Life that we deserve.



THE TRAM TO SPIDDAL

The Automobile Association represents the views of thousands of motorists around the country but here Conor Faughnan, Public Affairs Manager, AA Ireland, argues that greater concentration on providing quality public transport may be the key to solving congestion.

onsider the following sentence: "With full employment for the fifth year running and economic growth still the envy of Europe, and with some 200,000 Poles, Latvians and Lithuanians adding to the surge in immigration, it is little wonder that Ireland's 2.2 million vehicles are struggling to fit onto our expanded infrastructure."

Nothing strange about it, you might say. Might have been taken from any broadsheet newspaper in recent months. Perhaps so.

I was at a 20 year school reunion last November, and as I reflect on the wide-eyed and fearful group that emerged from the class of '86, I can think of no sentence that would have been as astonishing or as unbelievable to that group or to the times they lived in.

Ireland in the '80s was a failure. There is no kinder way of

saying it. We had unemployment at 20 per cent, double-digit inflation and interest rates, net emigration of 35,000 people per year, and we lost 320,000 work days per year to strikes. OK, we had fewer traffic jams but I wouldn't swap the problems of success for the mess that we had 20 years ago.

So as we grumble and moan about our congested cities and sky-high property prices we should take the time to remember that these are good times, these are good problems to have.

Which is not much consolation as you sit for ninety minutes on the M50 of a Tuesday morning, or go through a daily purgatory just to get through the Dunkettle interchange. Our prosperous cities are slowly choking on traffic.

Irish car ownership is still relatively low by European standards, but our pattern of car usage is almost unique.

In vast numbers we get to work and home again by private car. According to Dublin Transportation Office figures, 54 per cent of Dublin commuters travel by private car with just under 20 per cent using public transport. In almost every other city in the developed world, those proportions are reversed.

The way out of the problem lies in providing public transport. We have not made the same progress in this area as we have with our inter-urban road network but it must become our priority now. The Dublin Metro project contained in Transport 21 and the extensions to the Luas are a good beginning, but much more will be required. Quality rail based mass transit systems are any city's best countermeasure against traffic jams.

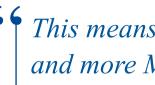
When was the last time you hired a car in London? It doesn't occur to anyone because you know that even as a relative stranger you can head out into London with a tube map in your hand and get anywhere that you want to go. That level of coverage and reliability is what we need. This means more Luases and more Metros. Trams running from Oranmore to Spiddal, from Glanmire to Douglas, from Tallaght to Blanchardstown. It requires an ambitious level of sustained investment, but as with the roads programme of the last 12 years we know we can do it and we know that the investment will pay us back handsomely.

While we await the cure we suffer the symptoms. With a due nod to Dunkettle, Claregalway, Rice Bridge and all the others, the clearest example of the good the bad and the ugly of Irish transport is Dublin's M50.

Thanks to the legendary slowness of the Irish planning process it took 20 years to build. By the time the link to the N11 was finally opened in June 2005, it had taken over 20 years to build 35 kilometres of two-lane motorway: a rate of 570 metres per year!

It has become so overwhelmed with traffic growth that it is now handling double its design capacity: 100,000 vehicles per day. It struggles desperately with traffic jams and regularly reduces drivers to tears. It is so vulnerable that a car with a faulty sparkplug can cause a two-hour gridlock affecting 50,000 people. This has happened.

Yet the M50 is no failure. It has fed the Tiger's growth. It has lead to the generation of new jobs, new housing and new economic opportunities. Sandyford, Tallaght and Blanchardstown are now major centres of employment rather than dormitory suburbs.



This means more Luases and more Metros. Trams running from Oranmore to Spiddal, from Glanmire to Douglas, from Tallaght to Blanchardstown."

The motorway's story continues. The additional pressure of the HGVs emerging from the Dublin Port Tunnel is great for the city centre but was equivalent to adding one year's growth to the M50 overnight. It is coping but it is wobbling with the strain. The major works to add a third lane between Red Cow and Lucan and upgrade the interchanges will be complete by the end of 2008, but in the meantime the road is horribly vulnerable to gridlock.

With the buyout of National Toll Roads complete next year we will also (we hope) see the removal of the toll gates at the Westlink Bridge. However, it will not mean the removal of the toll. All going well, there will be a system in place to charge a toll electronically without affecting traffic flow. This is certainly going to be a complex and expensive system and not a prospect that the AA views with any enthusiasm.

The first electronic toll will bring with it renewed attention for congestion charging in some shape or form. Clearly having devised a system for the M50 it will be possible to use the same mechanism for charging elsewhere. Systems like London's, or the more sophisticated version in Stockholm, have already been proposed, with revenue, anti-congestion and environmental justifications being cited.

One thing the AA does believe is that there is too much tax on the purchase and ownership of cars relative to their usage. We have expensive annual motor tax and extremely expensive VRT, yet we have among the cheapest fuel prices in Europe. It does make sense to change the emphasis on taxation to encourage the more careful use of cars.

One thing is certain. If we want to continue to prosper as a country then doing nothing is not an option.





NEW M50 - WILL IT WORK?

An electronic tolling system along the upgraded M50 could act as a congestion management system for the whole of Dublin city, according to Green Party Transport Spokesman, Eamon Ryan TD.

raffic gridlock is starting to strangle our city. For the people of Dublin the most frustrating thing is that journey times can never be predicted. One morning a trip might take half an hour and the next day twice or three times as long. Anyone who has to go across or along the M50 on a daily basis will know that things are not working.

The M50 is the centre point of our national road system as well as being a major artery for Dublin. Even after we widen the road and provide freeflow spaghetti junctions at all the major intersections, it is still not going to work.

The Bord Pleanala public hearing to consider the M50 upgrade project was a seminal moment in Irish roads planning. Engineers like to present solutions to transport problems and demonstrate how they will work for the next 20 years.

The M50 upgrade project was an engineers worst nightmare. Their own traffic forecasts, which were presented at the oral hearing, showed that the engineering solution they were proposing simply would not work. Traffic volumes on the main sections of the carriageway would double to 200,000 vehicles a day almost as soon as the new sections of road were opened.

6 Let does make sense for us to introduce an electronic system for collecting the tolls as this will allow us to collect tolls using variable pricing.



After spending over €1 billion to upgrade the road it will still be subject to the same erratic and chronic congestion problems that it is today. Even worse, all the journey time savings, that were meant to come from the billions we have spent on the main interurban motorways, will be lost as traffic crawls to a halt getting in and out of Dublin.

The oral hearing proved a useful exercise as it allowed for a public discussion on what the best solutions to this problem should be. The traffic experts, from the consultants who designed the new road, from the National Roads Authority and from the Dublin Transportation Office, all agreed that a demand management solution would be required to keep the M50 working.

Two main demand management solutions were considered. The first would be to put traffic lights or other physical restrictions on the approach roads to the motorway. However, this was considered unsatisfactory as it would only divert the levels of congestion from the Orbital carriageway to the radial national primary routes leading up to it

The second solution, involving an electronic tolling system to manage the M50, was considered a better solution by each of the traffic engineers who gave evidence. Such a system would work by providing an incentive for enough long distance car commuters to switch to public transport or to change their journey plans so that the volume of traffic on the road would not exceed the congestion reference flows.

Ensuring such a demand management tolling system works requires the introduction of toll points at several points along the motorway or alternatively on all the approach roads. In this way the overall motorway system can be managed.

Unfortunately, the Government has refused to even contemplate such a move. They have instead bought out the Westlink toll bridge at a cost of €600 million and promised to convert the bridge to an electronic tolling system by 2009 to try and improve traffic flows. They know, however, that this will have no effect either on the level of congestion on the road or in managing the increasing demand along the entire M50.

It does make sense for us to introduce an electronic system for collecting the tolls as this will allow us to collect tolls using variable pricing. This would work on the basis that tolls would not be charged at times when the road was free of congestion such as in the afternoon or at night, but tolls would apply to journeys taken in peak hours. The level of tolls would be set to manage the road so that the traveling public have some security as to how long their journey would take. It would not be an exercise in raising revenue. It would also require the other existing tolls on approach roads to the M50 to be removed so that motorists were not hit in two or three locations on their way into the city.

Such a tolling system would also in effect operate as a congestion management system for the whole city. It would restrict the volume of traffic coming off the M50 onto areas such as Dundrum, Crumlin and Ballymun where the existing road network cannot cope with the current level of traffic coming off the motorway. With the Grand and Royal canals then providing a physical restriction to the amount of traffic that can cross into the city centre we would have the makings of an effective traffic management regime which would provide some certainty for people trying to get around the city.

Even after we widen the road and provide freeflow spaghetti junctions at all the major intersections, the M50 is still not going to work."

Such a system would, of course, also require a massive investment in public transport so that the majority of trips could be taken by modes other than the private car. This is why the Green Party is proposing additional investment in the public transport network for the capital beyond what is proposed in the Government's Transport 21 plan. These will include new Luas lines to Rathfarnham, Finglas and Baldoyle, the extension of the proposed Metro to the south side of the city and a major expansion in the bus service.

The Green Party in Government will be looking to introduce such a co-ordinated approach to transport in the Capital. We believe we can convince other coalition partners that such an approach outlined above makes sense for the motorist as well as the wider traveling public.



HOW THE CAPITAL COPES

Dublin is now one of the top visitor destinations in the world, states Tom Coffey, Chief Executive Officer of the Dublin City Business Association*, but it needs reliable and efficient transport systems to cope.

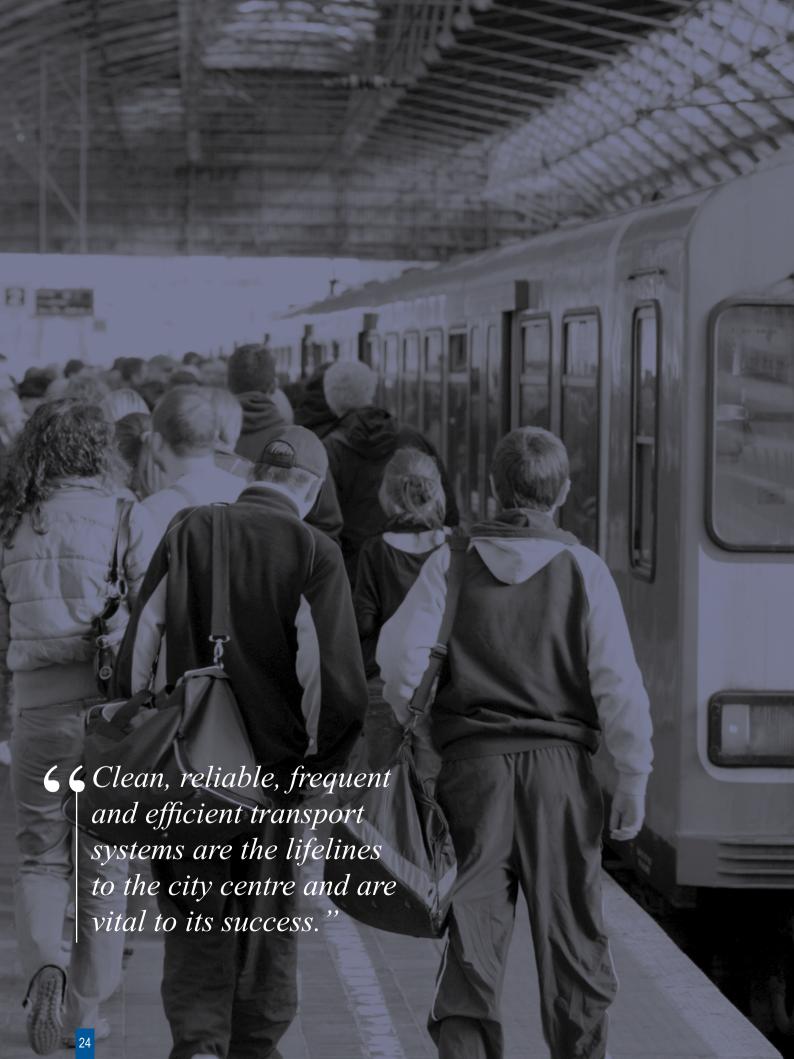
ublin city centre looks better than it ever has and is now firmly established as one of the top visitor destinations in the world. The results of the vision and significant financial investment of Dublin City Council, city businesses and property developers are now being realised

There are 4,000 shops and 10 department stores and shopping centres in Dublin city centre, providing the largest concentration of shops and the broadest choice anywhere in the country. These combine to make 4.5 million sq footage of retail space. The city centre's cultural, leisure and retail offering attracts an annual footfall of 260 million and a daily footfall of 660,000 – people shopping, working and enjoying their Capital City.

This massive city economy needs to be managed effectively to continue to operate successfully. Clean,

reliable, frequent and efficient transport systems are the lifelines to the city centre and are vital to its success.

As a result of the huge investment in transport infrastructure, the city centre is now relatively easy to get to and, arguably, does not suffer the same levels of congestion experienced in the suburbs and along the M50, Red Cow etc. Dublin City Council has done a great job in facilitating the explosion of cars on the country's roads into our capital's streets. As a direct result of investment and effective traffic management in changing road layout, traffic on the city's main streets is now moving easier than ever before. Improved transport infrastructure - such as the Quality Bus Corridors, the introduction of Luas, Environmental Traffic Cells and an additional 9,000 taxis since deregulation, have proven to be an effective way of combating congestion.



There are 22 car parks in the city centre which give priority to shoppers' cars so there are plenty of spaces available. There are 1,100 buses in the Dublin Bus fleet serving the city; two Luas lines; DART and 90 trains a day coming into Connolly and Heuston stations (compared to 13 in the 1950s).

The reality is that Dublin City centre has more people in it any day now than anytime in its 1,000 year history and it is easier for them to get in and out. People are accepting that Dublin is a capital city and because it has grown considerably, additional time must be given to access it. Consumers are adapting to "rush-hour" traffic. Members of the DCBA reported last year that trading on Thursday nights and Wednesday nights has increased significantly. This illustrates that people are using their commuting time wisely.

We congratulate the Government and Dublin City Council for the opening of the Port Tunnel. Taking trucks off the city centre roads will further improve the flow of traffic for shoppers. This significant initiative, together with the linking of the Luas lines and introduction of Metro are all important positive developments for the city centre economy.

Exemptions on restrictions for HGV movement in the city centre should be miniscule - the argument of "perishable product" is flawed. It is an historical term from an era before refrigeration and not appropriate to the 21st century where a product is defined in terms of shelflife. The quality of life in the city centre suffers from the negative consequences of the HGV traffic and unregulated deliveries. It is imperative that the Dublin City Council strategy is introduced and well managed.

The car shopper spends three times more money in the city than other road users and should be given daytime priority for access. The traffic management system must be changed now to give different times to different audiences – if business must deliver during the day they should do so outside of key commuting times and peak shopping times. According to research carried out by Trinity College the peak hours for deliveries are between 10am–11am. This is rush hour traffic and critical commuter and shopper time.

Forty nine per cent of all deliveries use on-street parking this causes congestion in the city's streets and is no longer acceptable. Deliveries undertaken during peak shopping hours adversely affect business in terms of compromised customer service, higher delivery costs and more difficult customer access. Managing the environment in which you operate is part of managing your business effectively. Many city centre businesses are now taking deliveries at night only.

The continued threat of rising tides is ultimately a threat to the city centre which we need to be prepared for. Barriers should be built from Malahide to Dun Laoghaire similar to that in Afsluitdijk in Holland and roads built on top of the barriers to improve traffic flow around Dublin. This infrastructure project is likely to take several decades to complete and should start soon.

The revival of Docklands has created a new generation of city centre residents who are owner/occupiers and by 2010 there will be an additional 70,000 people living within the canal ring. There is a need for a new Vision for our city that includes more residential accommodation as people are the lifeblood and essence of the city centre but we need residential accommodation that improves quality of life and is linked into transport infrastructure. Dublin Port should be used as residential and office accommodation to build the city centre of the 21st Century. The Government should immediately instruct Dublin Port to start the move to Braemore, for a proper East Coast Port.

We welcome the Dublin Transport Authority and look forward to the development of a hands-on constructive relationship with the city businesses in the interest of increasing economic growth, employment and investment in the city centre.

Dublin will continue to grow and prosper if we have a good quality of life and environment in the city centre and reliable, clean, frequent and efficient public service transport. There is a requirement and demand for this level of public transport at five minute intervals between 7.00am–8.00pm, seven days a week. We support Transport 21 overall and only by introducing a high standard of public transport will we be able to fulfill the demand that is quite obviously there as seen by the great success of the LUAS.

^{*} The views expressed in this article are personal views of the author alone and are not policy of the Dublin City Business Association.



IT'S NOT AS BAD AS WE THINK

Things are not all that bad on our roads compared to other European cities and traffic management measures are helping, insists Jimmy Quinn of the Irish Road Hauliers Association.

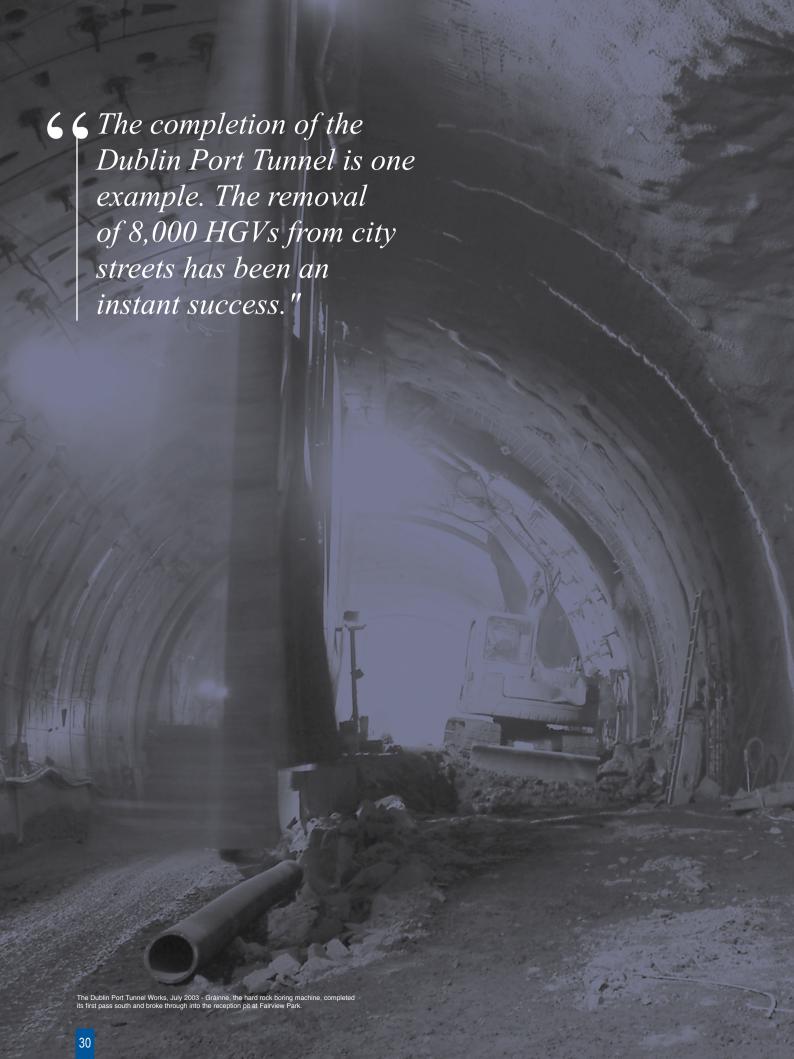
here are few subjects which people get wound up about as much as congestion. The perceived state of the health service is the other one. People think of their cars in the same light as their children, mine is lovely but I can just about stand everyone else's.

As usual when you do the numbers the real problems become exposed. There are in excess of 2,000,000 cars in this country. This was widely predicted some years ago as experts said car ownership levels would rise to European levels.

By way of comparison there are 16,000 licensed haulage vehicles in the Republic and some 5,000 licensed vehicles in the North of Ireland. These are mostly the large articulated types that induce all kinds of fear and paranoia in otherwise calm and rational adults. There are some 170,000 other kinds of goods vehicles. These mostly

range from farmers 4X4s up to shop delivery vehicles on which we all depend to keep the shops stocked. Road transport is a direct function of consumer society, not the other way around! Every commercial vehicle on the road is there because someone somewhere needs something.

To listen to some commentators you could be forgiven for thinking that gridlock was an Irish phenomenon. This is far from the case. I remember travelling around Paris on the Inner Peripherique in the 1980s at six o'clock one morning in a serious traffic jam and wondering would traffic in Dublin ever reach this level? Driving on the M4 heading to London is still your worst nightmare come true. In fact if you are commuting into any European city of a million people or more at rush hour the setting is the same, gridlock and plenty of it. But it is not all bad news.



The completion of the Dublin Port Tunnel is one example. The removal of 8,000 HGVs from city streets has been an instant success. It has solved a whole bunch of problems, but has caused a few others. The misguided decision to close Sean Moore Road to HGVs in advance of the completion of the M50 upgrade goes against the advice of the National Roads Authority and the entire transport stakeholder network.

I was asked for my comments on the morning the Tunnel opened and I politely suggested that we should now turn our attention to the completion of the M50 by way of the long awaited Eastern Bypass. We have dithered around enough with this. It is time we got a move on.

I don't hold with the notion that if we build more roads we will create more car owners. Car ownership is a function of an expanding population. In the 1970s my parents had a car. Today the family has six cars and a (working) 4X4.

What we must do is improve public transport. The success of DART, LUAS and many of the Quality Bus corridors (QBCs) are testament as to how the public will opt for decent public transport where it is provided. The train service from Dundalk is fully subscribed at rush hour.

This is a solution for someone who can walk to work from Connolly Station, or catch a LUAS to the Four Courts, but heaven help you if you have a job in the Docks or an industrial estate on the M50 ring.

The progress which has been made in this past 10 years is remarkable. Yes we are coming from behind: there are 22 major road schemes under construction at the moment. Nearly every small town in Ireland which doesn't already have a By-pass really needs one. However, when travelling around the rest of the country the new road improvements are really starting to make a difference.

Places like Mullingar, Carrickmacross, Ashbourne, Ballyshannon, Cavan, Monaghan are all coming to life again now that bypasses are complete. €1.6 billion is penciled in to be spent this year on roads; 368 kms of new road under construction and 189 kms due to start.

The figures are impressive by any measure. So relax, we are not there yet but we are getting there!

ROADSIDES THE PORT TUNNEL WORKS



The long-awaited Dublin Port Tunnel has had a major impact on traffic, and the comfort of pedestrians and cyclists, in Dublin city centre and surrounding areas by removing an estimated 8,500-plus HGV's per day from the capital's streets.

Despite some initial operational hiccups, the Port Tunnel is now running smoothly, 24-hours a day. Recent figures indicate that some 11,500 vehicles are using the Tunnel on weekdays, with around 2,500 of those being private cars and other vehicles.

Trucks with five axles and above have been banned from the city centre following on the opening of the Port Tunnel and this ban will eventually be extended to other trucks. There had been early fears that pushing the HVG's onto the already choked M50 would worsen congestion there but this does not appear to have materialised as a major concern and there have been few complaints from truckers as time goes by.



ON YER BIKE

Getting out of our cars and on to the bike could be the healthier solution to Dublin's congestion – and for ourselves – according to Dr Mike McKillen, Chairman, Dublin Cycling Campaign.

or most cyclists, congestion is what affects other road users as the essence of the bike, as a mode of transport, is its simplicity and directness: literally door-to-door personal transport. It is a human-powered metastable machine, gliding silently and almost effortlessly and with close to zero environmental impact, and good for your health into the bargain.

A marked improvement has taken place in bike design and construction over the past decade – lighter frames and components, front suspension, disc brakes, 18-gears as standard, etc can be part of the specification but the cost of a high specification commuting bike can be as much as £2,000.

However, you can get by on a typical hybrid bike costing not more than \in 400. On the basis of a typical urban bus fare of \in 1.40 each way (up to seven stages/approx 6km) you should cover the outlay on this latter bike within

seven months. Bikes require little maintenance in marked contrast with modern cars stuffed with so many electronic features that costly main-dealer servicing is a necessity.

So why do more commuters not change mode from a car to a bike? For those who live within 6km from their school, college or place of work it makes little sense to use a car or bus. In fact, there is no excuse for not using a bike to cover this distance as it can be covered consistently in some 20-25 minutes depending on the number of signal-controlled junctions.

Congestion has little or no effect on the journey time. The Dublin Transportation Office (DTO) has good advice for those contemplating shifting to bike commuting – a journey route plotter for Dublin makes it simple (see www. dto.ie). Alas nothing for Cork or other cities. You don't have to wait for any bus or train service that is susceptible to delay and you don't need a ticket. Consistency of

transit time is the reality by bike and you get to stay in bed longer!

Here are some of the reasons advanced by those who will not make the change:

1-It's always raining in Ireland. Not so, as Met Eireann will confirm (see http://www.met.ie/climate/ rainfall.asp.) The number of rain-days on the East coast, in particular, is quite low while the actual hourly amounts can be low too but surprisingly the rainfall pattern is such that morning and evening rush-hour time zones are remarkably free of deluges. In any event, advances in foul-weather gear design have made kitting yourself out to stay warm and dry so simple. What would make a real difference



Congestion has little or no effect on the journey time of a cyclist"

to comfort and convenience would be if employers and developers were compelled by planning law to provide sheltered and secure bike-stands and bike rider changing facilities (lockers, showers, dryingroom, etc) at colleges and workplaces.

2-It's dangerous. Not so, if you ride in a predictable fashion, know how to ride defensively and obey the rules of the road it is reasonably safe. It is also healthy and this outweighs the possible risk of injury or death. It is highly aerobic exercise, particularly if you tackle it as a training run. A free speed of 30 kph can be maintained on many commuting routes. If there are any doubters then a simple search of the international road safety literature using Google will help to change minds. The British Medical Journal, in particular, has published many papers showing that the benefits far outweigh the risks.

3-The congestion is too tricky to deal with. Not so paradoxically because congestion leads to slower

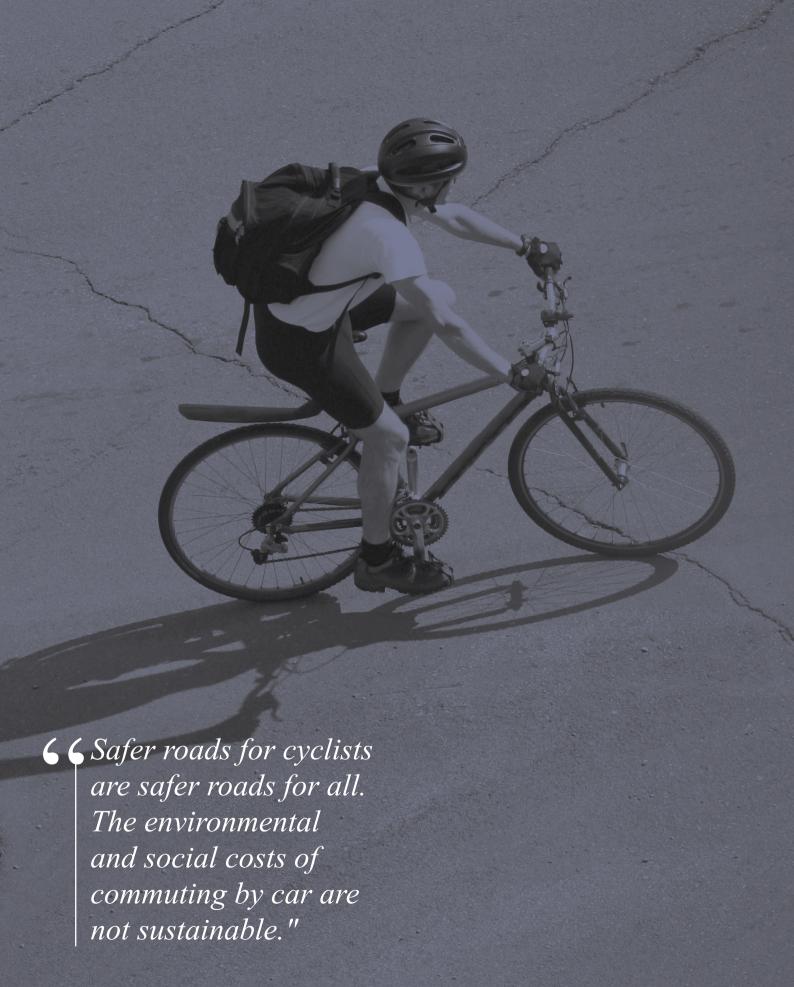
vehicle speeds and that reduces the severity of any impact between a vehicle and a rider. Local authorities have been directed by the Department of Transport to bring in inner-core area maximum speed limits of 30 kph so this will make for safer streets if it is properly enforced. Remember that a static vehicle presents no impact risk other than by a near-side door being opened without due care in the track of the rider.

However, congestion is not so pleasant from a noise and pollution perspective and you do have to ride using your wits to stay safe. But riding has this elemental quality to it – you are compelled to use all your senses and your muscles so it can be exhilarating and liberating. The dozy rider doesn't survive long. Just look at the élan displayed by bike courier riders - drivers regard them as "headbangers" but the riders display consummate riding skills. A good bike rider becomes part of the environment around them and there is even time to stop and chat to people you meet at stop lines.

Local authorities in urban areas have spent millions in marking out cycle tracks and bus lanes to provide a reasonably clear route for riders on the kerb margin of the vehicle lane. Advanced stop lines are provided at most junctions as a refuge for the rider when stopped at signals to permit the bike to get ahead of the vehicles at the change of signal.

So for cyclists, congestion is almost to be welcomed! As a society we have reached a crossroads, figuratively and literally, in our relationship with car use for commuting. Leaving aside the environmental costs of transport, childhood obesity incidence is increasing as sedentary lifestyles are too prevalent. The number of children cycling to school, scouts and guides, sports and youth clubs has plummeted in the past decade. This has happened as parental fears about road safety and abduction have increased so the net result is that parents have literally driven their own children off the road by car use patterns. This has to stop. Safer roads for cyclists are safer roads for all. The environmental and social costs of commuting by car are not sustainable.

The Dublin Cycling Campaign (see http://home.connect. ie/dcc/), along with its partners in Galway and Cork, is an advocacy group seeking safer roads for commuting cyclists. We have to think of our children's future today.





TAXIS EASE CONGESTION

They are often much maligned but the country's taxi drivers have a key role to play in our transport mix, insists Tommy O'Gorman, President, National Taxi Drivers Union.

axis are often easy targets for the media in Ireland. Yet taxis play a vital role within the transport industry. In many rural areas where there are no bus services a taxi can be the only option a person has to carry on their daily business.

Congestion is a major problem for both taxi driver and passenger. The heavier the congestion the more the passenger has to pay for the fare. Taxi drivers would welcome the introduction of more continuous bus corridors, not only in Dublin and the bigger cities, but throughout Ireland.

Another positive move would be to exempt taxis from paying the toll or a reduced toll on the Dublin Port Tunnel. By being allowed to use the tunnel toll free the paying public could save on taxi fares to and from Dublin Airport, Dublin Port and other areas adjacent to the Port Tunnel.

The lack of sufficient taxi rank spaces around the country is a factor leading to congestion in major cities. As of 31st December 2006 there were 16,429 valid taxi

licences nationwide but permanent taxi rank spaces have not increased in Dublin for approximately three years, thus leading taxi drivers to drive around the city looking for a fare, leading to increased emissions.

The Government and the relevant authorities, in conjunction with the transport industry, have to tackle the problem of congestion.

Positive actions which should be taken is to have an integrated bus, Luas and DART system along with synchronised traffic lights.

The removal of HGVs from Dublin city centre has made some improvement to traffic entering and exiting the city but all it has really achieved is to move the congestion problem to the M50 which was already congested prior to forcing the HGVs to use the route.

Before any further measures are introduced regarding traffic congestion the Government will have to ensure that the infrastructure is in place and is capable of handling such changes.



GALWAY'S STORY

Congestion is now an issue in every city and major town in the country. Here Michael Coyle, Chief Executive Officer of Galway Chamber, gives the Western experience.

raffic congestion in Galway city and environs is a phenomenon that manifests itself at peak times and at Festival time, during the summer for example and during the week-long Festival of Racing. In general terms, traffic congestion in Galway is not on the same scale as in Dublin but we are very aware that unless some measures are put in place, it could increase significantly.

An increase in car ownership, with no indication of slowing down, will fuel traffic congestion and Galway Chamber has lobbied strongly for the past 18 months to have the Galway City Outer Bypass expedited as a means of alleviating traffic congestion. The Outer Bypass will not solve traffic congestion on its own, but as a major part of a traffic plan, it will.

It is the view of Galway Chamber that the welcome N6 will further increase the traffic congestion in Galway city if it decants its users into the mainstream city traffic. It makes complete sense that traffic which doesn't need to go into the city, shouldn't. Currently there is no round route and all traffic, including five axle trucks, must traverse the city.

Galway Chamber, recently welcomed statements by Transport Minister, Martin Cullen TD, accelerating the works on the N18 to Shannon and the commencement of the Galway City Outer Bypass. Speaking in Galway the Minister said that work on the Ennis to Galway section of the corridor would begin early next year and that the Galway City Outer Bypass would have a projected start up date of 2009 and completion in 2012.

The Minister's commitment is welcomed by a lobby group which includes Galway Chamber, the American Chamber of Commerce Ireland (West Region); IBEC (West Region); Information Technology Association of Galway (ITAG); Failte Ireland (West) and the Irish Hotels Federation, (Galway Branch).

In an unprecedented move these organisations joined together 18 months ago to lobby for the Government's commitment to the N18 Galway/Shannon/Limerick and to the N6 Galway City Outer Bypass: two projects fundamental to the future economic development of Galway and the West.

The group has consistently maintained that the Galway City Outer Bypass is integral to solving Galway's growing congestion problems and we welcome the news that funding is to be accelerated for this project.

CASE STUDY: THE ENNIS BYPASS







The Ennis Bypass has brought welcome relief to the county town of Clare and to villages along its 12 kms of dual-carriageway which was opened earlier this year by the Minister for Transport, Mr Martin Cullen TD.

It is estimated that the Bypass, which was completed three months ahead of schedule, has taken over 14,000 vehicles a day (including 2,000 trucks) out of the town of Ennis while peak journey times between Limerick, Shannon and Galway have reduced by up to 20 minutes. The quality of life in villages such as Clarecastle and Barefield has been greatly improved while road safety has been boosted by the opening of a much safer roadway.

The N18 Ennis Bypass had an overall cost of €191.5 million, with actual construction costs accounting for some €119 million of that. Work began in April 2004 with a completion date set for April 2007. However, with the project well ahead of schedule, it was opened to drivers at the end of January. The scheme involved 16 major new structures, including nine bridges on the bypass and two farm/vehicle/pedestrian underpasses. There are two rail under bridges, three road over bridges, three road under bridges and a 50m span bridge over Latoon Creek. Construction required approximately 200 hectares of land.

The contractor for the project was Gama Strabag Construction Ltd. The company was formed by Gama Construction of Turkey and Strabag AG from Austria. The workforce used by the contractors was a very international one, including Turkish, Polish, Lithuanian, Slovakian and many other Eastern European workers. It reflected the wide mix of new nationalities who have chosen County Clare, and Ennis in particular, as their home in Ireland.

The project was funded by the Irish Government and part-financed by the European Union under the National Development Plan, 2000 – 2006. The scheme was co-financed at 85% by the cohesion fund of the European Union.

With Clare's rich history and precious environment, archaeological and environment concerns were important considerations for Clare County Council, the NRA and the contractors. Artefacts were examined dating from the Bronze and Iron Ages as well as the Early Christian period while the Old School House at Knockanean was converted into a state-of-the-art new roost for the Lesser Horseshoe Bat and measures were incorporated into the overall works to facilitate badgers and otters.

Planning work is progressing on the next stages of the N18, including Gort to Crusheen which will tie in to the north end of the Ennis Bypass and Gort to Oranamore.

Mr. Peter Malone, Chairman of the National Roads Authority commented: "Schemes such as the Ennis Bypass are important not just in a local context but nationally also. The Bypass forms part of the Atlantic Corridor, which is a core element of the Government's Transport 21 Plan. It will run from Donegal to Waterford and the ongoing development of this corridor will facilitate business expansion and tourism in the southeast, west and north west of Ireland"





CONGESTION CHARGING FOR DUBLIN?

Transport experts and other insist that imposing a congestion charge on drivers may be the best way to cut traffic in Dublin city centre. London has already experienced such a charge.

congestion charge for Dublin – and possibly Cork – is a real possibility in the future if traffic volumes continue to increase at their current levels. Transport Minister, Martin Cullen TD, has indicated that such a controversial levy may be considered in the future when current transport infrastructure projects – such as the M50 upgrade and Luas extensions – are in place.

There is support too for such a charge – and the general concept of road pricing - from bodies such as the Dublin Transportation Authority, and the Green Party which could find itself in Government after the next General Election. Indeed, it has been argued that a form of road pricing is the only way to discourage motorists from using the M50, even in its widened state.

The Government has already set out its intentions in the recent White Paper on Energy which laid out a range of options including congestion charges, road pricing, car sharing schemes and workplace travel plans aimed principally at reducing carbon emissions. These form part of a Sustainable Transport Action Plan due to be published before the end of the year.

Even with a change of Government, it is likely that the same – or similar – actions would be taken by any incoming administration in order to tackle the problem of air pollution and Ireland's international obligations.

Transport experts here can point to London – a city with a population at least eight time greater that Dublin – which has tackled its traffic chaos by the imposition of a controversial Congestion Charge in the central area.

Introduced in 2003, the Congestion Charge was aimed at encouraging people to think again about using their vehicles in central London and to choose other forms of transport. Before then the average speed of traffic in central London had fallen to below 3mph: the Transport for London body now claims it has increased to just below 10mph.



The scheme is policed by cameras on roads within the congestion zone which read car registrations. Drivers pay £8 per day; paying by either telephone, text message, post, Internet or in person at a retail outlet. A range of vehicles are exempt from the charge, including taxis, licensed minicabs, emergency services, alternative energy vehicles. Others entitled to a discount are mainly residents.

According to a report published by Transport For London, congestion levels in the zone are on average 26 per cent lower than in 2002 before the scheme was introduced.

The national environmental transport body in the UK – Transport 2000 – claims that during the charging hours 65,000 fewer car movements per day are being made into or through the congestion zone. The group also maintains that the charge has led to an increase in alternative modes of greener transport, such as cycling.

Michele Dix, Director of Congestion Charging, said that "the key objective of the congestion charge is to reduce levels of traffic coming into central London which is something we continue to see. London is the only major city in the world to achieve a shift from private car use to pubic transport, delivered through a combination of congestion charging and expansion of the bus service."

All monies raised through the congestion charge is ploughed back in to improving public transport – especially the provision of extra buses – along with traffic calming, road safety and environmental measures.

However, not everyone agrees with this rosy picture. Conservative Councillor, Phil Taylor, claims that the amount raised through the levy "has barely covered the original scheme's set up costs of £161.7 million. Pretty much all of the £677.4 million collected to date has been spent on out-of-control running set up and running costs."

Businesses have reacted negatively to the congestion charge. A group called Fighting for Private Business conducted a survey of 500 small-to-medium firms in London in November last year and found that 58 per cent had seen profits drop since the introduction of the congestion charge. A third had considered relocating and two-thirds reported a drop in footfall of clients and customers.

The Automobile Association in the UK does not oppose the scheme in principle because, it says, the Mayor of London, Ken Livingston, twice sought and won a mandate. The AA did promise to act as watchdog, however, and was highly critical of the lack of a public inquiry, the haste in which the scheme was introduced and the lack of clear answers to a range of technical concerns. It does not appear to have said much on the issue since then.

ROADSIDES

ROAD SIGNAGE UPGRADE

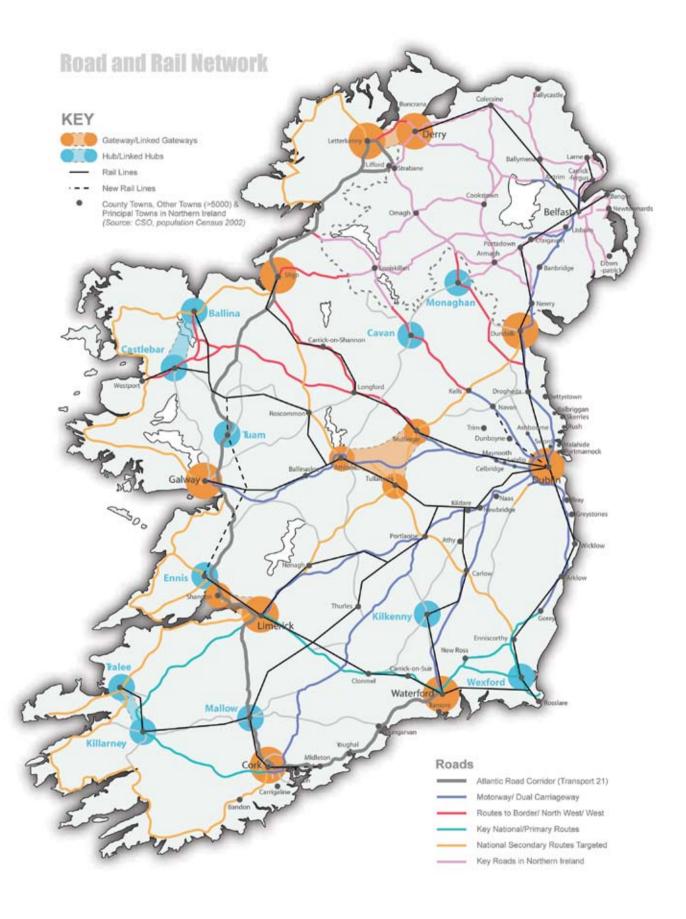
Road traffic signs around the country are to be overhauled – at last. Following years of complaint from exasperated motorists and also from the tourism industry, the problem on main roads is now being tackled by the National Roads Authority while the Department of Transport is setting out new rules for local authorities on signs to be used at roadworks.

Reports indicate that the NRA is to spend as much as €60 million upgrading signage on national routes. This, the Authority says, is to deal with inadequacies, inconsistencies and the confusing practice of not mentioning key cities and towns along main roads.

An example of this confusion was given as the present situation where motorists on the M50 wishing to drive to Cork must already be aware that the turn-off they need is actually signposted for Limerick. Similarly, drivers seeking the road to Galway must know that the signs actually point to Sligo. The new signs will be used on the upgraded M50 and will begin appearing this summer also on the N11, N3 and N17.

The NRA is also planning to make more use of overhead gantries for directional signs. These are already used on the South Eastern leg of the M50 and are considered safer and easier to see for drivers on busy motorways.

Meanwhile, the Department of Transport has issued new instructions to local authorities on how road works should be safely signposted. There has been concern for some time about the lack of coherent standards and the use of different signage on roadworks in different counties.



€17 BILLION FOR ROADS



Transport investment under the Government's National Development Plan (NDP) 2007-2013 will amount to just under €33 billion over the lifespan of the Plan. More than half of this - €17.6 billion – will be spent on the roads programme.

he National Development Plan highlighted how some 98.3 per cent of internal merchandise is carried by road in Ireland, underlining the need for a "world class roads system", particularly linking major urban centres.

But the NDP adds that "it is not sustainable to promote road and car transport as the major long-term mode of passenger transport, especially in urban areas. The growth in population and in employment, in tandem with the environmental imperative to reduce carbon emissions, requires a major modal switch in passenger transport from car to public transport."

However, the Plan also points out: "While the environmental benefits from a major switch to public transport are clear, the major investment in roads will also improve traffic flows, reduce congestion and thus result in lower rates of traffic related emissions."

Under the Roads Sub-Programme, some €13.3 billion will be invested in national roads and €4.3 billion in nonnational roads. The principal objectives of the Roads Sub-Programme will be the:

- Completion by 2010 of the major inter-urban routes linking Dublin with Belfast, Cork, Galway, Limerick and Waterford
- The upgrade of the M50 by 2010 which will convert to barrier free tolling in 2008
- Improvement of road links between the main NSS Gateways
- Ongoing development of the Atlantic Road Corridor from Letterkenny through Sligo, Galway, Limerick, Cork and Waterford
- Continued upgrading of road links to Northern Ireland
- Targeted improvements of a number of key national secondary routes
- Improvement and maintenance of the non-national roads network and
- Investment in strategic non-national roads which will complement the national roads investment.

Investment in national roads will be utilised to implement the objectives of the National Spatial Strategy. Particular focus will therefore be on investment in road routes which link the Gateways, including a major upgrading of the Atlantic Road Corridor, which links many of the Gateways outside Dublin.

Among the national secondary routes to be prioritised will be routes between the Gateways outside Dublin including upgrading roads linking the Midlands Gateway centres of Athlone, Tullamore and Mullingar. In combination with the Sub-Programme on Non-National Roads there will also be a significant investment in key routes impacting on National Spatial Strategy Gateways, Hubs and County Towns

The Plan also mentions that feasibility and planning work on the proposed Dublin Outer Orbital Road and the Eastern By-pass — as promised by Transport Minister Martin Cullen at the launch of Transport 21 in 2005 — is currently being pursued by the National Roads Authority.

The NDP acknowledges that non-national roads play an important economic role in Ireland because of:

- The relatively dispersed nature of the population and economic activity
- The importance of tourism and agriculture as generators of wealth and employment and
- The priority attaching to rural development and urban regeneration.

It notes that Ireland has a very extensive non-national (regional and local) road network. There are 11,630 kms of regional roads and 78,972 kms of local roads. This extensive road network, in comparison with other European States, has historical links to past dispersed settlement patterns, low population density and the traditionally agriculture-based economy, particularly in rural regions.

Recent decades have seen increased urbanisation, regional population growth and moves away from agriculture. Nonetheless, according to the NDP, the network of nonnational roads is still necessary to provide accessibility within and between local economies especially in rural areas and provides vital links to the strategic national road network and ports and airports which are our links to the wider international economy.

Over the period of the Plan, some €4.3 billion will be invested by the Exchequer and the Local Government Fund in the non-national roads network. This will be primarily aimed at improvement and maintenance of the

network and investment in strategic non-national roads. The re-opening of the remaining cross-Border roads closed during the Troubles will also be pursued over the period of the Plan.

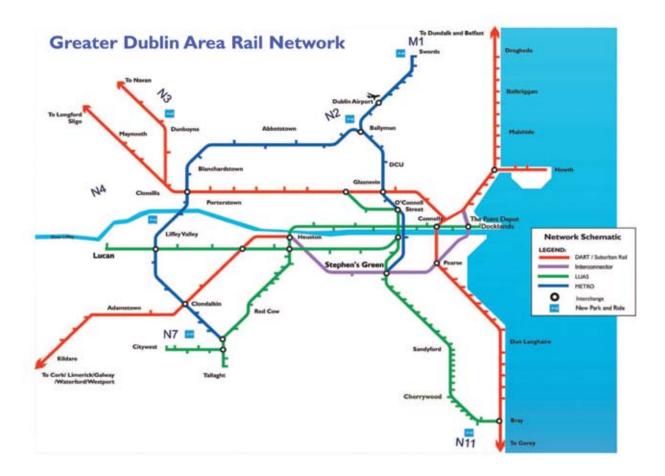
Dealing with public transport, the Plan says that just under €13 billion will be invested over the period. It adds that the NDP 2000-2006 saw the first concentrated investment programme in public transport and which has led to a significant increase in public transport capacity including enhanced DART and Rail capacity as well as the LUAS light rail system in Dublin. It has also funded the complete renewal of our national rail network and the upgrading and expansion of our bus fleets.

But it acknowledges that "a major further step-up in public transport investment" is required in this plan. Accordingly, a massive increase in public transport investment is the centerpiece of Transport 21 with the objective of promoting a switch from car usage to public transport. This is necessary to promote efficiency, quality of life, competitiveness and environmental sustainability.

The bulk of the public transport investment will be in the Greater Dublin Area (GDA). Projections show that there will be in the order of 300,000 more people living in the Dublin area by 2011. The Plan states: "Already the city is suffering from bad congestion at peak times. It is simply unsustainable environmentally and otherwise to rely on the car and the bus network alone to provide the answer."

What is required, it maintains, is a complete transformation in the public transport network in the GDA. Accordingly, over the period of Plan 2007-2013, the following projects will be advanced in line with the timetable in Transport 21:

- Completion of the Metro North line from city centre to Swords via Dublin Airport
- Phased development of the Metro West line
- Enhancement and extension of the LUAS network
- Expansion of the capacity of the suburban rail network through city-centre resignalling, quadrupling of track on the Kildare line and reopening of the Dublin to Navan rail link
- Commencement of the Heuston Docklands
 Interconnector and the electrification of section of the Dublin suburban rail network
- Significant expansion of the bus fleet and bus priority



- The introduction in the Plan of a fully integrated, customer-friendly, smart card ticketing system in the GDA, facilitating the use of different transport modes (bus, LUAS, DART, Irish Rail etc) in single journeys
- Construction of additional park-and-ride facilities
- The mainstreaming of accessibility across all modes of public transport, in line with the Department of Transport's Sectoral Plan under the Disability Act, 2006 and
- Development of enhanced cycling and walking facilities.

The NDP adds that in order to give more "effective, efficient, coherent and integrated transport in the Greater Dublin Area" legislation to establish a Dublin Transport Authority with overall responsibility for surface transport in the GDA is at an advanced stage.

Looking outside Greater Dublin, the NDP says the rest of the country also has a substantial need for upgrading of public transport infrastructure. The Plan will, therefore, also encompass:

A major focus on the provision of enhanced rail services, including either hourly/two hourly services on the principal intercity routes serviced by modern rolling stock

- The phased re-opening of the Western Rail Corridor from Ennis to Claremorris
- €90 million for the Rural Transport Initiative
- New commuter rail services in Cork and Galway
- Upgrading public transport services in provincial cities and in the regions, including additional buses, new bus priority measures and new park and ride sites.

Investment in public transport will also take account of the particular needs of rural and more isolated parts of the country. Over the period of the Plan, the Rural Transport Initiative (RTI) will be mainstreamed and ultimately expanded to areas where there remain unmet transport needs. Its funding will be doubled in 2007 and then increased steadily over the period of the Plan.

Public transport investment will also bring other benefits, including:

- Ensuring the accessibility of the public transport system to people with disabilities, including fully accessible city buses and enhancing the accessibility of bus and railway stations and
- Promoting sustainable transport solutions, including clean urban public transport modes, clean vehicle technologies and fuels, more fuel-efficient driving techniques and walking and cycling.



€1.5 BILLION FOR NATIONAL ROADS

Nine major road schemes with a combined length of over 100 kms will be completed this year under the National Roads Programme which will see a record spend of €1.53 billion in 2007.

n addition, work on 215 kms of news roads will commence this year while a further 343 kms will continue in construction. In total some 673 projects are being funded under this year's allocation by the Government which, according to Transport Minister, Mr Martin Cullen TD, represents the largest single annual investment in road infrastructure in the history of the State. It is being made under the Transport 21 initiative and means an average ongoing investment of over €125 million per month in Ireland's national roads.

The funds will allow the completion of work this year by the National Roads Authority (NRA) on nine schemes with a combined length of over 100 kms, including:

- The 15 km N2 Castleblaney Bypass
- The 9 km NI Border to Dundalk Road;
- The 23 km N11 Arklow-Gorey Bypass
- The N77 4 km Kilkenny Ring Road extension.

The funding will also allow the commencement of work by the NRA on seven schemes with a combined length of 215 kms. These include:

- The N3/M3 60 km Clonee to North of Kells project
- The M7/M8 40 km Portlaois to Cullahill/ Castletown Motorway
- The N9/M9 24 km Waterford to Knocktopher Motorway
- The N6 56 km Galway to Ballinasloe Dual Carriageway

Priority has been given to accelerating works to improve the M50: Phase 1 of the upgrade is already underway and Phases 2 and 3 will begin this year.

Thirteen projects will move forward to the Compulsory Purchase Order stage and these include:

- The N4 New Ross Bypass
- The N11 Enniscorthy Bypass

ROADSIDES

NEW RULES OF THE ROAD

How to cope with Luas trams on the streets of Dublin, penalty points and dealing with metric speed limits are just two of the changes introduced in a new edition of the Rules of the Road launched recently.

The 228-page publication has been edited and printed by the Road Safety Authority. It's 25 individual sections outline all aspects of road use, good driving practice and road safety. Rules for motorcyclists, cyclists and pedestrians are also included.

As a gesture towards our new communities, it is planned to also publish the latest Rules of the Road in Russian, Chinese, Mandarin and Polish as well as English and Irish. Copies are available from the Government Publications Office, Molesworth Street, Dublin and leading bookshops throughout the country, price €4. The new Rules can also be viewed on www.rsa.ie

ROADSIDES

ROADS IMPORTANT FOR TOURISM

Good roads and public transport are important to the tourism industry in Ireland and a major report has called for acceleration in the delivery of improvements in the road networks, in particular the Atlantic Corridor route.

The Tourism Development Strategy 2007-2013 launched recently by the Minister for Tourism, Mr John O'Donoghue TD, also makes the case for better public transport along with improved facilities at, and to, Dublin and the regional airports.

- The N4 Carrick-on-Shannon Bypass
- The N7 Newlands Cross Interchange
- The N26 Ballina to Bohola Scheme (Phase 2).

In addition, over €21 million is being allocated towards road safety measures, which include the line and signs programme, road junction improvement and traffic calming schemes. Funding will also continue to be provided for the extensive programme of engineering works run by the NRA with the aim of dealing with accident blackspots. Nearly 200 of these schemes are expected to be completed in 2007

Speaking about the €1.53 billion investment for national roads, Minister Cullen said: "This Government is committed to progressing projects that will enhance quality of life for people, connect communities and underpin our prosperity. The funding allocated for 2007 will allow for more new and better roads that will help road-users go about their daily lives in a more efficient way. Better roads also facilitate greater competitiveness. Business can do business in a more effective way".

Since 1997, almost 100 projects (over 650kms) have been completed, he said. The length of the motorway network has more than trebled in that time (from 70km in 1997 to more than 250km today) and the total combined length of motorways and dual carriageways has increased by more than 150 per cent.

Some of the major road building projects funded by that investment include:

- The almost full completion of the M1 motorway to the Border
- The completion of 50 per cent of the five major inter-urban routes to high quality dual carriageway/ motorway standard
- The Dublin Port Tunnel and the Jack Lynch Tunnel in Cork
- The continued development of the M50

The benefits of the record level of investment are evident throughout the country, according to the Minister. The elimination of longstanding bottlenecks in Kildare, Monasterevin, Cashel, Loughrea, Drogheda and elsewhere around the country has been achieved. This has delivered substantial journey time-savings and greater journey time certainty in these particular areas. The high quality network being put in place is contributing significantly to supporting our national competitiveness, job creation

and to the achievement of more balanced regional development.

Looking back at 2006, the first year of Transport 21, Minister Cullen said fourteen major road projects were completed and opened to traffic and a dozen more started construction - more than three times the number of starts than in the previous year. A number of projects opened ahead of schedule in 2006, including bypasses of:

- Ashbourne (opened four months ahead of time)
- Fermoy (eight months)
- Bundoran/Ballyshannon (three months)
- The N25 Kinsale Road Interchange (opened six months ahead of target)
- The N21 Castleisland/Abbeyfeale (three months).

In the early years of Transport 21, investment in the national road network will focus on the completion of the five major inter-urban (MIU) routes linking Dublin to Cork, Galway, Limerick, Waterford and the Border. Work is complete or underway on more than 70 per cent of these vital routes and they are very much on target for full completion by 2010, said the Minister adding that 2007 will see the pace of work on all the MIUs pick up with the final section of the M1 link to the Border completed before the end of the year.

Significantly, he said, the Portlaoise to Cullahill/Cashel section of the M7/M8 will begin this year and will join other major projects already in construction on the Dublin-Cork route such as the N8 Cullahill to Cashel and the N8 Cashel to Mitchelstown. This year will also see work begin on the 56km N6 Galway to Ballinasloe Bypass as well as the completion of the N6 Kinnegad to Kilbeggan Scheme.

Traffic congestion, said the Minister, was an unfortunate side effect of economic success. The National Roads Programme had consistently put in place measures to identify and address the worst traffic bottlenecks throughout the country but more remains to be done.

Priority has been given to accelerating works to upgrade the M50. Once complete significant benefits will include:

- Expand the capacity of the M50 to deal with 50% more traffic than at present
- Improve average peak hour speeds
- Reduce traffic congestion on the radial routes (N3, N4, N7) and
- Improve traffic flow on the whole of the Dublin road network.

ROADSIDES €600 MILLION M50 BUY-OUT



The Government's €600 million buy-out of the Westlink Bridge on the M50 is moving ahead. But while the current toll booths will eventually go, drivers will still have to pay tolls along this important route.

The Authority has already awarded the M50i Free-Flow Contract for barrier-free tolling to a consortium, MetEire Flow – comprising the CS and Sanet companies. Their task is to carry out the design, installation, operation and maintenance of roadside equipment and associated supporting systems for barrier-free tolling at a single point on the M50.

Target date for the inception of barrier-free tolling is 29th June 2008.

Now the NRA is seeking expressions of interest from Market Research and Marketing Services in connection with barrier-free tolling on the M50. In addition, the Authority may require advisory services in relation to interoperable electronic toll collection across the NRA's national tolled network and possibly other general marketing services.



LOCAL ROADS GET €600 MILLION

Restoration remains the primary focus as over €600 million is committed to fund regional and local roads.

ocal authorities around the country are to receive €607.5 million to fund non-national roads this year. This represents an increase of over €50 million on last year's allocation which topped the half billion euro mark for the first time ever.

Regional and local roads constitute 94 per cent of the overall network, carrying 60 per cent of all road traffic. As such, these routes play a key role in the economic life of the country, particularly in terms of local economic activity.

A major focus in this year's spending will again be on the Restoration Programme. The 2005 Pavement Condition Study and Review of Pavement Management Systems showed that there has been a very large growth in traffic volumes and the number of heavy goods vehicles on our roads over the last 10 years.

The overall conclusion of the 2005 study was that the existing Restoration Programme required re-focusing to increase the relative level of funding to counties that have the greatest identified pavement strengthening needs. That is necessary if counties having the highest proportion of deficient roads are to have their needs addressed in a reasonable timescale.

Announcing details of the grant allocations for the nonnational roads, Mr Dick Roche TD, Minister for the Environment, Heritage and Local Government, said he was continuing the process of re-focusing priority investment under the programme to areas of most need.

Almost €225 million is being set aside for the Restoration Improvement Programme, an increase of almost €20 million. This, he said, will allow for an increased allocation to every single County Council in 2007.

Restoration Maintenance grants are also being increased to \in 81 million this year, a rise of \in 6 million.

The Minister also announced grants for the provision of large schemes that make a significant contribution towards the National Spatial Strategy.

Mr Roche stated: "Non-national roads are strategically important – locally, regionally and nationally. They are a key component in our national infrastructure. As such, they play a crucial part in delivering the vision of the National Spatial Strategy for sustainable, more balanced development of our country."

More than €46 million in grants for New Strategic Non-National Roads Schemes will see 24 projects benefiting, including:

- The Waterford Airport Road
- The Moyross Access Road
- The Clonmore Link Road in Mullingar and
- The Western Distributor Road in Sligo town

The Minister said he was particularly pleased to allocate a grant of €500,000 to Limerick City Council for the design of the Moyross Access Road adding: "This proposed new road will bring significant benefit to Moyross by opening up the estate for social, community and economic development and I look forward to working with Limerick in advancing this work as quickly as possible."

Referring to the proposed new Road Safety Strategy for 2007 to 2011, the Minister announced that he was more than doubling the funds for the Low Cost Safety scheme of grants.

Under this scheme, grants are provided for improvements at locations that show possible accident contributory factors or an accident pattern that may respond to low cost road measures. In 2007, works will be carried out at over 300 locations.

A total of €30 million has been set aside this year for the Local Improvements Scheme. Under this scheme, grants are made available to County Councils for the carrying out of road works on private roads. Works carried out provide improved access for people in isolated and depopulated areas.

Other key aspects of the 2007 allocations are:

- Over €96 million for specific non-national road projects which promote employment and economic activity.
- Almost €34 million for projects which will assist housing, commercial and industrial development. Among the existing schemes which will benefit in 2007 are the Oranhill Distributor Road in Galway; the Naas Ring Road; Wicklow Town Relief and Port Access Road; the R158 Trim to Kilcock Road and the Corbally Link Road in Limerick.
- Discretionary Maintenance and Improvement Grants of €29.56 million and almost €25 million respectively to County Councils.
- A total sum of €16 million in Block Grants, as well as €17.2 million in Special Block Grants for Carriageway and Footpath Repairs, to City, Borough and Town Councils.
- Grants totalling €7 million to continue progress on the regional roads signposting programme, which commenced in 2003.
- €1.714 million for the Non-National Roads Training Programme.
- €2.215 million to Cork, Galway, Limerick and Waterford City Councils in Regional Traffic Management Grants.
- Almost €2m has also been set aside for the provision and improvement of footpaths in former Town Commissioner areas. This is a continuation of the new grant category introduced in 2005, and the 2007 allocation is double the initial 2006 allocation.

Total 2007 Non-National Road Grant Allocations

County Councils	2007 Grant Allocation €		
Carlow Co Council	7,432,150	Athy Town Council	287,000
Cavan Co Council	16,844,616	Ballina Town Council	287,000
Clare Co Council	20,142,783	Ballinasloe Town Council	287,000
Cork Co Council	58,016,882	Birr Town Council	287,000
Donegal Co Council	40,660,967	Bray Town Council	624,000
Dun Laoghaire/Rathdown Co Council	14,841,650	Buncrana Town Council	287,000
Fingal Co Council	7,119,239	Bundoran Town Council	204,000
Galway Co Council	31,509,556	Carlow Town Council	605,000
Kerry Co Council	22,281,800	Carrickmacross Town Council	204,000
Kildare Co Council	23,531,054	Carrick-On-Suir Town Council	287,000
Kilkenny Co Council	14,476,900	Cashel Town Council	204,000
Laois Co Council	12,188,682	Castlebar Town Council	287,000
Leitrim Co Council	11,869,150	Castleblayney Town Council	204,000
Limerick Co Council	17,574,205	Cavan Town Council	287,000
Longford Co Council	8,441,320	Ceannanus Mor Town Council	287,000
Louth Co Council	8,614,700	Clonakilty Town Council	204,000
Mayo Co Council	27,274,625	Clones Town Council	204,000
Meath Co Council	29,486,200	Cobh Town Council	287,000
Monaghan Co Council	15,099,650	Dundalk Town Council	624,000
North Tipperary Co Council	12,340,700	Dungarvan Town Council	287,000
Offaly Co Council	11,125,817	Ennis Town Council	605,000
Roscommon Co Council	17,197,750	Enniscorthy Town Council	287,000
Sligo Co Council	14,246,503	Fermoy Town Council	287,000
South Dublin Co Council	12,594,380	Killarney Town Council	287,000
South Tipperary Co Council	14,217,706	Kilrush Town Council	204,000
Waterford Co Council	15,701,983	Kinsale Town Council	204,000
Westmeath Co Council	15,892,060	Letterkenny Town Council	581,000
Wexford Co Council	16,877,850	Listowel Town Council	204,000
Wicklow Co Council	19,590,033	Longford Town Council	287,000
	2007 Grant	Macroom Town Council	204,000
City Councils	Allocation €	Mallow Town Council	287,000
Cork City Council	7,797,795	Midleton Town Council	287,000
Dublin City Council	14,727,000	Monaghan Town Council	287,000
Galway City Council	2,795,000	Naas Town Council	605,000
Limerick City Council	5,590,655	Navan Town Council	605,000
Waterford City Council	6,060,859	Nenagh Town Council	287,000
	2007 Grant	New Ross Town Council	287,000
Borough Councils	Allocation €	Skibbereen Town Council	204,000
Clonmel Borough Council	707,000	Templemore Town Council	204,000
Drogheda Borough Council	676,200	Thurles Town Council	287,000
Kilkenny Borough Council	625,000	Tipperary Town Council	287,000
Sligo Borough Council	3,565,000	Tralee Town Council	605,000
Wexford Borough Council	673,250	Trim Town Council	287,000
	0007 Cuant	Tullamore Town Council	287,000
Town Councils	2007 Grant Allocation €	Westport Town Council	287,000
Arklow Town Council	287,000	Wicklow Town Council	287,000
Athlone Town Council	581,000	Youghal Town Council	287,000

