

## **Road Maintenance Programme**

## 2020-2022



# Road Maintenance Section Municipal Services

February 2020



## Contents

3.Review of 2019 Road Maintenance Programme54.Funding and Programme Finance55.Strategy for Road Pavement Maintenance86.Road Resurfacing Programme – Major Works97.Road Resurfacing Programme – Minor Works98.Pavement Condition Surveys109.Prioritisation of Road Schemes1010.Footpath Upgrade Programme and Insurance Claims1111.Impact of Trees1312.Bridges and Structures Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding17	1.	Introduction	3
4.       Funding and Programme Finance       5         5.       Strategy for Road Pavement Maintenance       8         6.       Road Resurfacing Programme – Major Works       9         7.       Road Resurfacing Programme – Minor Works       9         8.       Pavement Condition Surveys       10         9.       Prioritisation of Road Schemes       10         10.       Footpath Upgrade Programme and Insurance Claims       11         11.       Impact of Trees       13         12.       Bridges and Structures Programme       14         13.       National Roads Programme       14         14.       Estate Management Programme       14         15.       Drainage and Gully Repair Programme       15         17.       Accessibility Works Programme       15         18.       Cycleway Maintenance Programme       16         19.       Roads Control Reinstatement Programme       16         20.       Works Funded From General Road Maintenance Funding       17         21.       Utilities – 10-Day Notices       17         Appendix 1 (Completed Programme 2019)       18         Appendix 2 (Planned Programmes 2020-2022)       20 <td>2.</td> <td>Overview of the DLR Public Road Network</td> <td>4</td>	2.	Overview of the DLR Public Road Network	4
5.       Strategy for Road Pavement Maintenance       8         6.       Road Resurfacing Programme – Major Works       9         7.       Road Resurfacing Programme – Minor Works       9         8.       Pavement Condition Surveys       10         9.       Prioritisation of Road Schemes       10         10.       Footpath Upgrade Programme and Insurance Claims       11         11.       Impact of Trees       13         12.       Bridges and Structures Programme       14         13.       National Roads Programme       14         14.       Estate Management Programme       14         15.       Drainage and Gully Repair Programme       15         17.       Accessibility Works Programme       15         18.       Cycleway Maintenance Programme       16         19.       Roads Control Reinstatement Programme       16         20.       Works Funded From General Road Maintenance Funding       17         21.       Utilities – 10-Day Notices       17         Appendix 1 (Completed Programme 2019)       18       Appendix 2 (Planned Programmes 2020-2022)       20	3.	Review of 2019 Road Maintenance Programme	5
6.       Road Resurfacing Programme – Major Works	4.	Funding and Programme Finance	5
7.Road Resurfacing Programme – Minor Works98.Pavement Condition Surveys109.Prioritisation of Road Schemes1010.Footpath Upgrade Programme and Insurance Claims1111.Impact of Trees1312.Bridges and Structures Programme1313.National Roads Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1416.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	5.	Strategy for Road Pavement Maintenance	8
8.Pavement Condition Surveys109.Prioritisation of Road Schemes1010.Footpath Upgrade Programme and Insurance Claims1111.Impact of Trees1312.Bridges and Structures Programme1313.National Roads Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1416.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	6.	Road Resurfacing Programme – Major Works	9
9.Prioritisation of Road Schemes	7.	Road Resurfacing Programme – Minor Works	9
10.Footpath Upgrade Programme and Insurance Claims1111.Impact of Trees1312.Bridges and Structures Programme1313.National Roads Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1416.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities - 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	8.	Pavement Condition Surveys	.10
11.Impact of Trees1312.Bridges and Structures Programme1313.National Roads Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1416.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities - 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	9.	Prioritisation of Road Schemes	.10
12.Bridges and Structures Programme1313.National Roads Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1416.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities - 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	10.	Footpath Upgrade Programme and Insurance Claims	.11
13.National Roads Programme1414.Estate Management Programme1415.Drainage and Gully Repair Programme1416.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	11.	Impact of Trees	.13
14.Estate Management Programme	12.	Bridges and Structures Programme	.13
15.Drainage and Gully Repair Programme	13.	National Roads Programme	.14
16.Taking-In-Charge (TIC) Programme1517.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	14.	Estate Management Programme	.14
17.Accessibility Works Programme1518.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	15.	Drainage and Gully Repair Programme	.14
18.Cycleway Maintenance Programme1619.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	16.	Taking-In-Charge (TIC) Programme	.15
19.Roads Control Reinstatement Programme1620.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	17.		
20.Works Funded From General Road Maintenance Funding1721.Utilities – 10-Day Notices	18.	Cycleway Maintenance Programme	.16
21.Utilities – 10-Day Notices17Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	19.	Roads Control Reinstatement Programme	.16
Appendix 1 (Completed Programme 2019)18Appendix 2 (Planned Programmes 2020-2022)20	20.	Works Funded From General Road Maintenance Funding	.17
Appendix 2 (Planned Programmes 2020-2022)	21.		
	Appendix	1 (Completed Programme 2019)	.18
Appendix 3 (Location Map)25			
	Appendix	3 (Location Map)	.25



#### **1. Introduction**

The Roads and Footpath renewal programmes have been established as 3year rolling programmes which are reviewed and updated each year.

The main programme elements are as follows:

- Road Resurfacing Programme Major Works ('Roads')
- Road Resurfacing Programme Minor Works ('Patching')
- Footpath Upgrade Programme
- Drainage/Gully Repair Programme

Further annual programmes are listed under National Roads, Bridges and Structures, Estate Management, Taking-in-Charge, Accessibility Works, Roads Control Reinstatement and Cycleway Maintenance.

We are conscious that the work of the Road Maintenance section forms part of a higher corporate strategy and aligns with the objectives set out in the Council's Corporate Plan, 2020-2024. The 8 high-level corporate goals are shown below and we are striving with our work and programmes to help meet the objectives of the plan, and it is argued that these programmes impact or connect, to a greater or lesser extent, with all of the corporate goals below.

- 1. Showing leadership in protecting the environment through education and in how we work.
- 2. Facilitate the development of a variety of housing options enabling improved choice that drives quality of life for all.
- *3. Enhance people's lives through access to sustainable travel choices across our network of communities.*
- 4. Provide quality community, recreational, sporting and cultural opportunities for all who live, work and visit the County.
- 5. Enhance the vitality of our town and villages while preserving our natural and built heritage.
- 6. Engage with businesses to support their presence and growth in the County.
- 7. Promote equality and human rights by implementing the Public Sector Equality and Human Rights Duty.
- 8. Optimise human, financial and physical resources to deliver accessible customer focused quality services.



We also need to plan in line with available resources and priorities. Given the less favourable budget position outlined in the following section, we have had to review our planned works as part of the 3-year programme, and that includes schemes signposted in previous Road Maintenance Programmes. This means that certain schemes that we would have hoped to complete in 2020 have either been reduced in scope or deferred to a later year.

It should also be noted that certain works may be deferred if other schemes warrant earlier attention, reflecting the dynamic nature of road maintenance and the potential impact from adverse weather.

The complete list of schemes to be progressed in the 3-year programme is provided in Appendix 2. A very important point to emphasise is that, regardless of the number of schemes set down in each area (i.e. Area West – Dundrum or Area East – Dún Laoghaire), in preparing the programmes we have looked to provide equitable treatment and funding across both areas.

#### 2. Overview of the DLR Public Road Network

In DLR we maintain a network of c. 780 km of roads of various categories (national, regional, local, etc.) throughout the County and c. 1400 km of footpath. The work to maintain this network is to a very significant extent funded by DLR's own resources. Funding for national road maintenance is provided by Transport Infrastructure Ireland (TII). In terms of the M50 and M11 motorway road network, this is managed and funded by TII and maintenance is carried out by either M50 PPP Concessions (applies to most of the M50) or by a Motorway Maintenance and Renewal Contractor (MMARC). See table 1 for further information on the breakdown of the public road network within the DLR Area.

Road Classification	Length (kms)	Percentage of Total length	Maintenance Responsibility	Funding
Motorway (M)	33	4.2%	TII/MMaRC Contractor	TII
National (N)	34	4.3%	DLR	TII
Regional (R)	108	13.7%	DLR	DLR
Local (L)	613	77.8%	DLR	DLR
Total	778			

Table 1



#### 3. Review of 2019 Road Maintenance Programme

A summary of the works completed under the various schemes in 2019 is provided in Appendix 1, but the headline statistics for the main roads and footpath programmes completed last year are as follows:

- Road Resurfacing Programme Major Works ('Roads' Programme) resulted in the reconstruction/resurfacing of a road length of c. 4.5 km.
- Road Resurfacing Programme Minor Works ('Patching' Programme) resulted in a road area of c. 12,500 square metres being reconstructed/resurfaced or the equivalent of c. 2km of road.
- Footpath Upgrade Programme works completed to upgrade a footpath length of c. 5 km.

This in many ways represents a strong body of work and Road Maintenance section is delivering within its budgetary and financial constraints. However, the extent of resurfacing carried out in 2019, which was an improvement on previous years, still only represents an annual renewal rate of less than 1% of the network of regional and local roads (i.e. 6.5 km of road resurfaced of a R/L road network of 721 kms). In otherwords, at this rate of renewal, it will take a period of over 100 years to fully renew the County's regional and local road network. Best practice would indicate that a proportion of 3 to 4% of the road network would need to be renewed annually, meaning road pavements would be considered to have an effective life of 25 to 35 years. To do this would require an increase in funding of 3 to 4 times above the current level and, given all the competing demands at national and LA level, this is simply not realistic. DLR is not alone in facing this challenge, nor is it a new challenge; DTTAS-funded LAs across the country are facing similar challenges. Our task in the Road Maintenance section is to maintain our roads to highest standard possible within the various constraints that exist.

#### 4. Funding and Programme Finance

The DLR revenue expenditure budget has been reduced by c. 5% in 2020, but the Road Maintenance section works budget for 2020 has been reduced by the order of 10% compared with the budget for 2019 as budget cuts have impacted discretionary works and programmes to a greater extent. This presents a significant challenge for the delivery of our programmes in 2020 and has implications for subsequent years. In light of the budget reduction, the proposed programme of works in 2020 has been prepared in line with available resources and priorities. Nonetheless, we believe that we have prepared an effective and fair works programme covering the breadth of the



County.

Up to 2014, prior to local government reform, road maintenance in DLR was part-funded through grants from Department of Transport, Tourism and Sport (DTTAS).

Since 2015 these grants have been replaced by the Local Property Tax (LPT) income, and, up to 2018, this resulted in a reduced income for road maintenance of approx.  $\leq$ 500,000 per annum. The LPT allocation for road maintenance in 2015 was c.  $\leq$ 3.5 million, of which  $\leq$ 2.672 million was used to finance the Roads Programme and the remainder  $\leq$ 0.8 million to fund discretionary general road maintenance works.

An additional sum of  $\in$ 500,000 was provided to the Road Maintenance section through DLR's 2019 Budget and this assisted in funding an expanded 'Patching programme', which we are now referring to as the 'Road Resurfacing Programme – Minor Works' as the term 'Patching' does not properly or fairly describe the scope and extent of the works completed under this programme. While there has been a 10% reduction in the funding for this programme in 2020 (reduction from  $\in$ 650,000 to  $\in$ 577,600), it is still significantly more than the equivalent sum allocated in 2018 of  $\in$ 150,000.

It is also worth pointing out that construction inflation nationally is running annually at 7% (Source: Society of Chartered Surveyors in Ireland, July 2019), with inflation generally averaging 1 to 2% higher in the Dublin Region. Our own analysis of tenders for projects in 2019, based on a comparison of unit rates, would show tender prices have increased year-on-year in 2019 in the order of 7 to 12%. We intend to review all our major road-works contractor frameworks in 2020 as a number are coming to an end and we will also use this opportunity to examine and update our procurement strategy to see if potential savings can be made and to ensure that we achieve optimum value for money in our works programmes.

The headline Road Maintenance programmes and the proposed expenditure in 2020 is shown in table 2 and it can be seen that we have a budget for these programmes of just over €4 million. As in previous years, the funding for these programmes may need to be supplemented by general road maintenance funding. The programmes in table 2 do not include the significant body of work completed under corrective and routine maintenance.



Programme	Budget 2020	Budget 2019	Comment
Road Resurfacing Programme – Major Works	€2,397,000	€2,672,000	Previously called the 'Roads Programme' and relates to local and regional roads
Road Resurfacing Programme – Minor Works	€577,600	€650,000	Previously called the 'Patching Programme' and relates to local and regional roads
Footpath Upgrades	€700,400	€780,000	Supported from Parking Income
National Roads	n/a	n/a	TII funded works
Bridges & Structures	€80,000	€80,000	No change in funding
Drainage/Gully Repair	€150,000	€150,000	No change in funding
Estate Management	€60,000	€60,000	No change in funding
Roads Control Reinstatement	€108,400	€130,000	10% reduction
Taking-In-Charge	-	-	Where financial implications are known and resources permit
Accessibility Works	-	-	From general road maintenance funding
Cycleway Maintenance	-	-	From general road maintenance funding
Total	€4,073,400	€4,522,400	

Table 2



#### 5. Strategy for Road Pavement Maintenance

The strategy adopted by DLR for road pavement maintenance has essentially 4 elements, all of which are intended to ensure road safety, enhance driver comfort and, critically, to manage and extend the life of the County's road assets. See Figure 1, below. There is an arbitrary difference between what is considered to be major or minor road resurfacing works and we would consider that the distinction is related to the length of the road and, to a lesser degree, whether all of the road is being resurfaced or not. Road Maintenance section in the last year have made greater use of a system sometimes referred to as 'Hotbox' Repairs for rectifying localised defects, such as potholes, in the road surface. This system involves cutting out and cleaning around the defect area and repairing using a hot bituminous macadam material that is stored in a mobile thermo asphalt container (i.e. Hotbox) and compacted into place using mechanical plant. This is a robust and effective solution for defect repairs and allows us to become less reliant on the use of cold or delay-set materials which are not as effective and really only something to be used as an urgent stopgap.



Figure 1



#### 6. Road Resurfacing Programme – Major Works

This programme has been referred to as the 'Roads' programme in previous years and it is essentially concerned with resurfacing and/or reconstruction of relatively long lengths of roads. Road Maintenance section tend to look at the road holistically when carrying out works under this programme strand and, as well as resurfacing, works can include footpath and cycleway upgrades, drainage repairs and often includes an element of cross-departmental working to upgrade the public realm, generally. This can include working with the Parks Dept. on necessary tree removal and re-planting or the Traffic section where traffic calming measures or cycleway improvements can be incorporated within the scheme. We are also keen to work with Utilities and third party service providers to ensure that all Utility-related works can be completed before DLR reconstructs or resurfaces the road.

Within this programme element, there are two large scale road maintenance projects which require significant resources. These are Nutgrove Avenue and Rochestown Avenue. We made good progress with the upgrade of Nutgrove Avenue in 2019, with resurfacing of roads, cycleways and junction improvements completed last year. The second half of the scheme will be completed in 2020, with Road Maintenance section leading the project and working in conjunction with DLR's Traffic section and the National Transport Authority (NTA).

However, progress on Rochestown Avenue has been slower. DLR have submitted a detailed upgrade scheme for funding support to DTTAS as the funds are not available within DLR to complete the ambitious scheme needed to improve the alignment and surface condition of the road, and also to provide appropriate cycling infrastructure. We would hope to progress the detailed design and public consultation on the Rochestown Avenue scheme in 2020 once the position on funding support from DTTAS becomes clear.

These are both complex, multi-annual schemes and involve the input from other DLR departments and other state agencies.

There are 13 No. schemes scheduled for completion under this programme element in 2020. See Appendix 2 for scheme details and the location map in Appendix 3.

#### 7. Road Resurfacing Programme – Minor Works

Started in 2017, the Road Resurfacing Programme – Minor Works (previously



called the 'Patching' programme, as mentioned earlier) was designed to deal with what was, up to then, an unstructured part of road maintenance. Major road resurfacing schemes are generally funded through the LPT allocations as described earlier.

The funding for this programme, supported by general road maintenance funding, deals with more localised road repair needs. This programme is targeted at those roads that do not make it onto the main road resurfacing programme and require more significant works than, say, pothole repairs. These jobs typically have a value each of the order of  $\leq 20,000$  to  $\leq 40,000$  and help to extend the useful life of the road and avoid the need for a more costly intervention if left unchecked.

There are 19 No. schemes scheduled for completion under this programme element in 2020. See Appendix 2 for scheme details and the location map in Appendix 3.

#### 8. Pavement Condition Surveys

As part of a national initiative to move towards a rational, asset management approach and away from traditional, solely subjective methods, Road Maintenance section, over the last number of years, has carried out PSCI surveys on the road network in the County.

PSCI (Pavement Surface Condition Index) is a visual survey of the road network, where roads are categorised between 1 and 10, with a rating of 10 representing excellent road condition. The PSCI is a nationally-used approach for assessing road condition in an objective manner. It is not intended to record localised poor patches or potholes. Similar ratings systems are now available for footpaths using the Footways Survey Condition Index or FSCI, referred to in a later section.

Extensive PSCI surveys were carried out at a national level on the regional road network in 2018 and the results are used by DLR in supporting road maintenance decisions. PSCI surveys of samples of the local road network will be undertaken in 2020 to help support decisions on the appropriate road maintenance interventions programmes for the County's local roads.

#### 9. Prioritisation of Road Schemes

The 2020-2022 Roads Maintenance Programme has been developed using a prioritisation system model based on the Irish Pavement Asset Group (IPAG), *Pavement Asset Management Guidance Manual*. IPAG was set up under the



aegis of the LGMA (Local Government Management Agency), and includes members from the DTTAS, Local Authorities and the LGMA.

The main criterion for prioritisation of a road for inclusion on the programmes is the PSCI rating.

However, prioritisation is not just about the condition rating, and the approach adopted by DLR is more holistic, and includes an assessment of the following factors:

- PSCI Rating
- Skidding resistance (SCRIM coefficient)
- Strategic importance of the route
- Road classification
- Level of traffic use
- Life span (if road material has reached end of life)
- Presence of bus routes and integration with public transport
- Local knowledge of Road Maintenance section engineers and inspectors
- Linkage with other planned programmes in DLR
- Representations from Councillors and Elected Representatives via CRM, AC meetings or other means
- Representations from the public, residents and local communities via CRM or other means

Using this prioritisation and assessment model results in a more comprehensive assessment of road maintenance needs and helps to ensure value for money in delivering road maintenance services.

# **10.** Footpath Upgrade Programme and Insurance Claims

The Footpath Upgrade Programme is funded from parking income, which currently stands at €700,400 in the 2020 budget.

The aim is to target high public liability (PL) insurance costs, which represent a significant cost to the Council each year. Irish Public Bodies (IPB), the Council's insurer, has indicated that, typically, 40% of the number of claims may be attributed to trips/falls, and this equates to approximately 80% of the total amount paid out in claims.

Table 3 below demonstrates that the general trend is showing a decrease in average annual claim numbers between 2017 and 2019, which is very positive. The second half of the table provides a breakdown of trips/falls



ranked by geographical area in DLR. The number of trips/falls claims in each area is shown in brackets and the relative percentage of claims is also shown. The total percentage of these 'hot spot' areas is shown at the bottom of the table.

2017 IPB data Trip/Fall Claims Loss Dates 20 (7 years)	10-2016	2018 IPB data Trip/Fall Claims Loss Dates 2014 (5 years)	-2018	2019 IPB data Trip/Fall Claims Loss Dates 2014 (6 years)	4-2019
Claim Count: 381		Claim Count: 286		Claim Count: 312	
Average Annual Cla	ims: 55	Average Annual Clair	ns: 57	Average Annual Clain	ns: 52
Dún Laoghaire (71)	19%	Dún Laoghaire (57)	20%	Dun Laoghaire (58)	22%
Blackrock (46)	12%	Blackrock (22)	8%	Blackrock (27)	9%
Stillorgan (28)	7%	Rathfarnham (21)	7%	Rathfarnham (23)	8%
Ballybrack (21)	6%	Stillorgan (18)	6%	Stillorgan (23)	6%
Rathfarnham (20)	5%	Dundrum (15)	5%	Shankill (20)	5%
Dundrum (17)	4%	Shankill (15)	5%	Ballybrack (17)	5%
Ballinteer (16)	4%	Glenageary (14)	5%	Dundrum (15)	5%
Monkstown (16)	4%	Ballybrack (13)	5%	Sandyford (11)	4%
Shankill (14)	4%	Sandyford (13)	5%	Sallynoggin (9)	4%
Sallynoggin (13)	3%	Dalkey (10)	4%	Ballinteer (8)	3%
Sandyford (13)	3%	Sallynoggin (9)	3%	Monkstown (7)	3%
		Ballinteer (9)	3%		
		Monkstown (9)	3%		
Total	81%	Total		Total	
		79%		74%	

#### Table 3

Reducing the number of claims has a number of benefits:

- Reduces the occurrence of injuries.
- Reduces the number of claims and pay out on claims.
- Manages and reduces DLR's associated financial liability and risk exposure.
- Assists IPB and DLR to provide a stronger defence in the event of claims.
- Over time, this can help reduce the cost of insurance for DLR and allow the savings to be spent on infrastructure works and service delivery.

This IPB data was first available in 2018, and verification of this approach to footpath management will only be realised as the extent of footpath upgrade and repair progresses over time in the 'hot spot' areas and the claim numbers reduce. So this is a long-term strategy and needs to be progressed over 5 to 6 years to allow for the approach to take full effect.

The above top claims locations are therefore reflected in the 3-year Footpath



Upgrade Programme and this provides the basis for planning the programme on a targeted, multi-annual basis. The aim is to make the necessary improvements to the footpath network and to see a corresponding reduction in cost for the PL claims associated with trips/falls over the period.

The survey tool FSCI (Footway Surface Condition Index) continues to be used, and the collection of this data will help to advise on future programmes, and to assess and document the condition and hazards on the footpath network. This is similar to the PSCI (Pavement Surface Condition Index) used for roads.

Footpath surveys will be carried out in advance of any footpath restoration works to maximise the repairs to hazards in the survey area. This means that in some cases there will only be a need to carry out localised repairs/replacement.

There are 21 No. schemes scheduled for completion under this programme element in 2020. See Appendix 2 for scheme details and the location map in Appendix 3.

#### **11. Impact of Trees**

It is acknowledged that trees provide a hugely positive environmental impact on the public realm and the streetscape and are valued by local communities, residents and public at large.

However, there are instances where the presence of trees adversely impacts on footpath and road condition and indeed pedestrian or cyclist safety.

There is an obvious desire to retain the affected trees and this has to be balanced with the needs of providing and maintaining a safe road and footpath infrastructure.

Roads Maintenance section engages on an ongoing basis with the Parks Dept. and each of the areas identified on the roads and footpath programmes will be examined to identify the appropriate actions to be taken where trees impact on roads and footpaths requiring repair or replacement.

#### **12. Bridges and Structures Programme**

An allocation of  $\in$ 80,000 is provided for this programme in the 2020 budget which may also require contributions from general road maintenance funding.



Works are required to a number of bridges in the County. These repairs are generally of a minor nature. A review of bridge condition and the need for further bridge maintenance works is ongoing and will inform the detail of the programme for 2020 and subsequent years.

#### **13. National Roads Programme**

TII provide all funding for National Roads within DLR, and there are 34 kms of National Road, comprising the N11 and N31 within DLR's area. A number of significant resurfacing schemes will commence in 2020.

This includes resurfacing of the N31, the Coast Road, between the junctions with Newtown Avenue, Blackrock, and Marine Road, Dún Laoghaire. Detailed assessment and design is being completed and we would expect to be on site later in 2020.

Resurfacing of all of the N11 in the DLR area as well as sections of the N31 will be carried out over the period from 2020 to 2022. Preparation for this work is well under way and DLR and TII hope to appoint a consultant for pavement condition surveys and pavement renewal design in the coming weeks.

#### **14. Estate Management Programme**

Roads Maintenance section will continue to collaborate with the Community and Cultural Development Dept. to carry out road and footpath repairs in estates with an Estate Management Forum in place. Estate Management provide a level of funding for specific schemes which is supplemented by general road maintenance funding.

Works were carried out in Rathsallagh estate, Meadowlands/Fitzgerald Park and Kilcross estate under this scheme in 2019.

These schemes are identified through Annual Service Plans prepared by each of the Estate Management forums. In 2019, €60,000 was provided for this purpose and we are planning on that basis in 2020.

#### **15. Drainage and Gully Repair Programme**

We have an expanded list of hot spot flooding locations included for assessment and repair in 2020. This list has been put together following



consultation between Cleansing and Road Maintenance sections, as well as from information from our CRM system, provided by Councillors and members of the public. We will consult with DLR's Water and Drainage section and Irish Water, as needed, to arrive at sustainable solutions for these problem locations.

Funding of  $\in$ 150,000 has been provided for this programme strand in 2020 and 13 No. locations have been identified for further investigation and repair. See Appendix 2 for details.

#### **16. Taking-In-Charge (TIC) Programme**

We had hoped to proceed to resolve a small number of legacy taking-incharge issues in 2019. This was a new initiative in 2019 and the aim was to formalise a programme to provide an outline plan of what is being proposed in terms of taking-in-charge of legacy roads and laneways over a 3-year timeframe. However, the major challenge has been to secure the necessary funding to bring roads and laneways that are sometimes in poor condition up to a good taking-in-charge standard. We will endeavour to progress a number of these legacy taking-in-charge issues, following completion of due diligence, and where resources allow in 2020. See Appendix 2 for details.

#### **17. Accessibility Works Programme**

We piloted this programme in 2019 and targeted accessibility improvement works focused on the specific needs of individuals with mobility challenges in their locality, whereby modifications were carried out to roads and footpaths to improve accessibility. This programme is very much about trying to cater for the needs of specific persons who may have mobility challenges and where simple, minor modifications could significantly ease their journeys from their home to places they frequently travel to, such as work, school, shops, hospitals and medical centres. This is seen as complementing the footpath and roads programmes.

We completed works under this scheme at a number of locations in 2019, including Lynwood, Ballinteer and Carysfort Avenue, Blackrock. Typically, the works include assessment of the individual's challenges and needs, repair and dishing works to footpaths, altering the locations of street furniture, patch repairs at crossing points, etc.

We have an expanded programme in 2020 and while it may be a modest programme for us a Council, the benefits of the works to someone who has significant mobility challenges in their locality can be enormous, so we are



keen to continue with this essentially demand-led scheme and we encourage Councillors and members of the public to come to us with suggestions for possible individuals/locations where we can help. See Appendix 2 for details.

#### **18. Cycleway Maintenance Programme**

The Cycleway maintenance programme was introduced as a pilot programme in 2019 and was initiated to record, maintain and repair cycle lanes throughout the County. We completed a number of small schemes and works in 2019 and we will continue to develop and expand this programme in 2020. While there isn't a specific allocation, works will be funded in 2020 from general road maintenance funding.

This programme recognises the importance of this growing and significant element of the County's transport infrastructure. Road Maintenance section have a remit to manage cycle lanes either on the road or integrated in the footways, but the integrated nature of the cycleway network, along roads and greenways, and within parks, requires a more collaborative approach between, primarily, Road Maintenance and Traffic sections and the Parks Dept.

We are investigating methods to provide winter service maintenance on cycleways and we would hope to trial approaches in the winter of 2020/2021. In terms of reactive maintenance, repairs are carried out based on information received via CRM, feedback from cyclists and representations from Councillors. See Appendix 2 for details.

#### **19. Roads Control Reinstatement Programme**

DLR's Roads Control section plays a very important role in regulating the activities of Utility companies, developers and contractors carrying out road opening and reinstatement on the County's roads, which are controlled under a road opening licence system. Roads Control also have a programme of larger scale reinstatements for a number of roads throughout the County and this is now reflected in this 3-year programme and details of the roads included within the programme are included in Appendix 2.

The permanent reinstatement of IW SLA road openings is carried out on an agency basis by Roads Control and works are carried out on as-needed basis as details of road openings are provided to Roads Control.



#### 20. Works Funded From General Road Maintenance Funding

In addition to the formal programmes many other smaller works programmes are carried out and funded by the allocations we receive as part of general road maintenance funding. Included in this are concrete road repairs, footpath replacement, signage repair/replacement, etc. utilising DLR's direct labour and contractors, as appropriate.

#### **21. Utilities – 10-Day Notices**

It is planned to notify all **Utility Companies** in the next week so that any services they wish to repair, renew or install shall be carried out prior to the Council carrying out its works.

**Appendix 1** provides a summary of the works completed under the main Road Maintenance Programme areas in 2019.

**Appendix 2** shows a list of the schemes set out under each programme element for completion in 2020, 2021 & 2022.

Please note that programme elements in the respective DLR areas are shaded as follows in Appendix 1 and 2.

Area West (Dundrum)

Area East (Dún Laoghaire)

A Location Map is referenced in **Appendix 3** which shows schematically the parts of the road resurfacing and footpath programmes to be progressed in 2020. Please note that these maps are in PDF format and are provided as attachment(s) to the main programme document.

Robert Burns Senior Engineer Road Maintenance 21<sup>st</sup> February 2020



## Appendix 1 (Completed Programme 2019)

RRP Major	Road Resurfacing Programme - Major Works	2019	Comments
1	Rathsallagh Estate	1	
2	Ballinclea Road (part of)	1	Avondale Road to Broadlands.
3	Tivoli Road	1	Large/complex scheme - York Road to Mulgrave Terrace.
4	Green Route (Northbound)	$\checkmark$	
5	Grangefield Estate	$\checkmark$	
6	Nutgrove Avenue	1	Public realm works in collaboration with Traffic Section & NTA.
7	Kilmacud Road Lower (incl. Old Kilmacud Road)	1	
8	The Park, Cabinteely (Valeview Lawn)	1	
9	Ballyedmonduff Road	$\checkmark$	
<b>RRP</b> Minor	Road Resurfacing Programme - Minor Works (Patching)		Comments
1	Old Connaught Avenue (at Conna Wood Estate)	1	IW completed sewer upgrade works and resurfacing works subsequently completed.
2	Maretimo Gardens West	1	
3	Eblana Avenue	1	
4	Shanganagh Road (near Park)	1	
5	Mine Hill Lane	1	
6	Shanganagh Road at Olcovar, Rathsallagh Junction & Aubrey Park	1	
7	Hillcrest Road	1	
8	Sandyford Village	1	
9	Woodpark Estate	1	
10	St. Patrick's Park	$\checkmark$	
11	Brehonfield Road (at junction of Kingston Estate)	1	



FP	Footpaths Programme		Comments
1	Dún Laoghaire town	1	Royal Terrace, Rosmeen Gardens & Queens Rd.
2	Blackrock town	1	Bath Place, Temple Road Jcn., side road off Georges Ave, Georges Ave., Anglesea Ave., & part of Sydney Ave.
3	Woodbrook Glen	1	
4	Killiney Road	1	
5	Killiney Avenue	1	
6	Pine Valley	1	
7	Sandyford Business District	$\checkmark$	
8	St Columbanus	$\checkmark$	
9	Broadford Estate	1	
10	Westminster Road	1	
11	St Laurence's Park	$\checkmark$	
12	Kilmacud Road (from Junction with South Ave.)	1	
DGP	Drainage / Gully Repair Programme		Comments
1	Quinn's Road, Shankill (at Tennis club)	1	
2	Killiney Hill Road (at Padua)	$\checkmark$	
3	Ard Mhuire Park, Dalkey	$\checkmark$	
4	Woodpark, Ballinteer	1	
EMP	Estate Management Programme		Comments
1	Rathsallagh Park - Road Resurfacing	1	Part of wider resurfacing works in Rathsallagh estate.
2	Meadowlands-Fitzgerald Park - Estate Road Repairs	1	
3	Kilcross Estate - Replacement of Damaged Footpaths	1	
AWP/CWP	Accessibility/Cycleway Works Programmes		Comments
1	Carysfort Avenue, at Avondale Lawn	1	
2	Lynnwood to Dundrum	1	
3	Ballinteer Avenue to Finsbury Park	1	Improvements for 'Cycle Bus' initiative.



### Appendix 2 (Planned Programmes 2020-2022)

RRP Major	Road Resurfacing Programme - Major Works	2020	2021	2022
1	Nutgrove Avenue	1		
2	Ballinteer Avenue	1	1	
3	Kilmacud Road Lower	1		
4	Green Route	1		
5	Sydenham Road	1		
6	Meadowmount Estate		1	1
7	Roebuck Road		1	✓
8	The Park Estate, Cabinteely		1	✓
9	Claremont Road		1	
10	Mulvey Park			1
11	Kilgobbin Lane			1
12	Adelaide Road	1		
13	Castle Park Road	1		
14	Ballinclea Road (Broadlands to Ballinclea Wood)	1		
15	Corrig Road	1		
16	Rathsallagh Estate	1		
17	Ashlawn Estate	1	1	1
18	Rochestown Avenue	1	1	1
19	Saval Park Road	1	1	
20	Glenageary Road Upper		1	
21	Barnhill Road		1	
22	Cumberland St and Dun Leary Hill		1	
23	Library Road		1	
24	Killiney Hill Road			1
25	Killney Ave.			1
26	Dalkey Square			1
27	Leslie Avenue			1
28	Newtownsmith and Marine Parade			1
29	Dalkey Avenue			1
30	Albert Road			1
RRP Minor	Road Resurfacing Programme - Minor Works	2020	2021	2022
1	Broadford Road	1		
2	Woodpark The Drive	1		
3	Stillorgan Road (old N11)	1	1	



4	Upper Kilmacud Road	1	1	1 1
4	Ticknock Road Edges	 ✓		
5	0	 ✓		
6	Ballyedmunduff/Ballybetagh Road Edges	-		
7	Heidelberg	<u> </u>		
8	Sandyford Village	$\checkmark$		
9	Old Clonkeen Road			
10	Clonskeagh Road		<i>✓</i>	
11	Woodside Road		<i>✓</i>	
12	Trisillian		<ul> <li>✓</li> </ul>	
13	Wyckham By-pass Roundabout		✓	
14	Olivemount Grove		1	
15	Prospect Lawn			✓
16	Lahanstown Lane			1
17	Brennanstown Road			1
18	Flemingston Park			1
19	Thorncliffe Park			1
20	Sweetmount Park			1
21	Drummartin Park			1
22	Dalkey Avenue	1		
23	Georges Place	1		
24	Patricks Square	1		
25	Casement Villas	1		
26	Temple Crescent	1		
27	Monkstown Farm	1		
28	Georges Street Lower	1		
29	Grotto Avenue/Grotto Place	1		
30	Barnaslingan Lane	1		
31	Shanganagh Terrace	1		
32	Dublin Road (from Old Connaught Ave. north - Circle K)	1		
33	Johnstown Rd/Pottery Road	-	1	
34	Avondale Road drive way (Part 1)			
35	Pearse Gardens		✓ ✓	
36	Grove Avenue			
37	Pakenham Road			
38	Ballybrack Village			
39	George's St Upper/Lower/Marine Rd			
40	Dunedin Close/Monksown Grove			
	Idrone Lane			
41	Brock's Lane			
42				
43	Proby Square (North, into Lindenvale)			✓



44	Newvale Crescent			1
45	Quinn's Road / Dublin Road			1
46	Longford Terrace			1
47	Pucks Castle Lane			1
48	Loughinstown Drive/Wood Park/community centre			1
49	Beaumont Gardens			1
50	Avondale Road drive way (Part 2)			1
51	Dublin Road (Shankill to Bray)			1
FP	Footpath Upgrade Programme	2020	2021	2022
1	Pine Valley	✓	<i>✓</i>	1
2	Sandyford Business District	1	1	1
3	Kerrymount Avenue	1	1	1
4	Westminster Road	1		
5	Enniskerry Road	1		
6	Cabinteely Close	1		
7	Eden Park/Slieve Rua/Dale Road			
8	The Park, Cabinteely	1	1	
9	Sweetbriar Lane		1	
10	Acorn Road		1	
11	Loreto Estate		1	
12	Mount Anville Road		1	
13	St Lukes, Milltown		1	
14	Ballycorous Road			1
15	Grange Wood			1
16	Landscape Park			1
17	Dún Laoghaire Town	1	1	1
18	Blackrock Town	1	1	1
19	Dalkey Village	1	1	1
20	Glasthule Village	1	1	1
21	Ashlawn Park/Coolevin	1	1	1
22	Wynberg Park	1	1	
23	Watsons Estate	1		
24	Woodbrook Glen	1		
25	Glenavon Park	1		
26	Ballybride Road	1		
27	Ballycorous Road	1		
28	Patrician Villas			
29	Eaton Brae	1		
30	Rockford Park		1	1



31	Hyde Road		1	
32	Rowanbyrn		1	1
33	Killiney Road		1	1
BSP	Bridges & Structures Programme	2020	2021	2022
1	Blue Light Wall Repair	1		
2	Woodside Road Retaining Wall	1		
3	Belfield Flyover	1		
4	Glenalua Wall Repair	1		
	Category 3 Bridges	1	1	1
DGRP	Drainage / Gully Repair Programme	2020	2021	2022
1	Oakdown Road, Churchtown	1		
2	De La Salle College, Churchtown	1		
3	End of Old Bray Road, Cabinteely	1		
4	Whitethorn Road, Clonskeagh	1		
5	Woodside Road	1		
6	Beech Lawn, Dundrum	1		
7	Mine Hill Lane	1		
8	Bridesglen Road	1		
9	Rathmichael Road	1		
10	Clonkeen Road (at South Park)	1		
11	Woodbine Park	1		
12	Seafield Road, Killiney	1		
13	Ruby Hall	1		
NRP	National Roads Programme	2020	2021	2022
1	N31 (Coast Road)	1		
2	N11- N31, 3-Year Resurfacing Programme	1	1	1
AWP	Accessibility Works Programme	2020	2021	2022
1	Lynnwood to Ballinteer	1		
2	Loreto Park	1		
3	Mount Anville Road at Deerpark	1		
4	Castlebyrne Park	1		
5	Mt Albany Estate	1		
6	Coolevin	1		
7	Cloister Estate	1		
8	O'Rourke Park	1		
9	Laneway from Gleann na Smól-Stradbrook Rd. (part of)	1		



СМР	Cycleway Maintenance Programme	2020	2021	2022
1	Brehonfield Road	1	1	
2	Churchtown Road Upper	1	1	
3	Kill Lane (sections from Foxrock to Deansgrange Jcn.)	1		
4	Baker's Corner junction	1		
EMP	Estate Management Programme	2020	2021	2022
1	Locations TBC	1		
2	Locations TBC	1		
TICP	Taking in Charge Programme*	2020	2021	2022
1	The Rise, Mount Merrion	1		
2	Redesdale estate - certain Laneways	1		
3	Lane adjacent to Centra At Millhouse, Stillorgan.		1	
4	Parking area at shops, Kilmacud Road Lower		1	
5	Foxrock Wood - Beech Park Laneway	1		
6	Richmond Green, Monkstown		1	
7	Laneways from Gleann na Smól to Stradbrook Road and Queens Park		1	
8	Lane Station Road Killiney (near DART) to Marino Avenue West		1	
	*Subject to investigation and clarification of ownership, costs needed to bring these roads/laneways up to taking no commitment can be made at this stage as completing dependent on available funding and resources.	in charg	e standa	rd, and
RCRP	Roads Control Reinstatement Programme	2020	2021	2022
1	Proby Square (South)	1		
2	Marine Court and assoc. Laneways	1		
3	Devitt Villas	1		



#### Appendix 3 (Location Map)

*Locations of schemes under the Roads and Footpath Programmes to be completed in 2020.* 

Map is provided as a separate PDF attachment.