

DELIVERING TRANSPORT IMPROVEMENTS

Sustainable Transport Measures Grants Report 2016



NTA Sustainable Transport Measures Grants

Outturn Report 2016

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Introduction

Providing solutions that will make sustainable transport more attractive to more people is at the heart of our mission at the National Transport Authority (NTA).

To support this mission, in 2016 we provided support under the Sustainable Transport Measures Grants programme by investing over €21m in 109 separate projects in the Greater Dublin Area. This brought to almost €150m, the total investment we have made across hundreds of projects since 2012.

Through partnership with local authorities and other state agencies, the NTA has delivered on projects that make sustainable transport a real option for more and more commuters. Among our 2016 projects are schemes that have made cycling safer, schemes that have made life easier for pedestrians and schemes that have made bus journeys faster and more reliable.

The projects include new bridges; improvements in bus infrastructure; new cycle corridors; junction improvements; pedestrian- and cyclist-friendly roundabouts; and city centre traffic management initiatives.

And this investment is delivering change.

National census figures published recently by the CSO indicate that between 2011 and 2016, the number of people using public transport to get to work has increased by 30,144 to 174,569. Over the same period, cycling to work showed the largest percentage increase of all means of transport, rising from 39,803 to 56,837, an increase of 42.8% over the five years.

Within Dublin, where this funding stream is focussed, the number of people coming into Dublin city centre between 7am and 10am by walking, cycling and public transport (excluding taxi) has increased from 60% to 65%. Over 131,800 people now choose to come into the city using public transport, bicycle, or on foot. That's up 20,775 in just five years.

There's certainly more to do and as additional funding becomes available, we look forward to identifying and supporting the key projects that we believe will encourage the further use of sustainable modes.

But NTA is pleased with the collaboration with our partner local authorities in making these changes happen on our roads and streets, and we applaud the travelling public who have chosen the new options and improvements to navigate the city in a smart and sustainable way.

Anne Graham

Background to Grant Programme:

As part of its remit to support the delivery of an integrated transport system, the Authority operates a Sustainable Transport Measures Grants (STMG) programme providing funding to local authorities, public transport bodies and other agencies for the implementation of various projects contributing to the Authority's remit within the Greater Dublin Area.

The STMG Programme aims to improve the transport offer for those choosing alternatives to the private car. The funding has become an important driver of change within the Greater Dublin Area. With the collaboration of the local authorities and other state agencies, and with support for the projects through public and stakeholder consultation, the programme is delivering significant infrastructural change, including:

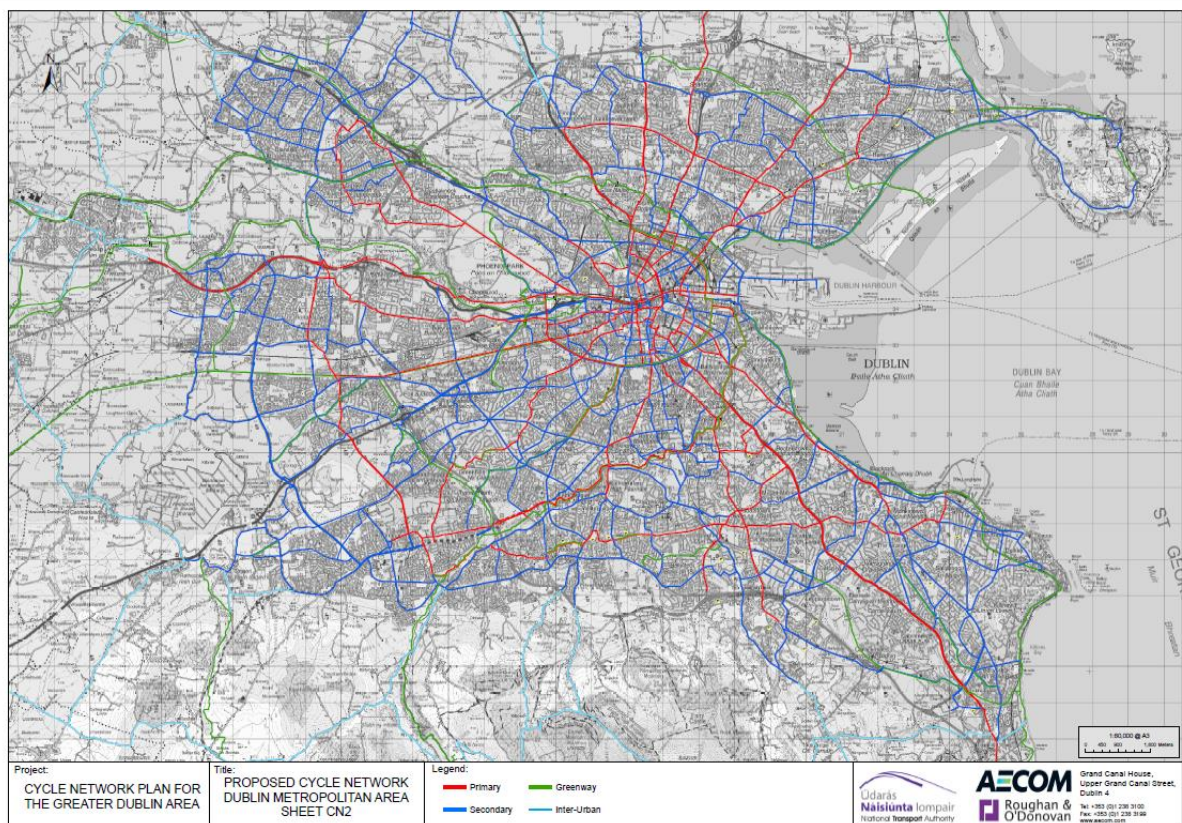
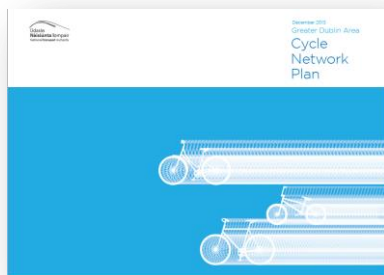
- Bridges;
- Bus infrastructure improvements;
- Cycle Corridors;
- Significant junction improvements;
- Pedestrian- and cyclist-friendly roundabouts; and
- City Centre Traffic Management changes.

The STMG programme continues to fund important local projects supporting pedestrian and cyclist permeability, safety, access to schools and public transport.

Cycle Network Projects

In April 2014, the Authority's Board approved the *Cycle Network Plan for the Greater Dublin Area*. This plan was developed with the seven GDA local authorities in order to provide a framework for investment in significant cycle infrastructure projects across the region, both within individual counties and across administrative boundaries.

The STMG Programme is now the primary source of funding for the delivery of priority routes within that cycle network.



In 2016, a number of regional strategic cycle routes were progressed by the Authority with the involvement of multiple local authorities. These included:

- *East Coast Trail (S2S Route) / Causeway to Wooden Bridge, Clontarf*
For a number of years the coastal cycle route on the north side of Dublin Bay has been in operation, with the exception of a section between the Causeway and the Wooden Bridge to Bull Island. This missing link required cyclists to return to the carriageway to continue their journey and was a barrier to risk-averse cyclists using the route. Construction of this link, funded jointly by the Authority and Irish Water (due to the installation of a major water main) commenced in 2015 and was substantially complete by the end of 2016.
- *East Coast Trail (S2S Route) Sandymount / Merrion to Blackrock Corridor Study*
In late 2014 the Authority appointed consultants to carry out an Options Report and Feasibility Study for two routes connecting Dun Laoghaire-Rathdown County to Dublin City along the coast. The Final Report was completed in late 2015.
In 2016 the Authority undertook non-statutory public consultation on the report, including specific consultation with key stakeholders and landowners, and information evenings for local residents and the general public.
- *Royal Canal Greenway*
This project is a key element of the Dublin-Galway National Cycle Route, running through Dublin City, Fingal County and Kildare County Council areas. Planning and design work was progressed in Dublin City Council on the key central sections (from Phibsboro / Glasnevin to Sherrif Street) and in Kildare in the Maynooth section towards the Fingal boundary.
- *Grand Canal Greenway*
While cycling provision on certain sections of the Grand Canal corridor had been enhanced in recent years, there remains a lack of continuity both within the Dublin City area and further west through South Dublin and Kildare. A route design was progressed to address these discontinuities. A spur from the Grand Canal, connecting Naas Town Centre to Millennium Park and Sallins railway Station was progressed through design in Kildare County Council in 2016.
- *Dodder Greenway*
The development of this greenway route presents a significant opportunity to enhance the cycling offer in the region, connecting the south Docklands in Dublin City, via Dun Laoghaire-Rathdown County Council at Milltown, to Tallaght in South Dublin and onwards to Bohernabreena. The route will provide increased leisure and recreation opportunities as well as cycling connections. In 2016, design option work was progressed in Dublin City Council to complement the designs completed in South Dublin County Council, to enable the completion of an Environmental Assessment of the entire route in Greater Dublin.

Key 2016 projects

Dublin City Council:

- Chapelizod Bypass – Kylemore Junction
- City Centre new pedestrian crossings
- Dublin Public Transport Interface Module (DPTIM) bus priority interventions
- On-Street Cycle Parking

Dun Laoghaire-Rathdown County Council:

- Rock Road Cycle Facilities Resurfacing
- Sallyglan Road Bus Facilities

Kildare County Council:

- North-South Corridor, Maynooth (Straffan Road) Cycle Facilities Upgrade

Meath County Council:

- Bus Stops, Colpe Road, Drogheda

South Dublin County Council:

- Knocklyon Road-Scholarstown Road-Idrone Avenue Junction
- Tallaght to Templeogue Cycle route

Dublin City Council – Chapelizod Bypass Outbound Bus Priority Measures €2,210,772

The R148 is one of the busiest bus corridors in the country, carrying not only the Lucan Quality Bus Corridor bus services, as well as regional buses and national coach traffic, especially on the Dublin –Galway route. In the evening peak, there is approximately one bus every 30 seconds.

A previous study into the provision of bus and cycle priority along the R148 Chapelizod Bypass concluded that bus priority improvement measures would help mitigate delays to outbound buses along the bypass during evening peak hours.



The key issues identified in the study included:

- Discontinuous bus lanes on the R148 at three locations;
- Delays to buses outbound (from both Chapelizod Bypass Mainline Services and Kylemore Road (Lucan QBC) at the merge with the on-ramp from Kylemore Road;
- Narrow existing bus lane widths (less than 3.0m) restricting the speed at which buses can travel;
- Safety concerns arising from inadequate sightlines; and
- Significant delays to buses (300% increase in journey time) and to general traffic (400% increase in journey time) during peak hours, particularly on the outbound side at the merge with the Kylemore Road on-ramp.

A scheme was developed to provide continuous 3.25m width bus lanes in both directions on the bypass for the full 4.5km length of the scheme from Memorial Road to west of

Kennelsfort Road. This work also involved extensive re-surfacing, to provide a significant future service life for the upgraded route. In addition, full bus protection was provided for the Lucan QBC services approaching the merge from Kylemore Road.

An innovative junction was devised and implemented at the Kylemore Road junction, which regulates the alternative use of the bus lane between the outbound Chapelizod Bypass and the Kylemore Road on-ramp, while facilitating free flow unsignalised traffic lanes through the junction on the Chapelizod Bypass.



Signals regulating competing flows at the R148 on-ramp from Kylemore Road

This unique design has yielded significant time savings for the multitude of outbound buses and coaches every evening leaving the city from both sides of the merge.



Dublin City Council – Programme of new pedestrian crossings

€161,965

In 2015, Dublin City Council undertook a public consultation exercise on the Draft *Dublin City Centre Transport Study*, which was prepared by the Council in collaboration with the Authority. Following its publication in early 2016, the Council submitted a programme of small projects to the Authority for funding, including a number of pedestrian crossings at junctions around the city that had high volumes of pedestrians but sub-optimal facilities.

In many cases the primary desire line for pedestrians had no crossing, requiring the pedestrians to deviate from their preferred route to use other crossings, often with significant delay to their journeys, or to cross without facilities on their desire line.

The Council implemented the schemes cognisant that their delivery may impact on city centre vehicular capacity, but intent on re-balancing the city centre locations in favour of more sustainable transport modes.

Locations are featured below:

Leonard's Corner / South Circular Road



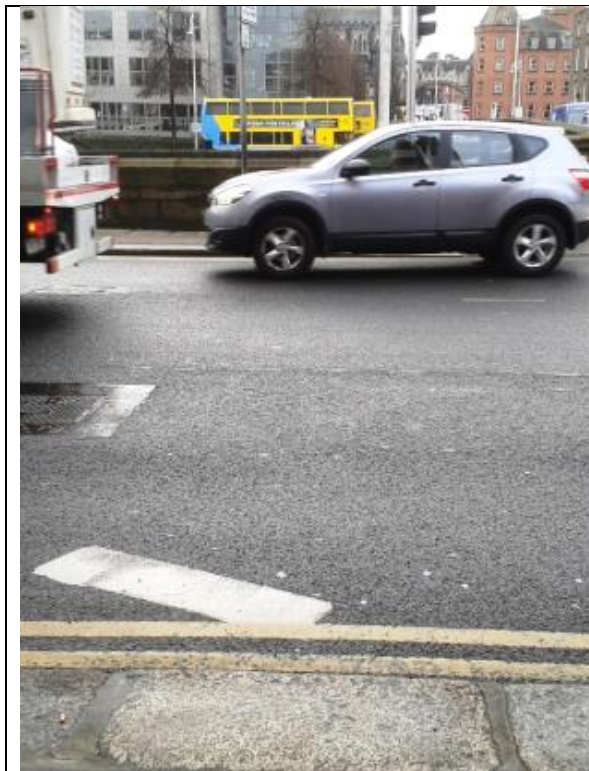
South Circular Road-Clanbrassil Street junction, facing south (towards the Grand Canal), during the all-pedestrian stage

Merrion Square / Clare Street



Crossing between Merrion Street Lower (the Oscar Wilde House) and Merrion Square West, serving local bus stops, access to/from Pearse Station and access to Merrion Square park.

O'Donovan Rossa Bridge / Ormond Quay Upper



Ormond Quay Upper, showing hostile environment for pedestrians before the installation of the crossing

Burgh Quay / Tara Street



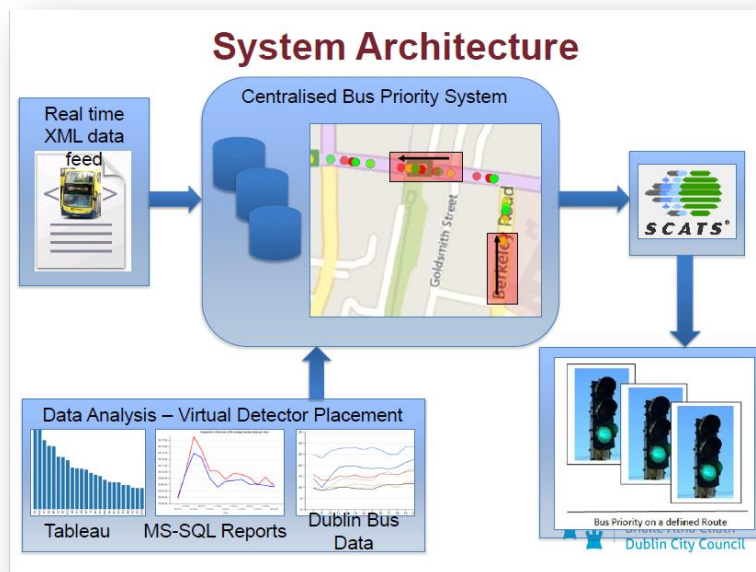
New crossing at Burgh Quay onto Butt Bridge, with Tara Street Station in the background

Dublin City Council – Dublin Public Transport Interface Module (DPTIM)

€1,272,223

In order to improve bus performance of the main city arteries, the Authority has funded a specialist team in Dublin City Council to identify locations of significant delay and propose interventions to address the delay. The project team reports to a steering committee comprising Dublin Bus, the Council and the Authority.

The team use technology communicating between the Dublin Bus fleet and the City's SCATS system to analyse delay points, as well as deploy interventions.



In addition to these signal changes, minor civil works were constructed at key locations where they were deemed necessary, including flexible bollards to protect bus lanes from encroachment by general traffic, extending bus lanes up to stop lines and the introduction of yellow boxes to assist buses leaving bus stops.

A programme of post-project monitoring commenced following the completion of the works to assess the efficacy of the measures. This monitoring has recorded considerable time savings and increases in service reliability along each corridor.

The team have delivered significant savings in recent years across a variety of corridors. In 2016, these corridors included:

- Rathfarmham
- Rathmines
- Blanchardstown QBC
- Swords QBC
- Malahide QBC
- Howth QBC

An example of the type of work undertaken is presented below:

Case Study: South Richmond Street (Inbound)

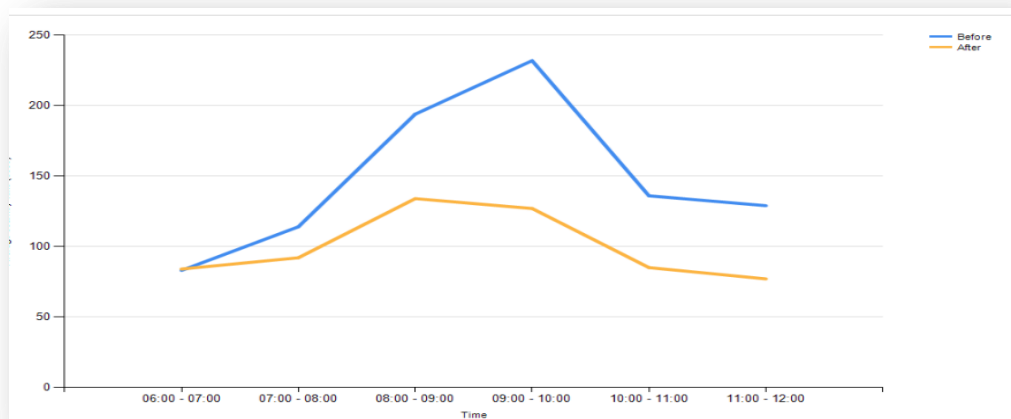


The

South Richmond Street, showing the re-positioned inbound bus lane on right hand side

Richmond Street South was identified as a significant delay point for a significant number of routes. The swapping of the bus lane on Richmond Street from the outbound side to the inbound side in 2016 reduced the bus journey times in this area by approximate 40% during AM peak. (Nearly two minutes was shaved off inbound journey times between 9am and 10am).

The graph below shows the “before” (blue) and “after” (yellow) journey times comparing the week of 23rd January 2017 with a similar week in January 2016.



Time Interval	Before		After		Comparison % Difference
	Total No of Buses	Avg Journey Time	Total No of Buses	Avg Journey Time	
06:00 - 07:00	26	83	32	84	1.20
07:00 - 08:00	130	114	113	92	-19.30
08:00 - 09:00	229	194	207	134	-30.93
09:00 - 10:00	245	232	199	127	-45.26
10:00 - 11:00	131	136	105	85	-37.50
11:00 - 12:00	115	129	107	77	-40.31

Dublin City Council – On Street Cycle Parking €197,372

As the level of cycling in the Greater Dublin Area has increased consistently for over ten years, the demand for cycle parking in Dublin City has also grown significantly. However, opportunities to install new cycle parking on existing footpaths are limited or undesirable.

In 2016 the Council introduced small clusters of cycle parking on build-outs at destinations such as shops and cafes in local neighbourhoods.



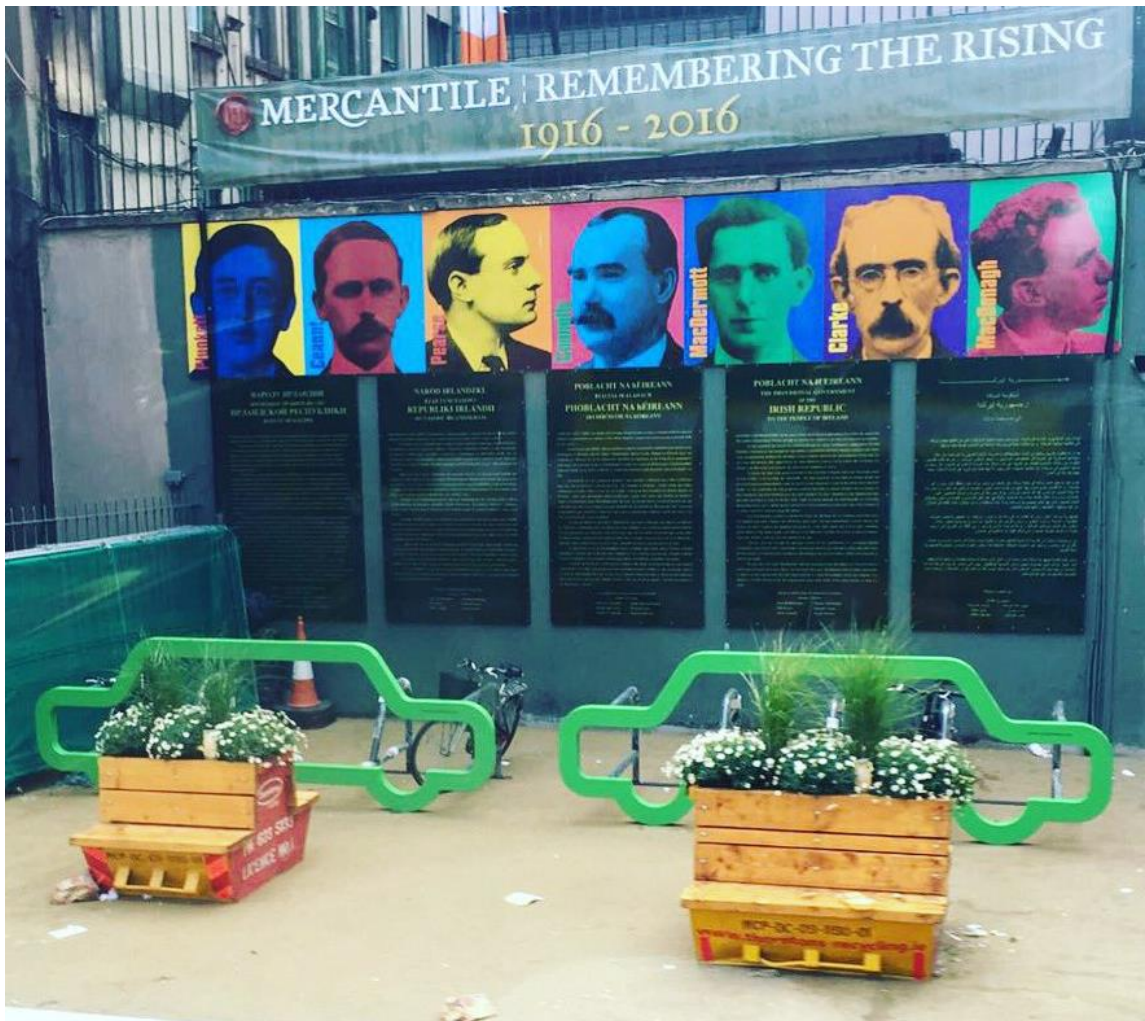
Cycle parking at local neighbourhood café near Griffith College on South Circular Road

In the city centre, cycle parking was installed on carriageways rather than on footpaths. In many cases this required the removal of on-street car parking spaces.

The Council also introduced 'bike car ports', (cycle parking racks with a frame resembling the outline of a car designed to occupy a single car parking space). In certain instances, these were used on a trial basis to assess the demand for cycle parking before a more permanent solution was constructed. Elsewhere, they are the preferred option for cycle parking provision if future land use is uncertain or subject to change.



On-carriageway cycle parking in Dublin city centre in former car parking spaces



'Car bike ports' on South Great George's Street

Dun Laoghaire-Rathdown County Council – Rock Road Cycle Facilities Resurfacing €193,847

The Rock Road runs between Blackrock village and Booterstown/Merrion Gates, and includes advisory cycle lanes and bus lanes along the route from the Dublin City-Dun Laoghaire Rathdown County boundary at Trimleston Avenue south to Blackrock.

The surface of the existing outbound cycle lane and bus lane had serious defects at a number of locations to the extent that they represented a risk to cyclists and detracted from the ride quality for bus passengers, and required urgent attention.

Dun Laoghaire-Rathdown County Council applied to the Authority for funding to reconstruct and resurface the road and to upgrade drainage locally to improve the ride quality and safety for cyclists.



Reconstructed bus Lane and cycle lane, Rock Road

The construction was carried out in Q3 of 2016 and was substantially complete by the time second- and third-level students were returning to school and college after the summer holidays.

Dun Laoghaire-Rathdown County Council – Sallyglan Road Bus Facilities €116,566

This project represents an example of the integrated capacity for public transport services revision and infrastructure delivery within the National Transport Authority.

With the agreement of the National Transport Authority and following a public consultation process, Dublin Bus amended the no. 7 bus in November 2016. This service operates between Loughlinstown/ Cherrywood and Dublin City Centre. The Authority sanctioned additional direct bus connections through Blackrock and Thomastown / Sallynoggin, and terminating at the new Authority-funded interchange at the Bride's Glen Luas stop in Cherrywood.

To support this amendment, the Authority also funded a number of infrastructural interventions on Sallyglan Road. These included six new bus stops at pedestrian crossings to ensure that the severance effect of the road was minimised for both bus passengers and residents of the estates on either side of the road. This construction work was overseen by Du Laoghaire Rathdown County Council.



The route revisions were implemented in November 2016 when the works were complete, and have resulted in reduced average journey times and increased reliability of the service.

**Kildare County Council – Cycle Facilities, North-South Corridor (Straffan Road), Maynooth
€1,207,794**

Much of the population of Maynooth, including a high proportion of the local third-level students, live in the residential areas either side of Straffan Road. The road is therefore a key artery in the town's transport network, linking these areas to the M4 motorway to the south and, to the north, to the town centre, the university, the Royal Canal and the railway station, which is one of the busiest stations in the Greater Dublin Area.

The Authority provided funding to Kildare County Council to enhance provision for sustainable transport modes along this key north-south corridor. The section of the route delivered in 2016 constitutes the main section of the overall north south corridor scheme.



This project delivered a refurbished high quality cycle route, enhanced pedestrian infrastructure, junction modifications, a new road surface and bus stop facilities in line with the Authority's Design Guidance.

Works carried out included:

- One new toucan crossing;
- One renewed signalised junction;
- 1.1km of new footpath;
- 1.1km of new cycle track (off road);
- One Bus turning circle (layby);
- Upgrade 2 bus stops (including provision of a new bus shelter);
- One cycle counter to evaluate performance of the project; and
- Narrowing of traffic lanes for a calmer traffic environment.

Meath County Council – Bus Stops, Colpe Road, Drogheda
€53,235

Colpe Road, on the outskirts of Drogheda, is a busy road for traffic and public transport movements. A safety issue was identified with the location of a bus stop on the northern side of the road, which was blocking residential entrances and compromising sight lines. Meath County Council identified a new location for this bus stop and the Authority agreed to fund the costs of its relocation.

The scope of the scheme included improved waiting facilities for bus passengers, with related improvements for buses, passing traffic and movements at a junction nearby, as well as additional bus set-down measures on the southern side of the road.



South Dublin County Council - Knocklyon Road-Scholarstown Road-Idrone Avenue Junction €464,754 (2016 outturn)

South Dublin County Council delivered a major upgrade to the complex junction of Knocklyon Road / Scholarstown Road / Idrone Avenue in 2016. The junction upgrade is part of the delivery of the “SO5” orbital cycle route in the *GDA Cycle Network Plan*, connecting Tallaght to Ballyboden to Dundrum.

The prime focus for this particular scheme was the re-opening of St Colmcille's Primary School on Idrone Avenue. The state-of-the-art school is the largest primary school in Ireland, and serves 1,600 pupils and employs 80 teachers, 23 special needs assistants and 11 ancillary staff. St Colmcille's Primary School has been actively involved with Green Schools Travel in developing sustainable travel initiatives.



The junction enables pedestrians, cyclists and mobility-impaired persons to negotiate the junction down to the school.

The work was completed during the summer of 2016, while the school was closed.

South Dublin County Council - Tallaght to M50 (Templeogue) Green Route €5,777,588

In 2016 South Dublin County Council, in conjunction with the Authority, completed the construction of the Tallaght to M50 (Templeogue) Green Route. This scheme, which was proposed in the *Greater Dublin Area Cycle Network Plan* (NTA, 2013), runs along the Old Dublin Road in Tallaght to the M50 cycle overpass at Junction 11.

The scheme, which is almost 2 km in length, provides not only new and improved sustainable transport measures, including segregated cycle facilities and new bus stops, but also significant urban realm improvements.

It offers a safe and attractive travel option by providing a dedicated cycle facility to accommodate all levels of cycling including individuals, families, commuters, tourists and those who are most risk-averse. This scheme was designed and constructed in accordance with the details and recommendations set out in the National Cycle Manual.

Scheme details:

- Four significant junction upgrades
- Eight priority junction improvements prioritising vulnerable road users
- A bespoke, cycle-friendly roundabout
- New and upgraded footpaths linking previously severed communities;
- New and upgraded dedicated cycle facilities;
- Improved toucan and pedestrian crossings; and
- A range of drainage, public lighting and utility upgrades.



Bus passengers at new 'island' bus stop, with cycle track by-pass

In addition to the public realm improvements, the works also include:

- Right-turn jug pockets and cycle signals to promote and encourage safe cycling along the route;
- Urban and environmental improvements including new energy efficient public lighting systems, passive security and social inclusion measures, sustainable urban drainage measures, intelligent transport system, pavement and footpath upgrades and future proofing of underground ducting and utilities; and
- Landscaping measures and street furniture improvements including cycle parking.



Right-turn jug pocket and Toucan crossing



Segregated cycle track, new footpath and 'island' bus stop



Cycle-friendly roundabout with raised zebra crossing and shared pedestrian-cyclist facilities

Financial Outturn:

2016 funding envelope

The Authority provided funding of **€21.22M** in 2016 to the various projects in the STMG programme.

This compares with project funding of €26.02M in 2015 and €30.53M in 2014. (The reduced funding in 2016 was necessitated by limits within the overall Capital Investment Framework 2012-2016, coupled with financial imperatives associated with the delivery of LUAS Cross City).

The STMG programme has supported 109 projects in 2016, compared with 120 in 2015, 201 in 2014 and 279 in 2013. The average annual drawdown per project in 2016 was €194,679.

Contractual commitments 2016

The 2016 STMG funding programme was part of the National Capital Investment Framework 2012-2016. The multi-annual funding within that framework gave the Authority scope to commit to funding larger projects over a number of years.

However, due to uncertainty around the funding for the STMG programme in 2017, project allocations were restricted in 2016 to facilitate a potential termination of funding at year end, should funding for the 2017 STMG programme fail to materialise.

In 2016, as far as possible, projects were restricted to discrete phases (design only, construction only, etc.), in order to concentrate limited funding into 2016 alone, and limit the extent of 2017 carryover or contractual commitments. (Funding for 2017 onwards was ultimately indicated to the Authority in Q4 2016).

Breakdown by scheme type

The Authority has divided its Sustainable Transport Measures Grants into five broad sub-programmes. These are:

1. Cycling/Walking Sub-programme, supporting physical improvements to tackle particular barriers to walking and cycling and to improve the walking and cycling environment, with particular emphasis on access to town centres, public transport nodes and education; in particular, this programme supports delivery of the Authority's *GDA Cycle Network Plan* (2013);
2. Bus Network Sub-programme, targeted at providing bus journey time savings, improvements to bus reliability throughout the whole bus network and passenger information/facilities;

3. Traffic Management Sub-programme, targeted at appropriate schemes to improve the effectiveness of traffic movement in balance with other modes of transport;
4. Safety Sub-programme, aimed at providing a safe travel environment for all road users, especially more vulnerable road users (pedestrians and cyclists); and
5. Other Projects Sub-programme (signage schemes, traffic studies, Intelligent Transport Systems, Goods-focused projects, etc.).

Notes:

- Walking and Cycling projects continued to attract the largest share of the overall funding allocation. In 2016 this rose to over 80% of the total drawdown under the programme.
- While the percentage for dedicated Safety schemes is comparatively low, it should be noted that the Principles of Sustainable Safety inform the design of all schemes across all sub-programmes.
- Under a separate funding stream, the Authority has commissioned design work on the combined Core Bus Network, to assemble preliminary designs for physical upgrades to each of the main bus corridors identified in the *GDA Transport Strategy*. Accordingly, STMG funding for bus measures was 9.4% of total investment only in 2016.

Total	Bus	Walking / Cycling	Traffic Management	Safety	Other
€21.22M	€2.00M	€17.57M	€1.08M	€0.30M	€0.27M
100%	9.41%	82.82%	5.07%	1.4%	1.3%

Table 1 Financial Outturn by scheme type **2016**

Financial Outturn by Scheme Type 2016 (€21.22M)

■ Bus ■ Walking / Cycling ■ Other ■ Traffic Management ■ Safety

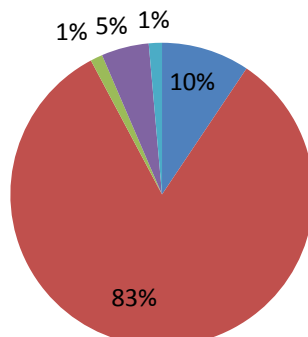


Figure 1: Financial outturn by scheme type 2016

Tables 1a, 1b, and 1c below provide comparative information for the three preceding years:

Total	Bus	Walking / Cycling	Traffic Management	Safety	Other
€26.02M	€3.76M	€17.7M	€3.12M	€0.67M	€0.77M
100%	14.47%	68.05%	11.98%	2.57%	2.95%

Table 2a Financial Outturn by scheme type **2015**

Total	Bus	Walking / Cycling	Traffic Management	Safety	Other
€30.53M	€6.7M	€15.69M	€6.91M	€0.63M	€0.6M
100%	21.94%	51.39%	22.63%	2.06%	1.97%

Table 3b Financial Outturn by scheme type **2014**

Total	Bus	Walking / Cycling	Traffic Management	Safety	Other
€32.72M	€5.04M	€17.49M	€8.79M	€0.1M	€1.3M
100%	15.4%	53.5%	26.9%	0.3%	4.0%

Table 4c Financial Outturn by scheme type **2013**

Figure 3 below provides comparative information for the period 2013 to 2016, reflecting the overall financial restrictions within the STMG programme overall (reflected in diminishing overall expenditure), and the profile of expenditure across the five sub-programmes, namely Safety (SAF), Traffic Management (TM), Other (OTH), Walking / Cycling (W/C) and Bus (BUS) :

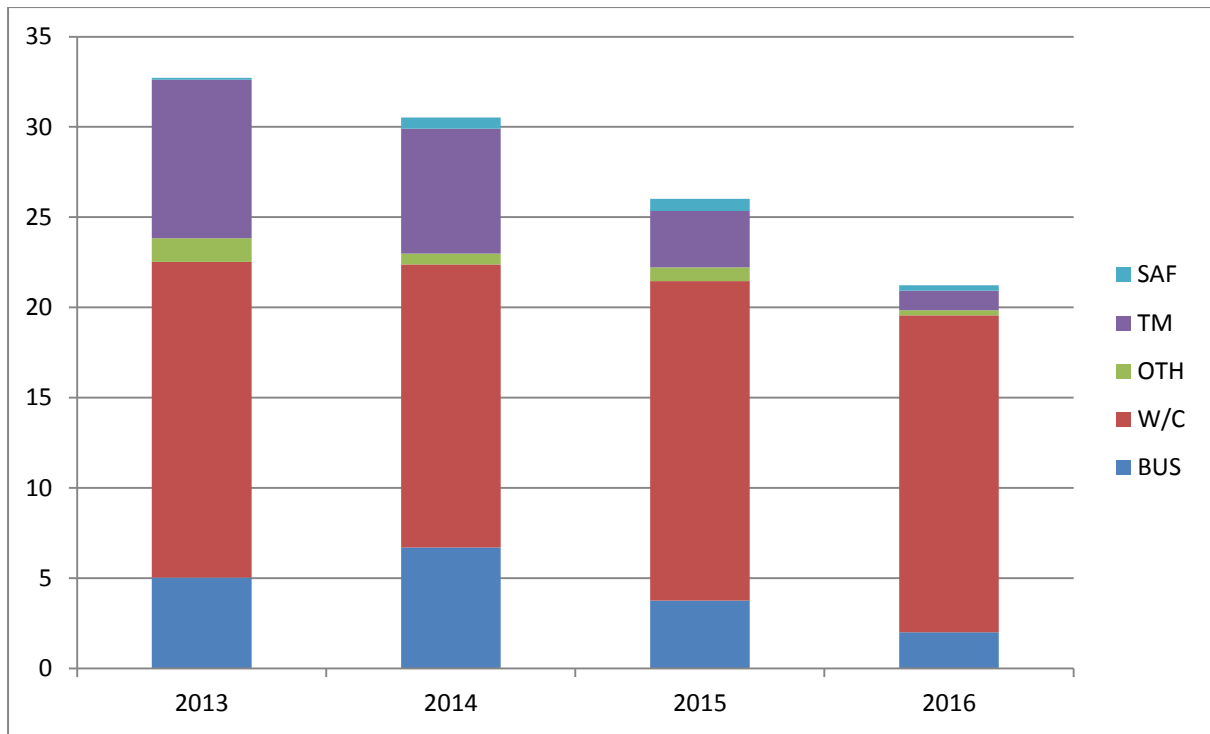


Figure 3: Comparison from 2013 to 2016

Breakdown by scale of project

The Project Management Guidelines (see below) identify project management requirements commensurate with the scale of the overall project cost, divided into three categories as follows:

- projects under €500,000;
- projects between €500,000 and €5 million; and
- projects between €5 million and €20 million.

Project Overall Cost	Under €500,000	between €0.5 million and €5 million	over €5 million
No. of projects	50	51	8

Table 2 2016 Breakdown by scale of project finance

The profile of project scale above facilitates a robust balance at programme level between the delivery of larger projects (which have more onerous administrative, planning and financial management requirements, but with strategic benefits to the region) and the more immediate impact of smaller schemes, which are generally more straightforward to deliver, and which bring sustainable benefits at a local level.

Breakdown by County

The funding is concentrated within the urban areas of the GDA, where there is greater opportunity to provide effective transport alternatives to the population. Furthermore, the projects benefit greater numbers of people compared with less-populated areas. Over 46% of the total was drawn down in Dublin City, almost 36% in the rest of County Dublin, with the remaining 18% spent in the three outer counties. The funding levels generally reflect the population and employment distribution within the Greater Dublin Area.

The significant investment in Dublin City Council schemes benefits both the local residents as well as commuters travelling into the city from neighbouring Local Authorities.

The breakdown of outturn by county is shown in the table below.

County	Dublin City Council (DCC)	Dun Laoghaire Rathdown County Council (DLRCC)	Fingal County Council (FCC)	Kildare County Council (KCC)	Meath County Council (MCC)	South Dublin County Council (SDCC)	Wicklow County Council (WCC)	Campus
Financial Outturn	€9.87M	€1.68M	€0.14M	€0.98M	€0.79M	€5.81M	€1.87M	€0.08M
100%	46.53%	7.91%	0.69%	4.61%	3.72%	27.36%	8.80%	0.37%

Table 3 2016 Financial Outturn breakdown by County

Financial Outturn by Agency 2016

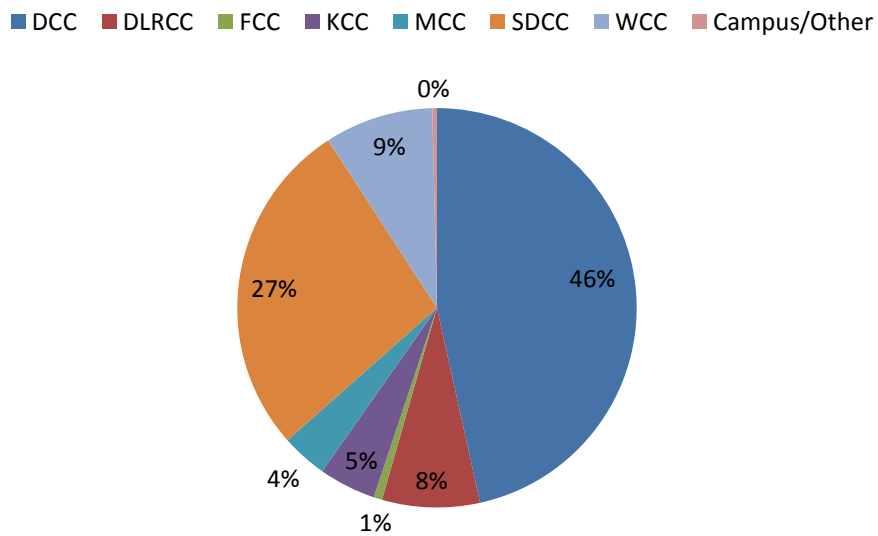


Figure 4: Financial outturn by agency 2016

Financial Outturn by Agency 2015

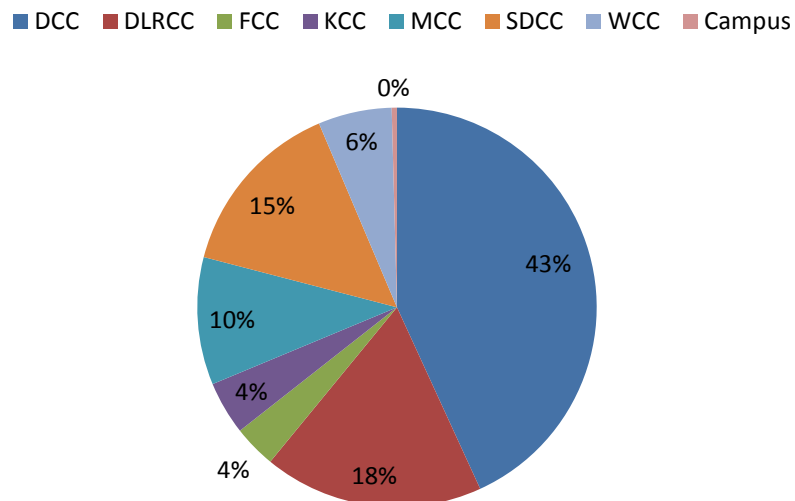


Figure 5: Financial outturn by agency 2015

Authority Administration:

5 Year Investment Frameworks

Multi-annual funding under the Government Investment Frameworks has provided a more coherent basis on which to plan and implement projects. In 2012 the Authority produced five-year investment frameworks with the Greater Dublin Area Local Authorities. These frameworks have informed the selection of projects to be funded within a particular year, under the STMG programme.

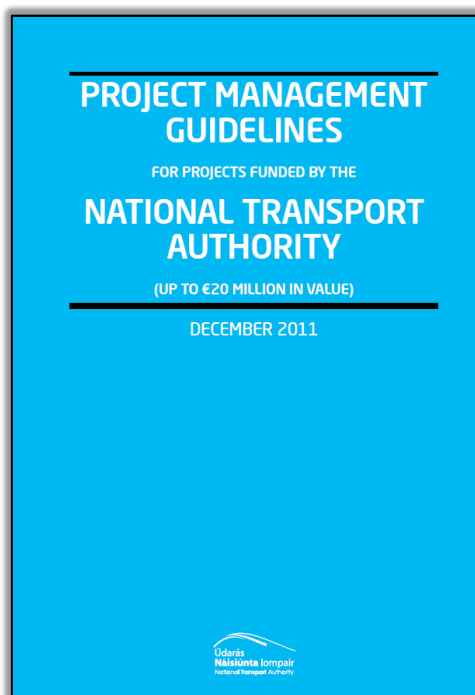
Project Reporting System (PRS)

A Project Reporting System (PRS), which was implemented in the first part of 2012, continues to provide a dependable system for inter-agency payments to be claimed, reviewed and processed online, and provides management tools to oversee project expenditure progress.

The PRS processed all Authority payments for the 2016 funding year. This system streamlined the administration of the grants to the benefit of both those claiming funding and to the Authority itself.

Project Management Guidelines

In December 2011, the Authority introduced Project Management Guidelines for projects funded by the Authority. These Guidelines provide a framework for, and a phased approach to, the development, management and delivery of transport projects of all types funded by the National Transport Authority up to a capital value of €20 million.



The Guidelines have helped to achieve an appropriate consistency of approach across projects undertaken by agencies in receipt of grants, and to provide the Authority with the degree of transparency and certainty that is appropriate for a Sanctioning Authority accountable for decisions involving agencies' use of public funds.

In addition, they allow for an appropriate level of reporting commensurate with risk and cost, as different procedures apply for projects less than €0.5m in value, for projects between €0.5m and €5m, and for projects between €5m and €20m.

Audit 2016

During 2016, the STMG programme was audited by the external auditors appointed to conduct internal audits on behalf of the Board of the Authority. The report findings included *inter alia*:

- That a sufficient audit trail exists;
- That funds claimed by recipients had been properly expended; and
- That the Authority's procedures provide reasonable assurance with regard to the authorisation and monitoring systems for grant claims.

Appendix A

2016 Programme Metrics Summary

	Footpath (m)	Shared footpath- cycle track (m)	Greenway (m)	Cycle lane/track (m)	Bus Lane (m)	Traffic Calming (m)	Bus Stop (no.)	Junction Treated (no.)	Roundabout (no.)	Cycle Parking (no. of racks)	Isolated crossing (pedestrian/ t oucan) (no.)	Bridge (no.)
Dublin City Council								2		166	8	
Dun Laoghaire Rathdown County Council	65	72		544	544		7					
Kildare County Council	2140			1000			2	5				
Meath County Council	90						2	1				
South Dublin County Council	4228	175	150	3555	60	1700	8	16	1		7	
Wicklow County Council	718					40	1	3			5	1
University College Dublin										100		
Totals	7241	247	150	5099	604	1740	20	27	1	266	20	1

Additional relevant metrics:

Dublin City Council:

- Cycle logo markings (city wide)
- 5 No. Cycle Parking Racks ('Car Bike Ports')

Dun Laoghaire-Rathdown County Council:

- 3 No. bus-friendly ramps

South Dublin County Council:

- 9 No. traffic calming ramps

Wicklow County Council:

- 1 No. raised table

Appendix C

Full List of Projects

Abbreviation	Agency
DCC	Dublin City Council
DCU	Dublin City University
DLRCC	Dun Laoghaire Rathdown County Council
FCC	Fingal County Council
KCC	Kildare County Council
MCC	Meath County Council
SDCC	South Dublin County Council
SJH	St James' Hospital
UCD	University College Dublin
WCC	Wicklow County Council

Agency	Project Name	2016 Outturn (€)
DCC	Royal Canal Cycle Route (Phase 2)	421,509
	Newcomen Bridge Cycle Scheme	546,997
	Royal Canal Cycle Route Phase 3 (North Strand Road to Phibsborough Road)	72,064
	Liffey Cycle Route	13,038
	S2S Pedestrian / Cycle Scheme (Clontarf)	3,893,902
	The Point Junction Improvement Scheme	- 1,029
	Swords Road QBC (Cat and Cage) Improvement Scheme	302,820
	Grand Canal Cycle Route	237,192
	Heuston to Chapelizod Greenway	33,073
	Thomas Street / James Street	87,988
	Fairview to Amiens Street Cycle Route	119,097
	Dodder Cycle Route	138,037
	City Centre High Density Cycle Parking Strategy	23,409
	St. Stephen's Green Traffic Management	86,492
	AVL Bus Priority Team Salaries & IT	226,523
	Royal Canal (Phibsborough to Ashtown)	22,556
	Cycle Parking	98,139
	MID/Pedestrian Improvements - Winetavern Street at Christchurch (in front of The Arch)	16,327
	Chapelizod By Pass Bus Lane Scheme	910,020
	Custom House Quay Contra Flow Bus Lane	3,606
	Clonskeagh to City Centre Cycle route	220,662
	Safety Improvements to Grand Canal Cycle Scheme (Grand Canal St. to Portobello)	66,813
	South Campshires	680,919
	DPTIM Civil Interventions	66,509
	Fibre Optic Connection to Garda Control Centre	211,530
	Lombard Street Contraflow Cycle Scheme	755
	Cycle Safety Improvements -Toucan Crossings	690,751
	East Link Bridge pedestrian and Cyclist Facilities - Feasibility Study	90,027
	City Centre Pedestrian Crossing Facilities	161,965
	City Centre Study Proposals - Initial Schemes	29,659
	Junction Changes related to City Centre Proposals	3,567
	Luas Cross City- Associated Traffic Changes	20,623
	College Green Plaza Development	29,771
	O'Connell Street /Cathal Brugha Street Taxi Rank	83,145
	O'Connell Bridge - Roof Slab to Western Sub-Way	235,562
	DCC TOTAL	9,844,018
DCU	DCU Cycle Parking	44,592
	DCU Permeability between DCU campus elements	18,696
	DCU TOTAL	63,288

DLRCC	Seapoint Avenue Traffic Management	8,216
	Wyattville Road	209,076
	Frascati Road, Blackrock	189,261
	N11-Johnstown Road Junction improvements	617,776
	N11 Bus and Cycle Corridor Major works -Stillorgan Park Road to Brewery Road	27,446
	Sandyford to City Centre Cycle Scheme (Sandyford to Clonskeagh)	113,526
	N11 Cycle Facilities Upgrade	53,490
	Cherrywood Business Park - Bus Interchange at Bride's Glen	44,948
	Sally Glen Bus Corridor improvements	116,566
	New Pedestrian and Cycle entrance to Belfield on N11 at NovaUCD	4,108
	Bus Stop Infrastructure Works	60,444
	Rock Road Resurfacing Works	193,847
	Cycle Parking Development	22,951
	Upper Churchtown Road - Taney Road - Dundrum Road junction review	17,635
	DLRCC TOTAL	1,679,290
FCC	Broadmeadow Estuary Cycle & Pedestrian Bridge	130,000
	S2S Extension Sutton to Malahide	7,547
	Royal Canal Cycle Route (12th Lock-KCC) (CN2) inc Deep Sinking Coolmine	7,979
	FCC TOTAL	145,526
KCC	Development of Bus Hub, Main Street, Naas	50,000
	North South Corridor Scheme - Maynooth (inc Footbridge)	552,394
	GDA Cycle Network Design in Naas - completion of design contracts for three routes	81,754
	Celbridge Road – Maynooth	327
	Footpath Construction - Carlow Road Athy	90,682
	Footpath Construction- Naas Road	67,851
	Footpath Construction- Cadamstown	44,521
	Footpath Construction- Brownstown	91,180
	KCC TOTAL	978,709
MCC	Navan: Cantilevered bridge provision for cyclists and pedestrians	92,314
	Laytown Park and Ride	14,250
	Kells: Pedestrian and cycle Link from Gardenrath, to Kells Swimming pool, 4 schools and R147	3,962
	Ashbourne: Main Street Refurbishment Scheme	90,000

	GDA Cycle Network Design within Meath towns, Scheme 1 - Proudstown Road to Trim Road - Navan	64,490
	GDA Cycle Network Design within Meath towns, Scheme 2 -Fairgreen to Johnstown - Navan	37,130
	GDA Cycle Network Design within Meath towns, Scheme 3 - Ratoath Town Network	86,747
	Development of - Kennedy Place	79,685
	Navan Town Centre Traffic Management	86,467
	Trim Safety Footpath	202
	Dunboyne Cycle Network	20,631
	School safety scheme, Cockhill Road, Stamullen	4,000
	Ashbourne Cycle Network	9,113
	Navan Town Centre Traffic Management - Revised Roundabout at Circular Rd/Railway Street	19,570
	Dunboyne Pedestrian Crossing at School, Maynooth Rd	44,659
	Kells HGV Ban	73,737
	Cople Rd. Drogheda, Co Meath, Bus Stop	53,235
	RTI Bracetown Business Park Co. Meath	10,073
	MCC TOTAL	790,265
SDCC	Tallaght to Templeogue cycle route	2,919,694
	Dodder Regional cycle route	161,975
	Tallaght to Ballyboden walking and cycling route	464,754
	St Enda's/Grange Road to Loretto Park/Nutgrove Permeability Project	313,767
	Willsbrook Road Cycle Facilities, Lucan.	968,437
	N81 cycling, walking and bus facilities	146,816
	Walkinstown Roundabout	54,028
	Monastery road walking route	399,457
	Tallaght to Liffey Valley Cycle Scheme	36,575
	N4 to City Centre Cycle Scheme (Celbridge Road Junction to Palmerstown)	109,717
	Green School cluster works - Ballyboden	166,796
	Hazelhatch Bridge Signalisation- Traffic Safety Improvements	64,155
	SDCC TOTAL	5,806,171
SJH	St James's Smarter Travel design and print	10,000
	SJH TOTAL	10,000
UCD	UCD Cycle Network Assessment	6,150
	UCD TOTAL	6,150
WCC	Arklow - Shillelagh Cycle Route (planning completion)	53,090
	Glendalough / Laragh	100,000
	Boghall Road Cycle Route	111,627

	Strand Road Cycle Track	770,000
	Bray DART Interchange	33,960
	Fitzwilliam Square (complete design)	48,496
	Wicklow Town port access route to Station Pedestrian Access	3,456
	Arklow - ped cycle scheme. Main Street/Vale Road/Wexford Road Junction	380,722
	Beech Road Footbridge, Arklow environs.	150,000
	Killarney Road Cycle Route (CN1)	6,562
	St Laurence's School Footpath provision	7,454
	N81 Baltinglass VRU improvements	14,795
	Greystones - Kilcoole Safety Project	176,800
	Strand Road extension to Harbour / Schools and Aquarium area	9,794
	WCC TOTAL	1,866,756