



Chapter 10
Population

Contents

10. Population	1
10.1 Introduction	1
10.2 Methodology	2
10.2.1 Study Area	2
10.2.2 Relevant Guidelines, Policy and Legislation	3
10.2.3 Data Collection and Collation	3
10.2.4 Appraisal Method for the Assessment of Impacts	4
10.3 Baseline Environment.....	11
10.3.1 Overview	11
10.3.2 Community Baseline.....	11
10.3.3 Economic Baseline	13
10.4 Potential Impacts	15
10.4.1 Characteristics of the Proposed Scheme	15
10.4.2 'Do Nothing' Scenario.....	16
10.4.3 Construction Phase	16
10.4.4 Operational Phase	23
10.5 Mitigation and Monitoring Measures	30
10.6 Residual Impacts	30
10.6.1 Construction Phase	31
10.6.2 Operational Phase	32
10.7 References	35

10. Population

10.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) has considered the potential community and economic impacts on the human population associated with the Construction and Operational Phases of the Blanchardstown to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme).

These potential impacts can affect the way in which people live, work, relate to one another, organise to meet their needs and generally operate as members of society. This population assessment will consider both social impacts on communities (community assessment) as well as economic impacts on commercial businesses (economic assessment). The assessment also considers the ways in which the Proposed Scheme will improve walking, cycling and bus facilities and is anticipated to encourage sustainable modes of transport, therefore reducing the demand for private vehicles / parking along the Proposed Scheme.

This Chapter drew on the outcomes of the assessments in the following EIAR chapters (Volume 2):

- Chapter 6 (Traffic & Transport);
- Chapter 7 (Air Quality);
- Chapter 9 (Noise & Vibration); and
- Chapter 17 (Landscape (Townscape) & Visual).

This Chapter is also supported by Figure 10.1 in Volume 3 of this EIAR and in the following two appendices in Volume 4 of this EIAR:

- Appendix A10.1 Schedule of Commercial Businesses. This is a list of all commercial businesses located along the Proposed Scheme and any businesses in the surrounding road network that are located on a road that is expected to experience a moderate or greater traffic impact from displaced traffic in the AM and PM peak hours (as identified in Chapter 6 (Traffic & Transport)).
- Appendix A10.2 The Economic Impact of the Core Bus Corridors Report (EY 2021). This report is an assessment of the economic impact of the Core Bus Corridors. The impacts have been considered across the short, medium and long term and are based on a review of published literature, including academic papers and wider reports and briefings provided on relevant projects globally. The assessment has not considered each individual corridor separately but rather them all together. The assessment identified five areas that could be influenced by the Core Bus Corridors: local businesses, public realm, health and wellbeing, social cohesion, and adapting to the future. This appendix has been referred to within this population assessment where relevant.

The aim of the Proposed Scheme when in operation is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The objectives of the Proposed Scheme are described in Chapter 1 (Introduction). The Proposed Scheme as described in Chapter 4 (Proposed Scheme Description) has been designed to meet these objectives. The specific objectives that are applicable to this assessment are:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable; and
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks; and
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services.

The design of the Proposed Scheme has evolved through comprehensive design iteration process with particular emphasis on minimising the potential for environmental impacts, where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. In addition, feedback received from the comprehensive consultation programme undertaken throughout the option selection and design development process have been incorporated, where appropriate.

10.2 Methodology

This Section presents the study area and appraisal method for the assessment of impacts on the local population, communities and businesses.

10.2.1 Study Area

The population assessment requires potential impacts to be considered and assessed for a wide range of receptors, comprising community facilities, recreational resources, tourism assets, residential properties, and commercial businesses. To capture how these receptors are likely to be impacted by the Proposed Scheme, the population assessment has been split into two sub-assessments. The two sub-assessments are:

- Community Assessment: An assessment to capture impacts from the Proposed Scheme on the local population; residents and communities; and
- Economic Assessment: An assessment to capture impacts from the Proposed Scheme on commercial receptors. Wider economic impacts of all the Core Bus Corridors are discussed in Appendix A10.2 (The Economic Impact of the Core Bus Corridors) (EY 2021) in Volume 4 of this EIAR.

The study areas for both assessments are described in Section 10.2.1.1 and Section 10.2.1.2.

10.2.1.1 Community Assessment - Study Area

The community assessment considers impacts on individual population receptors, including community facilities and recreational resources, as well as individual residential properties and land parcels being acquired on a temporary and/or permanent basis to accommodate the Proposed Scheme. As such, the community assessment comprises of the following assessment topics:

- Community amenity; and
- Community land use and accessibility.

The study area for the assessment of impacts on community amenity, land take and accessibility consist of 'community areas', which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). Community areas that would either be intersected by or are adjacent to the Proposed Scheme consist of the following:

- Mulhuddart;
- Corduff;
- Blakestown;
- Mount View;
- Blanchardstown;
- Laurel Lodge – Carpenterstown;
- Castleknock;
- Navan Road;
- Cabra West;
- Aughrim Street;
- Cabra; and
- Halston Street.

These community areas are presented in Figure 10.1 in Volume 3 of this EIAR.

Chapter 6 (Traffic & Transport) assessed changing traffic volumes within an indirect study area for the AM and PM peak periods in the 2028 Opening Year and the 2043 Design Year. The results identified key junctions in the surrounding road network where capacity issues may arise. In this Population assessment, the results from the 2028 Opening Year traffic assessment have been considered with respect to accessibility and amenity.

10.2.1.2 Economic Assessment - Study Area

The economic assessment considers impacts on individual commercial businesses along the Proposed Scheme within the community areas listed in Section 10.2.1.1, as well as any businesses in the surrounding road network that are located on a road that is expected to experience a moderate or greater traffic impact from displaced traffic in the AM and PM peak hours. To consider and assess these impacts, the economic assessment has been divided into the following two assessment topics:

- Commercial amenity; and
- Commercial land use and accessibility.

The study areas for these two assessment topics are the same as those outlined in Section 10.2.1.1.

10.2.2 Relevant Guidelines, Policy and Legislation

Guidelines, policy and legislation specifically relevant to the population assessment are outlined in Table 10.1.

Table 10.1: Relevant Guidelines, Policies and Legislation

Guidance	Description	Relevance to Assessment
Environmental Protection Agency (EPA) Guidelines on the information to be contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2022)	This document outlines EPA guidance for conducting Environmental Impact Assessments (EIAs) / EIARs and provides the fundamental requirements of the EIAR.	This guidance has been used to inform the significance of effect for all topics in the population assessment.
Design Manual for Roads and Bridges (DMRB) LA 112 Population and human health (hereafter referred to as the DMRB Guidance) (Highways England 2020)	The DMRB Guidance provides guidance on the assessment of land use and accessibility within an EIA.	This DMRB Guidance has been used to inform sensitivity and magnitude for the following assessment topics: <ul style="list-style-type: none"> • Community land take; and • Commercial land take.
Guidelines for Planning Authorities and An Bord Pleanála on carrying out an Environmental Impact Assessment (Government of Ireland 2018)	This document outlines Ireland specific guidance for consenting authorities carrying out EIA.	This report has been used to inform the development of the assessment methodologies.
Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (European Commission 2017)	This document provides practical insight to those who are involved during the stages of the EIA process, drawing upon experiences in Europe and worldwide.	This guidance has been used to inform the wider EIA methodology as outlined in Chapter 1 (Introduction).

10.2.3 Data Collection and Collation

Baseline data was collected through carrying out a desk study, availing of the most up-to-date available data, at the time of writing. This comprises the following sources:

- 2016 Census - Demographic, residential, travel to work and employment statistics (CSO 2016a; CSO 2016b; CSO 2016c; CSO 2018a; CSO 2018b);
- Population scoping reports and impacts assessments for other major linear infrastructure projects;
- Ordnance Survey Ireland (OSI) Prime 2 dataset (OSI 2020);

- Geodirectory data (Geodirectory 2019);
- Google maps (Google 2021);
- Proposed Scheme Design Drawings; and
- National Public Transport Access Nodes (NaPTAN) (NTA 2020).

The baseline for the community assessment is founded on the OSI Prime 2 dataset. The OSI Prime 2 dataset was used to establish the number of community receptors, including local educational, recreational and healthcare facilities (see Section 10.3.2).

Desktop research has been supplemented by a walkover survey in October 2021 to verify baseline data collection including the commercial businesses listed in Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR.

As part of the non-statutory public consultation process, submissions received were reviewed by the BusConnects Infrastructure team. Among the submissions received, there were some from business owners raising issues which they believed could have an effect on their businesses (e.g., loss/reduction of parking and loading bays). Discussions were also held with various businesses along the Proposed Scheme to inform them if the Proposed Scheme would impact on their property boundary. The issues raised were considered during the iterative design development for the Proposed Scheme by the BusConnects Infrastructure team and where reasonably practicable, measures to reduce the impact of the Proposed Scheme were included.

10.2.4 Appraisal Method for the Assessment of Impacts

This Section sets out how each assessment topic has been undertaken and highlights where input from other environmental disciplines has been included within the population assessment.

The population assessment has been adapted from the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2022). The significance of impacts matrix, based on the EPA Guidelines, was used to determine the significance of impact for land use and accessibility impacts (see Table 10.2).

Table 10.2: Significance Matrix

		Sensitivity				
		Very Low	Low	Medium	High	Very High
Magnitude	Very Low	Imperceptible	Not Significant	Slight	Slight	Slight
	Low	Not significant	Slight	Moderate	Moderate	Moderate
	Medium	Slight	Moderate	Moderate	Significant	Significant
	High	Slight	Moderate	Significant	Very Significant	Profound
	Very High	Slight	Moderate	Significant	Profound	Profound

In addition to the EPA Guidelines, the assessment of land use and accessibility impacts has been informed by the Design Manual for Roads and Bridges (DMRB) LA 112 Population and human health (land use and accessibility) (hereafter referred to as the DMRB Guidance) (Highways England 2020). The DMRB guidance is the standard approach used for road infrastructure schemes across the UK and Ireland, for the assessment of environmental impacts. The DMRB Guidance provides a framework for assessing the impact on land use and accessibility and has therefore been used to determine the sensitivity and magnitude of impact for relevant receptors.

There is no prescribed method for determining the significance of effects on receptors as a result of a change in amenity. The methodology for this assessment topic is therefore informed by established best practice and experience on other linear infrastructure projects, while the significance of impact is also adapted from the EPA Guidelines.

The assessment methodologies were applied to assess both the potential impacts during the Construction Phase and the potential impacts during the Operational Phase of the Proposed Scheme, unless otherwise stated.

10.2.4.1 Community Assessment

The methodology for the assessment of community impacts is outlined in this Section.

10.2.4.1.1 Community Amenity

Community amenity describes the perceived character or attractiveness of an area. This community amenity assessment has assessed the potential for people to change how they perceive their communities or how they use community facilities and recreational resources as a result of the Proposed Scheme.

The community amenity assessment includes the 'indirect' impact of the following environmental effects which may combine to create a change in amenity:

- Air quality;
- Visual;
- Traffic and transport; and
- Noise and vibration.

Where there is a combination of at least two environmental effects on a receptor, or group of receptors, this is classified as an 'indirect' impact on community amenity. For example, where there are both visual and air quality impacts on a receptor, or a group of receptors, the assessed receptor(s) would be indirectly impacted.

The assessment has considered the residual effect reported for each of the environmental effects under consideration. Therefore, specific sensitivity and magnitude criteria are not required for community amenity. The level of significance from each environmental effect was determined by the individual environmental assessments presented in the following chapters:

- Chapter 6 (Traffic & Transport);
- Chapter 7 (Air Quality);
- Chapter 9 (Noise & Vibration); and
- Chapter 17 (Landscape (Townscape) & Visual).

10.2.4.1.1.1 Aligning Receptors

To determine the impact on community amenity, there needs to be an alignment of receptors across the different contributing environmental assessments.

Chapter 6 (Traffic & Transport) assesses the impacts on 'general traffic' along the Proposed Scheme. The impact on general traffic has been considered as having the greatest potential to create a wider impact on community amenity, when combined with other environmental effects. The amenity assessment has considered residual impacts on general traffic (i.e. those after proposed mitigation). During construction, the amenity assessment has considered the restrictions to general traffic along the Proposed Scheme as well as the residual impact that will arise from additional construction traffic flows on the surrounding road network. During operation, the amenity assessment has considered the reduction in general traffic along the Proposed Scheme and the redistributed general traffic along the

surrounding road network. The residual impact on general traffic along the Proposed Scheme is assigned to all receptors located along the Proposed Scheme, while the impact from construction traffic flows (Construction Phase) or redistributed traffic (Operational Phase) is assigned to all receptors on the surrounding road network.

For the assessment of air quality, the residual impact on human receptors identified in Chapter 7 (Air Quality) were used for all receptors along the Proposed Scheme for construction and operation. Construction dust has been excluded from the amenity assessment as it is considered to be sufficiently mitigated during construction, that it will not result in a significant air quality impact.

Chapter 9 (Noise & Vibration) assesses the impact on Noise Sensitive Locations (NSL) which include: residential dwellings, schools and other educational establishments, hospitals and nursing homes, hotels and other short-term accommodation buildings, buildings of religious sensitivity, recreational and noise sensitive amenity areas and offices. During construction, noise impacts at NSLs can occur from a variety of activities including road widening, utility diversion, urban realm landscaping, and at the Construction Compound. In an instance where a NSL is impacted by more than one noise source, the worst impact has been considered in the amenity assessment. Construction traffic impacts were considered when aligning a noise impact to receptors in the surrounding road network. During operation, two assessment topics are considered in the noise and vibration assessment, namely, traffic noise along the Proposed Scheme and traffic noise on the surrounding road network. The residual impacts reported in respect to these two assessment topics are aligned to community and commercial receptors depending on whether they are situated along the Proposed Scheme or in the surrounding road network.

In Chapter 17 (Landscape (Townscape) & Visual), the assessment of townscape and streetscape has been used to assign a visual impact to all receptors along the Proposed Scheme. In Chapter 17 (Landscape (Townscape) & Visual), the term townscape is used to describe built-up areas of a medium to large extent, generally equivalent to neighbourhood scale or larger. Streetscape is used to define built up areas of largely public space within the confines of a street or road corridor. The townscape and streetscape assessment assigned a significance of impact to sections of road along the Proposed Scheme. These impacts have then been used to align a visual residual impact to all receptors along those sections of road unless Chapter 17 (Landscape (Townscape) & Visual) identified a visual amenity impact on a specific receptor.

10.2.4.1.1.2 Determining Significance of Effect

Following alignment of the environmental effects, an indirect amenity significance matrix has been used to determine the significance of localised impacts on individual receptors (see Table 10.3).

The amenity significance matrix is closely aligned with the EPA Guidelines. The term 'Significant' in the amenity matrix encompasses the EPA terms 'Profound', 'Very Significant' and 'Significant' while, the term 'Not Significant' encompasses the EPA terms 'Not Significant' and 'Imperceptible' as outlined in the EPA Guidelines (EPA 2022). Table 10.3 is used for either negative or positive impacts, but not a combination of both. Where both negative and positive impacts occur, professional judgement has been used to assign the overall impact on amenity.

Whilst the community amenity assessment imposes no duration criteria of its own, where a 'Significant' impact on amenity is identified, the temporal aspects from the environmental effects were examined to determine whether the impacts are likely to occur simultaneously and result in a 'Significant' indirect impact.

With this determination, the nature, significance and duration of effects for each community area has been reported in line with the EPA Guidelines (EPA 2022). Amenity impacts that may arise on individual receptors have only been stated separately in the Potential Impacts (see Section 10.2.4.1.1) for Slight/Moderate, Moderate, Moderate/Significant and Significant amenity impacts. Amenity impacts on

individual receptors that are assessed as less than Moderate (Slight, Not Significant and Imperceptible) are not discussed in the amenity assessment. Only individual receptors that are expected to experience a Moderate/Significant or Significant amenity impact are listed in the Residual Impact tables (see Section 10.6).

Table 10.3: Indirect Amenity Significance Matrix (Construction and Operational Phases)

Environmental Effect 1	Environmental Effect 2	Environmental Effect 3	Environmental Effect 4	Combined Impact
Significant	Significant	Significant	Significant	Significant
Significant	Significant	Significant	Moderate	Significant
Significant	Significant	Significant	Slight	Significant
Significant	Significant	Significant	Not Significant	Significant
Significant	Significant	Moderate	Moderate	Significant
Significant	Significant	Moderate	Slight	Moderate / Significant
Significant	Significant	Moderate	Not Significant	Moderate / Significant
Significant	Significant	Slight	Slight	Moderate
Significant	Significant	Slight	Not Significant	Moderate
Significant	Significant	Not Significant	Not Significant	Moderate
Significant	Moderate	Moderate	Moderate	Moderate / Significant
Significant	Moderate	Moderate	Slight	Moderate
Significant	Moderate	Moderate	Not Significant	Moderate
Significant	Moderate	Slight	Slight	Moderate
Significant	Moderate	Slight	Not Significant	Moderate
Significant	Moderate	Not Significant	Not Significant	Moderate
Significant	Slight	Slight	Slight	Slight / Moderate
Significant	Slight	Slight	Not Significant	Slight / Moderate
Significant	Slight	Not Significant	Not Significant	Slight
Significant	Not Significant	Not Significant	Not Significant	Not Significant / Potential direct impact on amenity*
Moderate	Moderate	Moderate	Moderate	Moderate / Significant
Moderate	Moderate	Moderate	Slight	Moderate / Significant
Moderate	Moderate	Moderate	Not Significant	Moderate
Moderate	Moderate	Slight	Slight	Moderate
Moderate	Moderate	Slight	Not Significant	Moderate
Moderate	Moderate	Not Significant	Not Significant	Moderate
Moderate	Slight	Slight	Slight	Slight / Moderate
Moderate	Slight	Slight	Not Significant	Slight / Moderate
Moderate	Slight	Not Significant	Not Significant	Slight
Moderate	Not Significant	Not Significant	Not Significant	Not Significant
Slight	Slight	Slight	Slight	Slight / Moderate
Slight	Slight	Slight	Not Significant	Slight / Moderate
Slight	Slight	Not Significant	Not Significant	Slight
Slight	Not Significant	Not Significant	Not Significant	Not Significant
Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

*Potential direct impacts on amenity for commercial businesses is discussed in Section 10.2.4.1.1.

10.2.4.1.2 Community Land Use and Accessibility

10.2.4.1.2.1 Land Take

This assessment considers both temporary and permanent direct land take impacts on community receptors. Temporary land take is considered during the Construction Phase while permanent land take is considered during the Operational Phase. In this assessment community receptors include community land and assets such as parks and rights of way (RoW) as well as residential land, including gardens, paths and driveways within the Proposed Scheme boundary. Direct land take impacts can lead to a temporary or permanent restriction in the ability of a user to use a property or a community facility.

Following the DMRB Guidance (Highways England 2020), residential land has been assigned a high sensitivity. A high sensitivity for residential properties ensures that all populations are considered in the assessment including vulnerable groups such as young children, elderly, and people with disabilities. The sensitivity of community facilities varies, and therefore, specific aspects were considered using professional judgement to assess the sensitivity of these receptors, such as:

- Availability of viable alternatives;
- Frequency of use; and
- Number of users on an average visit.

Some other examples of different sensitivities include:

- A hospital would be assigned a very high sensitivity;
- A nature reserve that attracts visitors from across Dublin City with no alternatives would be assigned a high sensitivity;
- A golf course, frequented daily, with no immediate alternative would be assigned a medium sensitivity;
- A small local park, with no extra amenities or features would be assigned a low sensitivity; and
- Derelict land or unoccupied buildings would be assigned a very low sensitivity.

The magnitude of impact of land take has been determined by the degree of loss of the resource including acquisition of gardens and private landings / driveways, as set out in DMRB Guidance and supported by professional judgement. In general, direct acquisition of a property has been categorised with a high or very high magnitude. A medium magnitude would be assigned where there will be changes to access or the acquisition of land, but the changes overall will not compromise the overall ability to use a property. A low magnitude has been assigned where there will be a minor loss of land, or where severance will be introduced but adequate accessibility will be maintained throughout the Construction Phase or provided during the Operational Phase. The assessment has been reported by community area with the nature, significance, and duration of effect assigned using the EPA Guidelines (EPA 2022).

10.2.4.1.2.2 Accessibility

Community accessibility relates to the ability of users to access community facilities, recreational resources and residential properties. Change in access to facilities can significantly affect users, particularly if these are important facilities (e.g. hospitals), or if there are a lack of alternative facilities available. Changes in traffic flow, parking provision, public transport services and walking and cycling provision can also impact the ability of users to access certain community facilities.

During the Construction Phase, temporary diversions and temporary road closures will be required for short periods of time with designated detour routes in place and local access accommodated. Lane closures may be required during different Construction Phases which will reduce traffic capacity. Chapter 6 (Traffic & Transport) has qualitatively assessed the potential impacts on pedestrians, cyclists, bus users and private vehicles as a result of construction activity. The residual effects assigned to each user type within Chapter 6 (Traffic & Transport) informs the qualitative accessibility assessment in this

Chapter. As such, the impact on access to community receptors during construction has been reported by each user type and for each community area, in line with EPA Guidelines (EPA 2022).

Changes in access to community receptors as a result of the Operational Phase of the Proposed Scheme were considered in respect to the outcomes of a changed walking environment for pedestrians, cycling provision for cyclists and bus infrastructure for bus users. The community accessibility assessment has drawn on the outcomes of the qualitative assessment metrics identified in Chapter 6 (Traffic & Transport). These qualitative assessments were considered collectively in order to assess the significance of impacts on access for each community area during the Operational Phase. The assessment has been reported by community area and by different user types (bus users, cyclists, pedestrians and private vehicles). Where a road is expected to experience an impact to accessibility, moderate and above, this has been reported individually, alongside the community receptors that are likely to be impacted as a result. The nature, significance and duration of effect for each receptor has been assigned using the EPA Guidelines (EPA 2022).

A parking assessment has been undertaken in Chapter 6 (Traffic & Transport) and therefore is not considered further in this Population assessment unless a negative, significant impact is identified at any point along the Proposed Scheme.

10.2.4.2 Economic Assessment

The methodology for the assessment of economic impacts is outlined in this Section.

10.2.4.2.1 Commercial Amenity

The commercial amenity assessment has included consideration of 'direct' and 'indirect' impacts on commercial amenity. An indirect amenity impact on commercial receptors has been assessed using the same method as for community amenity (Section 10.2.4.1.1). As before, an indirect amenity assessment matrix has been used to determine the significance of localised impacts on individual receptors (see Table 10.3). The amenity significance matrix is closely aligned with the EPA Guidelines (EPA 2022).

In some cases, a single (direct) environmental effect in isolation can result in an impact on commercial amenity where a business has a particular sensitivity. For example, certain activities can be sensitive to noise and vibration effects (i.e. performing arts, advanced manufacturing, and sound recording facilities). The assessment has therefore included an assessment of direct impacts on amenity for commercial receptors. Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR provides a list of all commercial businesses located along the Proposed Scheme and any businesses in the surrounding road network that are located on a road that is expected to experience a moderate or greater traffic impact from displaced traffic in the AM and PM peak hours (as identified in Chapter 6 (Traffic & Transport)). This appendix has been referred to in the assessment section, where appropriate.

The following approach has been taken for the assessment of direct amenity:

- The sensitivity of each commercial receptor has been considered from the perspective of the following environmental effects:
 - Air quality;
 - Visual;
 - Noise and vibration; and
 - Traffic.
- The following example questions were posed to assess the sensitivity of commercial receptors:
 - Is this business providing support to vulnerable people or people with disabilities who may be sensitive to noise disturbance?
 - Does the operation of the business rely on the visual landscape to attract trade (e.g. a restaurant, hotel or tourism asset)?

The magnitude of impact on each commercial receptor has been informed by the residual significance of effects identified within each environmental assessment. The nature, significance and duration of effect for each receptor has been assigned using the EPA Guidelines (EPA 2022).

10.2.4.2.2 Commercial Land Use and Accessibility

10.2.4.2.2.1 Land Take

This assessment considers direct land take on commercial properties / land and designated car parking. The impact on private landings, which can be used for a variety of reasons by businesses, has also been considered. This assessment has only considered commercial properties within the Proposed Scheme boundary that would be expected to experience direct land take. This assessment has followed the same approach as set out for community land take (Section 10.2.4.1.2.1). This assessment has only considered commercial businesses identified through a site walkover and desktop research (including businesses operating from residential properties where visible) and has not considered people choosing to work from home.

Large areas of commercial land, such as a business park or shopping centre, were assigned a high sensitivity. Derelict land or unoccupied buildings were assigned a low sensitivity. The magnitude of impact on commercial land has been determined by the degree of loss of the resource as per the DMRB guidance. Where there will be substantial permanent land take from a commercial land holding, a high magnitude has been assigned. A low magnitude would be assigned where there will be minimal disruption to non-operational land or a car park.

The nature, significance and duration of effect for each receptor has been assigned using the DMRB and EPA Guidelines (EPA 2022).

10.2.4.2.2.2 Accessibility

Commercial accessibility relates to the ability of users and employees to access commercial businesses. Changes in access to commercial business (i.e. changes in traffic flow, public transport services and walking and cycling provision) can significantly affect the level of usage experienced by commercial receptors, which may affect the ability of a business to operate successfully. The accessibility assessment has considered the commercial properties along the Proposed Scheme as well as those areas that are expected to experience positive and negative changes in traffic flows in the surrounding road network. Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR provides a list of all commercial businesses located along the Proposed Scheme and any businesses in the surrounding road network that are located on a road that is expected to experience a moderate or greater traffic impact from displaced traffic in the AM and PM peak hours (as identified in Chapter 6 (Traffic & Transport)) and has been referred to in the assessment section, where appropriate.

During the Construction Phase, temporary diversions may be required for short periods of time, with designated detour routes in place and local access accommodated as required. Lane closures will be required during different Construction Phases which will reduce traffic capacity. Chapter 6 (Traffic & Transport) has qualitatively assessed the potential impacts on pedestrians, cyclists, bus users and private vehicles as a result of construction activity. The residual effects assigned to each user type within Chapter 6 (Traffic & Transport) informs the accessibility assessment in this Chapter. As such, the impact on access to commercial receptors during construction has been reported by each user type and for each community area, in line with EPA Guidelines (EPA 2022).

Changes in access to commercial receptors as a result of the Operational Phase of the Proposed Scheme were considered in respect to the outcomes of a changed walking environment for pedestrians, cycling provision for cyclists, bus infrastructure for bus users, and changes to general traffic for private vehicles. The community accessibility assessment has therefore drawn on the

outcomes of the qualitative assessment metrics identified in the Chapter 6 (Traffic & Transport). These qualitative assessments were considered collectively in order to assess the significance of impacts on access during the Operational Phase. The assessment has been reported by community area and by different user types (bus users, cyclists, pedestrians and private vehicles). However, where a road is expected to experience an impact to accessibility, moderate and above, this has been reported individually, alongside the commercial receptors that are likely to be impacted as a result. The nature, significance and duration of effect for each receptor has been assigned using the EPA Guidelines (EPA 2022).

10.3 Baseline Environment

This Section presents the baseline environment for the community and economic assessments. The baseline includes a brief description of the community areas near or intercepted by the Proposed Scheme, details about the different types of community and commercial receptors in the study area and any notable features along the Proposed Scheme.

10.3.1 Overview

Blanchardstown is a major town centre and one of the largest retail centres in the Greater Dublin Area. It is home to a number of leading companies in the Information and Communication Technology (ICT) sector and public sector employers. Blanchardstown is also a strategic location and gateway from the northwest to Dublin City Centre with key infrastructure intersections along the Tolka Valley including the N3 National Road, M50 Motorway and the railway at Navan Road Parkway and Ashtown. The Navan Road provides a corridor between residential settlements, education, medical, employment and various community facilities. Stoneybatter is an urban neighbourhood with a vibrant mix of community and culture which connects suburbs such as Blanchardstown with Dublin City Centre. The study area for the Proposed Scheme consists of 12 community areas which have an approximate total population of 110,000 according to the 2016 Census (CSO 2016a) (see Figure 10.1 in Volume 3 of this EIAR).

The Proposed Scheme commences at Junction 3 (Blanchardstown / Mulhuddart) eastbound off-slip from the N3. The Proposed Scheme will proceed through Blanchardstown Shopping Centre and onto the N3 via Snugborough Road, before passing north of the community area of Castleknock and through Ashtown, via the R147 Navan Road. The Proposed Scheme will continue to the community area of Navan Road, where the character of the area becomes more residential. The Proposed Scheme will continue past the community area of Cabra West, maintaining a largely residential character, occasionally passing commercial properties. The Proposed Scheme will continue on Prussia Street, through the community area of Manor Street where it becomes increasingly urban in character as the Proposed Scheme approaches the City Centre.

For more details on the extent of the Proposed Scheme in the areas outlined above, please see Chapter 4 (Proposed Scheme Description).

10.3.2 Community Baseline

10.3.2.1 Community Facilities and Recreational Receptors

The Proposed Scheme is located in the vicinity of a number of community and recreation receptors and the number and type of receptor are presented by community area in Table 10.4.

Table 10.4: Community Receptor Type by Community Area (OSI 2020)

Community and Recreation Receptors	Place of Worship	Recreation	Hospital / Health Centre	Schools
Mulhuddart	6	5	0	5
Corduff	1	2	0	3

Community and Recreation Receptors	Place of Worship	Recreation	Hospital / Health Centre	Schools
Blakestown	1	2	0	2
Mount View	1	1	0	1
Blanchardstown	2	5	7	8
Laurel Lodge - Carpenterstown	1	1	0	1
Castleknock	2	4	2	7
Navan Road	2	2	3	3
Cabra West	2	3	0	9
Aughrim Street	5	4	2	4
Cabra	1	2	1	2
Halston Street	4	2	0	4
Study Area Total	28	33	15	49

Table 10.4 demonstrates that there are more schools in Cabra West compared to the other community areas. There is also a higher concentration of recreational resources in Blanchardstown compared to the rest of the study area. Examples of community receptors along the Proposed Scheme which may attract a large number of users include:

- Connolly Hospital Blanchardstown;
- St Brigid's GAA Club;
- HSE Ashtown Gate Navan Road;
- St Vincent's Special National School;
- St John Bosco Junior and Senior Boys School;
- Cabra Garda Station;
- St Joseph's School for Deaf Boys;
- Cabra Library; and
- Belvedere Sports Ground.

Within the study area there are three national trails and Phoenix Park used for walking and other recreational activities. These comprise the National Famine Way, the Royal Canal Way and the Royal Canal Greenway – Ashtown - Castleknock.

10.3.2.2 Residential and Community Land

There are approximately 32,000 residential properties and 330 apartment blocks within the community study area (OSI 2020).

10.3.2.3 Commute to Work

There are approximately 50,000 commuters across the Proposed Scheme community study area and 21% of these travel by public transport (bus or train) (CSO 2016b). The method of travel to work by community area is presented in Table 10.5. The proportion of commuters travelling by bus is greater in the study area (15%) than the County Dublin average (12%). Walking and cycling is also a more popular commuting option in the study area (20%) than it is across County Dublin (17%), particularly in the community area of Halston Street where nearly half the population commute by foot or bike (48%).

Table 10.5: Method of Travel to Work for Bus, Train, Car and Foot / Bike (%) (CSO 2016b)

Community Area	Travel by Bus / Minibus or Coach	Travel by Car / Van	Travel by Train	Travel by Foot / Bike	Other
Mulhuddart	13%	66%	1%	7%	13%
Corduff	14%	61%	2%	16%	8%

Community Area	Travel by Bus / Minibus or Coach	Travel by Car / Van	Travel by Train	Travel by Foot / Bike	Other
Blakestown	17%	56%	1%	17%	9%
Mount View	11%	65%	8%	9%	8%
Blanchardstown	14%	55%	11%	12%	8%
Laurel Lodge - Carpenterstown	10%	63%	13%	9%	5%
Castleknock	11%	63%	8%	8%	9%
Navan Road	20%	56%	4%	15%	5%
Cabra West	21%	45%	4%	25%	6%
Aughrim Street	18%	27%	6%	39%	10%
Cabra	18%	39%	2%	33%	9%
Halston Street	14%	12%	14%	48%	12%
Study Area Average	15%	51%	6%	20%	9%
County Dublin	12%	54%	8%	17%	9%

NaPTAN data published by the NTA (NTA 2020) identifies the access points for bus stops, rail stations, airports, and tram stops, providing an indication of the level of availability of public transport within community areas. There is a total of 447 public transport access points across the study area as shown in Table 10.6. Blanchardstown has the largest proportion of public transport access points in the study area (22%). The furthest community areas from the City Centre are Mulhuddart, Blakestown and Mount View, which have a total of 77 access points (16% of the total).

Table 10.6: Number of Public Transport Access Points Across the Study Area

Community Areas	Number of Public Transport Access Points	Percent of Stops Across the Study Area
Mulhuddart	46	8%
Corduff	61	14%
Blakestown	11	2%
Mount View	20	10%
Blanchardstown	100	22%
Laurel Lodge - Carpenterstown	17	4%
Castleknock	26	6%
Navan Road	36	10%
Cabra West	42	9%
Aughrim Street	45	10%
Cabra	18	4%
Halston Street	25	4%
Study Area Total	447	

10.3.3 Economic Baseline

10.3.3.1 Commercial Receptors

The Proposed Scheme will pass a number of commercial receptors including several industrial estates and business parks. The number of commercial receptors in the study area are presented in Table 10.7 (Geodirectory 2019). Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR lists approximately 215 businesses along the Proposed Scheme, which is approximately 4.6% of the commercial businesses across the total study area.

Table 10.7: Commercial Receptors within each Community Area (Geodirectory 2019)

Community Area	Commercial Receptors*
Mulhuddart	360
Corduff	304
Blakestown	19
Mount View	33
Blanchardstown	1,859
Laurel Lodge - Carpenterstown	43
Castleknock	104
Navan Road	113
Cabra West	123
Aughrim Street	305
Cabra	105
Halston Street	1,214
Study Area Total	4,582

*Geodirectory data can count commercial businesses that are in the same location e.g. a shopping centre, as one commercial business, which may skew the commercial receptor count.

Table 10.7 shows the largest number of commercial receptors are located in Blanchardstown, with a large proportion located within the Blanchardstown Shopping Centre, and Halston which is located within the city centre. The smallest number of commercial receptors are in the Blakestown and Laurel Lodge - Carpenterstown community areas.

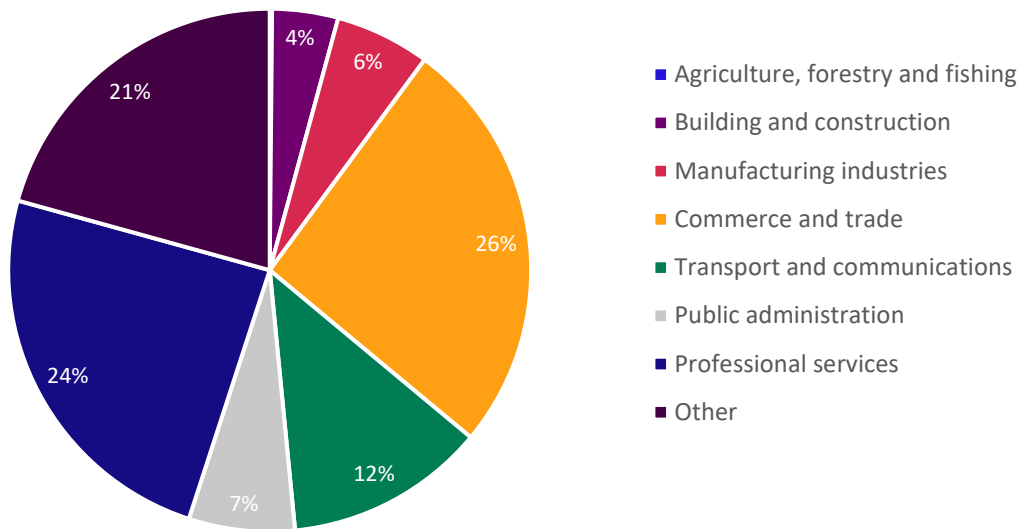
Appendix A10.2 in Volume 4 of this EIAR provides additional baseline data on footfall, modes of transport to commercial hubs and expenditure by mode of transport (EY 2021).

10.3.3.2 Employment

Within the study area there are approximately 51,900 people in employment (47% of the total study area population). Of the working age population, over 7,000 people are unemployed (12% of the working age population) across the study area population this equates to 6% being unemployed (CSO 2016c). This is roughly in line with the unemployment rate for Dublin (6.5%) (CSO, 2016a).

There are clusters of employment locations along the Proposed Scheme, particularly along Navan Road, Old Cabra Road and Prussia Street. The Proposed Scheme begins near Blanchardstown Shopping Centre which has multiple shops, restaurants and leisure facilities.

Graph 10.1 presents a breakdown of employment across the study area. The largest sectors of employment are commerce and trade (26%), professional services (24%) and other (21%) (CSO 2016c).



Graph 10.1: Employment by Industry within the Study Area (%), CSO 2016c

10.4 Potential Impacts

Potential impacts are typically those that could occur in the absence of mitigation, which then inform the need for mitigation or monitoring (refer to Section 10.5) and enables residual impacts to be determined. However, as explained in Section 10.2, the population assessment presented in this chapter is partly informed by the residual impacts identified in other topic chapters forming part of this EIAR, and as such the potential impacts in the following section already take into account mitigation proposed in those chapters.

10.4.1 Characteristics of the Proposed Scheme

The Proposed Scheme will be approximately 10.9km (kilometres) long from end to end. Along with an existing inbound bus gate at Stoneybatter at junction with King Street North being retained, six additional bus gates are proposed at the following locations: Navan Road/Old Cabra Road junction; Old Cabra Road at the railway overbridge; inbound and outbound at Manor Street at the junction with Prussia Street and Aughrim Street; Aughrim Street at the junction with Manor Street and Blackhall Place at the junction with King Street North. Quiet Street Treatment are offline cycle tracks which direct cyclists along roads with minimal general traffic. A Quiet Street Cycle Route is proposed along Castleknock Manor which connects to the two-way cycle track on the Navan Road.

The Proposed Scheme has been designed following the guidelines in Building for Everyone – A Universal Design Approach (Centre for Excellence in Universal Design, 2020). In general, the Proposed Scheme is likely to improve the street environment, ensuring it will meet current Universal Design good practice standards. However, the Proposed Scheme will address gaps in existing provision, as well as upgrade some pedestrian and cycle routes to a better standard (segregated instead of delineated with painted white lines). The urban environment will be easier and safer for a wider variety of pedestrians, including the visually impaired, wheelchair users and people with mobility difficulties, parents with young children and pushchair users. Details of provision for mobility impaired are set out in Chapter 4 (Proposed Scheme Description). This would help to reduce the impact of accessibility in the urban environment, particularly for people with disabilities.

As per Chapter 5 (Construction), during the Construction Phase, it is anticipated site staff numbers working on the Proposed Scheme will be approximately 250, rising to 300 workers at peak construction.

This level of employment will provide a positive economic impact to the economy in terms of associated spending from construction works, although a proportion will already reside locally. As discussed in Appendix A10.2, the operation of the Proposed Scheme will give households along the route access to wider and better job opportunities. The availability of public transport is expected to reduce time taken to get to places of employment having particular importance for low income households and people with a disability. The Economic Impact of the Core Bus Corridors Report (EY 2021) also identifies that there is expected to be an increase in job satisfaction as well as an increase in job retention (see Appendix A10.2).

Bus passenger numbers are projected to increase as a result of the Proposed Scheme through the realisation of faster journey times and better reliability, which will be coupled with the opportunity to increase capacity through more frequent services if required. In addition, the provision of enhanced cycling facilities should also increase the number of cyclists utilising the infrastructure.

The Proposed Scheme will have three Construction Compounds:

- Construction Compound BL1: Old Navan Road Car Park;
- Construction Compound BL2: Junction 6;
- Construction Compound BL3: R147 East of the M50

Construction Compound BL2 is located at the entrance to Junction 6 Castleknock Health and Leisure Village, which has multiple businesses including a gym and a kids soft play area. The other Construction Compounds are not located in close proximity to any community facilities or commercial businesses.

10.4.2 'Do Nothing' Scenario

In the Do Nothing scenario the Proposed Scheme would not be implemented and therefore be no changes to pedestrian, cycling or bus amenity and access, and no change to land use as a result of the Proposed Scheme. Therefore, there would be a Neutral impact on land use and potential Negative impacts on amenity and accessibility under the 'Do Nothing' scenario.

10.4.3 Construction Phase

10.4.3.1 Community Assessment

10.4.3.1.1 Community Amenity

Community amenity impacts arise from a combination of traffic, air quality, noise and visual impacts as discussed in Section 10.4.3.1.1.

Chapter 6 (Traffic & Transport) identified a residual Negative, Moderate and Temporary impact on general traffic along the Proposed Scheme and a Negative, Slight and Temporary impact from additional construction traffic flows in the surrounding road network. The following impacts have been identified on community facilities:

- A Negative, Moderate and Temporary impact is assigned to all community receptors along the Proposed Scheme; and
- A Negative, Slight and Temporary impact is assigned to community receptors located in the surrounding road network.

Chapter 7 (Air Quality) identified residual road traffic impacts on local human receptors to be Neutral and Short-Term during construction.

Chapter 9 (Noise & Vibration) identified a Negative, Moderate to Significant and Temporary impact on St Peter's Catholic Church as a result of noise from construction activities. A Negative, Slight to Moderate and Temporary impact is also identified on Cabra Library as a result of road widening / utility

diversion works. Community facilities on Nephin Road are expected to experience a Negative, Moderate and Temporary residual impact as a result of construction traffic. A number of community receptors are expected to experience this noise impact including:

- Cabra Garda Station;
- Nephin Nursing Home; and
- Saint Declan's College.

Chapter 17 (Landscape (Townscape) & Visual) identified a Negative, Moderate / Significant and Temporary / Short-Term impact on amenity designations including Belvedere Sports Ground and River Tolka Valley. The townscape and streetscape character assessment identified the following impacts during the Construction Phase:

- Negative, Moderate and Temporary / Short-Term impact from N3 Blanchardstown Junction to Snugborough Road and between Snugborough Road and the N3 / M50 Junction;
- Negative, Slight and Temporary / Short-Term impact between the N3 / M50 Junction and Navan Road/Ashtown Road Junction;
- Negative, Significant, Temporary / Short-Term impact on streetscape between the Navan Road / Ashtown Road Junction to the Navan Road / Old Cabra Road junction; and
- Negative, Moderate/Significant and Temporary / Short-Term impact between the Navan Road / Old Cabra Road Junction to Ellis Quay.

The impacts on townscape and streetscape as summarised above represent the visual impact experienced by community receptors along each stretch of road (see Chapter 17 (Landscape (Townscape) & Visual)).

These environmental impacts have been considered together to identify if there will be a combination of impacts on the same community facilities. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a Negative, Moderate and Short-Term impact on amenity for all community facilities directly located on the Proposed Scheme. Community receptors expected to experience this impact are:

- St. Vincent's Special National School;
- St Vincent's Centre - Disability support services;
- Our Lady Help of Christians Parish Church;
- Belvedere Sports Ground;
- Cabra Library;
- Navan Road Medical and Dental;
- HSE Ashtown Gate Navan Road;
- HSE Children with Disabilities;
- Little Stars Montessori Creche;
- Daughters of Charity Disability;
- Aura De Paul Swimming Pool;
- Butterfly Garden Preschool;
- The Brophy Medical Practice;
- Cabra Garda Station;
- Nephin Nursing Home;
- St Joseph's School for Deaf Boys;
- Manor Street Family Practice; and
- Church Of The Holy Family.

Some of these facilities are likely to become less attractive as a result of negative visual and traffic impacts due to construction, which could discourage users from visiting certain recreational assets such as Belvedere Sports Ground and Cabra Library during the Construction Phase. Navan Road community area contains a high proportion of the community facilities listed above, including St Vincent's Special National School, Belvedere Sports Ground, HSE Children with Disabilities, Aura De Paul Swimming Pool, The Brophy Medical Practice and Nephin Nursing Home, and is therefore expected to experience a Negative, Slight and Short-Term amenity impact during the Construction Phase. Other community

receptors impacted are located in the community areas of Aughrim Street, Blanchardstown and Cabra West but, due to the small number of receptors impacted, the overall wider amenity in these individual community areas is expected to be Negative, Not Significant and Short-Term during the Construction Phase.

All other community areas (Mulhuddart, Corduff, Blakestown, Mount View, Laurel Lodge – Carpenterstown, Castleknock, Cabra and Halston Street) are expected to experience a Neutral, Not Significant and Short-Term impact on amenity.

10.4.3.1.2 Community Land Use and Accessibility

10.4.3.1.2.1 Land Take

The assessment of community land take during the construction phase assesses the temporary land take acquired to accommodate construction works and the potential impacts this has on community facilities and residential properties.

A total of 95 community receptors (85 residential properties and 10 community facilities) are impacted by temporary land take as a result of the Proposed Scheme. Table 10.8 summarises the findings of the community land take assessment for residential properties along the Proposed Scheme during the construction phase.

Table 10.8: Land Take Impacts on Residential Properties during the Construction Phase

Community Area	Nature of Effect / Number of Residential Properties Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Blanchardstown	0	0	1	1
Navan Road	0	0	1	82
Total	0	0	2	83

Table 10.8 shows that 83 residential properties are expected to experience a Negative, Significant and Short-Term land take impacts during the construction phase. Within each community area the following residential land take impacts are expected:

- Blanchardstown: Negative, Significant and Short-Term land take impact on 3 Catherine's Well. This property is losing approximately a third of the back garden. A Negative, Moderate and Short-Term impact at Woods End Apartments from a small loss of land from the driveway. Navan Road: Negative, Significant and Short-Term land take impact at 110-116, 122 and 124 Navan Road (even number properties), 137-165 Navan Road (odd number properties), 198-212 Navan Road (even numbered properties), 225 Navan Road, 262 and 264 Navan Road, 255 and 257 Navan Road, 265-323 Navan Road (odd numbered properties), 331-351, 383-389 and 393-397 Navan Road (odd numbered properties). These properties require temporary land take from the front gardens/driveways to accommodate the construction activity. A Negative, Moderate and Short-term land take impact is expected at this zoned residential land at Ashtown Roundabout.

During the Construction Phase, access to residential properties and community facilities will be maintained, where practicable (see Chapter 5 (Construction)). Although access for residents will be maintained during the Construction Phase, in situations where the entirety of the front garden or driveway will be required as temporary land take to accommodate construction activity, parking private vehicles at a residence may not be possible and alternative parking provision in side streets would need to be temporarily used.

Table 10.9 summarises the findings of the community land take assessment for community facilities along the Proposed Scheme during the Construction Phase.

Table 10.9: Land Take Impacts on Community Facilities during the Construction Phase

Community Area	Nature of Effect / Number of Residential Properties Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Cabra West	0	1	2	0
Blanchardstown	0	1	0	0
Castleknock	0	1	0	0
Navan Road	0	2	2	1
Total	0	5	4	1

Table 10.9 shows one community facility is expected to be impacted by temporary land take during the Construction Phase of the Proposed Scheme. There is over 6m of temporary land take of the driveway at Little Stars Creche & Montessori. The impact is not expected to affect the use of the nursery or the outdoor play area but may impact use of the driveway for parking. The impact rating for this impact is Negative, Significant and Short-Term.

Four other community facilities, namely the Holy Family School for the Deaf¹, Cabra Garda Station (both in Cabra West), Belvedere Sports Ground and Navan Road Family Clinic (both in Navan Road) are expected to experience a Negative, Moderate and Short-Term impact during the construction phase.

Overall, the impact of land take across the impacted community areas (Blanchardstown, Castleknock, Cabra West and Navan Road) as a whole is considered Negative, Not Significant and Short-Term during the construction phase. No other community areas are impacted by land take during the Construction Phase.

10.4.3.1.2.2 Accessibility

Community accessibility relates to the ability of users to access community facilities, recreational resources and residential properties. The nature of the Proposed Scheme means accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians and cyclists, bus users and private vehicles.

Pedestrians and Cyclists

Pedestrian and cyclist safety measures are discussed in Chapter 5 (Construction). These safety measures are intended to allow the safe continuation of access along the route of the Proposed Scheme during the Construction Phase. It is expected that, as roads, cycle lanes and footpaths are being upgraded, that there will be some level of disruption to users and their ability to access community facilities. It is important to note that as the Construction Phase will be undertaken in sections, construction impacts would be limited to where the work is being undertaken and for a limited duration. As outlined in Section 5.5 of Chapter 5 (Construction), measures will be undertaken by the appointed contractor to ensure that access and parking are maintained during construction, wherever practicable, to reduce the impact on accessibility along the Proposed Scheme.

Chapter 6 (Traffic & Transport) has identified a residual Negative, Slight and Temporary impact on walking and a Negative, Moderate and Temporary impact on cycling along the Proposed Scheme during the Construction Phase. Taking into consideration the mitigation measures presented in Chapter 5 (Construction) and Appendix A5.1 Construction Environmental Management Plan (CEMP) in Volume

¹ Holy Family School for the Deaf was formed on 1st September 2016 with the amalgamation of the two former Schools for the Deaf in Cabra namely St. Mary's School for Deaf Girls and St. Joseph's School for Deaf Boys, <https://holyfamilydeafschool.ie/>

4 of this EIAR, it is expected that access to community receptors along the Proposed Scheme, will also likely be negatively impacted during the Construction Phase.

Bus Users

As confirmed in Chapter 5 (Construction), existing bus routes will be maintained during the Construction Phase. Bus stop locations may need to be temporarily relocated to accommodate the works. Use of buses to access community facilities will continue throughout construction, albeit there may be a change in the distance required to walk between the temporary bus stops and the community facilities.

Chapter 6 (Traffic & Transport) has identified a residual Negative, Slight and Temporary impact on bus users along the Proposed Scheme. Taking into consideration the measures in Chapter 5 (Construction), it is expected that the impact on access to community receptors along the Proposed Scheme will also likely be negatively impacted during the Construction Phase.

Private Vehicles

Chapter 5 (Construction) outlines temporary traffic management measures which may affect accessibility to parking provision and community facilities along certain parts of the Proposed Scheme, particularly where road closures or diversions will be required. Road diversions will be temporary and may result in an increase in the time taken to get to a community facility via private vehicle, but that overall access to that facility will be maintained. The impact on specific parking and loading provision is discussed in Chapter 6 (Traffic & Transport).

Chapter 6 (Traffic & Transport) has identified a residual Negative, Moderate and Temporary impact for general traffic travelling along the Proposed Scheme. Taking into consideration the measures in Chapter 5 (Construction) it is expected that the impact on access to community receptors from private vehicles along the Proposed Scheme will be Negative, Moderate and Short-Term during construction. Additional construction traffic flows on the surrounding road network are expected to result in a Negative, Slight and Temporary impact on general traffic. This will not include the impact of construction access vehicles which are considered in Chapter 6 (Traffic & Transport). Private vehicles may therefore be negatively affected on the surrounding road network although this is only expected to be Negative, Slight and Short-Term during the Construction Phase.

The impacts identified above are expected to be experienced by community areas located predominately along the length of the Proposed Scheme where construction activity, road diversions and closures are expected. It is acknowledged that users will travel between community areas to access community facilities within other community areas. However, the impact of construction activity will be experienced where the facility is located. The community areas that are expected to experience a Negative, Slight and Short-Term impact (pedestrians and bus users) and a Negative, Moderate and Short-Term impact (cyclists and private vehicles) as a result in changes to access are Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street.

Pedestrians, cyclists and bus users in all other community areas (Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra) are expected to experience a Negative, Not Significant and Short-Term impact as a result of changes to access, while private vehicles will experience a Negative, Slight and Short-Term impact as a result of changes to access during the construction of the Proposed Scheme.

10.4.3.2 Economic Assessment

10.4.3.2.1 Commercial Amenity

As outlined above in Section 10.2.4.2.1, commercial amenity impacts can arise indirectly from a combination of traffic, air quality, noise and visual impacts or directly where a single environmental

impact is significant enough to affect the amenity of a commercial business and potentially having implications on the ability of the business to operate successfully.

Chapter 6 (Traffic & Transport) identified a residual Negative, Moderate and Temporary impact on general traffic along the Proposed Scheme and a Negative, Slight and Temporary impact from additional construction traffic flows in the surrounding road network. The following impacts have been identified on commercial facilities:

- A Negative, Moderate and Temporary impact is assigned to all commercial receptors along the Proposed Scheme; and
- A Negative, Slight and Temporary impact is assigned to commercial receptors located in the surrounding road network.

Chapter 7 (Air Quality) identified residual road traffic impacts on local human receptors to be Neutral and Short-Term during construction.

Chapter 9 (Noise & Vibration) identified a Negative, Moderate to Significant and Temporary impact on the Crowne Plaza Blanchardstown Hotel as a result of road widening / utility diversion works. Commercial facilities between N3 Blanchardstown Junction and Snugborough Road are expected to experience a Negative, Slight to Moderate and Temporary residual impact as a result of construction traffic near Blanchardstown Centre. A number of receptors are expected to experience this noise impact including the Liberty Insurance Offices, Blanchardstown Shopping Centre, and the eBay Office.

Chapter 17 (Landscape (Townscape) & Visual) identified Negative impacts along all areas of the Proposed Scheme during construction. The townscape and streetscape character assessment identified the following impacts during the Construction Phase:

- Negative, Moderate and Temporary / Short-Term impact from N3 Blanchardstown Junction to Snugborough Road and between Snugborough Road and the N3 / M50 Junction;
- Negative, Slight and Temporary / Short-Term impact between the N3 / M50 Junction and Navan Road / Ashtown Road Junction;
- Negative, Significant, Temporary / Short-Term impact on streetscape between the Navan Road / Ashtown Road Junction to the Navan Road / Old Cabra Road junction; and
- Negative, Moderate/Significant and Temporary / Short-Term impact between the Navan Road / Old Cabra Road Junction to Ellis Quay.

These impacts on townscape and streetscape represent the visual impact on commercial businesses along these roads (see Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR for a list of commercial businesses along the Proposed Scheme).

These environmental impacts have been considered together to identify if there will be a combination of impacts acting upon the same commercial receptor. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a Negative, Moderate and Short-Term impact on amenity for all commercial businesses between the N3 Blanchardstown Junction and the N3 / M50 Junction and between the Navan Road / Ashtown Road Junction and Ellis Quay. Receptors 1 to 41 and 55 to 212 in Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR are expected to experience this impact.

The proportion of commercial businesses located along the Proposed Scheme is low compared to the businesses across the impacted community areas (Blanchardstown, Navan Road, Cabra West, Aughrim Street and Halston Street) (see Table 10.7). Therefore, the impact on these community areas is assessed to be Negative, Slight and Short-Term. All other community areas (Mulhuddart, Castleknock, Corduff, Blakestown, Mount View, Laurel Lodge – Carpenterstown and Cabra) are expected to experience a Neutral, Not Significant and Short-Term amenity impact.

No significant direct amenity impacts were identified on any commercial businesses during the Construction Phase of the Proposed Scheme.

10.4.3.2.2 Commercial Land Use and Accessibility

10.4.3.2.2.1 Land Take

The assessment of commercial land take during the construction phase assesses the temporary land take acquired and the potential impacts this has on commercial businesses. This assessment also considers the impact on private landings, this is the area in front of businesses that may be used for a variety of reasons including outdoor seating, selling produce or parking.

A total of 13 commercial receptors are impacted by temporary land take as a result of the Proposed Scheme. Table 10.10 summarises the findings of the commercial land take assessment for the Proposed Scheme.

Table 10.10: Land Take Impacts on Commercial Receptors during the Construction Phase

Community Area	Nature of Effect / Number of Commercial Receptors Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Aughrim Street	3	2	0	0
Blanchardstown	0	2	1	0
Castleknock	0	1	1	0
Navan Road	0	2	1	0
Total	3	7	3	0

Table 10.10 shows no commercial receptors are expected to experience significant impacts on land take. During the construction phase three commercial receptors are to experience Negative, Moderate and Short-Term impacts from the works, these are Blanchardstown Shopping Centre (losing approximately 130 car parking spaces), Circle K Ashtown (Castleknock) and Leitrim Lodge Bed & Breakfast (Navan Road).

Overall, the impact of land take across the impacted community areas (Aughrim Street, Blanchardstown, Castleknock and Navan Road) as a whole is considered Negative, Not Significant and Short-Term during the Construction Phase. No other community areas are impacted by land take during the Construction Phase.

10.4.3.2.2.2 Accessibility

Commercial accessibility relates to the ability of users to access commercial businesses as customers or employees. The nature of the Proposed Scheme means that accessibility impacts will differ based on the mode of travel used. The assessment, similar to the community accessibility assessment (Section 10.4.3.1.2.2) has separately assessed accessibility impacts on pedestrians and cyclists, bus users and private vehicles. As the Construction Phase mitigation measures presented in Chapter 5 (Construction) and the residual effects presented in Chapter 6 (Traffic & Transport) are the same for each mode of travel the impacts on commercial accessibility are the same as those reported in Section 10.4.3.1.2.2 for community accessibility.

A parking assessment has been undertaken in Chapter 6 (Traffic and Transport). No significant impacts on parking along the Proposed Scheme route were identified.

10.4.4 Operational Phase

10.4.4.1 Community Assessment

10.4.4.1.1 Community Amenity

Community amenity impacts arise from a combination of traffic, air quality, noise and visual impacts as discussed in Section 10.2.4.1.1.

Chapter 6 (Traffic & Transport) identified a Positive, Significant and Long-Term impact from a reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from redistributed traffic along the surrounding road network. The following impacts have been identified:

- A Positive, Significant and Long-Term impact is assigned to all community facilities along the Proposed Scheme; and
- A Negative, Slight and Long-Term impact is assigned to the majority of community facilities in the surrounding road network, apart from:
 - A Negative, Significant and Long-Term impact on Diswellstown Road and Damastown Road; and
 - A Negative, Moderate and Long-Term impact on Blakestown Road, Hollywoodrath Road, Church Road, Blanchardstown Road South, Castleknock Road, R806 Main Street, Constitution Hill, Snugborough Road, Snugborough Road Extension, Navan Road, Blakestown Road, Cappagh Road, Dorset Street Lower, Shandon Road and King Street North.

Chapter 7 (Air Quality) identified a Neutral and Long-Term impact on human receptors during the Operational Phase. There are residual moderate adverse air quality effects expected on the N1 Church Street as a result of the 2028 Operational Phase of the Proposed Scheme. St Michan's Church and St Mary of the Angels Church are community receptors located on Church Street.

Chapter 9 (Noise & Vibration) identified a Positive, Imperceptible to Negative, Slight, Short to Medium Term direct impact from changes in traffic volumes along the Proposed Scheme during the opening year (2028). A Negative, Moderate, Short to Medium Term impact from traffic noise was identified in the surrounding road network on Georges Lane, Nephin Road and Old Navan Road and a Negative, Slight to Moderate, Short to Medium Term impact was identified on Swilly Road. There are three community receptors on Nephin Road which have been assigned a Moderate residual impact for noise:

- Cabra Garda Station;
- Nephin Nursing Home; and
- Saint Declan's College.

Chapter 17 (Landscape (Townscape) & Visual) identified the following impacts on townscape and streetscape character during the Operational Phase:

- A Negative, Slight and Short-Term impact on N3 Blanchardstown Junction to Snugborough Road and Snugborough Road to N3 / M50 Junction and Between the N3 / M50 Junction and Navan Road / Ashtown Road Junction;
- A Negative, Moderate and Short-Term impact on Navan Road / Ashtown Road Junction to Navan Road / Old Cabra Road Junction; and
- A Positive, Moderate and Short-Term impact on Navan Road / Old Cabra Road Junction to Ellis Quay.

The impacts described above from the townscape and streetscape assessment represent the visual impact on community facilities along these sections. A Negative, Moderate and Long-Term impact was also identified on amenity designations which includes the community receptors River Tolka Valley and Belvedere Sports Grounds.

These environmental impacts have been considered together to identify if there will be a combination of impacts acting on the same community receptor. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a Positive, Moderate and Long-Term impact on amenity for all community receptors between Navan Road / Old Cabra Road Junction and Ellis Quay, within the Aughrim Street community area. The impact on amenity within the Aughrim Street community area as a whole is Positive, Slight and Long-Term overall.

In addition, a Negative, Moderate and Long-Term impact on the amenity of the following community receptors:

- Nephin Nursing Home on Nephin Road in the Navan Road community area;
- Cabra Garda Station, Saint Declan’s College and Pope John Paul Park on Nephin Street in the Cabra West community area; and
- St Michan’s Church and St Mary of the Angels Church on Church Street in the Halston Street community area.

The community areas of Navan Road, Cabra West and Halston Street are expected to experience a Negative, Not Significant and Long-Term impact on amenity overall.

All other community areas (Mulhuddart, Corduff, Blakestown, Mount View, Blanchardstown, Laurel Lodge – Carpenterstown, Castleknock and Cabra) are expected to experience a Neutral, Not Significant and Long-Term amenity impact.

10.4.4.1.2 Community Land Use and Accessibility

10.4.4.1.2.1 Land Take

The assessment of community land take during the operational phase assesses the impact of permanent land take acquisition on community facilities and residential properties.

A total of 62 community receptors (56 residential properties and six community facilities) will require permanent land take as a result of the Proposed Scheme. Table 10.11 summarises the findings of the community land take assessment for residential properties along the Proposed Scheme during the Operational Phase.

Table 10.11: Land Take Impacts on Residential Properties during the Operational Phase

Community Area	Nature of Effect / Number of Residential Properties Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Blanchardstown	0	2	0	0
Navan Road	0	15	39	0
Total	0	17	39	0

Table 10.11 shows no residential properties are significantly impacted by land take during the Operational Phase. Within each community area the following land take (linear metre) impacts are expected:

- Blanchardstown: A Negative, Slight and Long-Term land take impact on 3 Catherine’s Well and Woods End Apartments. These properties are losing no more than 1m of land-take permanently;
- Navan Road: A Negative, Moderate and Long-Term land take impact is expected on 137-161 Navan Road (odd numbered properties), 206, 208 and 210 Navan Road and 265-311 Navan Road (odd numbered properties). These properties are losing between 1-5m of land-take permanently.

- A Negative, Slight and Long-Term impact on land take is expected on 163, 165, 198, 200, 202, 204, 212, 313-323 Navan Road and the zoned residential land at Ashtown Roundabout. These properties are losing no more than 1m of land take permanently.

In addition, no community facilities are significantly impacted along the Proposed Scheme during the Operational Phase. Five community facilities, namely Millennium Park (Blanchardstown), open space at Auburn Green (Castleknock), the Holy Family School for the Deaf, Cabra Garda Station (both in Cabra West) and the Belvedere Sports Ground (Navan Road) that are impacted by permanent land take are expected to experience a Negative, Slight and Long-Term impact during the Operational Phase. The Navan Road Medical Centre/Curam Care Home is not significantly impacted by permanent land take as only a small section of land is required from the entry way.

Overall, the impact of land take across the impacted community areas (Blanchardstown, Castleknock, Navan Road and Cabra West) overall is considered Negative, Not Significant and Long-Term during the Operational Phase. No other community areas are impacted by land take during the Operational Phase.

10.4.4.1.2.2 Accessibility

Community accessibility relates to the ability of users to access community facilities, recreational resources and residential properties. The nature of the Proposed Scheme means that accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles.

The significant improvement to the walking, cycling and bus facilities included within the Proposed Scheme will encourage sustainable modes of transport, therefore reducing the demand for private vehicles / parking along the Proposed Scheme. Improved accessibility is also expected to increase social cohesion within the local community as discussed further in Appendix A10.2 in Volume 4 of this EIAR (EY 2021).

Changes to RoW are outlined in Chapter 4 (Proposed Scheme Description). Changes typically include localised restrictions to vehicular traffic (including bicycles) or proposed changes to access arrangements to properties. However, access will still be available via the surrounding road network and alternative accesses to properties will be provided where necessary. Access for pedestrians will generally be maintained. Given the limited nature of the proposed changes it is not anticipated that there will be a material effect on a community basis and is therefore not considered further in this accessibility assessment.

Pedestrians and Cyclists

Fully segregated cycle tracks will be provided throughout the Proposed Scheme. Existing bridge deck details necessitate the use of industry-standard cycle lane separators ('Armadillos') instead of the segregated kerbs at the N3 Overbridge in Mulhuddart and on the outbound side of Old Cabra Road Railway Bridge. Cycle tracks will also not be provided along the N3 between Snugborough Junction and Auburn Avenue Junction. A Quiet Street Cycle Route is proposed along Castleknock Manor which connects to the two-way cycle track on the Navan Road, located in the Castleknock community area. In addition, a short section of southbound cycle track will be provided on Prussia Street from its junction with North Circular Road before cyclists merge with general traffic just north of Park Shopping Centre. In the northbound direction, the cycle track will commence approximately 50m south of the junction with St Joseph's Road.

Chapter 6 (Traffic & Transport) identified a Positive Moderate to Very Significant and Long-Term impact on walking infrastructure and a Positive, Slight to Very Significant and Long-Term impact on cycling infrastructure along the Proposed Scheme. It is expected that if a beneficial impact on walking and cycling infrastructure is to be experienced, then access to community facilities along the Proposed Scheme will improve for those choosing to walk or cycle.

Bus Users

As discussed in Section 10.4.1, six bus gates are proposed along the Proposed Scheme, in addition to retention of an existing bus gate. These are to ensure bus priority is maintained along the length of the Proposed Scheme. Chapter 6 (traffic and Transport) identified a Positive, Moderate to Profound and Long-Term impact on bus infrastructure and a Positive, Very Significant and Long-Term impact on bus network performance (which includes journey times and journey time reliability). It is therefore expected that ease of access to community facilities via bus will also likely improve along the Proposed Scheme.

The impacts to pedestrians, cyclists and bus users are expected to be experienced by community areas located predominately along the length of the Proposed Scheme, as these will be the locations of all signal controlled junctions, bus gates, improved footpaths and cycle paths. The community areas that are expected to experience a Positive, Moderate to Very Significant and Long-Term (pedestrians), Positive, Slight to Very Significant and Long-Term (Cyclists) and a Positive, Moderate to Profound and Long-Term (bus users) impact on changes in access are: Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street. Community facilities located along the Proposed Scheme where accessibility will be improved as a result of reduced traffic include: Connolly Hospital, Saint Brigid's GAA Club, HSE Ashtown Gate Navan Road, HSE Children with Disabilities, Saint Vincent's National School, Little Stars Montessori Creche, Aura De Paul Swimming Pool, Belvedere Sports Ground, Butterfly Garden Preschool and Montessori, The Brophy Medical Practice, Our Lady Help of Christians Parish Church, Saint John Bosco Junior and Senior Schools, Nephin Nursing Home, Cabra Garda Station, Holy Family School for the Deaf, St Joseph's School for Deaf Boys, Curam Care Home, Navan Road Medical & Dental Centre, Cabra Library, Saor ollscoil Na hEireann, and Manor Street Family Practice.

All other community areas (Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra) are expected to experience a Positive, Not Significant and Long-Term impact as a result of changes in access during the Operational Phase of the Proposed Scheme.

Private Vehicles

Chapter 6 (Traffic & Transport) identified a Positive, Significant and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from redistributed traffic in the surrounding road network. The redistributed traffic assessment identified Negative, Significant and Long-Term impacts on three junctions during the AM 2028 peak hour. One community facility is located close to these roads, Clarendon Surgery in Laurel-Lodge – Carpenterstown community area.

The bus gate between Navan Road and Old Cabra Road Junction and the overbridge on Old Cabra Road will reduce non-residential access for private vehicles between these two points, only permitting access to buses, emergency vehicles and taxis, with adjacent footpaths and cycle tracks facilitating movement for pedestrians and cyclists. However as local access would still be available access to community facilities from private vehicles will remain, albeit the route length and journey time may increase for those choosing to use private vehicles. There are few community facilities located specifically along the length of the bus gates, with a very small number located at the junction of Manor Street / Prussia Street and Aughrim Street. Therefore, the predicted impact on access to community facilities along the Proposed Scheme for private vehicles is overall Positive, Significant and Long-Term within the community areas along the Proposed Scheme: Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street.

All other community areas (Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra) are expected to experience a Negative, Slight and Long-Term impact as a result of redistributed traffic to the surrounding road network during the Operational Phase of the Proposed Scheme.

10.4.4.2 Economic Assessment

10.4.4.2.1 Commercial Amenity

As previously mentioned, commercial amenity impacts can arise indirectly from a combination of traffic, air quality, noise and visual impacts, or directly where a single environmental impact is significant enough to affect the amenity of a commercial business and potentially having implications on the ability of the business to operate successfully.

Chapter 6 (Traffic & Transport) identified a Positive, Significant and Long-Term impact from a reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from redistributed traffic along the surrounding road network. The following impacts have been identified:

- A Positive, Significant and Long-Term impact is assigned to all commercial businesses along the Proposed Scheme; and
- A Negative, Slight and Long-Term impact is assigned to all commercial businesses in the surrounding road network with the exception of commercial businesses located on:
 - A Negative, Significant and Long-Term impact on Diswellstown Road and Damastown Road; and
 - A Negative, Moderate and Long-Term impact on Blakestown Road, Hollywoodrath Road, Church Road, Blanchardstown Road South, R806 Main Street, Castleknock Road, Constitution Hill, Snugborough Road, Snugborough Road Extension, Navan Road, Blakestown Road, Cappagh Road, Dorset Street Lower, Shandon Road and King Street North

Chapter 7 (Air Quality) identified a Neutral and Long-Term impact on human receptors during operation. There are residual negative moderate adverse air quality effects expected on the N1 Church Street as a result of the 2028 Operational Phase of the Proposed Scheme. There are a small number of commercial businesses located on Church Street (see Appendix A10.1).

Chapter 9 (Noise & Vibration) identified a Positive, Imperceptible to Negative, Slight, Short to Medium Term direct impact from changes in traffic volumes along the Proposed Scheme. An indirect Negative, Moderate, Short to Medium Term impact from traffic noise was identified in the surrounding road network on Georges Lane, Nephin Road and Old Navan Road and a Negative, Slight / Moderate, Short to Medium Term impact on Swilly Road. These roads are residential and therefore there are no commercial receptors impacted by these noise impacts.

Chapter 17 (Landscape (Townscape) & Visual) identified the following impacts on townscape and streetscape character during the Operational Phase:

- A Negative, Slight and Short-Term impact on N3 Blanchardstown Junction to Snugborough Road and Snugborough Road to N3 / M50 Junction and Between the N3 / M50 Junction and Navan Road / Ashtown Road Junction;
- A Negative, Moderate and Short-Term impact on Navan Road / Ashtown Road Junction to Navan Road / Old Cabra Road Junction; and
- A Positive, Moderate and Short-Term impact on Navan Road / Old Cabra Road Junction to Ellis Quay.

These environmental impacts have been considered together to identify if there will be a combination of impacts on the same commercial businesses. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a Positive, Moderate and Long-term impact on amenity for commercial businesses along the Proposed Scheme located between Navan Road / Old Cabra Road Junction and Ellis Quay, within the Aughrim Street and Halston Street community area. Commercial businesses 80 to 212 in Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR are expected to experience this positive impact.

The proportion of commercial businesses located along the Proposed Scheme is low compared to the businesses across the entire community areas (see Table 10.7). Therefore, the community areas of

Aughrim Street and Halston Street is expected to experience a Positive, Slight and Long Term impact on commercial amenity.

All other community areas (Mulhuddart, Corduff, Blakestown, Mount View, Blanchardstown, Laurel Lodge – Carpenterstown, Castleknock, Navan Road, Cabra West and Cabra) are expected to experience a Neutral, Not Significant and Long-Term amenity impact.

No significant direct amenity impacts were identified on any commercial businesses during the Operational Phase of the Proposed Scheme.

10.4.4.2.2 Commercial Land Use and Accessibility

10.4.4.2.2.1 Land Take

The assessment of commercial land take during the operational phase assesses the permanent land take acquired and the potential impacts this has on commercial businesses.

A total of seven commercial receptors require permanent land take as a result of the Proposed Scheme. Blanchardstown Shopping Centre, a very high sensitivity receptor due to the commercial receptor being greater than 5 hectares and a large employment hub, is expected to lose approximately 130 existing parking spaces, from a total of approximately 7,000, to accommodate the proposed bus interchange. Given that this is less than a 2% decrease in parking provision, and it is accommodating bus infrastructure, the impact on land use change is considered to be Negative, Slight and Long-Term.

Six other business will experience minimal permanent land take, these are Circle K Ashtown and Phoenix Park Racecourse (both Castleknock community area), Junction 6 Castleknock Health and Leisure Village and Ashtown Business Centre (both Blanchardstown community area), MSL Park Motors (Navan Road community area) and the Park Shopping Centre (Aughrim Street community area). The impact of land take on these six businesses is assessed to be Negative, Not Significant and Long-Term.

Overall, the impact on impacted community areas (Blanchardstown, Castleknock, Navan Road and Aughrim Street) is considered Negative, Not Significant and Long-Term as a result of the Proposed Scheme during the Operational Phase. No other community areas are impacted by land take during the Operational Phase.

10.4.4.2.2.2 Accessibility

Commercial accessibility relates to the ability of users and employees to access commercial businesses. The nature of the proposed works means accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles.

Chapter 6 (Traffic and Transport) assessed that people movement would significantly increase along the Proposed Scheme. It is therefore anticipated that all businesses along the Proposed Scheme will, to some extent, benefit from the increase in passing trade. Commercial businesses located along the Proposed Scheme are numbered in Appendix A10.1 Schedule of Commercial Businesses in Volume 4 of this EIAR.

Changes to RoW are outlined in Chapter 4 (Proposed Scheme Description). Changes typically include localised restrictions to vehicular traffic (including bicycles) or proposed changes to access arrangements to properties. However, access will still be available via the surrounding road network and alternative accesses to properties will be provided where necessary. Access for pedestrians will generally be maintained. Given the limited nature of the proposed changes it is not anticipated that there will be a material effect on a community basis and is therefore not considered further in this accessibility assessment.

Pedestrians, Cyclists and Bus Users

The positive impacts to pedestrians, cyclists and bus users will predominantly be experienced by community areas located along the length of the Proposed Scheme and where there will be Quiet Street Treatment, as these will be the locations of the improved footpaths and cycle paths. The community areas that are expected to experience a Positive, Moderate to Very Significant and Long-term impact on pedestrians, a Positive, Slight to Very Significant and Long-Term impact on cyclists and a Positive, Moderate to Profound and Long-Term impact on bus users as a result of changes in access are Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street.

All other community areas (Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra) are expected to experience a Positive, Not Significant and Long-Term impact as a result of changes in access during the Operational Phase of the Proposed Scheme.

Private Vehicles

Chapter 6 (Traffic & Transport) identified a Positive, Significant and Long-Term impact from the reduction in general traffic flows along the Proposed Scheme.

As stated in Chapter 6 (Traffic & Transport) (Section 6.4.6.2.8), it is recognised that there will be an overall reduction in operational capacity for general traffic given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus provision. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network. Overall, the impact from the reduction in operational capacity will be Negative, Slight and Long-Term impact from redistributed traffic in the surrounding road network. However, there will be some localised impacts during the AM and PM peak periods on a number of junctions in the surrounding road network as a result of displaced traffic:

- In the AM peak period, a Negative, Moderate impact was identified on Blakestown Road, Hollywoodrath Road, Church Road, Blanchardstown Road South, Castleknock Road, Main Street and Constitution Hill.
- In the AM peak period, a Negative, Significant impact was identified on Diswellstown Road and Damastown Road; and
- In the PM peak period, a Negative Moderate impact was identified on Snugborough Road, Navan Road, Blakestown Road, Cappagh Road, Dorset Street Lower, Shandon Road, King Street North and Constitution Hill.

Commercial businesses expected to experience these impacts are denoted with an “*” in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR.

Chapter 6 (Traffic & Transport) (Section 6.4.6.2.8.9) notes that while Significant effects (or higher) have been identified, these are at Diswellstown Road and Damastown Road, and effects will be short-lived and localised. This level of congestion is acceptable according to national guidance. Furthermore, the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network and therefore no mitigation measures have been considered to alleviate the impacts.

The most notable changes in accessibility for general traffic would occur at the location of the bus gates. This is the stretch of road between Navan Road / Old Cabra Road Junction and the overbridge on Old Cabra Road and at Manaor Street / Prussia Street and Aughrim Street. The bus gates will prohibit non-residential access for private vehicles only permitting access to public transport, walkers and cyclists. The introduction of the proposed bus gates is expected to reduce passing trade for all businesses along the stretch of the bus gate, however the road will still be accessible to private vehicles.

The bus gate on part of Old Cabra Road is located in the community area of Aughrim Street. There is one business located along the bus gate, Go Station (filling station). Go Station is expected to be

affected as a result of the proposed bus gate. Although this business can still be accessed by private vehicles, these will primarily be local residents in the surrounding community area and customers with existing knowledge of the location of the business. The primary source of income for the business is expected to be from passing trade, which is expected to be significantly reduced along Old Cabra Road due to the bus gates. During construction and operation of the Proposed Scheme it is expected that this business would no longer be able to operate successfully. The impact on this business is assessed as Negative, Very Significant and Long-Term during construction and operation of the Proposed Scheme.

The introduction of the bus gates at Manor Street / Prussia Street and Aughrim Street are expected to reduce through traffic along Manor Street. These bus gates are located in the Aughrim Street community area. There are a large number of commercial businesses located on Manor Street. Commercial businesses located along the Proposed Scheme are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR. Access to these businesses will still be maintained via Manor Place, Kirwan Street, and northbound from Blackhall Place, via King St North, George's Lane and Brunswick St North. It is therefore expected that passing trade would be reduced for these businesses but not completely removed. As private vehicle access to these businesses will be maintained, there is not expected to be an impact on the ability of the business to operate. As the bus gate is located in the community area of Aughrim Street the impact on access to commercial businesses and employment locations for private vehicles in this community area is assessed to be Negative, Not Significant and Long Term during the operational phase.

The impact on change in access to commercial businesses along the rest of Proposed Scheme for private vehicles is overall Positive, Significant and Long-Term as a result of the reduced congestion expected along the Proposed Scheme. The community areas expected to experience this impact are Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West and Halston Street. All other community areas (Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra) are expected to experience a Negative, Slight and Long-Term impact as a result of redistributed traffic to the surrounding road network during the Operational Phase of the Proposed Scheme.

A parking assessment has been undertaken in Chapter 6 (Traffic and Transport). No significant impacts on parking have been identified.

10.5 Mitigation and Monitoring Measures

The design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts, where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. This population assessment takes account of the design outlined in Chapter 4 (Proposed Scheme Description). The Proposed Scheme will ensure that there is no permanent disruption to services and that all temporary disruptions are kept to a minimum.

The population assessment presented in Section 10.4 has been informed by the residual impacts reported in Chapter 6 (Traffic & Transport), Chapter 7 (Air Quality), Chapter 9 (Noise & Vibration) and Chapter 17 (Landscape (Townscape) & Visual). The reported residual impacts in these chapters take into account any topic-specific mitigation identified within the respective chapters. No further mitigation is proposed over and above that set out in individual topic chapters.

10.6 Residual Impacts

No additional mitigation measures have been proposed for this population assessment therefore the residual effects are the same as potential effects detailed in Section 10.4.

10.6.1 Construction Phase

Table 10.12 summarises the potential impacts (same as residual impacts) of the population assessment during the Construction Phase of the Proposed Scheme. This includes all community and economic assessment topics.

Table 10.12: Summary of Construction Phase Significant Residual Impacts

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)
Community Assessment		
Community amenity	Negative, Slight and Short-Term – Navan Road Negative, Not Significant and Short-Term – Aughrim Street, Blanchardstown and Cabra West Neutral, Not Significant and Short-Term - Mulhuddart, Corduff, Blakestown, Mount View, Laurel Lodge – Carpenterstown, Castleknock, Cabra and Halston Street	No Significant impacts
Community land take	Negative, Not Significant and Short-Term – Blanchardstown, Castleknock, Cabra West and Navan Road	<u>Residential Properties</u> Negative, Significant and Short-Term - 3 Catherine's Well, 110-124 Navan Road (even number properties), 137-165 Navan Road (odd number properties), 198-212 Navan Road (even numbered properties), 225 Navan Road, 262 and 264 Navan Road, 255 and 257 Navan Road, 265-323 Navan Road (odd numbered properties), 331-351 (odd numbered properties) and 383-397 (odd numbered properties) <u>Community facilities</u> Negative, Significant and Short-Term - Little Stars Creche & Montessori
Community accessibility	<u>Pedestrians and Bus Users</u> Negative, Slight and Short-Term – Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street Negative, Not Significant and Short-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra <u>Cyclists</u> Negative, Moderate and Short-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street Negative, Not Significant and Short-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra <u>Private Vehicles</u> Negative, Moderate and Short-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street Negative, Slight and Short-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra	
Economic Assessment		
Commercial amenity	Negative, Slight and Short-Term - Blanchardstown, Navan Road, Cabra West, Aughrim Street and Halston Street Neutral, Not Significant and Short-Term - Mulhuddart, Corduff, Blakestown, Castleknock, Mount View, Laurel Lodge – Carpenterstown and Cabra	<u>Direct</u> No Significant impacts <u>Indirect</u> No Significant impacts
Commercial land take	Negative, Not Significant and Short-Term – Aughrim Street, Blanchardstown, Castleknock and Navan Road	No Significant impacts
Commercial accessibility	<u>Pedestrians and Bus Users</u> Negative, Slight and Short-Term – Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street	Negative, Very Significant and Long-Term – Go Station (Aughrim Street)

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)
	<p>Negative, Not Significant and Short-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra</p> <p><u>Cyclists</u></p> <p>Negative, Moderate and Short-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street</p> <p>Negative, Not Significant and Short-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra</p> <p><u>Private Vehicles</u></p> <p>Negative, Moderate and Short-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street</p> <p>Negative, Slight and Short-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra</p>	

10.6.2 Operational Phase

Table 10.13 summarises the potential impacts (same as residual impacts) of the population assessment during the Operation Phase of the Proposed Scheme. This includes all community and economic assessment topics.

Table 10.13: Summary of Operational Phase Significant Residual Impacts

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)
Community Assessment		
Community amenity	<p>Positive, Slight and Long-Term – Aughrim Street</p> <p>Negative, Not Significant and Long-Term – Navan Road, Cabra West and Halston Street</p> <p>Neutral, Not Significant and Long-Term - Mulhuddart, Corduff, Blakestown, Mount View, Blanchardstown, Laurel Lodge – Carpenterstown, Castleknock and Cabra</p>	No Significant impacts
Community land take	Negative, Not Significant and Short-Term – Blanchardstown, Castleknock, Navan Road and Cabra West	No Significant impacts
Community accessibility	<p><u>Pedestrians</u></p> <p>Positive, Moderate to Very Significant and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street</p> <p>Positive, Not Significant and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra</p> <p><u>Cyclists</u></p> <p>Positive, Slight to Very Significant and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street</p> <p>Positive, Not Significant and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra</p> <p><u>Bus Users</u></p> <p>Positive, Moderate to Profound and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street</p> <p>Positive, Not Significant and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra</p> <p><u>Private Vehicles</u></p> <p>Positive, Significant and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim Street and Halston Street</p> <p>Negative, Slight and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra.</p>	

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)
Economic Assessment		
Commercial amenity	Positive, Slight and Long-Term - Aughrim Street and Halston Street Neutral, Not Significant and Long-Term - Mulhuddart, Corduff, Blakestown, Mount View, Blanchardstown, Laurel Lodge – Carpenterstown, Castleknock, Navan Road, Cabra West and Cabra	Direct No Significant impacts Indirect No Significant impacts
Commercial land take	Negative, Not Significant and Long-Term – Blanchardstown, Castleknock, Navan Road and Aughrim Street	No Significant impacts
Commercial accessibility	<u>Pedestrians</u> Positive, Moderate to Very Significant and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street Positive, Not Significant and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra <u>Cyclists</u> Positive, Slight to Very Significant and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street Positive, Not Significant and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra <u>Bus Users</u> Positive, Moderate to Profound and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West, Aughrim and Halston Street Positive, Not Significant and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra <u>Private Vehicles</u> Negative, Not Significant and Long-Term – Aughrim Street Positive, Significant and Long-Term - Blakestown, Blanchardstown, Castleknock, Navan Road, Cabra West and Halston Street Negative, Slight and Long-Term - Mulhuddart, Corduff, Mount View, Laurel Lodge – Carpenterstown and Cabra	Negative, Very Significant and Long-Term – Go Station (Aughrim Street)

As outlined within Section 10.4.4 and summarised in Table 10.13, the Proposed Scheme will deliver positive impacts in terms of accessibility to community facilities and commercial businesses for pedestrians, cyclists and bus users during the Operational Phase. The Proposed Scheme is also expected to benefit individuals and businesses whose workers live along the corridor. Retail and leisure businesses along the route could gain a double benefit from both increased sales and improved staff productivity (see Appendix A10.2 in Volume 4 of this EIAR).

These improvements will help to achieve the aims and objectives of the Proposed Scheme by providing an attractive alternative to the use of private vehicles and promoting a modal shift to walking, cycling and public transport, allowing for greater capacity along the corridor to access residential, community and commercial receptors. As discussed in Appendix A10.2 the Proposed Scheme will also ensure to connect people with essential services such as healthcare facilities and jobs (EY 2021).

In order to accommodate the Proposed Scheme and to ensure it can be readily utilised by sustainable modes of transport, localised significant impacts from permanent land take are expected on a small number of properties. Negative (not significant) impacts are expected on private vehicles travelling in the surrounding road network. However, the design of the Proposed Scheme, which is a result of a detailed design iteration process, ensures that the surrounding road network will have the capacity to accommodate the redistributed traffic during the operation whilst still achieving the aims and objectives of the Proposed Scheme.

Accordingly, it is concluded that the Proposed Scheme will deliver strong benefits for users of sustainable modes of transport, with positive accessibility and amenity impacts for community areas in the study area and align with specific objectives identified in Section 10.1.

10.7 References

CSO (2016a). Census 2016 Small Area Population Statistics. [Online] Available from www.cso.ie/en/census/census2016reports/census2016smallareapopulationstatistics/

CSO (2016b). Means of Travel to Work. [Online] Available from www.cso.ie/en/releasesandpublications/ep/p-cp6ci/p6cii/p6mtw/

CSO (2016c). Persons at work by industry and sex. [Online] Available from census2016.geohive.ie/datasets/37cc24559d00445cb3d3364420ff730b_0

Department for Transport (2020). TAG Unit A4.2 Distributional Impact Appraisal.

EPA (2022). Guidelines on the information to be contained in Environmental Impact Assessment Reports. May 2022.

EY (2021). The Economic Impact of the Core Bus Corridors.

Geodirectory (2019).

Government of Ireland (2018). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.

Highways England (2020). LA 112 Population and human health, Revision 1, Standards for Highways.

NTA (2020). National Public Transport Access Nodes (NaPTAN) [Online] Available from data.gov.ie/dataset/2017-national-public-transport-access-nodes-naptan

Ordnance Survey Ireland (2020). PRIME2.