

ITEM No ...4.....

REPORT TO: FAIR WORK, ECONOMIC GROWTH AND INFRASTRUCTURE COMMITTEE – 21 AUGUST 2023

REPORT ON: ANNUAL ROAD SAFETY AND 20MPH PROGRESS REPORT

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 221-2023

1 PURPOSE OF REPORT

1.1 This is the Annual Road Safety and 20mph progress report and seeks to inform Committee of the progress made towards the national road casualty reduction targets to 2030 along with the Council's programme of road safety works for 2023-2024 and ongoing 20mph progress. The report also informs the Committee of the pedestrian crossing re-evaluation undertaken using the new pedestrian crossing assessment process.

2 RECOMMENDATION

2.1 It is recommended that the Committee:

- a notes the road casualty statistics for the local road network, and the Scottish Government road safety targets to 2030 and 2050;
- b approves the conversion of areas identified in Appendix B to 20mph zones;
- c approves the programme of road safety works contained in Appendix C; and
- d approves the locations identified in paragraph 6.7 where additional pedestrian facilities should be considered.

3 FINANCIAL IMPLICATIONS

3.1 The funding for the projects shown in Appendices B and C will be met from the Council's 2023/2024 Capital Plan allocation for:

- Road Safety Measures - £98,000 funded by 2023/2024 and 2024/2025 capital budgets;
- Road Safety Improvement Fund 2023-2024 - £198,902; and
- Cycling Walking and Safer Routes - £943,000.

4 BACKGROUND

4.1 The Road Traffic Act 1988 places a statutory duty on the Council as the Roads Authority to carry out a programme of measures to promote road safety and prevent road accidents. This applies to the existing road network and new roads.

4.2 In February 2021 the Scottish Government published its Road Safety Framework to 2030 which sets out the following strategic objectives:

a Safe Road Use

Achieved from road users who decide the most sustainable way to travel, know and comply with road rules and take responsibility for the safety of themselves and others, especially the vulnerable.

b Safe Vehicles

Well-maintained vehicles, reduce the risk of collisions and, in the event of a collision, reduce the harm to road users, including pedestrians, cyclists, horse riders, motorcyclists and vehicles occupants.

c Safe Speeds

Road users understand and travel at appropriate speeds to the conditions and within the speed limits.

d Safe Roads and Roadsides

They are self-explaining in that their design encourages safe and sustainable travel so that they are predictable and forgiving of errors.

e Post-crash Response

Allows an effective and appropriate response to collisions. Road victims receive appropriate medical care and rehabilitation to minimise the severity and long-term impact of their injuries. Learnings from collisions are captured and acted upon. Families of those killed or seriously injured are appropriately supported.

4.3 The framework identifies the part every one of us must play to ensure the Government's long term aspiration for Vision Zero (no death and no serious injuries on Scotland's roads by 2050) to become a reality. On this route to 2050 the road casualty reduction targets, for the year 2030, when compared with the average number of casualties for 2014-2018, are:

- 50% reduction in people killed;
- 50% reduction in people seriously injured;
- 60% reduction in children (aged<16) killed; and
- 60% reduction in children (aged<16) seriously injured.

4.4 The key organisations involved in road safety in Dundee are the Council's City Development and Children & Families Services, Police Scotland, Scottish Fire and Rescue, NHS Tayside and the Tayside Road Safety Forum.

4.5 The multidisciplinary and integrated approach involves a number of engineering, enforcement, education and encouragement initiatives:

a Engineering

A mixture of engineering measures and techniques are used to improve safety on our roads, such as 20mph zones, accident investigation and prevention (AIP) and traffic management which includes the provision of pedestrian/cycle facilities alongside traffic signs and road markings. Each of these targets different accident types but combine to reduce overall casualties. In addition, development control procedures and road safety audits are pursued to ensure that new developments and roads infrastructure are designed with safety in mind.

b Enforcement

Enforcement of traffic laws plays a crucial role in maintaining and improving road safety. Significant resources are devoted to enforcing speed limits, the drink and drug driving laws, wearing of seatbelts and other safety related legislation such as inappropriate parking. Another tool in the enforcement strategy is the targeted deployment of safety cameras. There are currently two safety camera sites on the local road network in Dundee. These cameras are operated by the North Safety Camera Unit and are a further tool that has helped to reduce road casualties.

c Education

In addition to initiatives such as the written theory examination in the National Driving Test and driver awareness training, much emphasis is also placed on the education of children. Safer Routes to School are encouraged and will be reinforced with engineering measures where appropriate including 20mph speed limits around schools and the ongoing deployment of the Safer School Streets programme.

d Encouragement

Promoting the use of child car seats and restraints, cycle helmets, lights, and bright clothing have a significant part to play in encouraging road users to adopt safe practices.

These road safety initiatives, combined with other schemes that are not directly aimed at casualty reduction, such as environmental improvements, have all contributed to reduce the number of road related injuries in Dundee.

- 4.6 Dundee City Council, alongside the other key organisations will look to deliver a multidisciplinary and integrated approach through engineering, enforcement, education and encouragement initiatives to create safer road use, safer speeds, safer roads and safer roadsides.

5 ROAD CASUALTY REDUCTION PROGRESS - SCOTTISH GOVERNMENT TARGETS 2030

- 5.1 The Council's current casualty reduction progress to 2022 is detailed below and in Appendix A.

a Table 1 - Dundee City - Local Road Network - All Casualties - 2014-2018 Average To 2030

All Casualties	2014-18 Average	2019	2020*	2021	2022	% Change*
Pedestrian	41.6	39	38	28	47	
Pedal Cycle	14.4	14	21	9	13	
Motorcycle	11	9	19	13	7	
Car/Taxi	67.4	70	86	57	79	
Bus/Goods/Other	6.8	12	6	9	10	
All	141.2	144	170	116	156	10%
* Percentage change as compared 2022 to 2014-2018 average						
x Car passenger fatality in 2020 did not occur on the local road network						

The number of road casualties on the local road network in 2022 is higher than in 2021 but lower than in 2020. A breakdown of these 2022 casualties shows that 51% were car/taxi drivers or passengers, 30% pedestrians, 8% pedal cyclists, 6% bus/goods/other and 5% motorcyclists. The 5-year moving average, Graph 1-Appendix A, indicates a slight downward trend from the baseline years.

b Road Safety Framework to 2030 target: 50% Reduction in People Killed**Table 2: Dundee City - Local Road Network - Killed Casualties - 2014-2018 Average To 2030**

Killed Casualties	2014-18 Average	2019	2020	2021	2022	% Change*	Scottish Government	
							2030 Target	2050 Target
Pedestrian	1	1	1	0	0			
Pedal Cycle	0	0	1	0	0			
Motorcycle	0.2	0	0	0	0			
Car/Taxi	0	0	1 ^x	1	0			
Bus/Goods/Other	0	0	0	0	0			
All	1.2	1	3	1	0	-100%	0.6	0

^x Car passenger fatality in 2020 did not occur on the local road network
* Percentage change as compared 2021 to 2014-2018 average

There were no reported fatal collisions on the local road network in 2022. The 5-year moving average Graph 2 - Appendix A indicates a slight downward trend from previous years.

Analysis of the casualties between 2019 and 2022 shows that 2 were pedestrians, 1 motor vehicle driver, 1 motor vehicle passenger and 1 pedal cyclist. Cognisance of this will be taken when considering future road safety initiatives and measures.

c Road Safety Framework to 2030 target: 50% Reduction in People Seriously Injured**Table 3: Dundee City - Local Road Network - Serious Casualties - 2014-2018 Average To 2030**

Serious Casualties	2014-18 Average	2019	2020	2021	2022	% Change*	Scottish Government	
							2030 Target	2050 Target
Pedestrian	10.8	15	19	15	20			
Pedal Cycle	3.2	4	10	2	2			
Motorcycle	6.2	5	13	6	3			
Car/Taxi	5.6	11	7	12	12			
Bus/Goods/Other	1	4	1	4	0			
All	26.8	39	49	36	37	38%	13.4	0

* Percentage change as compared 2022 to 2014-2018 average

The 2022 casualty data represents a 38% increase when compared with the 2014-2018 average. The 5-year moving average Graph 3 - Appendix A shows a continuing increase from the 2014-2018 average.

Analysis of the casualties between 2019 and 2022 shows that 43% are pedestrians, 26% are car/taxi occupants, 17% are motorcyclists, 11% are pedal cyclists and 3% bus/goods/other.

As reported last year, 2020 showed an increase in the number of pedestrian, pedal cycle, and motorcycle serious casualties and changes in travel choices, as a consequence of the pandemic, may have contributed to this rise. 2022 shows a similar increase in the number of pedestrian casualty types and cognisance of this will be taken when considering future road safety initiatives and measures.

d Road Safety Framework to 2030 target: 60% Reduction in Children (Aged <16) Killed

Table 4: Dundee City - Local Road Network – Child Killed Casualties - 2014-2018 Average To 2030

Child Killed Casualties	2014-18 Average	2019	2020	2021	2022	% Change*	Scottish Government	
							2030 Target	2050 Target
Pedestrian	0	0	0	0	0			
Pedal Cycle	0	0	1	0	0			
Motorcycle	0	0	0	0	0			
Car/Taxi	0	0	0	0	0			
Bus/Goods/Other	0	0	0	0	0			
All	0	0	1	0	0	0	0	0
* Percentage change as compared 2022 to 2014-2018 average								

The pedal cycle collision in 2020 remains the only child fatality on the local road network in Dundee between 2014 and 2022.

e Road Safety Framework to 2030 target: 60% Reduction in Children (Aged <16) Seriously Injured

Table 5: Dundee City - Local Road Network - Child Serious Casualties - 2014-2018 Average To 2030

Child Serious Casualties	2014-18 Average	2019	2020	2021	2022	% Change*	Scottish Government	
							2030 Target	2050 Target
Pedestrian	4.4	2	3	5	7			
Pedal Cycle	0.4	2	1	0	0			
Motorcycle	0	0	1	0	0			
Car/Taxi	0.2	0	0	0	1			
Bus/Goods/Other	0	0	0	0	0			
All	5	4	5	5	8	60%	2	0
* Percentage change as compared 2022 to 2014-2018 average								

The 2022 casualty data shows a rise in the number of children seriously injured on the local road network in Dundee. The 5-year moving average Graph 5 - Appendix A also shows a rise from the 2017-2021 average.

Analysis of these casualties between 2019 and 2022 shows that 77% are pedestrians, 14% are pedal cyclists, 5% are car/taxi occupants and 4% are motorcyclists. Cognisance of this will be taken when considering future road safety initiatives and measures.

6 PROGRAMME OF ROAD SAFETY WORKS FOR 2023-2024

6.1 Appendix B details the roll out of 20mph speed limits and Appendix C the AIP sites programmed for the 2023-2024 financial year.

6.2 As part of the Committee agreed roll out of 20mph limits the Mains of Claverhouse area, Craigiebank Sheltered Housing Complex and the Denhead of Gray area are programmed to start this financial year. Albany Terrace/The Law, Kirkton, St Marys; Mid Craigie, Gotterstone; and the Willows/Ormiston Crescent area are progressing through the Traffic Regulation Order process and are targeted for completion in 2023/2024. It is proposed that the following areas are converted to 20mph zones in 2024/2025:

- Camphill Road Area;
- Downie Park Area;
- Elmwood Area;
- Logie Area;
- Lawers Drive Area; and
- Stobswell Area.

6.3 At present 30% of the road network identified for 20mph in Dundee is now within a 20mph zone and this will increase to approximately 45% when the 2024/2025 areas are implemented. The remaining roads will be assessed and future 20mph zones will be brought forward subject to resources. These areas can be seen in a drawing contained in Appendix B and can also be viewed online at the following weblink:

https://www.dundee.gov.uk/sites/default/files/publications/20_mph_zones_0.pdf

6.4 Detailed proposals for 20mph zones will be subject to statutory consultation, public notice and advertisement as part of the Traffic Regulation Order process. To support pedestrian movement in high footfall locations of district centres, it is proposed to include Albert Street in the Stobswell 20mph zone consultation to help create a safer and more amenable shopping street environment.

6.5 These 20mph zones will support the progress towards the 2030 framework targets by reducing vehicle speed. The prioritisation of 20mph areas are based on a combination of factors which include accident data, existing speed/traffic data, road classification, number of requests, development type (residential, industrial etc) and overall function of road. The Council will develop zones in self-contained residential areas that will be easily understood by road users.

6.6 The Accident Investigation and Prevention (AIP) sites are detailed in Appendix C and include schemes carried over from 2022/2023 alongside new sites identified from the review of local road accident cluster site information. Engineering measures are subject to detailed design and priority shall be given to those schemes with the greatest potential to reduce injury accidents.

6.7 Pedestrian Crossing Assessment

- a The Council introduced a new process to assess the need for pedestrian facilities which was approved by the City Development Committee on 31 October 2022 (Report No 269-2022 refers). The new assessment process provides weighing factors to consider more vulnerable road users and other site specific characteristics such as road accidents, different vehicle types (HGVs, buses etc), road width, and vehicle speed while balancing the fact that there is a requirement to demonstrate a clear and tangible need.
- b The Council receives many requests to introduce additional pedestrian facilities throughout the city and undertakes surveys to assess whether a location requires pedestrian crossing improvements. The base data used to assess locations is known as the PV2 value. This is a nationally recognised value that indicates the number of passing vehicles and crossing pedestrians. Appendix D of this report provides the re-evaluated PV2 ratio, utilising the new assessment process, of all pedestrian crossing assessments surveyed by the Council.
- c As noted in Report No 269-2022 approved by the City Development committee on 31 October 2022, locations with new PV2 assessment values greater than 1 will be prioritised. Due to the low number of new locations in Dundee meeting this intervention criteria it is proposed to reduce the PV2 intervention criteria to 0.6 to enable progression of improvements to support active travel.
- d It is proposed to take forward all the following sites to investigate design possibilities for pedestrian facility improvements. The assessment gives a guide for facility improvements however there are likely to be on-site physical constraints at many locations that will prevent the delivery of pedestrian crossing infrastructure. The constraints maybe landownership, accesses, visibility, road alignment, road safety, and in certain occasions it may not possible to install pedestrian facilities. The locations where additional pedestrian facilities will be considered are noted below and detailed in Appendix D:
 - Balgillo Road/Forthill Road;
 - Kings Cross Road/Dunsinane Avenue;
 - Craigie Drive/Craigiebarn Road;
 - Macalpine Road/St Leonards Place; and
 - Laird Street at Craigowl Primary School.

7 **POLICY IMPLICATIONS**

- 7.1 This report has been subject to the Pre-IIA Screening Tool and does not make any recommendations for change to strategy, policy, procedures, services or funding and so has not been subject to an Integrated Impact Assessment. An appropriate Senior Manager has reviewed and agreed with this assessment.

8 **CONSULTATIONS**

- 8.1 The Council Leadership Team have been consulted in the preparation of this report and are in agreement with its content.

9 BACKGROUND PAPERS

9.1 None.

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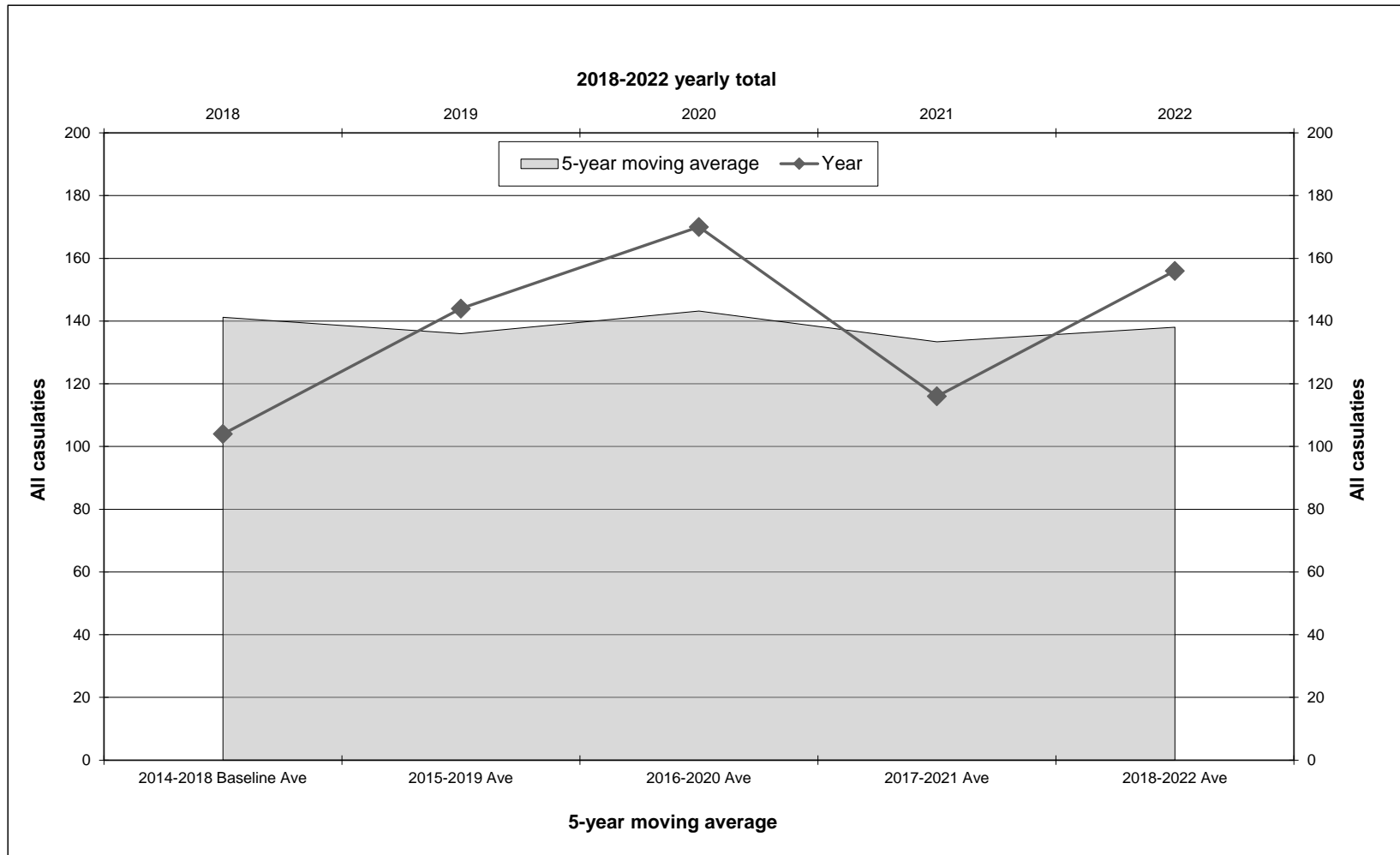
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Dundee House
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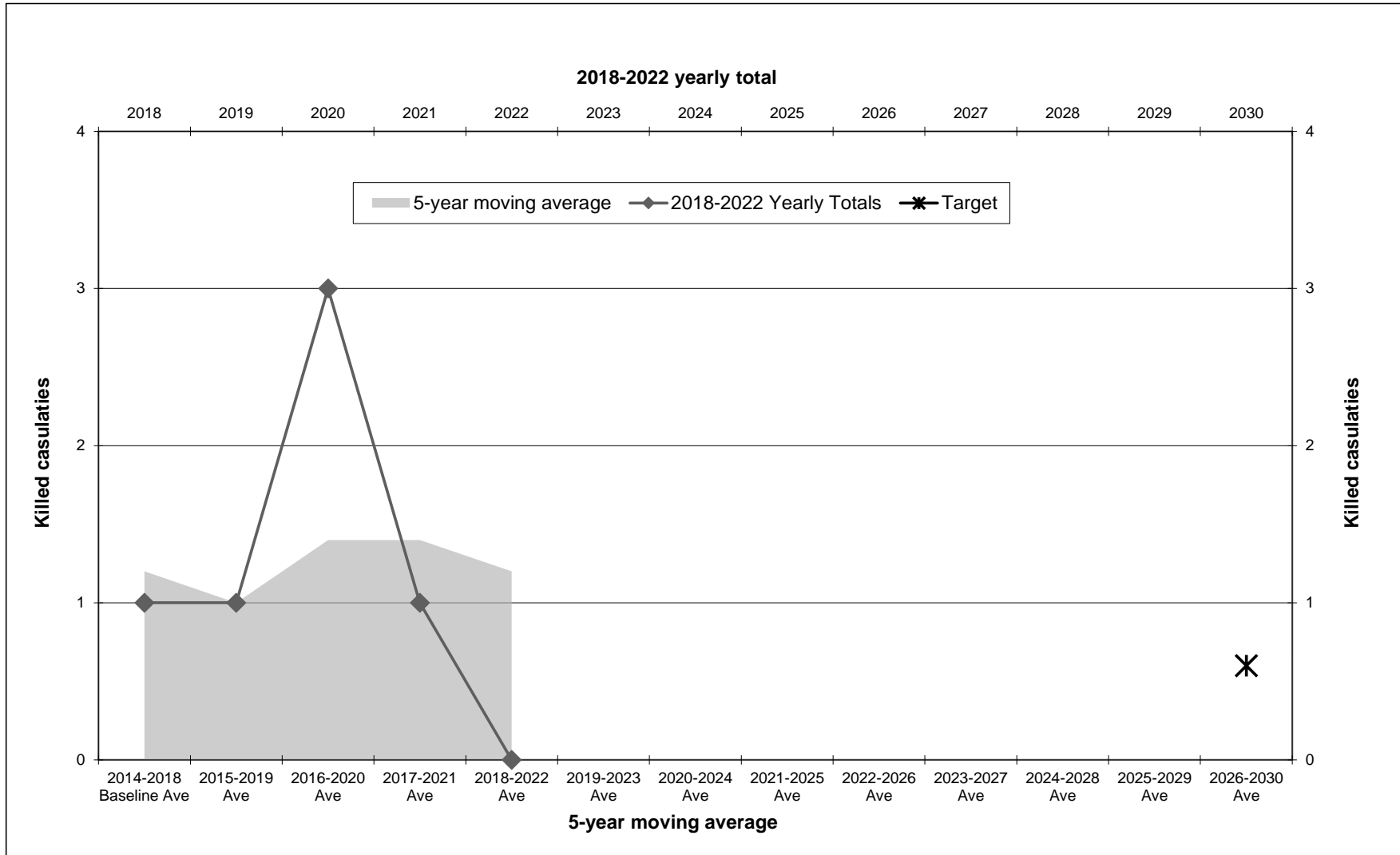
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APPENDIX A

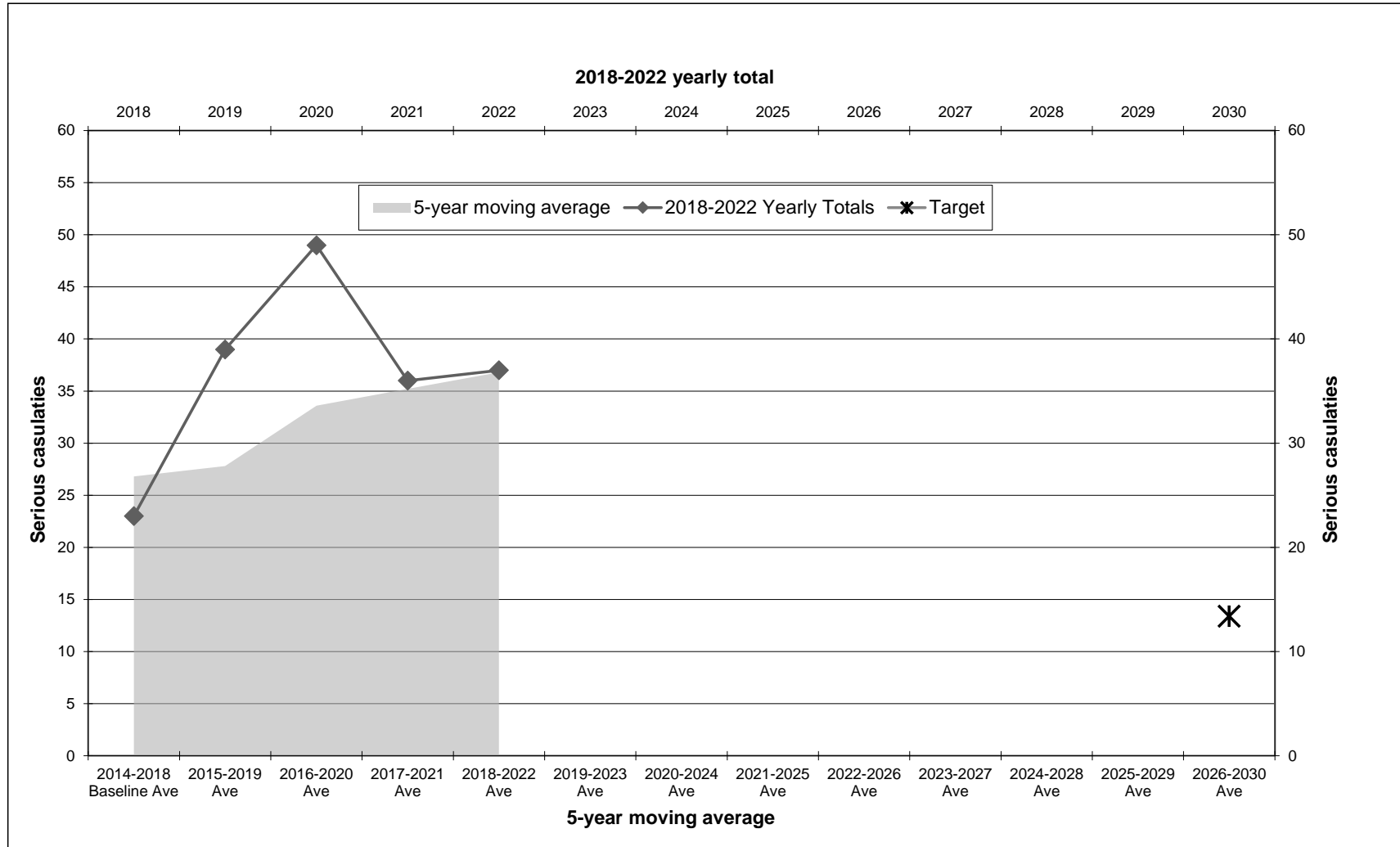
Graph 1 - Dundee City - Local Road Network - All Casualties, 5 Year Moving Average and Yearly Total



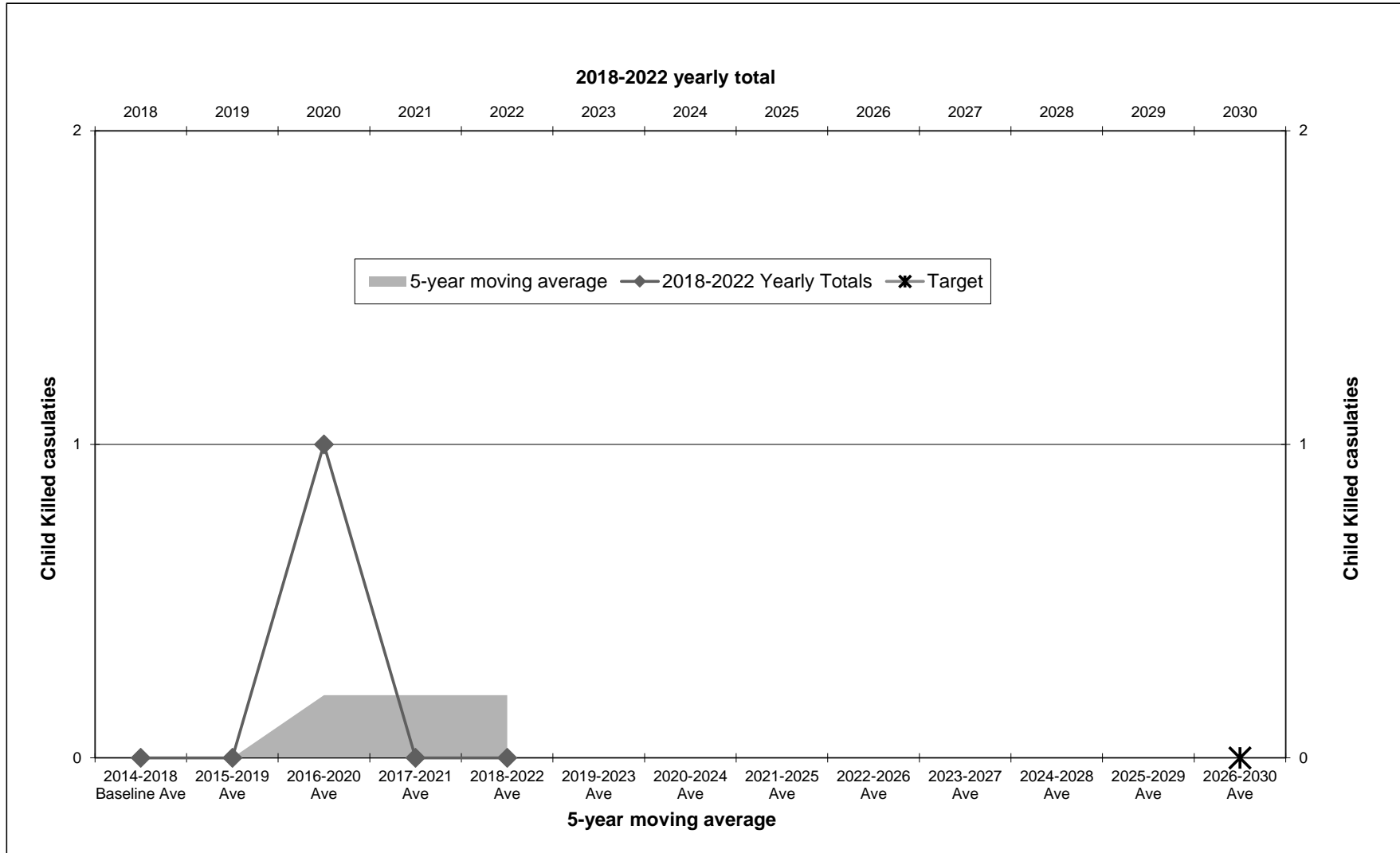
GRAPH 2 - DUNDEE CITY - LOCAL ROAD NETWORK - KILLED CASUALTIES, 5 YEAR MOVING AVERAGE AND YEARLY TOTAL



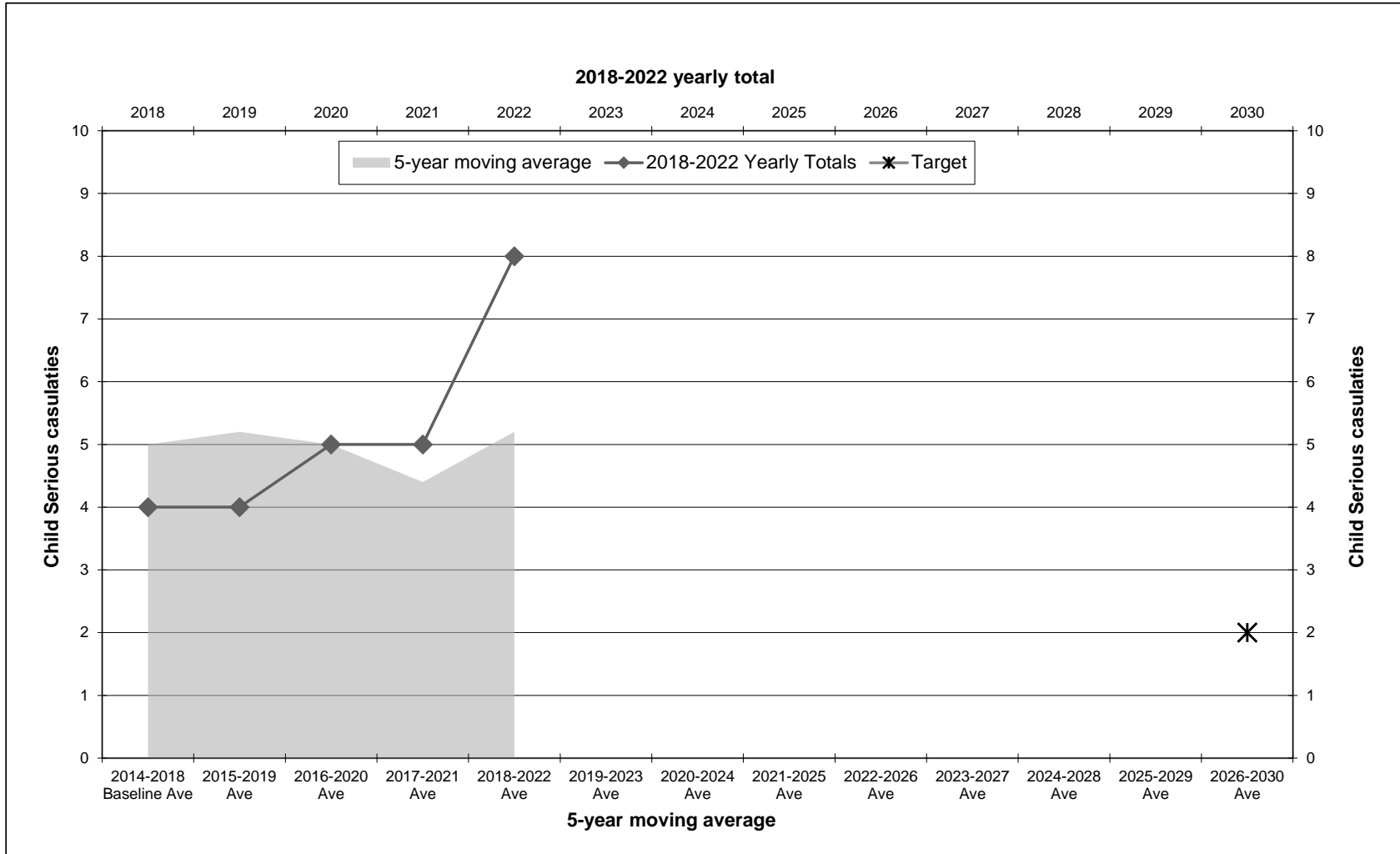
GRAPH 3 - DUNDEE CITY - LOCAL ROAD NETWORK - SERIOUS CASUALTIES, 5 YEAR MOVING AVERAGE AND YEARLY TOTAL



GRAPH 4 - DUNDEE CITY - LOCAL ROAD NETWORK – CHILD KILLED CASUALTIES, 5 YEAR MOVING AVERAGE AND YEARLY TOTAL

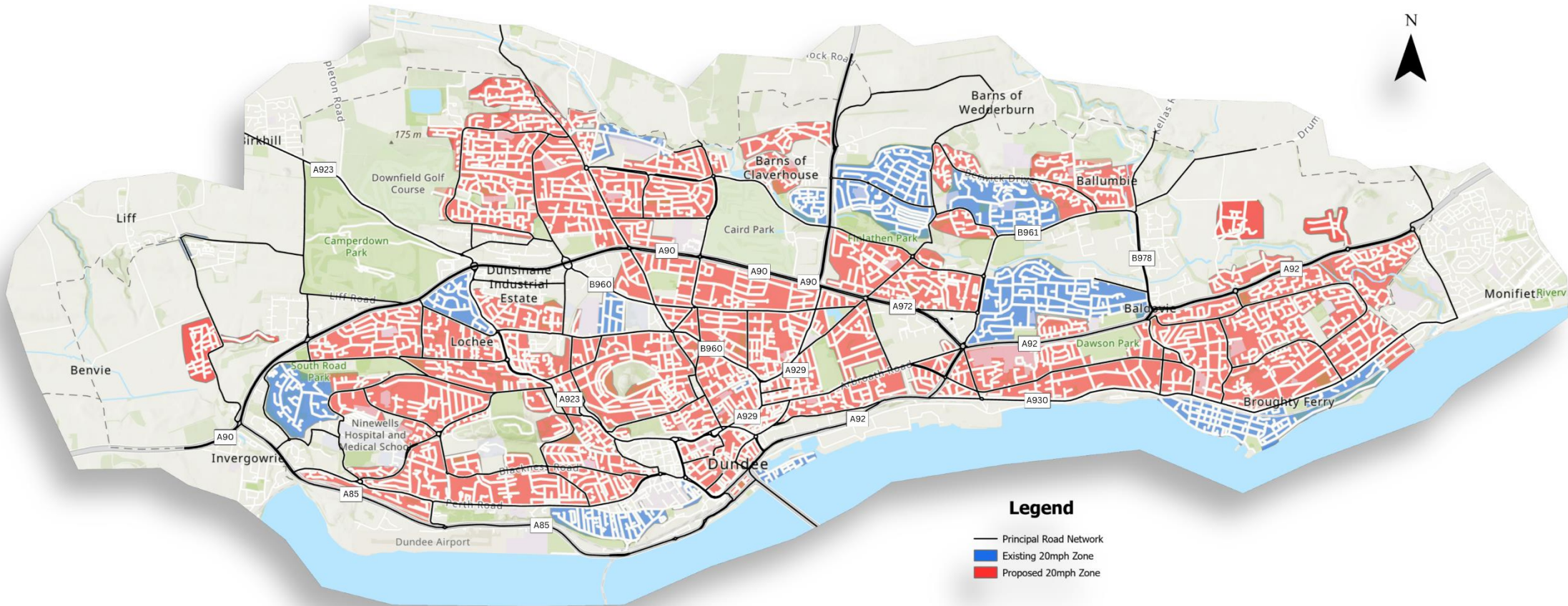


GRAPH 5 - DUNDEE CITY - LOCAL ROAD NETWORK, CHILD SERIOUS CASUALTIES, 5 YEAR MOVING AVERAGE AND YEARLY TOTAL



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APPENDIX B - 20MPH ZONE PROGRAMME



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APPENDIX C**ACCIDENT INVESTIGATION AND PREVENTION (AIP) SITES**Schemes to be Progressed 2023-2025

A923 Coupar Angus Road at Liff Road – road markings
Albert Street near Lyon Street – road markings and traffic signs
Arbroath Road at Old Craigie Road – junction improvements
Arbroath Road East of Balgavies Avenue – road markings
Claverhouse Road at Barns of Claverhouse – junction improvements
Coupar Angus Road at Templeton Road – junction improvements, traffic signs, and road markings
Douglas Road south of Ballindean Road - pedestrian improvements
Dura Street at Harriet Street – traffic signs and road markings
East Marketgait at King Street – traffic signal junction improvements
Fountainbleau Drive at Afton Way/Fintry Road – traffic signal junction improvements
Logie Street at Ancrum Road – road markings
Longtown Road east of Longtown Street - pedestrian improvements
Loons Road at Gardner Street – junction improvements
North Marketgait at Ladywell roundabout – road markings
Pitkerro Road north of Kingsway – pedestrian improvements
Princes Street at Arbroath Road - pedestrian improvements
Riverside Avenue at Wright Avenue – junction improvements
Riverside Drive west of Tesco service roundabout – road surface friction improvements
Strathern Road at Fairfield Road – traffic calming
Strathmartine Road at Camperdown Road/Gillburn Road – vehicle activated junction signs
Strathmartine Road at Clepington Road – traffic signal junction improvements
Victoria Road at Hilltown – pedestrian and lighting Improvements

Ongoing accident investigations may identify additional sites to be introduced and prioritised within the programme.

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APPENDIX D

PEDESTRIAN CROSSING SITE RE-EVALUATION SUMMARY

Location	Pedestrian/ Vehicle Ratio	Adjusted Pedestrian/ Vehicle Ratio	Recommendation
Wilison Street at Barrack Street	0.703	1.337	Resurvey following LEZ enforcement implementation from 30 May 2024 to establish potential impact of traffic reduction
Balgillo Road at Forthill Road	0.666	1.237	Consider pedestrian facilities (site constraints identified)
North Lindsay Street at Dundee House	0.624	0.905	Resurvey following LEZ enforcement implementation from 30 May 2024 to establish potential impact of traffic reduction
Kingscross Road at Dunsinane Avenue	0.416	0.698	Consider pedestrian facilities (site constraints identified)
Cleington Road at Mains Loan	0.309	0.686	Developer led pedestrian crossing (planning condition)
Brook Street, West of Gray Street Junction	0.361	0.606	Consider pedestrian facilities on west side of Gray Street. May necessitate signalisation of junction (subject to detailed design, modelling, road safety audit and Network Rail engagement due to proximity of level crossing). On hold pending Network Rail confirmation of electrification proposals as may impact traffic arrangements in locus.
Dalhousie Road at Bridge Street	0.323	0.599	Toucan crossing (pedestrian and cyclist signalised crossing) proposed to support Broughty Ferry Active Travel project
Craigie Drive at Craigiebarn Road	0.432	0.585	Consider pedestrian facilities to support safer routes to school
Macalpine Road at Street Leonard Place	0.382	0.569	Consider pedestrian facilities to support safer routes to school
Laird Street at Craigowl Primary School	0.361	0.550	Consider pedestrian facilities to support safer routes to school
Balfield Road at Harefield Road	0.19	0.538	Resurvey in 2024
Commercial Street at Dock Street	0.195	0.491	No action - below intervention level
Brook Street, Broughty Ferry East of Union Street	0.274	0.460	No action - below intervention level
Brook Street Broughty Ferry, at Church Street	0.256	0.456	No action - below intervention level

Location	Pedestrian/ Vehicle Ratio	Adjusted Pedestrian/ Vehicle Ratio	Recommendation
Dalhousie Road at Kerrington Crescent West (shops)	0.358	0.439	No action - below intervention level
Lochee Road at Tullideph Road	0.218	0.432	No action - below intervention level
Strathmore Avenue at Hospital Street	0.246	0.429	No action - below intervention level
Tom Johnston Road at Baldovie Road	0.199	0.405	No action - below intervention level
Arbroath Road at East Haddon Road	0.23	0.339	No action - below intervention level
Blackness Road at Balgay Road	0.196	0.317	No action - below intervention level
Old Glamis Road at Soccer World	0.152	0.311	No action - below intervention level
Moffat Road at Milton of Craigie Road North roundabout	0.223	0.307	No action - below intervention level
Old Glamis Road, South of Kingsway	0.162	0.279	No action - below intervention level
Lochee Road at Cobden Street	0.172	0.279	No action - below intervention level
Nursery Road at Shops	0.157	0.278	No action - below intervention level
Strathmore Avenue at Johnson Avenue	0.192	0.278	No action - below intervention level
Blackness Road at Kelso Street Steps	0.192	0.268	No action - below intervention level
Fintry Road at Finavon Street	0.179	0.244	No action - below intervention level
West Grange Road at Lawers Drive	0.156	0.238	No action - below intervention level
Berwick Drive West of School Access	0.115	0.233	No action - below intervention level
Johnson Avenue at Strathmore Avenue	0.148	0.233	No action - below intervention level

Location	Pedestrian/ Vehicle Ratio	Adjusted Pedestrian/ Vehicle Ratio	Recommendation
Monifieth Road at Panmure Street	0.156	0.230	Toucan crossing (pedestrian and cyclist signalised crossing) proposed to support Broughty Ferry Active Travel project - promoted as part of a wider active travel project.
Longtown Road, West of Milton of Craigie Road	0.167	0.230	No action - below intervention level
Claverhouse Road at Old Glamis Road	0.179	0.221	No action - below intervention level
Fountainbleau Drive at Pitkerro Drive	0.143	0.218	No action - below intervention level
Broughty Ferry Road at Stannergate roundabout	0.069	0.204	No action - below intervention level
Strathern Road at Fairfield Road	0.136	0.195	No action - below intervention level
Glamis Road South of Ancrum Road	0.124	0.178	No action - below intervention level
Arbroath Road at Old Craigie Road	0.101	0.175	No action - below intervention level
Strathmartine Road at Strathmartine Court	0.169	0.170	No action - below intervention level
Pitkerro Road at Dalkeith Road	0.113	0.169	No action - below intervention level
Gardner Street at Campbell Street	0.098	0.166	No action - below intervention level
Balgillo Road at Falkland Crescent	0.101	0.164	No action - below intervention level
Balgillo Road East at A92 Arbroath Road, south of roundabout	0.140	0.160	No action - below intervention level
Bank Street Lochee at High Street	0.105	0.159	No action - below intervention level
Pitkerro Road at Clepington Road	0.112	0.150	No action - below intervention level
Derwent Avenue at Asda/Community Centre	0.09	0.143	No action - below intervention level
Blackness Road at Seymour Street	0.139	0.139	No action - below intervention level
Gillburn Road at Strathmartine Road	0.107	0.136	No action - below intervention level

Location	Pedestrian/ Vehicle Ratio	Adjusted Pedestrian/ Vehicle Ratio	Recommendation
Balfield Road at Loons Road	0.06	0.133	No action - below intervention level
Camperdown Road at Macalpine Road	0.089	0.124	No action - below intervention level
Old Glamis Road at from Claverhouse roundabout to Emmock Road	0.107	0.122	No action - below intervention level
Clepington Road at Clive Street	0.082	0.122	No action - below intervention level
Buttars Loan at Liff Road	0.108	0.121	No action - below intervention level
Dundee Road at Stannergate roundabout	0.05	0.120	No action - below intervention level
South Road at Playpark near Lynch Centre	0.070	0.112	No action - below intervention level
Pitkerro Road at Stobsmuir North section beside Park	0.083	0.111	No action - below intervention level
Dudhope Terrace at Inverlaw Place	0.088	0.111	No action - below intervention level
Asda Milton of Craigie – Car Park Access	0.078	0.107	No action - below intervention level
St Leonards Place at school	0.078	0.107	No action - below intervention level
Baldovie Road at North of Tom Johnston Road	0.089	0.102	No action - below intervention level
Mallaig Avenue at Explorer Road	0.068	0.099	No action - below intervention level
Brook Street, Dundee at Co-op store	0.087	0.098	No action - below intervention level
Whitefield Drive at Whitfield Rise	0.071	0.097	No action - below intervention level
Dudhope Terrace at Infirmary Brae	0.086	0.095	No action - below intervention level
Haldane Crescent at shops	0.05	0.091	No action - below intervention level
Camperdown Road at Strathmartine Road	0.047	0.090	No action - below intervention level
Riverside Approach at Magdalene Green Cycle Path	0.070	0.088	No action - below intervention level

Location	Pedestrian/ Vehicle Ratio	Adjusted Pedestrian/ Vehicle Ratio	Recommendation
Whitfield Drive at Drumgeith Road	0.066	0.078	No action - below intervention level
Lothian Crescent at Balumbie Primary School	0.043	0.076	No action - below intervention level
Blackness Avenue near Corso Street	0.035	0.072	No action - below intervention level
Pitkerro Road at Stobsmuir Park (middle)	0.053	0.072	No action - below intervention level
King Street, Broughty Ferry - West of Church Street	0.043	0.067	No action - below intervention level
Perth Road at Hyndford Street	0.05	0.066	No action - below intervention level
Dundee Road at Ravenscraig Gardens	0.019	0.062	No action - below intervention level
Rosebank Street at Constitution Street	0.046	0.061	No action - below intervention level
Milton of Craigie Road North of Asda roundabout	0.038	0.059	No action - below intervention level
Nursery Road at Forthill Road	0.032	0.052	No action - below intervention level
Perth Road at Rockfield Street	0.036	0.052	No action - below intervention level
Blackness Road near Glamis Road	0.034	0.051	No action - below intervention level
Drumgeith Road west of Forties Road	0.051	0.050	No action - below intervention level
Perth Road east of Ninewells roundabout	0.037	0.049	No action - below intervention level
Clelington Road west of Mains Loan	0.029	0.049	No action - below intervention level
Linlathen Road at A92 Arbroath Road	0.021	0.045	No action - below intervention level
Buttars Loan at South Road	0.03	0.045	No action - below intervention level
Buttars Loan at North of Buttars Street	0.035	0.042	No action - below intervention level
Drumgeith Road at East of Forties Road	0.037	0.039	No action - below intervention level

Location	Pedestrian/ Vehicle Ratio	Adjusted Pedestrian/ Vehicle Ratio	Recommendation
Drumgeith Road at Ballumbie Road	0.027	0.037	No action - below intervention level
Birkdale Place - East End	0.019	0.033	No action - below intervention level
West Park Road at Perth Road	0.021	0.029	No action - below intervention level
Drumgeith Road east of Whitfield Drive	0.023	0.027	No action - below intervention level
Harcourt Street west of Strathmartine Road	0.021	0.026	No action - below intervention level
Pitkerro Road at Stobsmuir Park south	0.017	0.023	No action - below intervention level
Drumgeith Road west of Whitfield Drive	0.016	0.022	No action - below intervention level
Brown Constable Street between Dura Street and Arthurstone Terrace	0.012	0.018	No action - below intervention level
Drumgeith Road at Hawick Drive/Peebles Avenue	0.016	0.018	No action - below intervention level
Mains Loan south of Clepington Road	0.014	0.017	No action - below intervention level
Riverside Avenue at Perth Road	0.009	0.017	No action - below intervention level
Balunie Avenue at Baldovie Road	0.015	0.016	No action - below intervention level
Dickson Avenue at Liddel Road	0.012	0.016	No action - below intervention level
Dykes of Gray Road at Church Road	0.01	0.014	No action - below intervention level
Mains Loan north of Clepington Road	0.004	0.005	No action - below intervention level
Seymour Street at Blackness Road	0.003	0.004	No action - below intervention level
Forties Road at Drumgeith Road	0.003	0.004	No action - below intervention level
Milton of Craigie Road South of Asda roundabout	0.001	0.002	No action - below intervention level
Birkdale Place - West End	0.001	0.001	No action - below intervention level
Ashbank Road at Blackness Road	0.001	0.001	No action - below intervention level