

# Research and Information Service Briefing Paper

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# Committee for Infrastructure: Forward work planning discussion paper

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# 1 Introduction

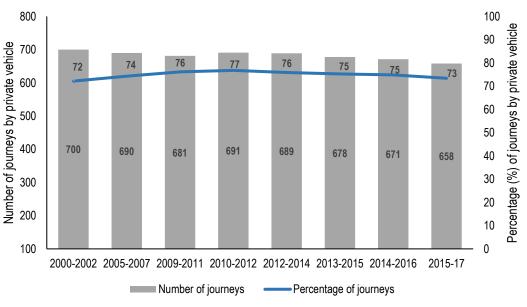
Broadly speaking the Department for Infrastructure (DfI) is responsible for roads; public transport; water; flood alleviation infrastructure; and planning. This paper looks at a number of issues within each of these policy areas with the intention of generating discussion during the Committee for Infrastructure's forward planning day. Topics discussed include:

- Travel behaviour and modal shift;
- Concessionary Travel;
- Waste Water Capacity;
- Structural Maintenance Funding;
- Road Safety Strategy 2020; and
- Planning

# 2 Travel Behaviour

Driving is integral to the lives of people in NI. Statistics show the proportion of the eligible population who are both licenced to drive and have access to a car is increasing year on year.

- There are almost one million licensed cars in NI (944,000);<sup>1</sup>
- This equates to 6478 licensed cars per 10,000 of the eligible population (17+)<sup>2</sup>. This is a higher rate than in Scotland, England and Wales;
- 81% of households have access to at least one car (a rise from 74% in 2004-06);
- 81% of men (17%) and 71% of women (17+) had a full car driving licence in 2016;
- 42% of 17-20 year olds had a full car driving licence in 2016 (up from 27% in 2004-06);<sup>3</sup>
- Almost three quarters of all journeys (figure 2) and 81% of the total distance travelled is made by car;
- 87% of journeys of one mile or over are made in a car.<sup>4</sup>



Number of journeys made by car and as a percentage of total journeys

Source: Department for Infrastructure: <u>TSNI Headline Report 2015-17</u> and <u>TSNI in-depth report 2010-12</u>

<sup>&</sup>lt;sup>1</sup> Department for Transport, <u>Table VEH0105</u>, accessed 17 November 2018.

<sup>&</sup>lt;sup>2</sup> calculated using: NISRA, 2017 Mid-Year Population Estimates for Northern Ireland, <u>population by sex and single year of age</u> (<u>1991-2017</u>), accessed 12 December 2018

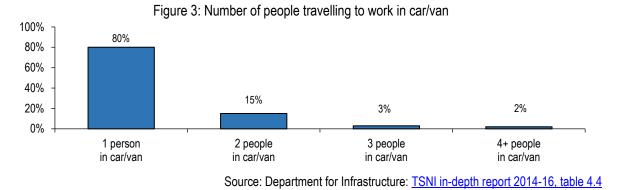
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<sup>&</sup>lt;sup>3</sup> Department for Infrastructure, <u>Travel Survey for Northern Ireland in-depth report 2014 – 2016, table 1.2: Basic Travel</u> Statistics, November 2017.

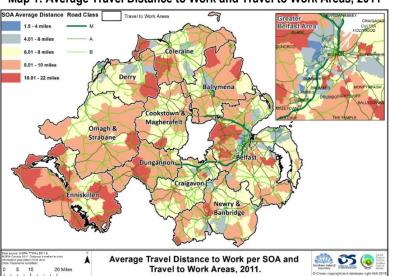
<sup>&</sup>lt;sup>4</sup> ibid.

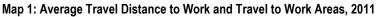
# 2.1 Travel to work

Commuting is the biggest single reason we travel. Those who work make on average 298 commuting journeys per year, this accounts for 16% of all journeys and 22% of the total distance travelled.<sup>5</sup> A car or van is used for over 80% of these journeys.<sup>6</sup> What has the most significant impact on the road network, particularly during morning and evening peaks, is the prevalence of low occupancy vehicles with 80% of all commuter cars/vans carrying only one person with 95% carrying no more than two.



(TTWAs) for major settlements in Northern Ireland.<sup>7</sup> This shows large parts of the region, particulalrly in the West and North have large concentrations of people travlling more than eight miles to work. Across Northern Ireland there are only small pockets of SOAs in and around large urban settlements with TDTW distance below six miles. Getting these people to move from using their cars is a particularly difficult challenge, as distance could exclude walking and cycling for many and public transport is likely to be available. It could be argued that solutions such as carshare could work best here and innovations in this area should be looked at.





<sup>&</sup>lt;sup>5</sup> Department for Infrastructure, <u>Travel Survey for Northern Ireland: Report 2015-17</u>, July 2018

<sup>&</sup>lt;sup>6</sup> Department for Infrastructure: TSNI urban-rural report 2014-16, table 6.4, July 2017.

<sup>&</sup>lt;sup>7</sup> Northern Ireland Statistics and Research Agency (NISRA), <u>Travel to work areas</u>, accessed 25 October 2018.

TDTW goes some way to explain car dependency and the high proportion of car based commuter journeys. However, census data shows us that many of those who live close to work still choose to drive:

- 40% of NI's working population live within 5km of work 70% drive, 23% walk or cycle while 7% use public transport.
- Of those who travel less than 2km 59% drive, 38% walk or cycle and 3% use public transport.<sup>8</sup>

The Committee may want to explore what interventions the DfI has considered to increase the proportion of people using sustainable transport to travel to work.

There would appear to be significant potential to change behaviours in those people who live within 5km of work but still chose to drive in such high numbers.

The committee may want to enquire if the Dfl has carried out any work to target these people, or has plans to do so

# 2.2 Impact of current travel behaviour

Traffic congestion has a significant impact on the economy, the environment and society. As discussed, the High levels of car use and particularly low occupancy vehicles cause severe peak period traffic congestion in Belfast which, which according to TomTom data, is the worst in the UK<sup>9</sup>.

City	Congestion Level	Morning Peak	Evening Peak
Belfast	43%	87%	87%
Edinburgh	40%	69%	74%
Brighton and Hove	36%	57%	60%
Bournemouth	36%	57%	64%
Sheffield	35%	55%	64%
Hull	35%	65%	68%
Bristol	34%	62%	67%
Leicester	32%	61%	60%
Swansea	29%	46%	53%
Cardiff	27%	51%	53%

Table 1: 10 most congested cities (with a population below 800,000) in the UK

Source: TomTom

<sup>&</sup>lt;sup>8</sup> Table DC7701NI: method of travel to work by distance travelled to work

<sup>&</sup>lt;sup>9</sup> TomTom, <u>Traffic Index: full ranking, Europe, UK, small cities</u>, accessed 11 October 2018.

TomTom's traffic index is based on a comparison of travel times in congested and uncongested conditions across a year.<sup>10</sup> Belfast had an overall congestion level of 43% in 2017, an increase of 4% on 2016. This means that the average trip took 43% longer than it would in uncongested conditions.<sup>11</sup> During both the morning and evening peak periods, the average trip took 87% longer in Belfast. The time lost equates to 52 minutes extra travel time per day or 200 hours per year (more than 8 days).

Transport data firm Inrix calculated that on average, drivers in the U.K. lost 178 hours per year due to congestion, costing the UK economy £7.9 billion or £1,317 per driver.<sup>12</sup> According to their data Belfast is above average (190 hours) and is second only to London (227 hours) in terms of hours lost in congestion, with the cost to drivers in Belfast estimated to be £1,406 per annum.<sup>13</sup> An earlier report showed congestion affects towns and cities across NI (table two).

Settlement	Hours spent in congestion p/week	Cost per driver	Cost to city
Derry	17	£1,052.04	£51m
Coleraine	9	£619.55	£38m
Newry	8	£453.41	£19m
Ballymena	6	£404.14	£24m
Craigavon	5	£352.44	£15m

#### Table 2: Hours lost to congestion, cost per driver and cost to settlements of congestion in NI

source: inrix

The INRIX study took into consideration the direct costs incurred by drivers such as fuel and time, as well as indirect costs relating to freighting and business fees from company vehicles idling in traffic that are passed on to household bills through higher prices.<sup>14</sup> Economist Dr Esmond Birnie, of the Ulster University's economic policy Centre commented that while he could not attest to the veracity of the report's findings the implication of the report is that congestion is more costly in Northern Ireland than the UK as a whole, "It is about 2.4% of GDP in NI, but about 2% of GDP for UK on average."<sup>15</sup>

<sup>15</sup> ibid.

<sup>&</sup>lt;sup>10</sup> TomTom, <u>Traffic Index: About</u>, accessed 11 October 2018.

<sup>&</sup>lt;sup>11</sup> TomTom, <u>Traffic Index: Belfast</u>, accessed 11 October 2018.

<sup>&</sup>lt;sup>12</sup> Inrix, <u>Global Traffic Scorecard</u>, February 2019

<sup>&</sup>lt;sup>13</sup> Inrix, <u>2018 Traffic Scorecard Report</u>, accessed 21 February 2019.

<sup>&</sup>lt;sup>14</sup> Mark Edwards, <u>Traffic congestion on Northern Ireland roads cost economy over £1 bn in 2017</u>, Belfast Telegraph, February 6 2018, accessed 4 March 2019.

#### Emissions

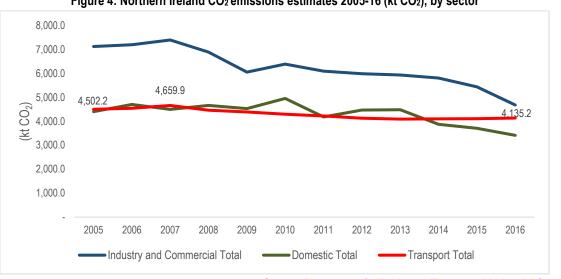
Under the UK Climate Change Act, NI contributes to the overall UK target of reducing GHG emissions by at least 80% by 2050 from 1990 baseline levels.<sup>16</sup> NI's has an intermediate target of at least a 35% reduction compared to 1990 levels in 2025. As of 2016, emissions were only 16% below their 1990 levels meaning there is some way to go if these targets are to be realised.<sup>17</sup>

	Targets: Reductions from 1990 baseleine	Emissions change 1990- 2016	Relative change emissions 2015-16	Average annual emissions change 2009-16
UK	35% by 2020	-41%	-5%	-3.1%
Scotland	56% (actual emissions) by 2020 42% (net) by 2020	-49% (actual) -45% (net)	+4.8%	+1.4%
Wales	27% by 2020 (CCC recommendation) 40% by 2020 (esisting non-statutory target	-14%	+4.8%	+1.4%
Northern Ireland	35% by 2025	-16%	+1.3%	-0.2%

#### Table 3: Emission reduction targets and progress for UK and devolved regions

Committee on Climate Change

Northern Ireland's transport sector is a major reason emissions are not falling at the desired rate, falling at a slower rate than in any other sector. Figure five shows that while domestic and commercial sectors have recorded notable reductions, emissions from transport remain relatively flat.



#### Figure 4: Northern Ireland CO<sub>2</sub> emissions estimates 2005-16 (kt CO<sub>2</sub>), by sector

Source: Department for Business, Energy and Industrial Strategy

<sup>&</sup>lt;sup>16</sup> Salisbury, E. et al., <u>Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990-2012</u>, May 2014

<sup>&</sup>lt;sup>17</sup> DAERA, Northern Ireland greenhouse gas inventory 1990-2016 statistical bulletin data and charts, June 2018

#### Air Quality

Transport is one of the main sources of air pollution in the UK. It is slowly improving, but many areas still fail to meet national air quality objectives and European limit values for some pollutants – particularly particulate matter (PM) and nitrogen oxides (NOx):

- Half of the PM produced from road transport is from fuel combustion, the other half is from tyre and brake dust and road wear. PM causes a range of health and environmental issues.
- Nitrogen oxides (NOx) includes nitrogen monoxide (NO) and nitrogen dioxide (NO2). The
- NOx emitted by road transport leads to increased concentrations of this pollutant at
- ground level in busy streets. Emissions are worse from diesel vehicles and long term exposure is linked to a variety of health and environmental issues.

Monitoring of these pollutants is carried out by the Department of Agriculture, Environment and Rural Affairs (DAERA) at 22 sites across Northern Ireland; they are measured against UK Air Quality Strategy objectives and EU Air Quality Directives<sup>18</sup>. District councils also operate <u>monitoring sites</u> to meet local objectives. The areas where pollatants are highest in NI, such as Stockmans Lane in Belfast, Downpatrick, Limavady and Dungiven are all are traffic-related sites beside major or busy roads.<sup>19</sup>

# 3 Modal shift policy

Achieving modal shift from private car to public transport and active travel has been a long-term policy goal in Northern Ireland (NI). The Regions first transport strategy, published in 2002, sought to address 'decades of under-investment and an ad hoc approach to transportation planning',<sup>20</sup> setting out 'a strategic framework for the future planning, funding and delivery of transportation throughout the region'.<sup>21</sup> The long-term vision presented in the strategy was:

"To have a modern, sustainable, safe transportation system which benefits society, the economy and the environment and which actively contributes to social inclusion and everyone's quality of life."<sup>22</sup>

The strategy included a number of measures aimed at attracting users to public transport, particularly in Belfast:

- Expenditure on new rolling stock;
- Increased capacity on bus and rail;

<sup>&</sup>lt;sup>18</sup> DAERA, <u>Northern Ireland Environmental Statistics Report</u>, May 2018

<sup>&</sup>lt;sup>19</sup> DAERA, Air Pollution in Northern Ireland 2017,

<sup>&</sup>lt;sup>20</sup> Department for Regional Development, Regional Transportation Strategy for Northern Ireland 2002 – 2012, July 2002

<sup>&</sup>lt;sup>21</sup> ibid.

<sup>22</sup> ibid, page 16.

- The introduction of Quality Bus Corridors (QBCs); and
- The commencement of a bus rapid transit (BRT) scheme in Belfast.

The 2002 RTS also suggested that in order to maximise the impact of any improvements to public transport services consideration would be given to use of certain demand management interventions, such as increased carparking charges/reduced capacity and road user charges.<sup>23</sup>

### 3.1 Investment

The RTS set out plans to invest £3.5 billion in NI's transport infrastructure.<sup>24</sup> This represented the most significant planned transport investment ever in NI, with funding to be split between roads (62%), public transport (35%), and other modes such as walking and cycling (2.5%).

Actual expenditure, set out in table five, was over half a billion pounds more than planned. However, expenditure on public transport and other modes was less than planned with more than 70% of total expenditure going to roads schemes.<sup>25</sup> An unbalanced spending profile in favour of roads has continued as set out in table 5.

	Planned Expenditure £m (2002-03 Prices)	Planned Share of funding %	Actual Expenditure £m (2002-03 Prices)	Actual Share of funding %
Roads	2,176.1	62.2	2,737.6	70.3
Public Transport	1,227.4	35.0	1,103.5	28.4
Walk/Cycle	86.5	2.5	50.2	1.3
All/Other	10.0	0.3	0.6	0
Total	3,500	100	3,891.9	100

Table 4: RTS - Planned/Actual Expenditure (2002-03 to 2011-12)

Source: NIAO

#### Table 5: Northern Ireland road expenditure versus public transport expenditure 2010-11 2015-16

	2010-11	2010-12	2010-13	2010-14	2010-15	2010-16	Total over Period
				£m			
All road expenditure	512.6	400.2	396.7	436.1	421.8	372.3	2539.7
Public Transport Expenditure	130.4	180.2	141.4	110.9	96.3	105.9	765.1
Total	643	580.4	538.1	547	518.1	478.2	3304.8
Percentage Split Road (%):	75:25	55:45	64:36	75:25	77:23	72:28	70:30

Source: Dfl26

<sup>&</sup>lt;sup>23</sup> ibid, page 6

<sup>&</sup>lt;sup>24</sup> Dfl, Transport plans for Northern Ireland, accessed 14 December 2018.

<sup>&</sup>lt;sup>25</sup> NI Audit Office, <u>DRD: the effectiveness of public transport in Northern Ireland</u>, April 2015.

<sup>&</sup>lt;sup>26</sup> Department for Infrastructure, Northern Ireland Transport Statistics 2015-2016, September 2016

According to the ISNI a modern road network addresses Executive priorities of economic growth and competitiveness and balanced regional development with both 'positive and negative' environmental impacts. It suggests significant investment in roads is necessary in order to address a legacy of under-investment and proposes that at least all key transport corridors in Northern Ireland should be at least dual carriageway standard.

The former Executive emphasised its continued commitment to the A5, identifying it as one of four flagship infrastructure projects alongside the A6 road, the Glider Bus Rapid Transit (BRT) system (which became operational in September 2018) and the Belfast Hub. A number of other projects that would be prioritised, should funding become available, included the York Street Interchange, Derry Transport Hub, the Narrow Water Bridge and the Newry Southern Relief Road.

The Committee may want to explore what the plans the Dfl has to address the funding disparity between roads and public transport.

### 3.2 Programme for Government

The 2016-21 Programme for Government (PfG) sets out 12 outcomes that the former Executive intended to deliver over the period with the objective of 'improving wellbeing for all – by tackling

disadvantage and driving economic growth'.<sup>27</sup> While there is no Executive, the NI Civil Service takes its direction from the outcomes agreed by the former Executive. There are two outcomes specific to transport:

- Outcome 2: We live and work sustainably protecting the environment; and
- Outcome 11: We connect people and opportunities through our infrastructure

These outcomes call for a reduction in car use through increases in walking, cycling and public transport or people not travelling at all; a reduction in transport emissions; improved road links and reduced congestion. It is proposed these will be achieved through:

- Enhancing public transport infrastructure rolling stock investment; marquee infrastructure projects such as transport Hubs for Belfast and Derry/Londonderry and The Belfast Rapid Transit service;
- Incentivising more sustainable and efficient ways of travelling such as walking, cycling and public transport; and

<sup>&</sup>lt;sup>27</sup> NI Executive, <u>Draft Programme for Government 2016-21</u>, May 2016

 Aligning land use and transport policies by integrating new regional/local transport plans, with Councils' Local Development Plans.<sup>28</sup>

#### Criticism of policy approach

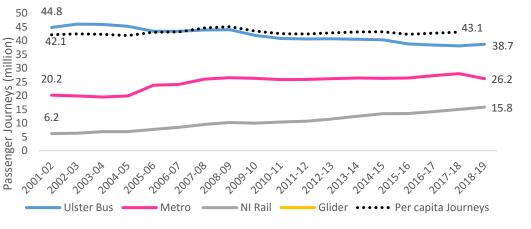
The Northern Ireland Audit Office examined the effectiveness of public transport in Northern Ireland in 2015 against the public transport initiatives and targets outlined in the 2002 RTS.<sup>29</sup> Their review included analysis of:

- the funding of public transport in Northern Ireland;
- The governance structures in place to plan and manage public transport in Northern Ireland;
- The performance in terms of realising targets for modal shift and increased passenger numbers; and
- How NI compares to comparators in GB

The report noted that while overall public transport journeys had risen slightly, this was in line with population growth and no modal shift had occurred (see figure five). It noted that significant investment in rail services and Belfast metro had been successful in increasing passenger numbers but that Ulsterbus, which is responsible for carrying the highest number of passengers, had seen journey number fall.

The report concluded that not only had modal shift not been achieved, commuters were now less likely to use public transport to get to and from work than a decade ago, causing increasing peak time congestion on Belfast's arterial routes. The report indicated that a re-balancing of funding was needed in order to achieve modal shift targets in what is a car dependent society.

Figure 5: Ulsterbus/Metro/NI Rail passenger journeys and Public Transport Journeys per capita: 2001-02 to 2018-19



Source: Department for Infrastructure

<sup>&</sup>lt;sup>28</sup> The Executive Office, <u>Outcome Delivery Plan 2018-19</u>, June 2018

<sup>&</sup>lt;sup>29</sup> NI Audit Office, <u>DRD: the effectiveness of public transport in Northern Ireland</u>, April 2015.

In response to the NIAO report the NI Assembly's Public Accounts Committee concluded:

- More innovation is needed among those key to planning and delivering public transport in order to increase the numbers of fare paying passengers;
- Translink must improve what it offers to its customers;
- There is a need for stronger vision and leadership in order to achieve Modal Shift there is an unwillingness to apply demand management measures;
- The Department needs to show greater commitment to public transport in its funding allocations;
- There is a need for improved challenge and scrutiny of public transport to encourage greater efficiency and innovation within Translink; and
- There is a need to address the public transport skills deficit within the Department.<sup>30</sup>

Since the NIAO report the Glider service, in East and West Belfast has launced. According to the Minister for Infrastructure, the Glider service provided 13.6 million journeys between September 2018 and January 2020. This represents an increase over 45,000 passenger journeys per week in comparison to Metro services it replaced (2.3m per year).<sup>31</sup> The Minister has suggested that this growth in passenger numbers demonstrates the effectiveness of this type investment in promoting modal shift.<sup>32</sup>

The Committee may want to explore what progress the Dfl has made on implementing the recommendations made by the Public Accounts Committee, particularly:

- what innovations, services and approaches it is taking to increase public transport patronage? and
- What has been done to address the transport skills deficit identified by the NIAO?

# 3.3 Potential policy interventions

An individual's choice of transport mode is influenced by a number of factors. Social norms, habitual and automatic behaviour and quality of public transport infrastructure

<sup>&</sup>lt;sup>30</sup> Public Account Committee, <u>Report on DRD: The Effectiveness of Public Transport in Northern Ireland</u>, June 2015.

<sup>&</sup>lt;sup>31</sup> NI Assembly, written question, 23 January 2020, <u>AQW 837/17-22</u>

<sup>32</sup> ibid.

have been identified as particularly important.<sup>33</sup> Analysis of a range of studies by Batty (2015) looking at what qualities attract people to public transport found that comfort, accessibility, speed, seamlessness of journey, safety, security, affordability and reliability are fundamentals, without which modal shift will not occur.<sup>34</sup>

These are what are described broadly as 'pull' factors i.e. the types of qualities that might attract people to alter their travel behaviour. They are largely delivered through investments in infrastructure and services. In contrast, there are conditions under which car usage can be made either unattractive, difficult or impossible to undertake, with users effectively 'pushed' to change behaviour. Examples of push policies include road user charging, congestion zone charges and car parking policies.<sup>35</sup> This 'push' approach often, though not always, struggles to gain public support, and hence political support is rarely forthcoming.

Increasingly policy makers are taking notices of insights from across the behavioural sciences and particularly behavioural economics that attempt to explain peoples' behaviour by examining the role of psychological, social, and emotional factors in the decision making process. This is being used to develop non-intrusive interventions, referred to as 'nudges', to modify behaviour.

A report by Alta Planning and Design and the Behavioural Insights Team (BIT), looking at applying behavioural insights in transportation demand management, outlined a simple three-step behavioural approach methodology to increasing and improving public transport use

- 1. Map out behavioural touch points to identify the points in the process where there are psychological or behavioural barriers keeping people from using public transit.
- 2. Design an intervention to ensure the solution is targeted at a specific behaviour and group of people.
- 3. Test whether the intervention worked to evaluate whether solutions are impactful and cost effective before scaling up.

They acknowledge that 'nudges' may not be the panacea for correcting the transport system but that

"...if a low-cost behavioural intervention can move some people to use the bus that would otherwise have taken the car, or shift some daily riders to off-peak times, the approach should free up resources to be spent on those

<sup>&</sup>lt;sup>33</sup> House of Lords Science and Technology Select Committee, 2<sup>nd</sup> Report of Session 2010-12, <u>Behaviour Change</u>, HL Paper 179, July 2011.

<sup>&</sup>lt;sup>34</sup> Paul Batty, et al., Challenges and opportunities in developing urban modal shift, Travel Behaviour and Society vol. 2, 2015, pp. 109–123

<sup>&</sup>lt;sup>35</sup> Sascha von Behren, <u>Office relocation and changes in travel behaviour</u>: <u>Capturing the effects including the adaptation phase</u>, Transportation Research Procedia 32 (2018) 573–584

bottlenecks that require significant investment—such as improving frequency or adding more stops to a route."

It is argued that none of these approaches works in isolation and implementing a combination of 'pull', 'push' and 'nudge' policies is the most effective way to effect changes in travel behaviour.<sup>36</sup> It is therefore likely that significant and sustainable modal shift will require a range of interventions.

The Committee may want to explore what approaches to transport demand management interventions the Dfl favours and what impact their approach is likely to have on modal shift targets

# 4 Concessionary Fares

The NI Audit Office assessment of the effectiveness of public transport in NI noted that concessionary fare passengers skew passenger journey figures on Metro and Ulsterbus. The Minister for Infrastructure has noted the Glider Service is also popular with concessionary fare passengers, indicating that SmartPass users increased from 49,730 in the first seven months of operation to March 2019, to 138,766 in the period from April 2019 to December 2019.<sup>37</sup>

# 4.1 Northern Ireland Concessionary Travel Scheme

The Northern Ireland Concessionary Fare Scheme was established in 1978, under Article 5 of the Transport (Northern Ireland) Order 1977. Initially free travel was restricted to individuals who were registered as blind while half fare concessions were available to senior citizens aged 65 and over, people in receipt of a regular war disablement pension, and children between the ages of 6 and 16. People over 65 have been entitled to free travel on scheduled buses and trains since 1 October 2001 on production of a pass, the eligibility range for free travel was then extended to include those aged 60-64 in October 2008.<sup>38</sup>

The overall aim of Northern Ireland's Concessionary Fare Scheme is:

'To promote social inclusion by improving public transport accessibility through free and concessionary fares for members of the community who are most vulnerable, or liable to social exclusion.'<sup>39</sup>

<sup>&</sup>lt;sup>36</sup> Federal Ministry for Economic Cooperation and Development, <u>Transportation Demand Management</u>, April 2009 <sup>37</sup> ibid.

<sup>&</sup>lt;sup>38</sup> Department for Infrastructure, <u>The Northern Ireland Concessionary Fare Scheme</u>, accessed February 2020

<sup>&</sup>lt;sup>39</sup> ibid.

#### Free travel for those ages 60-64

The extension of the scheme to those aged 60-64 followed a 2007 policy review that considered the potential costs and benefits of including/excluding a number of groups based on the perceived risk of social exclusion. The groups included children and young people, those with disabilities, those on low incomes and 60-64 year olds. It was concluded that extending the scheme to those aged 60-64 would bring a number of benefits:

- It would closely align with the overall policy aim of increasing social inclusion;
- It would bring the NI scheme in line with rest of the UK; and
- it would ensure that all those in receipt of a state pension in Northern Ireland would be eligible for free travel on public transport.

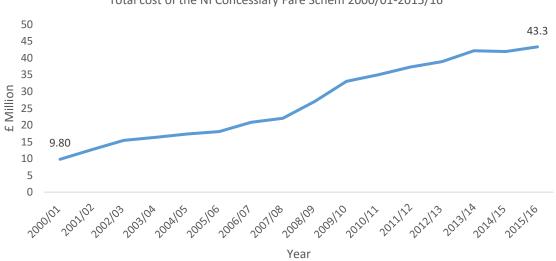
#### Scheme cost

It was originally estimated that extending the eligibility of the concessionary fare scheme would cost in the region of  $\pounds 3.9m$ .<sup>40</sup> However, by 2011/12, the cost of the scheme for 60-64 year olds was around  $\pounds 6.7m$  and in 2016-17 it was  $\pounds 8.3m$ . It is not only the cost of 60+ pass which have increased, the cost of the scheme has risen significantly:

- In 2007/08, the year before the introduction of the 60+ pass, the scheme cost £12,765,000;
- In 2008/09, the first year of the 60+ pass, the overall scheme cost £17,822,000 a 40% increase;
- In 2011/12, the scheme cost £26,422,000, a 107% increase form 2008/09;
- In 2016/17, the scheme cost £43,721,000, a 65% increase from 2011/12.

Figure 6: Total cost of the NI Concessionary Fare Scheme 2000/01-2015/16

<sup>&</sup>lt;sup>40</sup> RalSe, <u>Background to the Free Travel Scheme for People Aged 60-64</u>, October 2012



Total cost of the NI Concessiary Fare Schem 2000/01-2015/16

#### **Changing demographics**

The size of the population eligible for the concessionary fare scheme is increasing year-on-year: <sup>41</sup>

- The number turning 60 each year is around 20,000 and this has increased from around 15,000 over the last 20 years;
- There were around 97,000 60-64 year olds in 2016 and this number is rising steadily each year (from around 70,000 20 years ago);
- The number of those aged 65 and over increased by 2 per cent in the year ending mid-2016 to reach 297,800 people (16.0 per cent of the population);
- the population aged 85 and over increased by 2.8 per cent to reach 36,500 people (2.0 per cent of the population);
- The number of people over 65 years living in Northern Ireland is expected to increase by 74.4% in the next twenty years.<sup>42</sup>

#### Are people working longer?

As the population ages due to better health, people are working longer. This has been reflected in the UK Government's decision to increase the state pension age. Over the half-century from 2014 to 2064 it is projected that remaining life expectancy at aged 65 in the UK will increase by around 5 years six months for men (from 21.2 years to 26.7 years) and 5 years 2 months for women (from 23.5 to 28.7 years). The rate of improvement is projected to be broadly uniform across the UK's constituent countries.<sup>43</sup>

<sup>&</sup>lt;sup>41</sup> NISRA, <u>Mid-year Population Estimates for Northern Ireland</u>, June 2017

<sup>&</sup>lt;sup>42</sup> Age NI, <u>Achieving Better Outcomes for Older People</u>, January 2016

<sup>&</sup>lt;sup>43</sup> House of Commons Library, <u>State Pension age review</u>, August 2017

There were around 44,000 people age 60-64 in employment in NI in 2015-16; this accounts for 43% of the 60-64 age cohort. This figure will likely increase in the coming years as the pension age increases. Research by conducted by YouGov, on behalf of the Charity Age NI and Business in the Community, found that 47% of workers in Northern Ireland aged 40-64 – estimated to be more than 297,800 people – plan to work past the state pension age as many believe they will not be able to afford to retire.<sup>44</sup>

#### Concessionary Travel for those aged 60-64 Key stats:

As of April 2017, there were approximately 66,294 active cardholders within the 60-64 SmartPass category:

- There were 3,126,503 trips made by 60-64 SmartPass holders in 2016/17;
- On average users made 47 trips each;
- Of the 3.1m trips 2,629,809 trips were made off peak (after 09:20), 84 per cent of all trips;
- 133,075 were made during peak hours (before 09:20), 16% of all trips.
- The cost of travel for 60-64s in 2016/17 was £8,273,252,72;
- The average cost of a trip was £2.67.

#### Summary

Since the introduction of free travel for those aged 60-64, there have been some significant changes. The population now eligible for concessionary travel has increased significantly and this is expected to increase further in the next twenty years as the population ages and people live longer. These projections have already led to changes to the state pension age which have will also see parity in eligibility for men and women being introduced. England and Wales have amended their concessionary fare scheme to align with the state pension age, with the suggestion being the rising costs make the scheme unsustainable. Already in Northern Ireland, 44,000 or 43% of the 60-64 age cohort work, and this will likely increase in the coming years.

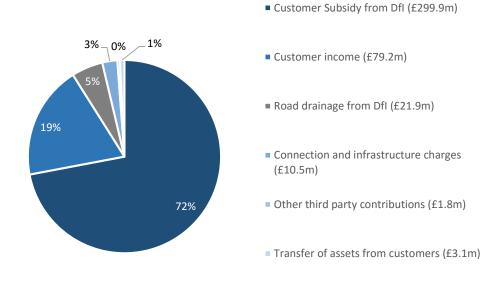
The Committee may want to explore with the DfI what planning has taken place with regards to the future of the NI Concessionary fare scheme in light of changing demographics and approaches taken elsewhere to align entitlement with pension age

<sup>44</sup> ibid.

# 5 Investment in Waste Water Infrastructure

According to NIW, underfunding wastewater infrastructure investment is curbing economic development, already preventing new housing and commercial developments connecting to the sewerage system in over 100 towns. NIW has warned that the planned growth of Belfast City will stall unless £1bn investment in strategic drainage is supported.<sup>45</sup>

Figure seven shows the breakdown of NIW's revenue for 2018/19. Revenue was  $\pounds$ 416.4m for the year, including a subsidy of  $\pounds$ 299.9m and  $\pounds$ 79.2m income from non-domestic customers.<sup>46</sup>



#### Figure 7: NIW sources of revenue 2018/19 (£m)

#### Source: NI Water Annual Report and Accounts 2018/19

Under the current Price Control (PC15) that runs from 2015-21, the utility regulator determined NIW would require revenue of £2,340m to deliver its business plan. This included a subsidy of more than £296m per year (£1,774m over PC15) that would account for 76% of NIW's revenue requirements. Figure two provides a breakdown of NIW's revenue sources over the first four years of PC15, this includes subsidy a subsidy payment rising year on year from £283.5m in 2015/16 to £299.9m in 2018/19. This subsidy covers the notional household charge of around £400 per annum (table one).<sup>47</sup>

#### Table 6: Price Control 2015-21 (PC15) notional household charge

<sup>&</sup>lt;sup>45</sup> NIW, <u>Our Strategy 2021-46</u>, accessed 18 February 2020

<sup>46</sup> ibid

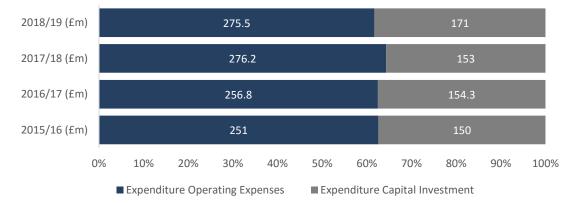
<sup>&</sup>lt;sup>47</sup> Utility Regulator, <u>PC15 Final Determination</u>, December 2014

		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
I	PC15 Final Determination	£410	£402	£402	£394	£387	£395	£400

### 5.1 Investment in wastewater infrastructure

NIW has estimated that it could invest £1.4bn efficiently in PC15 if funding was available, while it identified a further £1bn capital requirement to address strategic drainage issues and comply with EU regulations.<sup>48</sup> As NIW is subject to the public expenditure constraints investment plans for PC15 were based on an indicative allocation of £990m for water and sewerage services in the Executive's Investment Strategy.<sup>49</sup>

This has had a direct impact on NIW's investment output. For example, the PC15 Business Case proposed addressing capacity issues at 70 Wastewater Treatment Works (WwTW) at an estimated cost of £200m.<sup>50</sup> £60m was allocated over the PC15 period, enabling work on 19 sites to be completed. Figure three sets out NIW's operating and investment expenditure over the first four years of PC15. During this period NIW has invested £628m; to reach the £990m indicative investment agreed in PC15 it would require £362m over the two remaining years of PC15 2019/20 and 2020/21.<sup>51</sup>



#### Figure 8: NIW operating expenses and capital investment 2015/16 to 2018/19

#### PC21

NIW has indicated it will need in excess of £500m to address wastewater capacity issues in the next price control period (2021 - 2027).<sup>52</sup> This is to address both the backlog from PC15 and to deal with new sites identified in the forthcoming business plan. Failure to meet this requirement could create a vicious circle where failure to

<sup>&</sup>lt;sup>48</sup> Utility Regulator, <u>PC15 Final Determination, Annex K Capital Investment</u>, December 2014

<sup>49</sup> ibid.

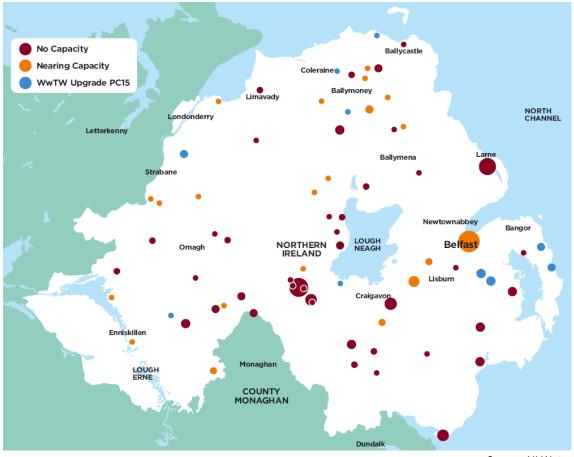
<sup>&</sup>lt;sup>50</sup> Michael Fitzpatrick & Cormac Campbell, <u>Sewage problems 'may limit house building'</u>, BBC News online, October 2018

<sup>&</sup>lt;sup>51</sup> NI water, <u>Annual Report and Accounts 2015/16 to 2018/19</u>, accessed 1 March 2020

<sup>&</sup>lt;sup>52</sup> NI Water, <u>Funding restraints curb development</u>, October 2018

address capacity issues creates an ever-growing backlog of work which could have significant impacts on the local economy and environment. Map one shows the current sites where wastewater treatment works are at or near capacity.<sup>53</sup>

NIW has stated underfunding of PC15 curbed economic development preventing new housing and commercial developments connecting to the sewerage system in over 100 towns. Furthermore, the strategy warns that the planned growth of Belfast City will stall unless the £1bn investment in strategic drainage is supported.<sup>54</sup> Annex one details the Wastewater systems at or near their capacity and the impact this is having on new developments at August 2019.





Source: NI Water

NIW's Chief Executive has recently addressed issues related to capacity with the broader NIW infrastructure network:

<sup>&</sup>lt;sup>53</sup> NI Water, Annual Report and Accounts 2018-19, August 2019

<sup>&</sup>lt;sup>54</sup> NIW, <u>Our Strategy 2021-46</u>, accessed 18 February 2020

*"Every part of our infrastructure network has a finite capacity.* There is an example of *a water main commissioned in the 1880's that is part of a network supplying some 20,000 customers"*<sup>55</sup>

"The sewerage network is now becoming a major issue and realistic, significant investment is needed to increase its capacity and enable the continuing safe management of ever increasing volumes of wastewater and sewage. Currently, almost 30 per cent of the largest wastewater treatment works are either at, or are fast approaching their capacity".<sup>56</sup>

NIW has submitted its business plan for the next PC21 that contains an investment plan of some £2.5bn. It remains to be seen how much will be allocated to NIW for this period and if it will be sufficient to deliver on its business plan goals.

The Committee may want to explore what options exist to fund NI Water:

- Is there a potential for PFI or private borrowing from example bonds?
- Is consideration being given to changing the current water charging policy?
- What if any changes will be made to current governance arrangements at NIW?

# 6 Roads – Structural Maintenance

Structural maintenance is the collective term for activities that maintain the integrity of the road and footway structure; the main activities include resurfacing and reconstruction, surface dressing, patching and structural drainage. Planned Structural maintenance activities, such as resurfacing and surface dressing, provide good value for money. However, planned maintenance rarely attracts the necessary budgetary commitment, with final allocations often dependent on in-year-bids from the Dfl. This results in a higher level of reactive maintenance which is inefficient and has the potential to undermine the roads ability to withstand the damage inflicted by heavy vehicles, extreme weather, and street works.

An independent review of the Structural Maintenance funding requirements for Roads Service was undertaken by Professor MS Snaith in 2009.<sup>57</sup> The 'Snaith Review' recommended that a time bound plan and budget be put in place to address the

<sup>&</sup>lt;sup>55</sup> Agenda NI, <u>NIW: Infrastructure for economic boom or gloom</u>, June 2019

<sup>56</sup> ibid.

<sup>&</sup>lt;sup>57</sup> Snaith, M.S. (2009) A review of the structural maintenance funding requirements for the Roads Service. DRD: Belfast (copy available in NI Assembly Library

backlog of maintenance, which stood at approximately £700 million in 2008. The *Snaith Review* makes it clear that historical levels of funding are unsustainable. It suggest underinvestment has created "a vicious circle": as pavements deteriorate through a lack of planned maintenance, they require relatively expensive patching to avoid public liability claims and maintain road safety, which draws further funds away from good value resurfacing and surface dressing (this vicious is circle is described in figure one).

A second independent review of the optimum level of funding required to properly maintain the Northern Ireland road network was conducted Mr Jim Barton, a UK highway expert, and published in 2019. This report described the way in which structural maintenance is funded as bizarre,

The way in which maintenance funds have been allocated over the course of successive financial years demonstrates a volatile, even bizarre, approach with very often inadequate budgets set at the start of the year and then added to in-year. This makes the planning and implementation of an effective road maintenance strategy very difficult to deliver. Certainty of funding is the key to being able to provide the supply chain with the confidence to properly plan maintenance programmes and thereby lock them into keenly priced tenders. Similarly, budget certainty allows managers to plan and deploy their own workforce more effectively. <sup>58</sup>

This report noted that:

- While current survey methods indicate that trunk and A class roads are generally in reasonable condition. The current inspection methodology could be inadequate.
- Course Visual Inspection (CVI) surveys are undertaken on only 10% of the unclassified network each year.
- The deterioration of the lower class network can be seen, vividly, in the number of customer complaints, potholes and vehicle damage claims.
- Over the past year, 90% of customer complaints/enquiries were concerning the B, C and U class network.
- Between 2009 and 2017 structural maintenance was underfunded by around £311m (2017/18 prices); however, the maintenance backlog increased by £400m from £796m to £1.2bn (2017/18 prices).
- A realistic estimate for the structural maintenance funding requirement is £143m per year.<sup>59</sup>

 <sup>&</sup>lt;sup>58</sup> Jim Bsarton, <u>Review of the Structural Maintenance Funding Requirements For DFI</u>, November 2018
 <sup>59</sup> Ibid,

# 6.1 NI Audit Office Report on Structural Maintenance

The NI Audit Office acknowledged the findings of the Dfl's independent review of structural maintenance and recommended:

- 1. The Department work with the Department of Finance to secure long-term funding options, such as ring-fenced funding, to increase budget certainty and promote better value for money.
- 2. The Department should develop a strategy to communicate, consult and engage with all stakeholders regarding the condition of the road network. This should be developed with inputs from local government councils and partners in other public bodies.
- The Department should publish a strategy for maintaining the road network to a satisfactory state. The strategy could form part of a wider roads investment strategy, which takes account of the needs of the existing network when considering the affordability of large-scale road infrastructure and other transport investments.
- 4. The Department should publish information regarding the condition of the road network on a regular basis. This should include meaningful performance indicators and standards, providing all elected representatives and road users with valuable information to support independent monitoring and inform decision-making.
- 5. In light of the latest condition data for the trunk road network, which indicates that it is in better condition than previously thought, the Department should reconsider how funding is allocated for structural maintenance to ensure fair coverage for all sections of the network including rural roads.<sup>60</sup>

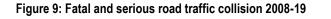
# 7 NI Road Safety Strategy 2020

Northern Ireland's Road Safety Strategy (NIRSS) to 2020 outlined the key road safety challenges to be addressed by government between 2010 and 2020. It identified four casualty reduction targets and 199 action measures for improving road safety.

Since the strategy was published in 2011, the number of people killed or seriously injured has gone down. Most notably between 2009 and 2010, there was a period of stability from 2013-2015 (varying only by 1% each year). However, 2016 saw an increase of 14% on 2015, with KSI casualty numbers higher than they had been in any of the previous five years. It would appear that this increase was a temporary spike:

<sup>&</sup>lt;sup>60</sup> NI Audit Office, <u>Structural Maintenance of the Road Network</u>, March 2019

KSIs fell by 12% in the subsequent two years, and numbers recorded in 2018 are the same as they were in 2015.

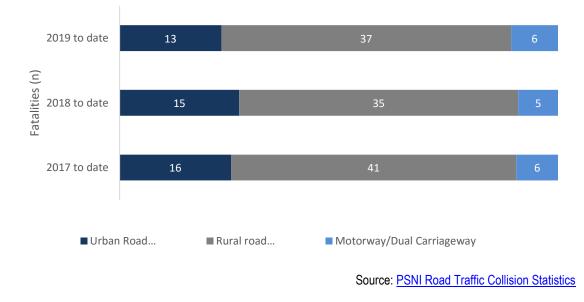




Despite the success of the strategy, 56 people tragically lost their lives on Northern Ireland's roads in 2019, bringing unimaginable loss and suffering to individuals, families and communities. The fact is that these tragedies are avoidable; public bodies have a responsibility to create awareness around the potential dangers of our roads, implement traffic laws, and ensure road infrastructure is safe. However, all road users share a collective responsibility to act in a manner that does not endanger themselves or others.

#### **Rural Roads**

Rural roads, whilst having a lower frequency of RTCs than urban roads consistently see more severe outcomes. Figure 10 shows the share of fatalities in NI over the last three years.



With the current road safety strategy expiring this year (2020) The Committee may want to inquire what stage development of a new strategy is at and what measures are proposed to continue reducing the number of serious and fatal road traffic collisions.

# 8 Planning

### 8.1 Potential updates required

On the 1st April 2015 a new two-tier planning system came into force under the Planning Act (Northern Ireland) 2011 (2011 Planning Act)<sup>61</sup>, introducing a sharing of planning responsibilities between councils and the Department for Infrastructure (Dfl).

There are a number of outstanding issues since the Assembly was in abeyance:

- In September 2016, the Minister at the time, Mr. Chris Hazzard MLA, announced his intention to conduct a review into the strategic planning policy for 'Renewable Energy' and 'Development in the Countryside' under the SPPS.<sup>62</sup>
- From December 2016 to February 2017, a consultation was conducted by the Department for Infrastructure on amending the 2015 Order to remove PD rights for oil and gas (or mineral) exploration.<sup>63</sup>
- Outstanding amendments to permitted development for telecommunications.<sup>64</sup>
- According to the Chief Planner's Update 2017, DFI is considering the development of a Regional Infrastructure Delivery Plan. This will support the spatial elements of the RDS, inform the long-term delivery of infrastructure at the regional level and assist in achieving Programme for Government outcomes.<sup>65</sup>

The Committee may wish for updates on any of the above.

# 8.2 Called in and regionally significant applications

The Department deals with regionally significant applications, and has the power to call-in applications from local councils should they be considered to raise issues of significant regional impact. Developments being determined by the Department include, and are not limited to:

- Casement Park
- Dalradian Gold mine

<sup>&</sup>lt;sup>61</sup> Planning Act (Northern Ireland) 2011

<sup>&</sup>lt;sup>62</sup> Dfl, <u>Hazzard announces planning review on renewable energy and countryside development</u>, 27 September 2016

<sup>63</sup> Dfl, <u>Review of Permitted Development Rights for Mineral Exploration</u>.

<sup>&</sup>lt;sup>64</sup> Planning Portal NI, Consultation Paper on the Review of Permitted Development Rights, 5 May 2016

<sup>&</sup>lt;sup>65</sup> Planning Portal NI, <u>Chief Planner's Update 2017</u>, September 2017

- Sand extraction at Lough Neagh
- Hightown Incinerator.

While the Committee may not wish to get involved in individual applications – it may be of interest to keep a watching brief over these types of applications to ensure the regional legislative and policy framework has been applied consistently across NI, and that it is in fact fit for purpose.

### 8.3 Local Development Plans

In NI, Local Development Plans (LDPs) are a two-stage process with a Plan Strategy providing the strategic framework for the local, site specific Local Policies Plan (LPP).

#### Current state of play

The timeframe for the preparation of LDPs is set out in each council's timetable, as prescribed under the Planning Act 2011 and the subsequent 2015 LDP Regulations. Councils have now published their timetables, and most plan to have their LDPS adopted between 2019 -2021. Until the new local councils develop their own LDPs, the existing development plans<sup>66</sup> made by the department under the old system will remain in place.

All councils (as of January 2020) have consulted on their draft Plan Strategy. One council so far, Belfast, has submitted their draft PS to Dfl for independent examination by the Planning Appeals Committee, which is part for the process.<sup>67</sup>

### 8.4 Monitoring and review of the planning system

The new planning system has been in operation since 2015. In general, it has meeting its indicators for local development and enforcement, however not for major applications. The indicator for the processing of major applications is within an average for 30 weeks. With the average for 2018/19 being 59 – it is well over the indicator and has in fact shown an increase since last year.<sup>68</sup>

Council decisions – councils have a legal duty to provide adequate, coherent and intelligible reasons for decisions on applications. According to the Chief Planner's update (2019) - a judicial review (Stuart Knox v Causeway Coast and Glens Borough Council [2019] NIQB 34) concluded that councils should review practices, procedures and cultures to ensure this obligation is discharged properly.<sup>69</sup>

<sup>&</sup>lt;sup>66</sup> Planning Portal NI, <u>Development Plans: A-Z by New Council Area</u>

<sup>&</sup>lt;sup>67</sup> BCC, <u>Belfast Local Development Plan</u>

<sup>68</sup> Dfl, Northern Ireland planning statistics April 2018 - March 2019

<sup>&</sup>lt;sup>69</sup> Planning Portal NI, Chief Planner's update (2019), November 2019

#### **Recent developments**

The first <u>NI Planning Monitoring Framework</u> was published in September 2019. This was developed along with local councils. It contains a set of indicators around which the new planning system in NI will be monitored.<sup>70</sup>

Chief Planner's report 2019 mentions a report conducted by John Irvine, which reviewed the efficiency and effectiveness of the planning system, with a focus on statutory consultees. This report was circulated around councils; however, the Committee may find it useful to request a copy.

> Chief Planner's update also mentioned that a review of the planning system would be conducted at local and central government level by the NI Audit Office, set to commence in 2020. The Committee may wish to be kept appraised on this.

### 5 Environmental governance

The Environment Bill<sup>71</sup> was introduced to Parliament on the 30 January 2020, with 133 provisions and 19 schedules, of which approximately 57 provisions and 9 schedules extend to Northern Ireland (NI). The scope of the Bill is far-reaching with the first half providing the legal framework for new environmental governance in the form of an Office for Environmental Protection in NI.

Post-transition, the role of the European Commission and the Court of Justice (CJEU)<sup>72</sup> of the European Union in holding the UK Government to account will instead be played by the OEP. Its main role is to ensure NI government and public bodies comply with UK and NI environmental legislation. It main means of enforcement is via judicial review, and unlike the EC and CJEU, it does not appear to have any fine/infraction powers.

Essentially, the scope of the OEPs role is scrutiny, advice, complaints and enforcement functions in NI is determined by the definition of environmental law.

<sup>&</sup>lt;sup>70</sup> Dfl, <u>NI Planning Monitoring Framework</u>, 19 September 2019

<sup>&</sup>lt;sup>71</sup> Environment Bill

<sup>&</sup>lt;sup>72</sup> Europa, <u>Court of Justice of European Union (CJEU)</u>

#### NI environmental law

This means any legislative provision contained in, or an instrument under, NI legislation including any Acts of the Assembly. It does not include excepted matters (disclosure of or access to information, the armed forces/national security, taxation, spending, government allocation of resources). (Sch3 (3))

The definition applies to a whole or any element of an Act or regulation that is considered to be "mainly concerned" with environmental protection. According to the <u>explanatory memorandum</u>, this may include elements of planning legislation in relation to environmental impact assessment and strategic environmental assessment.

### 6 Waste and planning

It is Northern Ireland's intention to revise its current Strategy -Delivering Resource Efficiency73. A consultation74 on a new waste management plan (WMPNI) was held at the end of 2019. Its core aim is to bring current waste management policies under the umbrella of one national plan. This will also incorporate planning policies for determining suitable waste facility sites e.g. the SPPS, RDS, PPS11 and PPS 18 – the first time for any waste management plan in NI.

The outcome of the consultation and production of a new waste management plan may be of interest to the Committee concerning potential planning related commitments.

<sup>&</sup>lt;sup>73</sup> DAERA, Delivering Resource Efficiency - Northern Ireland Waste Management Strategy, 28 April 2015.

<sup>&</sup>lt;sup>74</sup> DAERA, Waste Management Plan for Northern Ireland, 16 October 2019.

# 7 Sewage capacity and development

Sewage capacity issues affecting housing developments across NI appears to be an ongoing issue. A number of areas have had development halted: Saintfield<sup>75</sup> and <u>Larne<sup>76</sup></u> for example. In 2018, NI Water Chief Executive Sara Venning stated:

several areas of Northern Ireland face the prospect of curbs on development as the result of capacity issues in the sewerage networks.<sup>77</sup>

Director of the Federation of Master Builders NI, stated that developers adding independent treatment works still require NI Water-approved pipe work and drainage systems and are facing costs between £3,000 and £5,000 per property.<sup>78</sup>

In fact, the <u>Northern Ireland Federation of Housing Associations</u> (NIFHA)<sup>79</sup> has identified wastewater capacity constraints as a major issue needing urgent investment:

**New connections** for new developments such as houses, offices, factories, hotels, hospitals or schools are being curtailed because 99 Wastewater Treatment Works (WWTW) at locations around Northern Ireland are almost at capacity with a further 33 predicted to reaching capacity by 2027. Significant investment is urgently required to address this.<sup>80</sup>

The Committee may wish to consider these impacts along with the points raised in section 5 of this paper

<sup>&</sup>lt;sup>75</sup> BBC News, <u>Saintfield sewage problems lead to building ban</u>, 22 August 2018.

<sup>&</sup>lt;sup>76</sup> BBC News, <u>Sewage problems 'may limit house building'</u>, 23 October 2018.

<sup>&</sup>lt;sup>77</sup> Belfast Telegraph (September 2018) Housing development threatened by sewerage under-capacity, September 2018.

<sup>&</sup>lt;sup>78</sup> BBC News, <u>Sewage problems 'may limit house building'</u>, October 2018.

<sup>79</sup> NIFHA

<sup>&</sup>lt;sup>80</sup> NIFHA, <u>Development</u>.

Council Area	Issues Identified
Belfast City Council	Belfast WWTW (predicted to reach capacity in 2021)
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken at Belfast (Glenmachan sub catchment), Kinnegar (Sydenham sub catchment), Newtownbreda, Whitehouse, Dunmurry. As a result of this, new connections are being declined in parts of the catchment.
Antrim & Newtownabbey Borough Council	Wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken at Antrim, Ballyclare, Whitehouse. As a result, new connections are being declined in parts of the catchment.
Mid and East Antrim	Clogh WWTW
Borough Council	Grange WWTW
	■ Larne WWTW
	<ul> <li>Moorfields WWTW</li> </ul>
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Ballymena, Larne, Carrickfergus, Greenisland, Larne, Ballycarry, Portglenone, Tully Road (Carnlough & Glenarm). As a result, new connections are being declined in parts of the catchment.
Lisburn and Castlereagh	Moneyreagh WWTW*
City Council	*WwTW Upgrade / New Works Scheduled for PC15 Delivery within NI Water's current Business Plan period (2015/16 to 2020/21).
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Lisburn, Moneyreagh, Annahilt, Dromara, Raverent, Glenavy, Newtownbreda. As a result, new connections are being declined in parts of the catchment.
Ards and North Down	■ Ballygowan*
Borough Council	Ballywalter (Retention Tank)*
	Carrowdore*
	<ul> <li>Killinchy</li> </ul>
	Loughries
	*WwTW Upgrades / New Works Scheduled for PC15 Delivery within NI Water's current Business Plan period (2015/16 to 2020/21).
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Bangor, Newtownards, Killinchy, Cotton, Kinnegar, Kircubbin, Donaghadee, Millisle. As a result, new connections are being declined in parts of the catchment.
Armagh, Banbridge and	<ul> <li>Blackwatertown</li> </ul>
Craigavon Borough	Lawrencetown
Council	<ul> <li>Markethill</li> </ul>
	<ul> <li>Moneyslane</li> </ul>
	<ul> <li>Mountnorris</li> </ul>
	Moy
	Poyntzpass
	Robinsonstown
	Waringstown
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Lurgan,

### Annex 1: Wastewater systems at or near their capacity (August 2019)

	Armagh, Banbridge, Rathfriland, Loughbrickland and Dollingstown. As a result of this new connections are being declined in parts of the catchment.
Newry Mourne and Down District Council	<ul> <li>Cranfield (Down)</li> <li>Drumaness (WWTW)</li> </ul>
	<ul> <li>Dundrum (Down)*</li> </ul>
	• Lurganare
	<ul> <li>Maghera (Down)</li> </ul>
	*WwTW Upgrades / New Works Scheduled for PC15 Delivery within NI Water's current
	Business Plan period (2015/16 to 2020/21).
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues
	are emerging due to sewer network modelling activities being undertaken in Saintfield, Newry, Annalong, Annsborough, Arugulas, Cranfield, Downpatrick, Dundrum (PC15 scheduled Network Upgrade), Hilltown, Newtownhamilton, Rathfiland, Strangford and Warrenpoint. As a result of this new connections are being declined in parts of the catchment.
Mid Ulster District Council	<ul> <li>Augher (WwTw)</li> </ul>
	<ul> <li>Aughnacloy (WwTW)</li> </ul>
	<ul> <li>Ballygawley (WwTW)</li> </ul>
	<ul> <li>Ballyronan (WwTW)</li> </ul>
	<ul> <li>Cabragh (WwTW)</li> </ul>
	Cappagh (WwTW)*
	<ul> <li>Carmean (WwTW)</li> </ul>
	<ul> <li>Clogher (WwTW)</li> </ul>
	<ul> <li>Derrycrin (WwTW)</li> </ul>
	<ul> <li>Donaghey (2) (WwTW)</li> </ul>
	Dungannon (WwTW) *
	<ul> <li>Eglish (Tyrone) (WWTW)</li> </ul>
	<ul> <li>Fivemiletown (WwTW)</li> </ul>
	■ Killygonlan (WwTW)
	<ul> <li>Moy (WwTW)</li> </ul>
	<ul> <li>Redford (WwTW)</li> </ul>
	■ The Loup (WwTW)*
	<ul> <li>Waterfoot Road (WwTW)</li> </ul>
	*WwTW Upgrades / New Works Scheduled for PC15 Delivery within NI Water's current Business Plan period (2015/16 to 2020/21).
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Aughnacloy, Bellaghy, Cappagh, Castlecaulfield, Cluntoe Richardson,Coalisland, Cookstown, Desertmartin, Draperstown, Dungannon, Fivemiletown, Gulladuff, Knockloughrim,Longfield Moorside Villas, Maghera, Magherafelt & Swatragh. As a result of this new connections are being declined in parts of the catchment.
Causeway Coast & Glens	<ul> <li>Aghanloo (WwTW)</li> </ul>
Borough Council	<ul> <li>Ardgarvan (WwTW)</li> </ul>
	<ul> <li>Armoy (WwTW)</li> </ul>
	Ballintoy (WwTW)*
	Ballybogy (WwTW)*
	Ballyvoy (WwTW)*
	Carnduff (Retention Tank)*
	<ul> <li>Dernaflaw (WwTW)</li> </ul>
	Dervock (WwTW)
	Dunserverick (Retention Tank)*

	Killyrammer (WwTW)
	<ul> <li>Kilrea (WwTW)</li> </ul>
	Longs Glebe
	■ Mayboy (WwTW)*
	Moss-side
	■ Mullans (WwTW)*
	*WwTW Upgrades / New Works Scheduled for PC15 Delivery within NI Water's current Business Plan period (2015/16 to 2020/21).
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Bellany, Capecastle, Clarehill, Cloghmills, Coleraine, Culcrow, Cushendall, Drumraighland, Dunloy,Feeny, Finvoy, Greysteel, Limavady, Liscolman, Loughguile, Macfin, Macosquin, Magherahoney, Moneydig, Moss-side & Rasharkin. As a result of this new connections are being declined in parts of the catchment.
Fermanagh & Omagh	<ul> <li>Belleek (Fermanagh) (WwTW)</li> </ul>
District Council	■ Clabby (WwTW)*
	Church Hill (WwTW)
	<ul> <li>Drumquin (WwTW)</li> </ul>
	Edenderry (Tyrone) (WwTW)
	Ederney (WwTW)
	■ Garrison (WwTW)
	Lough Macrory (WwTW)
	<ul> <li>Mountfield (WwTW)</li> </ul>
	Seskinore (WwTW)
	*WwTW Upgrades / New Works Scheduled for PC15 Delivery within NI Water's current Business Plan period (2015/16 to 2020/21).
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Arvalee, Ballinmallard, Ballycassidy, Beragh, Brookeborough ,Carrickmore, Cavanacaw, Enniskillen, Florencecourt , Kesh, Lisbellaw, Lisnarrick, Lisnaskea, Magheraveely, Mountfield, Mountjoy, Omagh, Seskinore, Tempo &Teemore. As a result, new connections are being declined in parts of the catchment.
	<ul> <li>Douglas Bridge (WwTW)</li> </ul>
	■ Donemana (WwTW)
	<ul> <li>Drumlegagh Church Road (WwTW)</li> </ul>
	In addition to the wastewater treatment works (WwTW), wastewater network capacity issues are emerging due to sewer network modelling activities being undertaken in Artigarvan, Ballymagorry, Eglinton, City of Derry, Killen, Letterbin, Sion Mills. As a result, new connections are being declined in parts of the catchment.

#### Disclaimer:

The wastewater system capacity information provided by Council area in this table is subject to change. NI Water should be contacted directly on water and wastewater capacity issues by Councils, Developers should always use the pre-development enquiry (PDE) process.

Source: NI Water