

June 2016

NORTHERN DIVISION

Annual Report 2016/2017

to

Antrim & Newtownabbey
Borough Council



INVESTOR IN PEOPLE

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Foreword

The Mayor, Aldermen and Councillors Antrim & Newtownabbey Borough Council

I have pleasure in submitting my second Annual Report on TransportNI work in the Antrim & Newtownabbey Borough Council area.

Northern Division covers the three Council areas shown on page 4 of this report. It is one of four Divisions, each of which manages the road network, commissions new works, and is the contact point for road users and public representatives.

This report deals with works completed in the Antrim & Newtownabbey Borough Council area during the year 2015/2016 and sets out our initial proposals for schemes to be undertaken in the year 2016/2017.

The operation of a preparation pool of major schemes, without a funding commitment, is allowing the Division to take some important major schemes on the strategic route network through the statutory processes and to be in a good position to proceed when funding is confirmed. This report includes details of work we are undertaking on major schemes which affect your council area.

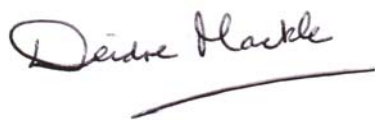
There are pressures on both capital and resource funding going into 2016-17. On the capital side, my staff will continue to develop resurfacing and traffic management schemes to enhance safety, to improve traffic flow and provide measures for pedestrians and cyclists. The Department will also continue to bid in monitoring rounds for further capital funding for structural maintenance to maintain the integrity of the road network.

On the resource side, we start the year only being able to deliver a reduced routine maintenance service. However, if in year bids in monitoring rounds are successful funding will immediately be used to normalise the service.

Our Request / Enquiry forms can be used to raise local issues with TransportNI, or deal with matters that are not directly related to my report. I would also encourage Councillors to continue to contact the relevant members of my staff in relation to operational matters and they will do their best to assist.

Finally, on 9 May of this year TransportNI became part of the new Department for Infrastructure. Whilst this is a significant change it will have no impact on the service provided by TransportNI.

I hope that you find this report informative. TransportNI values constructive comment on all its activities, and I, along with Stephen Gardiner, Section Engineer, look forward to meeting the Council.



**Deidre Mackle
Divisional Manager**

Northern Division

Northern Division is one of four Client Divisions within TransportNI. It spans the local Council areas of Antrim & Newtownabbey, Causeway Coast & Glens and Mid & East Antrim (see map below).



In Northern Division we are responsible for approximately 5,844km (3,631miles) of public road together with 1,328 bridges. We carry out functions under the headings:-

- Strategic Road Improvements – Road Improvement Schemes greater than £1.5million on the strategic road network
- Network Maintenance – Maintenance of Roads and Structures
- Network Development - Street Lighting and Road Improvement Schemes up to £1.5million
- Network Planning - Development Control and Area Plans

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Northern Division - Senior Management Structure



Deidre Mackle
Divisional Manager

TransportNI wishes to build upon the good working relationships it has with Council Members and Officers. The Senior Management Team are listed below, however day to day matters should be raised with the relevant Senior Engineers whose details are listed at the start of each section.



Andrew Hitchenor
Colin Hutchinson
Strategic Road Improvements Managers
Major works schemes; Management of consultants;
Large minor works schemes; Lands



Gary Quinn
Network Maintenance Manager
Road maintenance operations; Section Offices; Inspections, Road maintenance standards, Utility street works; Winter service; Structural maintenance planning and programming; Estimates and allocations for all operation & maintenance functional activities

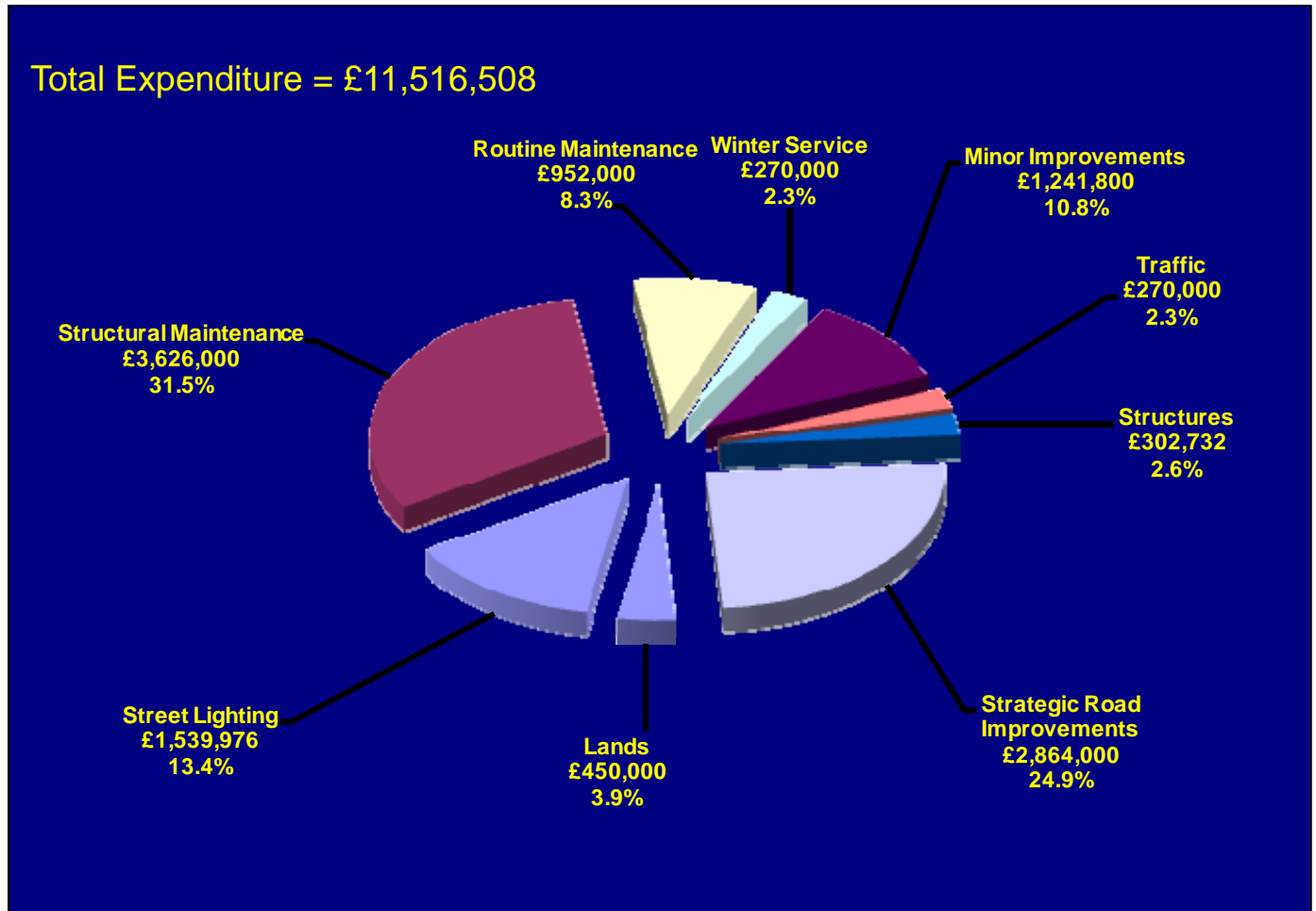


Alan Keys
Network Development Manager
Minor improvements; Traffic management; Street lighting capital & maintenance; Estimates and allocations for local transport & safety measures; Car parking



Cathal Brown
Network Planning Manager
Development Control; Private Streets; Area Plans; Forward Planning; Highway structures

Antrim & Newtownabbey Council Area 2015/16 Expenditure Profile



| | |
|-------------------------------|--|
| Structural Maintenance - | Resurfacing, Surface Dressing, Patching and Drainage |
| Routine Maintenance - | Grass cutting, Environmental Work, Gully Emptying, Embankment / Verge Maintenance, Fencing and Car Parks |
| Winter Service - | Gritting, Snow Clearance |
| Street Lighting - | Lighting Provision, Maintenance and Energy |
| Traffic - | Collision Remedial, Traffic Management, Traffic Calming and Transportation |
| Network Development - | Minor Improvements and Safety Barriers |
| Structures - | Bridge Maintenance and Bridge Strengthening |
| Strategic Road Improvements - | Major Improvements to Key Transport Links |
| Lands - | Acquisition of land for road schemes |

SECTION 1

STRATEGIC ROAD IMPROVEMENTS

Strategic Road Improvements Managers: Andrew Hitchenor & Colin Hutchinson

They are supported by the following staff



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1.1 Scheme Development Overview

The current programme of **Strategic Road Improvements (SRIs)** to improve transportation links in Northern Ireland has evolved over the last decade or so. The key documents and strategies guiding this programme are:

- The White Paper “A New Deal for Transport: Better for Everyone” published 1998.
- “Moving Forward”: Northern Ireland Transport Policy Statement published 1998.
- “Regional Development Strategy for Northern Ireland 2025” published 2002.
- “Regional Transportation Strategy for Northern Ireland 2002-2012” published 2002.
- “Regional Strategic Transport Network Transport Plan 2015” published 2005.
- “Investment Delivery Plan (IDP) for Roads” published April 2008.
- “Regional Development Strategy 2035” published 2012.
- “Ensuring a Sustainable Transport Future - A new approach to Regional Transportation” published 2012.
- “Investment Strategy for Northern Ireland 2011-2021” published 2012.

TransportNI carries out a **comprehensive appraisal of each SRI proposal**. The appraisal procedure requires a clear understanding of the objectives which are to be met, and appropriate criteria to be used, to decide whether a proposal meets them. The **Government’s five objectives for transport** are pivotal to the appraisal process:

- **Environmental impact** involves reducing the direct and indirect impacts of transport facilities on the environment of both users and non-users. There are 10 sub-objectives including noise, atmospheric pollution of differing kinds, impacts on countryside, wildlife, ancient monuments and historic buildings.
- **Safety** is concerned with reducing the loss of life, injuries and damage to property resulting from transport incidents and crime. There are 2 sub-objectives: reduce accidents and improve security.
- **Economy** is concerned with improving the economic efficiency of transport. There are 5 sub-objectives: improve economic efficiency for consumers and for business users and providers of transport, improve reliability and the wider economic impacts, and get good value for money in relation to impacts on public accounts.
- **Accessibility** is concerned with the ability with which people can reach different locations and facilities by different modes.
- **Integration** aims to ensure that all decisions are taken in the context of the Government’s integrated transport policy.

There is tension between these objectives, such that proposals may contribute to the achievement of one objective, but work against the achievement of others. The appraisal procedure must allow determination of an appropriate balance between the five objectives.

Appraisals are reported in **Scheme Assessment Reports (SARs)** which describe the advantages and disadvantages of the proposed scheme. Scheme assessment reporting is a three stage procedure: the level of detail and the coverage of the assessment is appropriate to the type of decision that can reasonably be taken at each stage.

- **Stage 1** – identify the environmental, engineering, economic and traffic advantages, disadvantages and constraints associated with broadly defined improvement strategies.

This concludes in the selection of a number of potential route corridors or scheme options.

- **Stage 2** – identify the factors to be taken into account in choosing alternative routes or improvement schemes and to identify the environmental, engineering, economic and traffic advantages, disadvantages and constraints associated with those routes or schemes. This concludes in the selection of a preferred route or scheme option.
- **Stage 3** – identify clearly the advantages and disadvantages, environmental, engineering, economic and traffic terms of the preferred route option. A particular requirement at this stage is an assessment of the significant environmental effects of the project in accordance with the requirements of Article 67A(3) of The Roads (Northern Ireland) Order 1993, implementing EC Directive 2011/92/EU.

Where appropriate, each assessment stage includes a proportionate effort land-use assessment examining the effects on agriculture including (i) land-take (ii) type of husbandry (iii) severance and major accommodation works for access, water supply and drainage etc.

Strategic Road Improvement schemes wholly or partly within Northern Division

Located on the Northern Corridor (connecting Belfast to Londonderry via Antrim, Ballymena, Ballymoney, Coleraine and Limavady and on to Donegal):

- a bypass of Ballykelly (an IDP for Roads Preparation Pool scheme).
- dualling of the A26 Frosses Road from Glarryford crossroads at the northern end of the existing Crankill dual carriageway to the Drones Road junction (under construction).
- dualling of the A26 Newbridge Road from the Portrush Road Roundabout at Ballymoney to the Wattstown Roundabout at Coleraine (an IDP for Roads Forward Planning Schedule scheme). No development work has been carried out on this scheme so far.

Located on the Eastern Corridor (connecting Belfast north to Larne, south to Newry and on to Dublin):

- dualling of the A8 between Coleman's Corner and the Ballyrickard Road (completed).

Located on the North Western Corridor (connecting Belfast to Londonderry via Antrim, Toome, Castledawson and Dungiven and on to Donegal):

- a dual carriageway between Randalstown and Castledawson (an IDP for Roads Preparation Pool scheme).
- a dual carriageway between Derry~Londonderry and Dungiven, including a dual carriageway bypass of Dungiven (an IDP for Roads Preparation Pool scheme).

Non Strategic Major Improvements

- dualling of the A2 Shore Road at Greenisland (completed).

1.2 A8 Belfast to Larne

(Being dealt with by Billy Miller)

Joint Venture contractor Lagan Ferrovial Costain began construction of the 14.4 kilometre dual carriageway, between Coleman's Corner and Ballyrickard Road, in August 2012. The project was part funded by the European Commission under its Trans European Network (TEN-T).

Progress Report

- The £133 million dualling scheme was officially opened on 16 December 2015.
- This scheme has improved journey times for this stretch of the A8 by removing the issues of surges in flow and queuing of vehicles, especially at times coinciding with ferry arrivals and departures at the port of Larne. The scheme has also reduced driver frustration and improved the safety performance of this route for all road users.



Photograph shows aerial view of the junction connecting the A57 Templepatrick Road to the A8 dual carriageway.

1.3 A2 Shore Road Greenisland

(Being dealt with by Eastern Division)

The part on-line/off-line scheme widens 1.9 kilometres of the existing A2 Shore Road between Jordanstown Road and Station Road to an urban dual carriageway and also provides 1.6 kilometres of new off-line dual carriageway between Station Road and Seapark. Four roundabouts connect the new road to the existing road network.

ROADS Service

A2 SHORE ROAD GREENISLAND

Length of Scheme: 3.5km
Work Commences: 5th March 2013
Expected Completion: Summer 2015

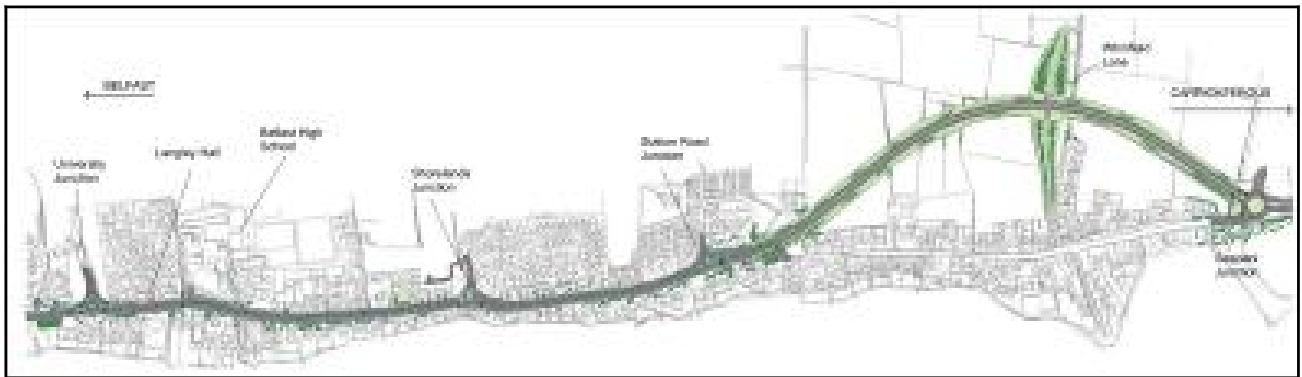
Emergency Telephone No:
08000232320
www.graham.co.uk/a2shoreroad
Email: a2shoreroad@graham.co.uk
Please Drive Carefully

European Union
This project is part funded under the EU European Regional Development Fund Competitiveness and Employment Programme

European Regional Development Fund
Investing in your future

GRAHAM

Roads Service Apologise For Any Inconvenience



Progress

Graham Construction began work on the 3.5 kilometre dual carriageway in March 2013. The £50 million scheme was fully opened to traffic on 28 September 2015.

Some off-road ancillary works remain to be completed and the Contractor retains a reduced site presence to enable these to be expedited.



1.4 A6 Randalstown to Castledawson

(Being dealt with by Cathal McKenna)

The Regional Strategic Transport Network Transport Plan (RSTN TP) 2015 endorsed the provision of a continuous dual carriageway from the western end of the M22 at Randalstown to the Castledawson Roundabout.

Progress Report

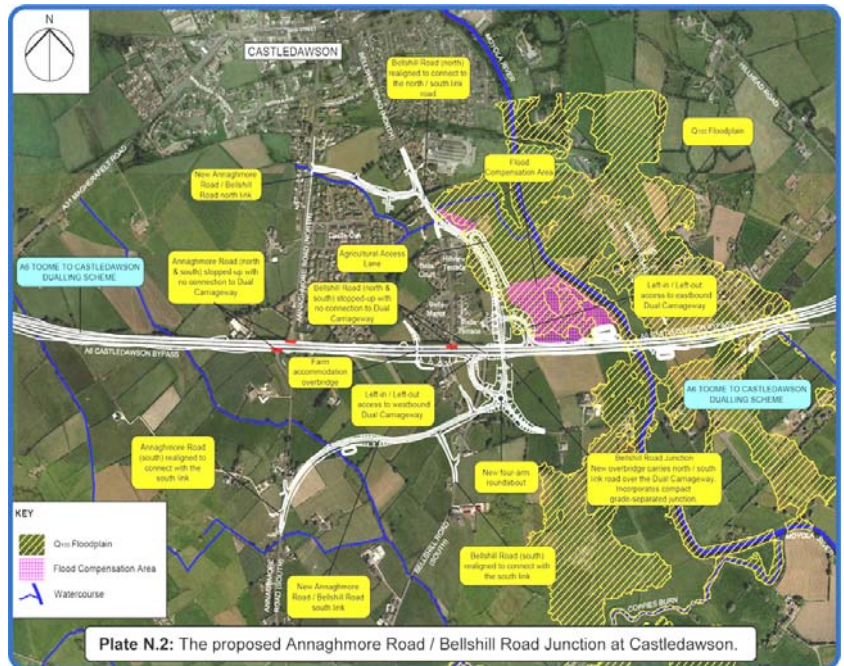
The Department published its decision in January 2013, confirming it was minded in principle to accept the Inspector's recommendation not to proceed with the alternative junction examined at the February 2012 Inquiry, and confirmed it would submit a new Planning Application for a further alternative junction.

A planning application for an alternative junction layout at Bellshill Road was submitted at the end of June 2013. Planning approval for the junction was granted on 3 December 2014. The Notice of Intention to Make a Vesting Order (NIMVO) was published the weeks commencing 9/2/15 and 16/2/15. A number of objections were received and a Public Inquiry was held in Castledawson on 29 September 2015. The Department has prepared a Statement in consideration of these Objections and will publish the document in due course.

Construction



Ground investigation works



A two phase procurement strategy has been adopted, influenced by current funding constraints, encompassing a design development phase and a construction phase. The first phase, a contract to develop the detailed design and a Target Cost (cost to carry out the works) was awarded on 1 May 2015 to a Graham/Farrans JV. Development work has commenced, including additional site investigation work to inform the design process. It is anticipated that Phase 1 will be complete in late summer 2016. With funding allocations in the Executive's Budget Statement of December 2015 it is anticipated that Phase 2 (Construction) of the scheme will start in late summer 2016.

Visit <https://www.infrastructure-ni.gov.uk/topics/road-improvements/a6-randalstown-castledawson-dualling-scheme> to find out more about the scheme.

SECTION 2

NETWORK MAINTENANCE

Network Maintenance Manager: Gary Quinn

He is supported by



Stephen Gardiner

Section Engineer

Antrim & Newtownabbey Section Office

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Explanation of Maintenance Operations

Resurfacing and Strengthening

- Roads generally fail by cracking and rutting. They usually do not fail suddenly, but gradually deteriorate due to the impact of traffic, age and weathering. Wear normally appears as either excessive permanent deformation of the whole or part of the carriageway structure, or is associated with the cracking of the bituminous layers.
- Road pavements are normally designed for an operational life of 20 years. During this period and beyond, there is a need for the highway authority to intervene at times to either treat or replace the top course of bituminous material known as the “wearing course” or to provide additional depth to preserve the structure of the pavement and extend its life.
- Resurfacing is the application of a layer of this mixed material of 40mm (1.5") minimum thickness. It strengthens the road, seals it against the ingress of water, and improves skidding resistance and riding quality. The thicker the layer, the more strength imparted.
- Wearing course Bitmac has an expected life of 7-12 years (which can be extended by subsequent surface dressing) whereas Asphalt has an expected life of 15-20 years but costs more.
- Resurfacing of existing roads can usually be carried out on top of the existing surface (overlay) but where kerb levels or bridge heights are restricted the existing surface may need to be removed by planing.

Surface Dressing

This process involves spraying a bitumen emulsion binder onto the existing road surface, followed by a layer of stone chippings, which is then rolled. It has three main purposes:-

- to improve skidding resistance of the surface
- to seal the road surface against ingress of water
- to prevent deterioration.

Slurry Sealing

This process provides similar benefits to traditional 'surface dressing'. However, it has some superior characteristics e.g. has a fast setting time and generally has no loose chippings resulting from the process. It is more expensive than surface dressing and is normally confined to urban areas.

Micro Surfacing

This material is a cold applied bituminous material similar to slurry sealing with a relatively fast setting time. However it is designed for more demanding locations, uses larger aggregates with a high quality binder, and can be laid in two courses up to a total thickness of 20mm to allow limited surface re-shaping. Its main benefits, as with slurry sealing, are that it can be laid quickly with minimal preparatory work thereby reducing traffic disruption. It is suitable for busy urban roads and the new surface can be trafficked within 15 to 20 minutes.

Drainage Works

The quick and effective drainage of surface water from the carriageway contributes significantly to the safety of the road. Improvement works carried out include the upgrading of the existing drainage facilities to ensure effective dispersal of surface water and prevent as far as possible the occurrence of standing water or flooding of the road. In many cases the provision of new drainage facilities have to be undertaken including the installation of road gullies, pipes and manholes.

Grass Cutting

Grass cutting is carried out for road safety reasons rather than for amenity purposes. Grass cutting policy allows for routine cutting of 1 swathe width (approximately 1.2m) twice a year in rural areas and in urban areas, five times a year across the full verge width. Areas of verge for sight lines are cut more frequently as required. In some designated urban areas local Councils carry out grass cutting to amenity standards and TransportNI make an appropriate contribution to the cost.

Gully Emptying

Drainage gullies in urban areas are cleaned twice per year and in rural areas once per year. Open outlets are also cleaned once per year. At times, the accumulation of leaves and litter can reduce the effectiveness of gullies and outlets causing local flooding. In such occurrences additional responsive cleaning is carried out.

Emergency Assistance

We have a call centre to deal with emergency calls outside normal office hours. Appropriate personnel can be called upon to deal with emergencies such as flooding on roads, obstructions such as fallen trees, and clearing up after road traffic accidents. The emergency telephone number is (028) 703 53202.

Resurfacing Completed 2015/2016

| Route No. | Road Name / Location | Length (m) |
|-----------|--|------------|
| A57 | Ballyclare Road, Templepatrick | 2,270 |
| A6 | Antrim Road, Glengormley | 589 |
| U404 | Hightown Avenue, Mallusk | 391 |
| U409 | Heather Drive, Newtownabbey | 60 |
| A26 | Dunsilly Roundabout | 675 |
| U406 | Farmley Road | 220 |
| A2 | Rush Park roundabout | 124 |
| C31 | Carntall Road | 920 |
| U419 | Fairhill Road | 307 |
| U419 | Glebe Road | 160 |
| U410 | St Quintin Park | 100 |
| U410 | Glencoole Park | 110 |
| U412 | Swanson Park | 170 |
| U29 | Gravelhill Road | 1,060 |
| U410 | St. Quintin Avenue | 130 |
| U410 | Glebecoole Drive | 90 |
| U35 | Horseshoe Road | 460 |
| U411 | Moss Road | 150 |
| U411 | Richmond Gardens | 210 |
| B56 | Ballyclare Road | 850 |
| | Various small overlay schemes in the Antrim Area | 1,800 |

Total Resurfacing Completed **10,846**

At a cost of **£1,625,000**

Resurfacing Proposed 2016/2017

| Route No. | Road Name / Location | Length (m) |
|-----------|--|------------|
| B518 | Ballycraigy Road | 1,136 |
| U1136 | Ballydonaghy Road | 500 |
| C31 | Carnmoney Road | 1,107 |
| A2 | Station Road Roundabout | 202 |
| A8 | From Corrs Corner Roundabout to Houstons | 1,349 |

Total Resurfacing Proposed 4.294km

At a cost of £1,547,000

Footway Resurfacing Proposed 2016/2017

| Route No. | Road Name / Location | Length (m) |
|-----------|---|------------|
| U419 | Knockane Way | 1,052 |
| | Various scheme in Antrim Area still to be confirmed | 1,000 |

Total Footway Resurfacing Proposed 2.052km

At a cost of £160,000

Surface Dressing Completed 2015/2016

| Route No. | Road Name / Location | Length (m) |
|-----------|----------------------|------------|
| C45 | Steeple Road | 5,475 |
| C39 | Bridge Road | 898 |
| C39 | Brookfield Road | 1,428 |
| U16 | Ballyvessey Road | 969 |
| U20 | Browns Road | 793 |
| U21 | Clarkelodge Road | 741 |
| U28 | Kiln Road | 803 |
| U29 | Sallybush Road | 984 |
| U31 | Springwell Road | 441 |
| U142 | Largy Road | 615 |
| U104 | Umgall Road | 1,292 |
| U127 | Carn Road | 1,460 |
| U150 | Ballyginniff Road | 1,028 |
| U147 | Seacash Road | 958 |
| U123 | Carmavy Road | 1,463 |
| U84 | Maxwells Road | 768 |
| U81 | Islandreagh Road | 1,249 |
| U82 | Burnside Road | 2,516 |
| U45 | Rectory Road | 1,457 |
| U48 | Moyra Road | 1,281 |
| U53 | Drumadarragh Road | 2,299 |
| U57 | Craigarogan Road | 401 |

| Route No. | Road Name / Location | Length (m) |
|------------------|-----------------------------|-------------------|
| U35 | Horseshoe Road | 2,310 |
| U39 | Ballylinney Road | 2,356 |
| U39 | Lower Size Hill Road | 549 |

Total Surface Dressing Completed 34.53km

At a cost of £203,000

Surface Dressing Proposed 2016/2017

| Route No. | Road Name / Location | Length (m) |
|-----------|----------------------|------------|
| C49 | Barnish Road | 4,600 |
| UR54 | Milltown Road | 1,900 |
| UR23 | Moneyrod Road | 1,630 |
| UR34 | Greenan Road | 3,861 |
| UR36 | Cranfield Road | 1,760 |
| UR46 | Magherabeg Road | 2,904 |
| UR45 | Pipe Road | 2,541 |
| B95 | Burn Road | 1,495 |
| C44 | Crosskennan Road | 6,000 |
| UR96 | Bryantang Road | 1,061 |
| UR86 | Tardree Road | 2,302 |
| UR89 | Hollybank Road | 2,308 |
| UR95 | Whinknowe Road | 745 |
| UR99 | Ballymartin Road | 1,099 |
| UR81 | Islandreagh Drive | 1,020 |
| C29 | Tirgracey Road | 2,670 |
| UR11 | Loughview Road | 6,445 |
| C18 | Garlandstown Road | 1,030 |
| U13 | Sealstown Road | 2,461 |
| U21 | Fort Road | 274 |
| U16 | Roughfort road | 762 |
| U16 | Ballyvessey Road | 235 |

| Route No. | Road Name / Location | Length (m) |
|------------------|-----------------------------|-------------------|
| B95 | Burn Road | 2,033 |
| U22 | Millbank Road | 1,176 |
| U21 | Millbank Road East | 940 |
| U23 | Lowtown Road | 1,123 |
| U25 | Carnanee Road | 2,267 |
| U25 | Knowhead Road | 1,002 |
| U27 | Ballymartin road | 2,141 |
| U30 | Ballypalady Road | 1,371 |
| U38 | Rushfield Road | 1,031 |
| U37 | Lisnalinchy Road West | 726 |
| U36 | Lisnalinchy Road | 2,903 |

Total Surface Dressing Proposed 65.816km

At a cost of £386,928

Drainage Work Completed 2015/2016

| Route No. | Road Name / Location | Length (lin m) / No. of gullies / manholes |
|-----------|-----------------------------|---|
| A6 | Moneynick Road | Drainage investigation and culvert repair |
| A6 | Belfast Road, Templepatrick | Drainage investigation and pipe repair |
| C44 | Crosskennan Road | Culvert upgrade |
| U20 | Coolsythe Road | Culvert upgrade |

Drainage Works completed at a cost of £22,000

Drainage Work Proposed 2016/2017

| Route No. | Road Name / Location | Length (lin m) / No. of gullies / manholes |
|-----------|-------------------------|---|
| A6 | Toome Bypass | Maintenance of SUDS system |
| B59 | Old Coach Road, Mallusk | 260m pipe, 4 manholes, 2 gullies |
| C42 | Tildarg Road | 2 Culvert Replacements |
| U23 | Lowtown Road | Drainage investigation and culvert repair |
| U31 | Kings Moss road | Culvert upgrade |

Drainage Works proposed at a cost of £100,000

Major Utility Works Completed 2015/2016

| Utility | Road Name / Location | Scheme Details |
|---------|-----------------------------|-----------------------|
| NIW | B56 Ballyrobert Road | Storm sewer |
| NIW | A6 New Street - Randalstown | Watermain replacement |

Major Utility Works Proposed 2016/2017

| Utility | Road Name / Location | Scheme Details |
|---------|----------------------------|-------------------|
| NIW | Manse Road, Carnmoney | Watermain Renewal |
| NIW | Woodford Area, Carnmoney | Watermain Renewal |
| NIW | Ballynure Road, Ballyclare | Storm Sewer |
| NIW | Ballycorr Road | Watermain Renewal |
| NIW | Shore Road, Greencastle | Watermain Renewal |

The details above represent the best information available to TransportNI at this time. Service connections for new customers, Emergency & Urgent Works, and Minor Works may also occur.

Winter Service 2015/2016

During the winter of 2015/16 the equivalent of 69 full salting actions were carried out on the 415km of road on the 9 gritting routes for the Antrim & Newtownabbey Council area. A total of 4,636 tonnes of salt was used over this period compared to a total usage of 6,624 tons for the 2014/15 season.

The official Winter Maintenance period commenced on 1st October 2015 and ended on 30th April 2016. The first salting action took place on 20th November 2015 and the final application on 28th April 2016.

The weather from early November to Mid January was dominated by nine named storms. During storm Desmond on 5 December, 341.4mm of rain fell in 24-hours, a new UK rainfall record. The West and South of Northern Ireland experienced the worst of the severe flooding which led to extended emergency response from all Drainage organisations. Storm Frank followed at the end of the year, bringing storms and severe gales to Northern Ireland. At one point over 250 roads were closed due to fallen trees.

Winter 2015/16 was the third-warmest for the UK in a series from 1910, behind the winters of 1989 and 2007.



SECTION 3

NETWORK DEVELOPMENT

Network Development Manager: Alan Keys

He is supported in Antrim & Newtownabbey by the following staff



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3.1 Minor Improvements

Minor Improvement Schemes Completed 2015/2016

Stiles Way / Steeple Road, Antrim - Junction Upgrade - £1,200,000

The scheme to improve the junction of Stiles Way / Steeple Road was completed in September 2015. The new junction layout retains traffic signal control but the improvements will lead to a significant increase in capacity of the junction. This crossroads junction had been under pressure for some time with significant queues and delays during peak periods. It is a key junction on a route which serves a number of significant generators of large volumes of traffic including Antrim town centre, Belfast International Airport, Antrim Area Hospital, a number of large schools, industrial estates and housing areas. This scheme will improve the flow of traffic through the junction and help to reduce queues and delays thus improving journey times along this key route in Antrim.

U1198 Brantwood Gardens, Antrim - Footway - £5,800

A scheme to construct a missing link of footway in Brantwood Gardens in the existing grass verge to connect Brantwood Gardens to Greystone Road was constructed in January 2016. See before and after photographs below.



BEFORE

AFTER



B95 / U23 Old Coach Road / Lowtown Road - Visibility splay improvement - £21,000

A scheme to improve the visibility to the right for traffic exiting Lowtown Road on to Old Coach Road by setting back the fence / hedge line commenced in March 2016 and has recently been completed. See before and after photographs below.



BEFORE



AFTER

A57 Dublin Road, Antrim - Footway - £15,000

Construction of a missing link of footway in the existing grass verge on the Dublin Road at Briar Hill housing estate commenced in March 2016 and was completed by Easter. See before and after photographs below.



BEFORE



AFTER

Minor Improvement Schemes Proposed 2016/2017

Network Development currently has a very limited budget to carry out Minor Improvement schemes in 2016/17. However, subject to the availability of finance the following scheme will be taken forward to construction later this financial year.

C52 Staffordstown Road / C52 Gallagher Road - Junction Visibility Improvement - £35,000

It is proposed to improve the junction visibility sight splay at the southern side of this cross-roads junction to give 4.5m x 215m visibility.

3.2 Traffic Management

Traffic Schemes Completed 2015/2016

Traffic Management Schemes

Castle Way / Dublin Road, Antrim - £50,000

Work to upgrade the traffic signals at the Castle Way / Dublin Road junction is now complete. This work increased the capacity of the junction as well as providing improved pedestrian facilities.



Dublin Road Traffic Lights, Antrim.

Altmore Green, Newtownabbey - £20,000

Work is complete to realign the carriageway in Altmore Green to allow improved access for residents and service vehicles.

Church Road, Newtownabbey - £9,000

The extension of the right turn lane into the retail park is now complete, this provides improved storage of right turning vehicles.

Creggan Village, Staffordstown - £7,000

A series of safety measures have recently been introduced to address concerns about traffic speeds and overall safety of the village community. The measures include upgraded traffic signs, enhanced road markings and red coloured surfacing.



Creggan Village, Staffordstown.

Millhouse Development, Antrim- £10,000

Work is complete on the widening of the Millhouse junction with Stiles Way, to allow two lanes of traffic to exit, reducing delays during peak periods.



Millhouse / Stiles Way, Antrim.

Collision Remedial Schemes

Monkstown Road/Bridge Road, Newtownabbey - £10,000

Measures have now been implemented to clarify priorities and address the history of traffic collisions involving right turn movements into Bridge Road.

Dungonnell Road near British Road, Antrim - £40,000

Work is now complete to address 'loss of control' type collisions on a left hand bend prior to British Road. The work included the removal of existing NIE and BT service poles along with road realignment and high friction surfacing.

Manse Road / Waverley Road, Newtownabbey

A number of options are being considered to address a history of collisions involving pedestrians crossing Manse Road, these include upgraded footways, pedestrian safety railings and possible road widening. This scheme is now being considered as part of a larger project to widen Manse road and provide footways and possible cycle ways.

Traffic Calming Schemes

Victoria Road, Ballyclare - £10,000

A scheme to include the provision of a series of road humps has been implemented.



Victoria Road, Traffic Calming (BEFORE)



Victoria Road, Traffic Calming (AFTER)

Merville Garden Village, Newtownabbey - £2,000

A small number of developments throughout the province have been selected as pilot sites for 20mph speed limits where physical measures such as road humps are not being used. Merville Garden Village off A2 Shore Road is one of the selected developments and legislation has just been processed. The new 20mph limit is currently being implemented.

Transportation - Pedestrian Measures

Minor Pedestrian Measures - £10,000

Minor measures such as dropped kerbs and short footway links have been considered as identified during the year.

Castle Road, Antrim - £5,000

A central refuge island has been provided at the entrance to the Castle gardens, to assist pedestrians crossing from Castle Park and Innishmoyne.

Manse Road, Newtownabbey - £15,000

Work will commence shortly on the installation of a new Puffin crossing on Manse Road at Mossley Primary school to provide improved pedestrian facilities for parents and children at the school .

Old Manse Road, Whiteabbey

Provision of a kerb build out and associated waiting restrictions to provide improved pedestrian crossing points. The waiting restrictions have been implemented however the kerb build out has been deferred due to local concerns.

Carmoney Road North and South - £10,000

A series of measures have been implemented near the park entrances to improve conditions for pedestrians crossing.

Transportation - Bus Measures

Dungonnell Road, Aldergrove - £3,000

A hard standing at the bus stop and a short footway linking to the existing network is to be provided.

Ahoghill Road, Randalstown - £3,000

Work has been completed on the provision of a hard standing area at the bus stop and a short footway linking to the existing network.

Stiles Way at Millhouse - £5,000

A pedestrian refuge island has been provided on Stiles Way adjacent to Millhouse development to facilitate access to and from the existing bus stop. A hard standing has also been provided at the bus stop.

Transportation - Park and Ride

New Street, Randalstown - Park and Ride Car Park - £45,000

Work is now complete on the provision of 44 car parking spaces in the new Park and Ride car park on New Street to facilitate those using the bus service and also those wishing to park and share transport.

Park and Ride Facility - Ballynure Village - £35,000

Work is now complete on the provision of 12 Park and Ride car park spaces in the village for those wishing to use the bus service.

Traffic Signs and Carriageway Markings

Improvements and additional traffic signs and carriageway markings will be provided as identified.

Improvements and additional traffic signs and carriageway markings will be provided as identified.

Antrim

The Village Templepatrick relocation of direction signage.

Parking bays at Main Street Parkgate.

New lanes widths, parking bays and school keep clears at Crumlin Primary School.

2No. back to back 40mph / 30mph on Lough Road, Antrim.

Installation of new Antrim Castle Gardens tourist signage.

Long Rig Road, Antrim, double solid lines and Hidden Dip signs.

Thornhill Road – bend warning sign and slow marking.

Replacement Patterson spade mill signage.

Give way and extension bar at mini roundabout at Railway Street Antrim.

High Friction Surfacing at crossing point at Railway Street, Antrim.

Installation of bollards on Parkgate Road / Connor Road, Parkgate.

Newtownabbey

Ballyclare Nursing Home – Entrance Marking.

Ballyclare Presbyterian Church – Extend zig zag markings to cover Church entrance.

Straid Primary School – New School Warning Signs, Red Patches and SCHOOL markings on Road.

Monkstown Road – New Ladder hatching and turning lane into petrol station to create traffic calming effect.

Rathmore Drive – New steps to accommodate houses on the high side of verge.

Ballyhenry Road – Extend centre line on approach to Sandyknowes Roundabout to create better flow of traffic.

Antrim Road, Glengormley – Keep Clear marking outside church

Portland Avenue – Junction markings

Mallusk Road @ Park Road – SLOW markings and refresh junction markings.

Whiteabbey Primary School – SCHOOL KEEP CLEAR markings

Carntall Road @ Irish Hill Road – Bend Warning and SLOW markings

Ashgrove Primary School – Move centre line to allow parking on one side and corner restrictions

The Brambles – Corner Restrictions at Doagh Road junction

Cloughfern Roundabout – Extend hatching to improve visibility at roundabout junctions

No.1 Farmley Crescent – Entrance Marking

No.30 Avondale Drive – Entrance Marking

Longlands Road @ Church Road – Corner Restrictions

Merville Garden Village – Double yellow lines to rear of No.177 to allow better access for disabled resident

Lisglass Road @ A8 – Signs to recycling centre

A57 Templepatrick Road @ Ballyrobert Road – New Signage to Ballyrobert

Doagh Road – Bridge Road – New School warning signs, red patch and PATROL markings on road

Doagh Road, Ballyclare – I Marking at No.44

Starid Primary School – Red High Friction Surfacing, SCHOOL marking and improved signage

Mallusk Drive – Corner Restrictions at BT

Hightown Road – KEEP CLEAR at solicitors

Loughshore Court / Circular Road – Corner Restrictions

George Close / Gardens – Corner restrictions

Portland Avenue – Create two parking bays over an unused entrance

Forthill Park – I Marking at No.56

Ardmillan – I Marking at No.29

Hightown Park / Hightown Gardens – Give way Markings

Greenville Park – KEEP CLEAR at No.4a Hammerhead

Old Manse Road – Corner Restrictions

Ypres Park – Extend Double Yellow Lines to cover driveway

Ballyduff Road – Centre Line to improve driver behaviour

The Glade – Corner Restrictions and KEEP CLEAR box at steps
Beverly Road Car Park – Make parking bays bigger
Cambria Drive – KEEP CLEAR marking at hammerhead
Circular Road – I Marking at No.2
Dunloy Gardens – Make layby into parking bays
Church Road, Ballynure – SLOW marking before bend on approach to village
Ballymena Road Doagh – I marking at No.15
Hillhead Road at Colmans Corner – Destination Markings on approach
Mallusk Road – 40mph Roundels
Merville Garden Village – 20mph signs
A8 – Signs to Recycling Centre

Disabled Parking Bays

Applications for “disabled” parking bays were assessed on an individual basis, as they were received.

Traffic Schemes Proposed 2016/17

Traffic Management Schemes

A6 Ballygrooby Roundabout, Randalstown - £10,000

Plans are being developed to provide High Friction Surfacing and amended white line arrangement on exit towards Antrim from Ballygrooby roundabout.

This is to address a history of vehicles losing control on the exit of the roundabout.

A52 Nutts Corner Road, Crumlin - £5,000

Plans are in place to review the traffic signs and lines on the A52 Nutts Corner Road between Crumlin and Nutts Corner to enhance safety on this rural road.

B59 Ballymena Road, Doagh - £5,000

Plans are in place to review the existing speed limit, traffic signs and lines on the B59 Ballymena Road Doagh to improve driver behaviour and enhance safety on the entrance to Doagh.

Dunloy Gardens, Rathcoole - £3,000

Plans are in place to carry out some minor kerb realignment in Dunloy Gardens Rathcoole to allow improved access for residents and service vehicles..

Collision Remedial Schemes

Doagh Road / Fenagh Drive, Newtownabbey - £10,000

Plans have now been developed to provide High Friction Surfacing (HFS) on the Doagh Road on the approach Fenagh Drive, along with a 2.5m right turning pocket into the junction.

This will address a history of 'shunt' type collisions on Doagh Road.

Traffic Calming

Avondale Drive, Ballyclare - £20,000

Plans are now being progressed for a Traffic Calming scheme on Avondale Drive in Ballyclare from Harrier Way to Grange Valley. These measures are designed to reduce vehicle speeds and assist pedestrian safety for pupils crossing to the school and to the Sixmile Water park. The scheme consists of seven round topped humps and two raised tables at the entrance to the school and park.

Transportation - Cycle Measures

A8 between Corrs Corner and Houstons Corner, Ballyclare - £150,000

Approx' 800m of shared pedestrian / cycle facility is to be provided on the East side of the A8 as part of the proposed resurfacing scheme.

This facility will link the existing cycleway at the Doagh Road with the National Cycle Network at Corrs Corner.

Transportation - Pedestrian Measures

Ballynure Road, Ballyclare - £15,000

A recent pedestrian survey has identified a requirement for a formal crossing point on Ballynure Road to the Post Office and Garage. This work will be improve pedestrian facilities in this vicinity with the alteration of existing footways and provision of a puffin crossing.

A6 Belfast Road, Muckamore - £15,000

Plans are now complete to provide approximately 95m of footway and a pedestrian refuge island on the A6 Belfast Road at Islandbawn stores. This will improve safety for pedestrians wishing to cross Belfast Road to access the garage and shop.

B95 Hightown Road, Glengormley - £5,000

A recent pedestrian survey has identified a requirement for an informal crossing point on B95 Hightown Road adjacent to Gaelscoil Eanna. This facility will provide a refuge for children crossing to the school from the nearby developments.

B95 Mallusk Road, Newtownabbey - £5,000

A recent pedestrian survey has identified a requirement for an informal crossing point on B95 Mallusk Road adjacent to the petrol station and shop. This facility will provide a refuge for pedestrians wishing to visit the shop and Post Office.

Old Shore Road. Whiteabbey - £10,000

Plans are currently being developed to widen the footpath across the front of house numbers 661—669. This will improve pedestrian linkage between commercial premises on the shore side of Old Shore Road.

Carnmoney Road / Carnmoney Primary School. Carnmoney - £3,000

It is proposed to provide bollards and pedestrian barriers on the Carnmoney Road at the Primary School to improve parking discipline and pedestrian safety in the vicinity of the school.

Transportation - Bus Measures

B95 Ahoghill Road, Randalstown - £2,500

Plans are now complete to provide a hard standing at the bus stop on the Ahoghill Road at Craigstown Road.

Further Improvements to existing and proposed bus stops will be considered as identified.

Minor Traffic Management Measures

A programme of sign replacement in the Newtownabbey area has begun to replace any life expired signs, this programme will continue through the Council area as finances permit.

Improvements and additional traffic signs and carriageway markings will be will be provided as identified.

Disabled Parking Bays

Applications for “disabled” parking bays will be assessed on an individual basis, as they are received.

3.3 Street Lighting

The total number of lights in the council area is now 23,906. Expenditure on street lighting during 2015/2016, amounted to £140,728 for maintenance and £916,901 for energy. The total capital spend amounted to £482,347.

Budget constraints have resulted in a much reduced maintenance regime during the last two years and at times this has severely affected response times to notified outages. The maintenance budget continues to be challenging and may mean having to rely more on TransportNI's in-house maintenance resource which will affect service. The initial capital budget for 2016/17 has also been severely cut in comparison with recent years and will severely limit planned upgrading work.

Schemes Completed 2015/2016

| Area | Location | No. of lights working | Scheme Type |
|--------------|-------------------------|-----------------------|-------------|
| Newtownabbey | Shore Road, Greenisland | 28 | Upgrade |
| Newtownabbey | Carnmoney Road | 20 | Upgrade |
| Newtownabbey | Burnthill Road | 12 | Upgrade |
| Newtownabbey | Glencairn Park | 2 | Upgrade |
| Newtownabbey | Heather Drive | 3 | Upgrade |
| Newtownabbey | Burney Mews | 2 | Upgrade |
| Newtownabbey | Drumcorr Court | 4 | Upgrade |
| Newtownabbey | Old Irish Highway | 29 | Upgrade |
| Newtownabbey | Ballyearl Estate | 9 | Upgrade |
| Newtownabbey | Longwood Road | 44 | Upgrade |
| Newtownabbey | Monkstown Estate | 10 | Upgrade |
| Newtownabbey | Saint Quentin Park | - | Re-cable |

| Area | Location | No. of lights Working | Scheme Type |
|--------------|--|-----------------------|---------------------|
| Newtownabbey | Swanston Park | - | Re-cable |
| Newtownabbey | Antrim Road from Jubilee Way to Sandyknowes Roundabout | - | Re-cable |
| Newtownabbey | Ballycraigy Road / Ballyclare Road junction | - | Re-cable |
| Ballyclare | Main Street (in conjunction with DSD) | 18 | Upgrade |
| Ballyclare | Hillmount Avenue | 5 | Upgrade |
| Antrim | Firfields | 40 | Upgrade |
| Antrim | Ashgreen Phase 2 | 5 | Upgrade |
| Antrim | Belmont Road | 5 | Upgrade |
| Antrim | Brantwood Gardens | 3 | Upgrade |
| Antrim | Tiger Court | 5 | Lantern Upgrade LED |
| Crumlin | Parkfield | 13 | Upgrade |
| Randalstown | Main Street (In conjunction with DSD) | 25 | Upgrade |
| Randalstown | Portglenone Road | 1 | Upgrade |

Total number of lights installed and working 283

Schemes Proposed 2016/2017

| Area | Location | Scheme Type |
|--------------|---|--------------------|
| Newtownabbey | Longwood Road RAB | Upgrade |
| Newtownabbey | Knockane Way | Upgrade |
| Newtownabbey | Carnway | Upgrade |
| Antrim | Additional Street Lighting schemes in conjunction with footway resurfacing. | Upgrade |

SECTION 4

NETWORK PLANNING

Network Planning Manager: Cathal Brown

He is supported in Antrim & Newtownabbey by



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4.1 Development Control

Planning Applications

Planning Service forward planning applications to the Development Control Section of TransportNI for scrutiny of the road issues, including access arrangements, parking standards and provision, and road layout and geometry. The road widths, radii, gradients, drainage and other construction data are checked against departmental standards. Development Control also checks the visibility splays and forward sight distances at the vehicle access points.

The Private Streets Order 1980 is applied if the street is to become public and maintained by the Department. The Development Control Section determines the area to be adopted, calculates the bond amount, arranges the supervision of the construction of the private street and, following satisfactory completion of the street(s) by the developer, arranges for adoption into the public road network. If necessary, the Department can take appropriate enforcement action to ensure completion of the street.

Other work includes Property Enquiries, Planning Appeals and the approval of road access works via the Roads (NI) Order 1993.

During the period 1 April 2015 to 31 March 2016 Development Control Section dealt with:-

| | |
|---|-----|
| Planning Applications | 720 |
| Pre-Planning Enquiries | 810 |
| Planning Applications involving Private Streets Order | 19 |

Adoptions

The Department adopted a total of 1,602m of carriageway and 307m of footway. Developments adopted are listed below:-

| Development | Carriageway (m) | Footway (m) | Date |
|--------------------------------|-----------------|-------------|----------|
| Rashee Grove, Ballyclare | 51 | 38 | 27/05/15 |
| Collinward Gardens, Ballyclare | 88 | 0 | 31/07/15 |
| Hillhead Road, Newtownabbey | 0 | 44 | 31/07/15 |
| Abercorn Drive, Newtownabbey | 34 | 0 | 10/08/15 |
| Abercorn Drive, Newtownabbey | 0 | 17 | 12/08/15 |
| Forthaven, Ballyclare | 296 | 0 | 17/08/15 |
| Friars Wood, Newtownabbey | 91 | 0 | 21/08/15 |
| Bush Manor, Antrim | 127 | 0 | 25/08/15 |

| Development | Carriageway (m) | Footway (m) | Date |
|------------------------------|------------------------|--------------------|-------------|
| Mill Road, Newtownabbey | 90 | 0 | 27/08/15 |
| Tildarg Road, Ballyclare | 0 | 26 | 15/09/15 |
| Toberdowney, Ballynure | 82 | 0 | 02/10/15 |
| Ballydonagh Meadows, Crumlin | 189 | 0 | 15/10/15 |
| Hillhead Road, Ballyclare | 0 | 30 | 20/10/15 |
| Ballyduff Road, Newtownabbey | 0 | 44 | 23/11/15 |
| Circular Road, Jordanstown | 0 | 40 | 27/11/15 |
| Kings Gardens, Newtownabbey | 0 | 9 | 30/11/15 |
| Swanston Road, Newtownabbey | 6 | 0 | 01/12/15 |
| Millhouse Village, Antrim | 138 | 0 | 15/01/16 |
| Bedford Meadow, Antrim | 95 | 0 | 01/02/16 |
| Carnbeg, Antrim | 315 | 0 | 10/02/16 |
| Glencairn Park, Glengormley | 0 | 32 | 04/03/16 |
| Old Larne Road, Ballynure | 0 | 27 | 15/03/16 |

4.2 Maintenance of Structures

The Structures Section manages the 1,327 bridges and culverts with a span of 1.8m and greater within the Division, there are 257 of these structures in the Antrim & Newtownabbey council area. Smaller structures are managed by the local Section Office. A further 40 bridges on or over the M2 and M22 Motorways are maintained by HMM, the Design, Build, Finance and Operate Company responsible for a large part of the motorway network.

Structural Maintenance Work Completed 2015/2016

| Route No. | Name | Description | Estimate |
|-----------|-------------|--|----------|
| C32 | Church Road | Erected road restraint system and timber post and rail fence. | £70,793 |
| B94 | Ballyclare | Erected steel parapets to meet current containment standards. (see photograph below) | £46,309 |



| Route No. | Name | Description | Estimate |
|-----------|--------------------------|---|----------|
| U48 | Brookfield | Rebuilt parapets to meet current containment standards. | £9,717 |
| U30 | Ballypalady | Repaired damaged invert and parapet. | £9,183 |
| B39 | Seven Mile Straight | Repaired joints on west side of structure | £1,835 |
| A2 | Glas-Na– Craden | Repaired undermined wingwalls, cutwaters and abutments. | £4,945 |
| A8 | Larne Road / Castlewater | Repaired retaining wall at entrance to subway. | £1,734 |
| U69 | Gribbonstown | Removed vegetation, sealed verges and raised parapets | £5,507 |
| B39 | Shanloguestown | Removed vegetation, re-pointed and installed drainage. | £4,162 |

Structural Maintenance work completed at a total cost of £154,185

Structural Maintenance Work Proposed 2016/2017

Schemes on this list may be substituted or altered depending on finance and developing circumstances throughout the year.

| Route No. | Name | Description | Estimate |
|------------------|---------------------|--|-----------------|
| B90 | Old Carrick | Repair abutments, wingwalls and raise parapets. | £13,000 |
| B94 | Hillhead | Repair undermined cutwater and wingwall. Replace missing concrete at apron. | £8,000 |
| C37 | Church Road | Repair parapets. | £5,000 |
| U11 | Blacks | Repair scoured apron and raise parapets. | £14,000 |
| U36 | Ballylagan | Repair inverts and aprons. | £6,000 |
| C26 | Printshop | Upgrade parapets to meet current standards for containment. | £10,000 |
| U41 | Rushvale | Repair wingwalls. | £5,000 |
| B94 | Hillhead Flyover | Repair deck and arch ring. | £3,000 |

Structural Maintenance work proposed at a total cost of £64,000

Road Restraint Systems Upgraded 2015/2016

| Route No. | Name | Description | Cost |
|-----------|------------------------|---|---------|
| A6 | Belmont Road | 128m of Road Restraint System upgraded to meet current policy and specification. | £47,944 |
| A6 | Moneynick Road | 96m of Road Restraint System upgraded to meet current policy and specification. | £11,525 |
| C52 | Staffordstown Road | 128m of Road Restraint System upgraded to meet current policy and specification. | £12,567 |
| A6 | Ballygrooby Roundabout | 433m of Road Restraint System upgraded to meet current policy and specification. (See photograph below) . | £56,636 |

Road Restraint System Upgrade work completed at a total cost of £128,672



Proposed Road Restraint System Upgrade 2016/2017

| Route No. | Name | Description | Estimate |
|-----------|--------------|---|----------|
| A6 | Belmont Road | Upgrade Road Restraint System to meet current policy and specification. | £155,000 |
| A522 | Castleway | Upgrade Road Restraint System to meet current policy and specification | £135,000 |

Road Restraint System Upgrade work proposed at a total cost of £290,000