



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	4
10.2.4	Appraisal Method for the Assessment of Impacts	4
10.3	Baseline Environment	1
10.3.1	Overview1	1
10.3.2	Community Baseline	1
10.3.3	Economic Baseline	3
10.4	Potential Impacts	5
10.4.1	Characteristics of the Proposed Scheme	5
10.4.2	'Do Nothing' Scenario	6
10.4.3	Construction Phase	6
10.4.4	Operational Phase	2
10.5	Mitigation and Monitoring Measures	8
10.6	Residual Impacts	8
10.6.1	Construction Phase	8
10.6.2	Operational Phase	9
10.7	References	1



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 Templeogue / Rathfarnham 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 by 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); and

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, 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, urban 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 would 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;
- 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 a 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; residents, 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) 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 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 consists of 'c ((0

community areas', which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries
CSO 2016a). Community areas that will either be intersected by or are adjacent to the Proposed Scheme consist
f the following:

- Knocklyon;
- Firhouse;
- Tallaght Tymon;
- Willington;
- Templeogue;
- Ballyroan;
- Rathfarnham;
- Churchtown;
- Terenure;



- Rathgar;
- Harold's Cross;
- · Rathmines;
- Harrington Street;
- Francis Street;
- Whitefriar Street; and
- Meath Street and Merchants Quay.

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 Opening Year (2028) and the Design Year (2043). The results identified key junctions in the surrounding road network where capacity issues may arise. In this population assessment, the results from the Opening Year (2028) traffic assessment have been considered with respect to accessibility and amenity.

10.2.1.2 Economic 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 follow 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: 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 European and worldwide	This guidance has been used to inform the wider EIA methodology as outlined in Chapter 1 (Introduction & Environmental Impact Assessment Process)



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);
- 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 a count of community receptors, including local educational, recreational, and healthcare facilities (see Section 10.3.2).

Desktop research has been supplemented by a walkover survey (January 2023) 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. The nature of the submissions varied from business owners, including loss/reduction of parking. Discussions were 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: EPA Significance Matrix

		Sensitivity				
		Very Low	Low	Medium	High	Very High
	Very Low	Imperceptible	Not significant	Slight	Slight	Slight
Magnitude	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 (2022), 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 impacts 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 impacts is also adapted from the EPA Guidelines (EPA, 2022).

The assessment methodologies are 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 is 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 and 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 measures have been implemented). 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 and 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 activity including road widening, upgrading, utility diversion, urban realm landscaping and Construction Compounds. 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 <u>Determining Significance of Effect</u>

Following alignment of the environmental effects, 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). The term 'Significant' in the amenity matrix encompasses the EPA terms 'Profound', 'Very Significant' and 'Significant', while the term 'Not Significant' includes 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 have 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 (Section 10.4) 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 (Section 10.6).

Table 10.3: In-Combination 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				

^{*}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 public rights of way 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 viability of 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 impacts 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).

The potential impacts of the Proposed Scheme on parking and loading bays during the Construction Phase and Operational Phase are described in Chapter 6 (Traffic & Transport), and therefore, are 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 impacts (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?; and
 - 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 impacts 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 DMRB Guidance (Highways England 2020). 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 Guidance 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 adjacent 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 impacts assigned to each user type within Chapter 6 (Traffic & Transport) informs the 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 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 or 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 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

The Templeogue Section of the Proposed Scheme will commence in the community area of Tallaght Tymon, east of the M50 interchange. This Section is predominantly residential in nature and passes by a number of housing estates and individual houses in the community area of Templeogue. The Proposed Scheme will then pass through Terenure Village, in the community area of Terenure, where it will link with the Rathfarnham Section of the Proposed Scheme. The Proposed Scheme will travel through the suburban community areas of Rathfarnham, Terenure, Rathgar and Rathmines before crossing the Grand Canal into the more urban character part of the Proposed Scheme towards Dublin City Centre. As the Proposed Scheme approaches the City Centre it is lined by a mix of residential, commercial and community properties.

The study area for the Proposed Scheme consists of 16 community areas which have an approximate total population of 130,000 according to the 2016 Census (CSO 2016a).

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 will pass 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 Care	Schools
Knocklyon	3	7	2	4
Firhouse	3	2	2	4
Tallaght Tymon	1	1	2	5
Willington	2	9	0	2
Templeogue	2	3	0	4
Ballyroan	1	2	0	4
Rathfarnham	4	3	1	4
Churchtown	1	7	2	3
Terenure	6	8	2	7
Rathgar	9	4	3	5
Harolds Cross	1	5	1	3
Rathmines	1	5	3	7
Harrington Street	2	2	3	6
Francis Street	3	2	0	5
Whitefriar Street	6	0	1	2
Meath Street and Merchants Quay	6	6	1	6
Study Area Total	51	66	23	71

Table 10.4 demonstrates that there is an even spread of community facilities across the study area, with slightly more recreational resources in the community areas of Terenure, Knocklyon and Willington. Examples of community receptors along the Proposed Scheme which are likely to have a large number of users include:



- · Bushy Park;
- Rathfarnham Castle;
- Terenure College and Swimming Pool, Terenure;
- St Luke's Hospital, Rathgar;
- · Our Lady's School, Templeogue; and
- DIT University, Whitefriar Street.

10.3.2.2 Residential Land

There are approximately 39,000 residential properties and over 300 apartment buildings within the community study area (OSI 2020).

10.3.2.3 Commute to Work

There are approximately 61,000 commuters across the Proposed Scheme community study area and 16% 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 number of commuters relying on public transport for travelling to work is smaller in the study area (16%) compared to the average for County Dublin (20%). Commuters residing in Firhouse and Knocklyon, at the furthest distance from the City Centre, have the largest percent of commuters traveling to work by car or van (75%), and the fewest travelling by foot or bike (8% and 7% respectively).

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

Community Area	Travel by Bus / Minibus or Coach	Travel by Car / Van	Travel by Train	Travel by Foot / Bike	Other
Knocklyon	11%	75%	1%	7%	6%
Firhouse	11%	75%	1%	8%	5%
Tallaght Tymon	13%	67%	2%	12%	6%
Willington	13%	71%	1%	9%	6%
Templeogue	12%	63%	1%	17%	8%
Ballyroan	12%	67%	1%	12%	7%
Rathfarnham	13%	63%	1%	16%	6%
Churchtown	6%	56%	13%	17%	7%
Terenure	15%	48%	1%	28%	8%
Rathgar	14%	34%	6%	37%	9%
Harolds Cross	13%	32%	2%	45%	8%
Rathmines	10%	20%	8%	50%	12%
Harrington Street	10%	16%	6%	51%	17%
Francis Street	14%	16%	6%	52%	12%
Whitefriar Street	11%	10%	5%	37%	37%
Meath Street and Merchants Quay	12%	11%	7%	44%	27%
Study Area average	12%	45%	4%	28%	11%
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 are a total of 491 public transport access points across the study area, as shown in Table 10.6. Generally, the public transport stops are split evenly across the study area. The community area with the greatest proportion of public transport access points is Meath Street and Merchants Quay (12%).



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

Community Areas	Number of Public Transport Access Points	Percentage of Stops Across the Study Area
Knocklyon	45	9%
Firhouse	27	5%
Tallaght Tymon	22	4%
Willington	17	3%
Templeogue	29	6%
Ballyroan	19	4%
Rathfarnham	33	7%
Churchtown	45	9%
Terenure	44	9%
Rathgar	35	7%
Harolds Cross	21	4%
Rathmines	35	7%
Harrington Street	28	6%
Francis Street	18	4%
Whitefriar Street	16	3%
Meath Street and Merchants Quay	57	12%
Study Area Total	491	

10.3.3 Economic Baseline

10.3.3.1 Commercial Receptors

The Proposed Scheme will pass a number of commercial receptors. 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 provides a list of all commercial businesses along the Proposed Scheme, approximately 744 were identified, which is approximately 12% of the commercial businesses across the total study area.

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

Community Area	Commercial Receptors
Knocklyon	90
Firhouse	51
Tallaght Tymon	177
Willington	44
Templeogue	135
Ballyroan	120
Rathfarnham	225
Churchtown	425
Terenure	309
Rathgar	228
Harolds Cross	269
Rathmines	606
Harrington Street	802
Francis Street	264
Whitefriar Street	927
Meath Street and Merchants Quay	1,572
Study Area Total	6,244

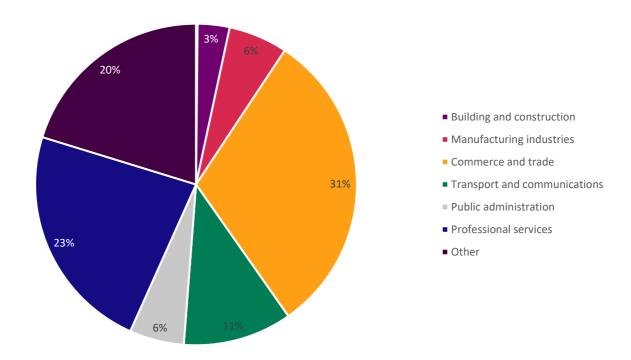
Table 10.7 shows the largest number of commercial receptors is located in Meath Street and Merchants Quay and the smallest number of commercial receptors are in the Willington and Firhouse community areas.



10.3.3.2 Employment

Within the study area there are approximately 65,000 people in employment (50% of the total study area population). Of the working age population, over 5,700 people are unemployed across the study area, which means that 8% of the working age population (and 4% of total study area population) is unemployed (CSO 2016c).

There are a number of clusters of employment locations along the Proposed Scheme. There are several small retail and food and drink businesses in Terenure, including along Terenure Road East and in Rathfarnham along Main Street. Other areas include Rathmines and George's Street area. Graph 10.1 presents a breakdown of employment across the study area. The largest sector of employment is commerce and trade which accounts for over 30% of employment in the study area, this is followed by professional services which makes up 23% of employment (CSO 2016c).



Graph 10.1: Employment by Industry within the Study Area (%)



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 10.6, 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 sections already take into account mitigation proposed in those chapters.

10.4.1 Characteristics of the Proposed Scheme

The Proposed Scheme has an overall length of approximately 10km from end to end online with additional offline upgrades and quiet street treatment of approx. 2km and 1.5km respectively. The Proposed Scheme will be comprised of two main alignments, namely from Templeogue to Terenure (3.7km), and from Rathfarnham to the City Centre (6.3km)

The Templeogue to Terenure section will commence on the R137 Tallaght Road, east of the M50 junction 11 interchange. From here, the Proposed Scheme is routed via the R137 along Tallaght Road and Templeogue Road, through Templeogue Village, to Terenure Cross, where it joins the Rathfarnham to City Centre section. The Rathfarnham to City Centre section will commence on the R821 Grange Road at the junction with Nutgrove Avenue, and is routed along the R821 Grange Road, the R115 Rathfarnham Road, the R114 Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower, Richmond Street South, Camden Street Upper and Lower and Wexford Street as far as the junction with the R110 at Kevin Street Lower and Cuffe Street where priority bus lanes end. From Cuffe Street to Dame Street along Redmond's Hill, Aungier Street, and South Great George's Street the route will involve a traffic lane and a cycle track in both directions where it will join the prevailing traffic management regime in the city centre. In addition to the above, an alternative cycle facility will be provided along Harold's Cross Road / Terenure Road North between Terenure Cross and Parkview Avenue, as well as along Bushy Park Road, Wasdale Park, Wasdale Grove, Zion Road and Orwell Road. The route of the Proposed Scheme is shown in Image 1.1 in Chapter 1 (Introduction).

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. An accessibility audit determined that the majority of footways along the existing route were in a reasonable state of repair, however there were some instances where crossing facilities at side roads are of a poor standard, particularly in terms of catering for the mobility and visually impaired. The Proposed Scheme will address gaps in existing provisions, as well as upgrade some pedestrian and cycle routes to a better standard (segregated cycle tracks instead of on-road cycle lanes or cyclist sharing bus lanes). 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.

The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities. The scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane resulting in improved journey time reliability. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers and cycle facilities will be substantially improved with segregated cycle tracks provided along the links and protected junctions with enhanced signaling for cyclists provided at junctions.

Two bus gates are proposed along the Proposed Scheme at the following locations:

- Templeogue Road at junction with Fergus Road (Inbound direction only) 06:00 20:00, 7 days a
 week; and
- Rathmines Road Lower at junction with Lissenfield 06:00 20:00, 7 days a week.

Moreover, pedestrian facilities will be upgraded, and additional signalised crossings will be provided. In addition, urban realm works will be undertaken at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrians experience, an example of this can be seen in Terenure, particularly at Terenure Cross.



Permanent land take along the Proposed Scheme will be required from 91 residential properties, 13 community facilities and 23 commercial businesses. All permanent land acquisition will be required to facilitate the widening of the carriageway and to allow for the provision of improved pedestrian, cycle and bus infrastructure.

As per Chapter 5 (Construction), during the Construction Phase, the anticipated site staff numbers working on the Proposed Scheme will be 200, rising to 250 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 Economic Impact of the Core Bus Corridors Report), the operation of the Proposed Scheme will give households along the route access to wider and better job opportunities (EY 2021). The availability of public transport is expected to reduce the time taken to commute to workplaces, this would have a particular impact for low-income households and people with a disability. Appendix A10.2 (The Economic Impact of the Core Bus Corridors Report) also identifies that there is expected to be an increase in job satisfaction as well as an increase in job retention.

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 six Construction Compounds along its length, as listed below:

- Construction Compound TR1: Spawell Roundabout;
- Construction Compound TR2: Terenure Road North;
- Construction Compound TR3: Dodder View Road;
- Construction Compound TR4: Military Road;
- Construction Compound TR5: Richmond Street South; and
- Construction Compound TR6: Spawell Link Road.

10.4.2 'Do Nothing' Scenario

With respect to Population, the 'Do Nothing' scenario means that there would 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 10.2.4.1.1.

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 on general traffic in the surrounding road network as a result of additional construction traffic from the Proposed Scheme.

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 and Temporary noise impact from Construction Phase Traffic for community receptors along Castlewood Park, Charleville Road, Wynnefield Road and Mountpleasant Avenue Lower.

Chapter 17 (Landscape (Townscape) & Visual) identified the following townscape and streetscape impacts during construction:



- A Negative, Moderate and Temporary/Short-Term impact between Tallaght Road and Rathfarnham Road (West of Templeogue);
- A Negative, Significant to Very Significant and Temporary/Short-Term impact between Tallaght Road and Rathfarnham Road (Templeogue to Rathfarnham Road);
- A Negative, Very Significant and Temporary/Short-Term impact between Nutgrove Avenue and Terenure Road North;
- A Negative, Very Significant and Temporary/Short-Term impact between Terenure Road North and Charleville Road: and
- A Negative, Moderate and Temporary/Short-Term impact between Charleville Road and Dame Street.

Chapter 17 (Landscape (Townscape) & Visual) also identified these impacts on townscape represent the visual impact experienced by community receptors along the Proposed Scheme. The following amenity designations are expected to experience and Negative, Very Significant and Temporary/Short-Term impact during the Construction Phase of the Proposed Scheme:

- · Rathfarnham Dental Practice;
- · Rathfarnham Orthodontics; and
- R&D Dental Practice.

These environmental impacts have been considered together to identify if there will be a combination of impacts acting upon 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 along the Proposed Scheme. All community facilities away from the Proposed Scheme are expected to experience a Negative, Slight and Short-Term impact on amenity.

The community facilities along the Proposed Scheme are located in the community areas of Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay. However, due to the small number of community facilities in each community areas, the overall impact on these community areas is expected to be Negative, Not Significant and Short-Term.

All other community areas are expected to experience a Neutral, Not Significant and Short-Term amenity impact.

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 94 community receptors (75 residential properties and 19 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	
Templeogue	0	1	11	3	
Rathfarnham	0	1	3	8	
Terenure	0	1	44	1	
Rathgar	0	0	1	0	
Rathmines	0	1	0	0	
Total	0	4	59	12	

Table 10.8 shows that 12 residential properties are expected to experience significant temporary land take impacts during the construction phase. Of the residential properties that experience significant impacts, seven are located along Rathfarnham Road (67 and 153 – 141), all of which require temporary land take from a large part of the driveways. Two properties at Rathfarnham Wood (10 and 11 – demolition of garden sheds and acquisition of a proportion of rear gardens)) and three at Fortrose Park (11 – acquisition of a proportion of rear gardens)) are expected to experience significant impacts.

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 Community Facilities Affected				
	Imperceptible / Not Significant	Slight	Moderate	Significant	
Templeogue	0	1	0	0	
Rathfarnham	0	4	4	1	
Terenure	0	0	4	0	
Harrington Street	0	2	1	0	
Knocklyon	0	0	1	0	
Willington	0	1	0	0	
Total	0	8	10	1	

Table 10.9 shows that only one community facility is expected to experience significant land take impacts during the construction phase of the Proposed Scheme (a dental practice on Rathfarnham Road in the same location as residential properties with similar impacts).

Overall, the impact on the following community areas overall is expected to be Negative, Not Significant to Slight and Short-Term: Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Rathmines and Harrington Street.

All other community areas are expected to experience a Neutral, Not Significant and Short-Term impact.

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, 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, 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 possible, 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 4 of the EIAR, it is expected that access to community receptors along the Proposed Scheme will also likely be negatively impacted (a Negative, Slight and Temporary impact for pedestrians and a Negative, Moderate and Temporary impact for cyclists), 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 these 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 be negatively impacted (a Negative, Slight and Temporary impact), 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 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 not be prohibited. 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 on general traffic travelling along the Proposed Scheme during construction. 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 Temporary 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 and Transport). Private vehicles may therefore be negatively affected on the surrounding road network, this is also expected to be Negative, Slight and Temporary during the Construction Phase.

Summary

The impacts identified above are expected to be experienced by community areas located predominately along the length of the Proposed Scheme where construction activity and road diversions 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 Temporary impact (pedestrians and bus users) and a Negative, Moderate and Temporary impact (cyclists and private vehicles) as a result of



changes in access are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

Pedestrians, cyclists, and bus users in Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street are expected to experience a Neutral and Temporary impact as the community area is situated in proximity but away from the Proposed Scheme, where no change in existing user facilities is proposed as part of the Proposed Scheme. Private vehicles within Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street will experience a Negative, Slight and Temporary impact however as a result of changes to access during the Construction Phase of the Proposed Scheme.

10.4.3.2 Economic Assessment

10.4.3.2.1 Commercial Amenity

As outlined above in Section 10.2.4.1.1, 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 on general traffic in the surrounding road network as a result of additional construction traffic from the Proposed Scheme.

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 and Temporary noise impact from Construction Phase Traffic for commercial receptors along Castlewood Park, Charleville Road, Wynnefield Road and Mountpleasant Avenue Lower.

Chapter 17 (Landscape (Townscape) & Visual) identified the following townscape and streetscape impacts during construction:

- A Negative, Moderate and Temporary/Short-Term impact between Tallaght Road and Rathfarnham Road (West of Templeogue);
- A Negative, Significant to Very Significant and Temporary/Short-Term impact between Tallaght Road and Rathfarnham Road (Templeogue to Rathfarnham Road);
- A Negative, Very Significant and Temporary/Short-Term impact between Nutgrove Avenue and Terenure Road North;
- A Negative, Very Significant and Temporary/Short-Term impact between Terenure Road North and Charleville Road; and
- A Negative, Moderate and Temporary/Short-Term impact between Charleville Road and Dame Street.

Chapter 17 (Landscape (Townscape) & Visual) identified the following impacts on townscape represent the visual impact experienced by commercial receptors along the Proposed Scheme. The following commercial receptors are also expected to experience Negative, Very Significant and Short-Term landscape and visual impacts as a result of the construction of the Proposed Scheme:

- Centra Texaco, Rathfarnham Road;
- An Siopa Kosher Ltd;
- The Management Company; and
- The Roslin Lodge.

These environmental impacts have been considered together to identify if there will be a combination of impacts acting upon the same commercial businesses. 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 along the Proposed Scheme. Commercial businesses located along the Proposed



Scheme are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR. 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 impact on community areas along the Proposed Scheme (Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay) is considered to be Negative, Not Significant and Short-Term.

All other community areas are expected to experience a Neutral, Not Significant and Short-Term amenity impact.

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 23 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 Commerc	sial Receptors during the Construction Phase

Community Area	Nature of Effect / Number of Commercial Receptors Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Rathfarnham	0	0	2	0
Terenure	0	0	2	0
Harrington Street	0	0	19	0
Total	0	0	23	0

Table 10.10 shows no commercial receptors are expected to experience a significant land take impact during the construction phase. 23 commercial receptors, the majority, located in Community Area of Harrington Street (Camden Street Lower), are expected to experience moderate temporary land take impacts.

During construction, the existing footpath and some green space along the north-west extents of Bushy Park will be temporarily required to facilitate construction. This area of Bushy Park is used on a weekly basis for the Bushy Park Market. This has been included in the assessment of Bushy Park, which is expected to experience and Negative, Moderate and Short-Term impact.

Overall, the impact of land take across the impacted community areas as a whole (Rathfarnham, Terenure and Harrington Street) is considered Negative, Not Significant and Short-Term during the Construction Phase. All other community areas are predicted to have a Neutral, Not Significant and Short-Tern impact 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) 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 impacts 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 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, Moderate 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. No road junctions in the surrounding road network are expected to be significantly impacted by the operation of the Proposed Scheme.

Chapter 7 (Air Quality) identified a Neutral and Long-Term residual impact on human receptors during the Operational Phase.

Chapter 9 (Noise & Vibration) identified a Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium impact from traffic noise along the Proposed Scheme and an Indirect, Positive, Imperceptible to Slight and Short to Medium-Term to Indirect, Negative, Moderate and Short to Medium-Term in the surrounding road network.

Chapter 17 (Landscape (Townscape) & Visual) identified the following impacts on townscape and streetscape character during the Operational Phase within 1-year of the Proposed Scheme:

- A Positive, Moderate to Significant and Short-Term impact between Tallaght Road and Rathfarnham Road;
- A Negative, Very Significant and Short-Term impact between Nutgrove Avenue and Terenure Road North:
- A Negative, Significant and Short-Term impact between Terenure Road North and Charleville Road;
- A Positive, Moderate to Significant and Short-Term impact between Charleville Road and Dame Street.

These impacts on townscape represent the visual impact experienced by community receptors along these stretches of road, one year post-construction and are expected to improve over time (see Chapter 17 (Landscape (Townscape) & Visual)). The following amenity designations are also expected to experience the following a Negative, Significant and Short-Term impact during the Operational Phase of the Proposed Scheme:

Rathfarnham Castle Demesne.

These environmental impacts have been considered together to identify if there will be an in-combination of impacts acting upon the same community facilities. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a Negative, Slight and Long-Term impact on community receptors located along the Proposed Scheme between Nutgrove Avenue and Terenure Road North and Terenure Road North and Charleville Road and a Positive, Slight and Long-Term impact on community receptors located along the Proposed Scheme between Tallaght Road and Rathfarnham Road and Charleville Road and Dame Street.

Therefore, community areas Rathfarnham and Harolds Cross are expected to experience a Negative, Not Significant and Long-Term impact, and community areas Willington, Templeogue, Terenure, Rathgar, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay are experience a Positive, Not Significant and Long-Term impact.

Community receptors located away from the Proposed Scheme are expected to experience a Negative, Slight, Long-Term impact. Therefore, community areas, Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street are likely to experience a Negative, Not Significant, Long-Term 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 89 community receptors (72 residential properties and 17 community facilities) 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			ted
	Imperceptible / Not Significant	Slight	Moderate	Significant
Templeogue	0	1	14	0
Rathfarnham	0	9	2	0
Terenure	0	0	45	0
Rathgar	0	0	1	0
Total	0	10	62	0

Table 10.11 shows that no residential properties are significantly impacted by permanent land take during the operational phase. The majority of residential properties experiencing a Negative, Moderate and Long-Term impact are located in the community area Terenure.

Table 10.12 summarises the findings of the community land take assessment for community facilities along the Proposed Scheme during the operational phase.

Table 10.12: Land Take Impacts on Community Facilities during the Operational Phase

Community Area	Nature of Effect / Number of Community Facilities Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Templeogue	1	0	0	0
Rathfarnham	0	5	3	0
Terenure	0	2	2	0
Harrington Street	0	2	1	0
Willington	0	1	0	0
Total	1	10	6	0

Table 10.12 shows there are no community facilities that are expected to experience significant permanent land take during the operational phase of the Proposed Scheme. Community facilities that are expected to be moderately affected include Rathfarnham Castle Park, Rathfarnham Dental Practice, Bushy Park and the International School of English. All of which are only expected to lose a small amount of land that is not expected to have an impact on the ability of users to use the facilities.

Overall, the impact of land take on community areas Willington, Templeogue, Rathfarnham, Terenure and Harrington Street is Negative, Not Significant and Long-Term.

All other community areas are expected to experience a Neutral, Not Significant and Long-Term impact.



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 improvements 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 (The Economic Impact of the Core Bus Corridors) (EY 2021) in Volume 4 of this EIAR.

Pedestrians and Cyclists

Chapter 6 (Traffic and Transport) identified a Positive, Significant and Long-Term impact on pedestrian infrastructure and a Positive, Moderate to Significant and Long-Term impact on cycling infrastructure along the Proposed Scheme. The beneficial impacts on pedestrian and cycling infrastructure is expected to lead to improvements in access to community facilities along the Proposed Scheme will improve for those choosing to walk or cycle as there will be increased provision for these modes of travel.

A Neutral, and Long-Term impact is anticipated in the community areas of Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street as they are situated away from the Proposed Scheme, with no changes to pedestrian and cycling infrastructure proposed.

Bus Users

Chapter 6 (Traffic and Transport) identified a Positive, Moderate to Very Significant 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 access to community facilities by bus users will also improve along the Proposed Scheme.

These impacts on access to community facilities for pedestrians, cyclists and bus users are expected to be experienced by community areas located predominantly along the Proposed Scheme as these will be where signal controlled junctions and improved footpath and cycle tracks will be provided. The community areas likely to experience these positive impacts are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

Whilst situated away from the Proposed Scheme, the community areas of Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street are still expected to experience the benefits expected on the wider bus network performance and as such there is a Positive, Slight and Long-term impact on bus users in this community area.

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate 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. Chapter 6 (Traffic and Transport) did not identify any localised impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The two bus gates in the community areas of Terenure and Rathmines are designed to restrict access to private vehicles and prioritise buses. The impact on private vehicles passing through Templeogue Road at Fergus Road in an inbound direction and Rathmines Road Lower at junction with Lissenfield will require minor local rerouting but will not change the ability to access community facilities in the area.

Summary

On the whole, the community areas that are likely to experience Positive, Moderate and Long-Term impacts on change in access to community facilities, as a result of the reduction in general traffic, are those situated along



the Proposed Scheme, such as Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

Negative, Slight and Long-Term impacts on change in access to community facilities, as a result of the redistribution of traffic in the surrounding road network, are likely to be experienced in community areas situated away from the Proposed Scheme, namely Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street.

10.4.4.2 Economic Assessment

10.4.4.2.1 Commercial Amenity

Commercial amenity impacts arise from a combination of traffic, air quality, noise and visual impacts as discussed in Section 10.4.4.2.1.

Chapter 6 (Traffic & Transport) identified a Positive, Moderate 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. No road junctions in the surrounding road network are expected to be significantly impacted by the operation of the Proposed Scheme.

Chapter 7 (Air Quality) identified a Neutral and Long-Term residual impact on human receptors during the Operational Phase.

Chapter 9 (Noise & Vibration) identified a Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium impact from traffic noise along the Proposed Scheme and an Indirect, Positive, Imperceptible to Slight and Short to Medium-Term to Indirect, Negative, Moderate and Short to Medium-Term in the surrounding road network.

Chapter 17 (Landscape (Townscape) & Visual) identified the following impacts on townscape and streetscape character during the Operational Phase within 1-year of the Proposed Scheme:

- A Positive, Moderate to Significant and Short-Term impact between Tallaght Road and Rathfarnham Road:
- A Negative, Very Significant and Short-Term impact between Nutgrove Avenue and Terenure Road North;
- A Negative, Significant and Short-Term impact between Terenure Road North and Charleville Road;
 and
- A Positive, Moderate to Significant and Short-Term impact between Charleville Road and Dame Street.

These environmental impacts have been considered together to identify if there will be an in-combination of impacts acting upon the same commercial businesses. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a Negative, Slight and Long-Term impact on commercial businesses located along the Proposed Scheme between Nutgrove Avenue and Terenure Road North and Terenure Road North and Charleville Road and a Positive, Slight and Long-Term impact on commercial businesses located along the Proposed Scheme between Tallaght Road and Rathfarnham Road and Charleville Road and Dame Street.

Therefore, community areas Rathfarnham and Harolds Cross are expected to experience a Negative, Not Significant and Long-Term impact, and community areas Willington, Templeogue, Terenure, Rathgar, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay are experience a Positive, Not Significant and Long-Term impact.

Commercial businesses located away from the Proposed Scheme are expected to experience a Negative, Slight to Moderate, Long-Term impact. Therefore, community areas, Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street are likely to experience a Negative, Not Significant, Long-Term impact.



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 23 commercial receptors require permanent land take as result of the Proposed Scheme. Table 10.13 summarises the findings of the commercial land take assessment for the Proposed Scheme during the operational phase.

Table 10.13: Land Take Impacts on Commercial Receptors during the Operational Phase

Community Area	Nature of Effect / Number of Commercial Receptors Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Rathfarnham	0	0	2	0
Terenure	0	0	2	0
Harrington Street	0	0	19	0
Total	0	0	23	0

Table 10.13 shows that no commercial receptors are significantly impacted by permanent land take. 21 commercial receptors are expected to experience moderate land take impacts as a result of the Proposed Scheme, the majority of these are located in the Harrington Street Community Area.

Overall, no permanent significant adverse land take effects have been identified on commercial businesses as result of the Proposed Scheme during the operational phase.

Overall, the impact of land take across the impacted community areas Rathfarnham, Terenure and Harrington Street as a whole is considered Negative, Not Significant and Long-Term during the Operational Phase. All other community areas are predicted to have a Neutral, Not Significant and Long-Term impact 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 expected 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 listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR.

Pedestrians, Cyclists and Bus Users

The positive impacts of improved accessibility to pedestrians, cyclists and bus users will predominantly be experienced by community areas located along the length of the Proposed Scheme as these will be the locations of improved footpaths and cycle paths. The community areas that are expected to experience a Positive, Significant and Long-Term impact on pedestrians, a Positive, Moderate to Significant and Long-Term impact on cyclists and a Positive, Moderate to Very Significant and Long-Term impact on bus users, as a result of changes to access are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.



A Neutral, Long-term impact is anticipated in the community areas of Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street as they are situated away from the Proposed Scheme, where no changes to pedestrian, cyclist or bus infrastructure is proposed.

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from the redistribution of traffic in the surrounding road network. Chapter 6 (Traffic and Transport) did not identify any localised capacity impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The impact on private vehicles passing through Terenure and Rathmines community area is considered Negative, Not Significant to Slight and Long-Term, this is due to the proposed introduction of the bus gates at Fergus Road on Templeogue Road and Lissenfield on Rathmines Road. The bus gates on are not expected to have a significant impact on private vehicles accessing commercial businesses along these stretches of roads due to the lack of on-street parking provision, however they will impact accessibility in terms of lengthened and re-routed journeys.

The impact on access to commercial businesses along the Proposed Scheme for private vehicles is considered to be Positive, Moderate and Long-Term. The community areas that are expected to experience this impact this are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

The impact on access to commercial businesses in the surrounding road network, a result of redistributed traffic, is considered to be Negative, Slight and Long-Term. The community areas that are expected to experience this impact as a result of changes in access to commercial businesses during the Operational Phase of the Proposed Scheme are those situated away from the Proposed Scheme, namely Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street.

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



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) which minimises negative population impacts including: improving safety for cyclists with additional road closures; minimising cycle track widths to reduce land take from residential properties; modifying junction layouts to protect cyclists and altering layout and signal timings of major junctions to minimise traffic redistribution into side roads.

During construction, the existing footpath and some green space along the north-west extents of Bushy Park will be temporarily required to facilitate construction. This area of Bushy Park is used on a weekly basis for the Bushy Park Market. Prior to construction commencing, the NTA and the appointed contractor will liaise with Dublin City Council with regard to the phasing of the construction activities in Bushy Park and also any temporary reorganisation of the area that may be needed which could change the layout of the weekly market.

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 10.14 summarises the predicted impacts (same as residual impacts) of the population assessment during construction of the Proposed Scheme. This includes all community and economic assessment topics.

Table 10.14: Summary of Construction Phase Residual Impacts

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)		
Community Assessmen	ut			
Community amenity	Negative, Not Significant and Short-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay Neutral, Not Significant and Short-Term – Knocklyon, Firhouse,	No Significant impacts		
	Tallaght Tymon, Ballyroan, Churchtown and Francis Street			
Community land take	Negative, Not Significant to Slight and Short-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Rathmines and	Negative, Significant and Short-Term – 10 and 11 Rathfarnham Wood		
	Harrington Street	153 – 141 Rathfarnham Road		
		11, 14 and 15 Fortrose Park		
		67 Rathfarnham Road		
Community accessibility	Pedestrians and Bus Users			
	Negative, Slight, and Temporary – Willington, Templeogue, Rathfari Rathmines, Harrington Street, Whitefriar Street and Meath Street an			
Neutral and Temporary – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown ar		lyroan, Churchtown and Francis Street		
	Cyclists			
	Negative, Moderate and Temporary – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay			
	Neutral and Temporary – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street Private Vehicles			



	Negative, Slight, and Temporary – Knocklyon, Firhouse, Tallaght Ty Rathfarnham, Churchtown, Terenure, Rathgar, Harolds Cross, Rath Whitefriar Street and Meath Street and Merchants Quay	
Commercial amenity	Negative, Not Significant and Short-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay Neutral, Not Significant and Short-Term – Knocklyon, Firhouse,	No Significant impacts
Commercial land take	Tallaght Tymon, Ballyroan, Churchtown and Francis Street Negative, Not Significant and Short-Term – Rathfarnham,	No Significant Impacts
Commercial accessibility	Terenure and Harrington Street Pedestrians and Bus Users Negative, Slight, and Temporary – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay Neutral and Temporary – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street Cyclists Negative, Moderate and Temporary – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay Neutral and Temporary – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street Private Vehicles Negative, Slight, and Temporary – Knocklyon, Firhouse, Tallaght Tymon, Willington, Templeogue, Ballyroan, Rathfarnham, Churchtown, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Francis Street Whitefriar Street and Meath Street and Merchants Quay	

10.6.2 Operational Phase

Table 10.15 summarises the predicted impacts (same as residual impacts) of the population assessment during operation of the Proposed Scheme. This includes all community and economic assessment topics.

Table 10.15: Summary of Operational Phase Residual Impacts

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)	
Community Assessmen	t		
Community amenity	Negative, Not Significant and Long-Term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Rathfarnham, Churchtown, Harolds Cross and Francis Street Positive, Not Significant and Long-Term – Willington, Templeogue,	No Significant impacts	
	Terenure, Rathgar, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay		
Community land take	Negative, Not Significant and Long-Term – Willington, Templeogue, Rathfarnham, Terenure and Harrington Street	No Significant Impacts	
Community accessibility	<u>Pedestrians</u>		
	Positive, Significant and Long-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay Neutral, and Long-Term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street		
<u>Cyclists</u>			
	Positive, Moderate to Significant and Long-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay		
	Neutral, and Long-Term - Knocklyon, Firhouse, Tallaght Tymon, Bal	lyroan, Churchtown and Francis Street	
	Bus Users		
	Positive, Moderate to Very Significant and Long-Term – Willington, T Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Str Quay		



	Positive, Slight and Long-term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street Private Vehicles Positive, Moderate and Long-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay Negative, Slight and Long-Term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street		
Economic Assessment			
Commercial amenity	Negative, Not Significant, Long-Term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Rathfarnham, Churchtown, Harolds Cross and Francis Street	No Significant impacts	
	Positive, Not Significant and Long-Term – Willington, Templeogue, Terenure, Rathgar, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay		
Commercial land take	Negative, Not Significant and Long-Term – Rathfarnham, Terenure and Harrington Street	No Significant Impacts	
Commercial accessibility	Pedestrians Positive, Significant and Long-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay		
	Neutral, and Long-Term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street		
	Cyclists		
	Positive, Moderate to Significant and Long-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay		
	Neutral, and Long-Term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis S		
	Bus Users		
	Positive, Moderate to Very Significant and Long-Term – Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay		
	Positive, Slight and Long-term – Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street		
	Private Vehicles		
	Positive, Moderate and Long-Term – Willington, Templeogue, Rathfa Cross, Rathmines, Harrington Street, Whitefriar Street and Meath St		
	Negative, Slight and Long-Term – Knocklyon, Firhouse, Tallaght Tyr Street	mon, Ballyroan, Churchtown and Francis	

As outlined within Section 10.4.4 and summarised in Table 10.15 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

Centre for Excellence in Universal Design (2020). Everyone – A Universal Design Approach.

CSO (2016a). Census 2016 Small Area Population Statistics [Online] Available from <a href="https://www.cso.ie/en/census/c

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

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

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

Geodirectory (2019).

Google (2021). Google Maps.

Government of Ireland (2018). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment [Online] Available from https://www.housing.gov.ie/planning/guidelines/environmental-impact-assessment-eia/guidelines-planning-authorities-and-bord

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.