Kildare County Library Newbridge

Urban Design Analysis

December 2021



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1 Introduction

The Urban Design Analysis is designed to inform the architectural design of the proposed new County Library, Archive and Cultural Centre Complex in Newbridge. The study area is shown on Fig No.1 It contains the site of the proposed complex as well as the immediate surrounding area. This area has been defined based on the immediate contextual criteria that will influence the design.

Figure 1: General Area



(Source: MyPlan)

The analysis will include

- Consideration of public policy insofar as it applies directly to the proposed Centre.
- Historical development in terms of form and function of the area including building heritage designations.
- Existing land use within the area and vacancy.
- Socio-demographic profile.
- Movement including pedestrian, cycle and vehicular traffic and public transport.
- Building morphology including block sizes, building heights, massing, orientation and material finishes.



2 Public Policy

2.1 Kildare County Development Plan 2017-2023

The policies of direct relevance are policies are ACO1 and ACO 6 where it is stated that Council will seek to further expand Kildare's arts and cultural facilities through the physical enhancement of arts spaces in libraries, including visual arts, gallery performance and workshop facilities. Other policies and objectives relate to the topics set out above and these are referred to as appropriate under theses headings.

2.2 Newbridge Local Area Plan 2013-2019 extended to December 2021

The Library and Riverbank Arts Centre are within an area zoned for *Town Centre* use. Both uses are compatible with the zoning. There is no specific mention of the proposed development of the subject area. There is a policy CF 9 "To encourage and assist the development of the arts and to support the ongoing development of cultural infrastructure." Other policies of a general nature are applicable to the area, and these are referred to again under the headings set out above. Of note is Figure 18, which shows a new built form/edge to the southern section of the proposed cultural facility. This has been already achieved by the construction of new architecturally attractive housing.



3 Historical Development

The immediate area of the library originally formed part of Newbridge Barracks that was built by 1819. There is little historic evidence of any previous development however a bridge in the vicinity dating from 1750 as well as a ford across the river would suggest that there was an active crossing point here prior to this date. The 1837 Ordnance Survey Map and that of 1880-1915 show a long linear barrack building running parallel to the river. The present town hall was formerly a Methodist chapel and school attached to the barracks and dates from 1847. Little else remains of the former barracks beyond old walls and gateways at Athgarvan Road and Cutlery Road. The barracks initiated the development of buildings containing shops and houses along the north-west side of Main Street as a kind of "vicus" to the military establishment. The barracks was strategically located at the bridge built in 1790, which replaced the earlier bridge close by that was destroyed by floods the previous year. This bridge in turn was replaced by one built in 1936 and was altered in 2006 by the addition of boardwalks to either side.

Figure 2: The existing bridge



The withdrawal of British troops in May 1922 saw the abandonment of the barracks and more modern development to the northern section of the barracks site which included the construction of the library building in 1936.



Figure 3: Historic Ordnance Map 1837

Figure 4: Historic Ordnance Map 1880-1915

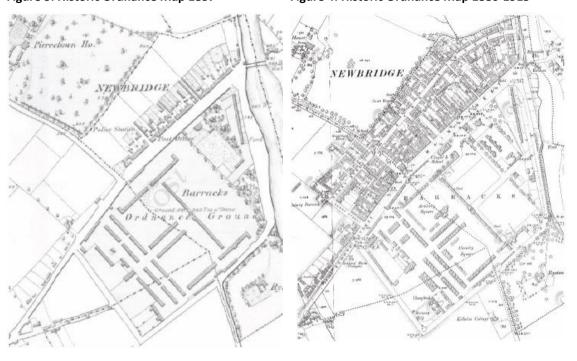


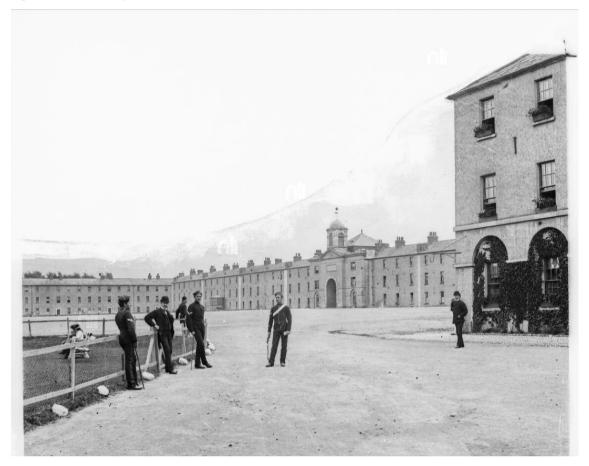
Figure 5: Barracks Entrance from Main Street



(Source: Lawrence Collection NLI)



Figure 6: Barracks Square



(Source: Lawrence Collection NLI)

The library building was originally the library and headquarters for the entire in the Kildare Record of Protected Structures (No. RPS B2341). It is given a regional rating in the Inventory and is described as an international modern style building. It is two stories in height and finished in render. It is L shaped in plan form and external elevations have a vertical emphasis by reason of the window design and projecting building elements at the centre and each end. It is surrounded by a low wall and railings. Many original elements remain. However, a number of the original steel windows have been replaced as well as rainwater goods. The steel windows are something of a rarity as most such windows have been replaced throughout Ireland because of their poor insulation characteristic and need for regular maintenance. The building was originally finished in a bright render and may have been designed to create an impression of a stone building.

It can be described as a landmark building by reason of its design and function as well as its location at a major junction and bridge entry point to the town centre proper. Development of lands to the south will require a sensitive architectural response acknowledging the building's visual importance in the town. The library was extended with single storey flat-roofed structures using pre-cast concrete components to the side fronting Athgarvan Road. These additions are not architecturally distinguished.



Figure 7: Library viewed from St Conleth's Bridge at town entrance



Figure 8: Elevation to Athgarvan Road showing single-storey library extension









Buildings on Main Street in the north of the area are built on the footprint of previous plot sizes but a number have been amalgamated to form bigger plots to accommodate larger buildings. These are two and three storeys high and are heavily adulterated and include a couple of unattractive modern interventions. They are in a variety of uses described below.



Figure 10: 11Small and large floor plate and block sizes on Main Street









(Source: Metropolitan Workshop)

Directly to the south-west of the library is the Riverbank Arts Centre for the performing arts. It occupies a large footprint and is in effect three-stories in height. It is modern in design and has a rendered finish. The render is coloured in two different colours in bay form to break up what is a long elevation onto Main Street and together with windows having a somewhat vertical emphasis is an attempt to integrate the building visually with the town centre. The main entrance is at first floor level via a substantial glazed entrance. The building is prominent and inviting when seen from Main Street from the south-west but less so when seen from the north-eastern approach.



Figure 11: The Riverbank Arts Centre





Figure 12: The Library when freshly painted



The building includes a café that is popular with local people

Structures immediately to the south-east consist of are residential in use and date from the 1930's up to recent years



4 Existing Land Use

The existing land use in the wider area typical of mixed use in Irish towns, but the dominant use in this immediate area is cultural/civic use given the location of the library and Arts Centre which form a cultural nexus. Remaining uses include residential, financial, undertaking, retail, public house, office, sports and small hotel. This creates a lively effect on this section of Main Street and the retention of the mixed use character is highly desirable. A Penney's store located further to the south-west is the key retail outlet and it together with the Post Office is vital to the retail health of Main Street. The GAA grounds in such a central location aids the vibrancy of the town.

Vacancy rates are typical of the rest of the town centre c. 10% and vacant units can be found on the north side of Main Street at both ground and first floor levels. The present Covid 19 crisis is without doubt challenging for businesses in the area and could increase the vacancy rate in future years.

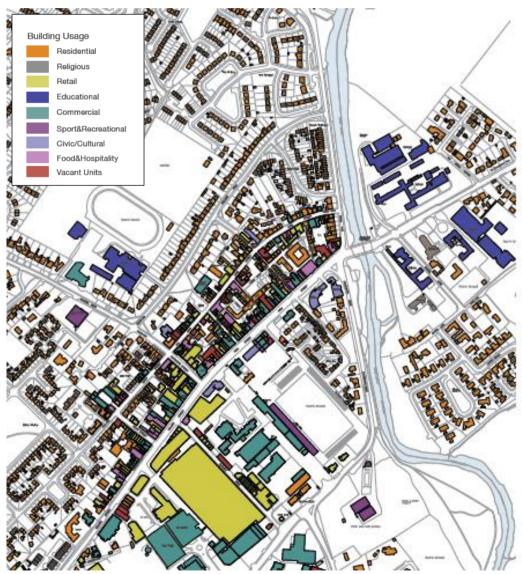


Figure 12: Ground Floor Use



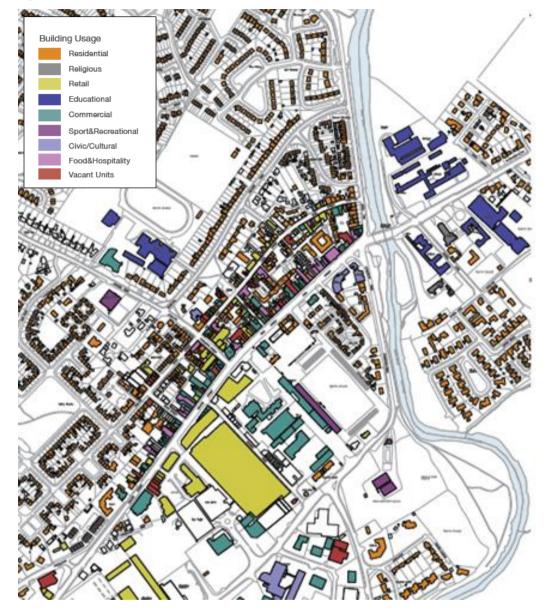


Figure 13: First Floor Use

4.1 Day and Night-time Economy

The existing uses create activity throughout the daytime and evening. Although the main retail focus is in other areas of the town such as the Whitewater Centre, there a is a range of business and leisure activity including shops, takeaways, pubs, business uses and the cultural activities that maintain pedestrian and vehicular movement over a sixteen-hour period. This assists in creating a safe self-policing environment.

The on- street short-term parking can also be considered an advantage in assisting activity in this location.



4.2 Local Amenities

The area is bounded on its north-eastern side by the river Liffey and its associated park. Although cut off by heavy traffic volumes from the cultural nexus, it and its bankside provide a natural amenity and serves as a visual contrast to the hard urban nature of the town's morphology. It is well maintained by the local Tidy Towns committee and is real bonus in such a central location.



5 Existing Urban Design Character

The area to the north-east is characterised by openness, heavy traffic and the visual clutter that is associated with trying to create safe conditions where pedestrians meet traffic with a proliferation of signals, signs and railings. However, the area along the north-western side of Main Street is well-defined by terraces of buildings, two and three stories high with pitched roofs. The town developed in a grid fashion directly opposite the former barracks. Main Street is wide and typical of many Irish towns. Historic photographs show a visually integrated late Georgian/early Victorian aesthetic that derives from its having been built within a relatively short time period, when there was consensus on the architectural style largely developed from classical principles and where a limited palette of building materials was available. The appearance of the town was restrained and ordered with a sharp contrast between the hardness of the built environment and heavily treed open spaces at either end of Main Street. The bones of this urban structure remain in place with terrace structures topped with pitched roofs. The south-eastern side was historically quite open with typical barracks morphology of regimented barracks buildings around rectilinear parade grounds that did not allow for permeability so that it was of radically different building morphology.

The barracks closure allowed the development of much larger building foot plates and opened the way for industrial units to be developed as well as open sports grounds. Block sizes are notably much larger from across the street with less permeability. However, this subject site area did develop as a terraced block defining the space of this section of Main Street area and achieved a more visually coherent streetscape. The south-eastern side of Main Street beyond the Arts Centre is disparate in character and lacks architectural coherence. Buildings date from the later part of the twentieth Century and early twenty first century. They vary in design and height.

Main Street is on average 27.5 metres wide and does not have a full sense of enclosure given the gaps on its south-eastern side. The ratio of building height to street width is on average 5.0:1.0. A greater sense of enclosure might be achieved by reinforcing the existing tree planting. It would not make sense to try and achieve a greater sense of enclosure by permitting higher buildings as they could only develop piecemeal and would detract from the existing streetscape quality and the protected structures located therein.

The cultural complex block size is relatively small and although it compares more to those found on the far side of the street, it would not necessarily require additional throughways to create more permeability. The curved building of the Riverbank Arts Centre does not make urban design sense in that it does not lead to an important street off Main Street but does achieve visual presence and signals the entrance strongly.

Liffey Terrace to the south-west of the Arts Centre was developed initially with two-storey terraced housing on its south-western side and dates originally from the 1930's. They are mainly small two-bedroom and three-bedroom units and were formerly developed as social housing units. Opposite them are attractive single storey semi-detached units. Many of the older houses have since been purchased. The initial section of the street has had "Home Zone" principles applied where the terraced houses fronted directly onto the street and new private zones and common areas are delineated and marked by surface treatment and planter boxes. The houses are finished in render and have been heavily adulterated by the insertion of modern doors and windows but retain a simple volumetric coherence. Further along the street houses are semi-detached and further along again revert to terracing, the development of new buildings fronting the green area to the south creates a defined space.



Figure 14: Residential development to the south-east



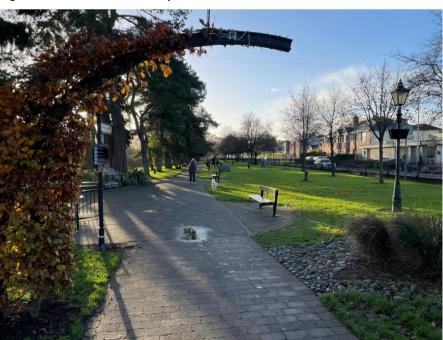






Buildings directly to the south-east of the library comprise two semi-detached houses and a bungalow which appear to date from the 1930's.

Figure 15: The linear riverside park





5.1 Orientation

The block containing the cultural facilities is favourably orientated in terms of impacts on neighbouring properties. Main Street is of a width that there is no impact from shadowing to properties across the street and Liffey Terrace lies to the south-west of the block. The area to the east is open around the Liffey.

There is therefore no orientation issue affecting the height of any redevelopment of the library surroundings. The issue of critical importance is an aesthetic one of relating ang new structure to the existing protected structure and the surroundings.

5.2 Building Heights

Newbridge is low-rise in character, one, two and three storeys are the dominant heights in this section of the town. Penney's further to the south-west is the highest building at three storeys with high floor to ceiling heights. There can an argument for increasing height to signal an important building or landmark. However, this approach at the cultural centre would detract from the townscape qualities of Newbridge and the library as a protected structure. It is recommended that any additional structures be of a maximum of three storeys.

5.3 Material Finishes

The dominant finish to buildings is painted render. Some buildings of importance have a stone or brick finish notably the former Methodist Church and the Bank of Ireland corner building at Charlotte Street. This is very typical of towns of this period. The two existing cultural building are also rendered for the greater part.

Any new extension of the cultural complex could follow this traditional approach or given the status of the complex could consider contrasting materials provided they are of high quality with low maintenance characteristics.



6 Socio-Demographic Profile

A socio-demographic Profile of the town is presented in the Appendices. The population of the town and its environs has grown by 189% between 1986 and 2016 and to reach 22,543 in 2016. Estimates from the CSO in 2020 envisaged a growth in County Kildare of 6%. As population growth in Newbridge has exceeded the county average in the past, it can be anticipated that the population has now reached c. 24,000. The NTA has indicated that they expect the population to reach 31,167 by 2035. The economic dynamism of the Dublin Region is likely to increase the population further and this was reflected in the County Development plan in its core strategy. Good educational facilities are available and there is a well-educated population in the town This growth will create a demand for more facilities including cultural facilities and should provide a firm basis for an expansion of those already present in the town.

The immediate area includes residents and a working population in the businesses and in the cultural facilities.

It can be assumed that the existing houses as well as "over the shop accommodation" given their age are likely to have a lower occupancy rate than the average for the town which has seen a significant population increase in the newer suburban areas. The age profile is also likely to include a higher proportion of older persons. The housing units are small in size and can be expected to accommodate persons in the lower socio-economic brackets.

The construction of new housing units to the south will have re-enforced the residential population and helped consolidate the town.



7 Movement

7.1 Pedestrian

A survey of pedestrian movement in the vicinity has been taken and is presented as Appendix I to this document. As might be expected, movement is densest along Main Street and that density is maintained throughout the day. Movement along Athgarvan Road is relatively light and very low on Liffey Terrace. Pavement widths are very generous along Main Street outside both the Arts Centre and the library appropriate to an area requiring spill out space after the closure of events, but the pedestrian environment is poor near the junction of Main Street and Athgarvan Road given the heavy traffic volumes at what is the second of the two busiest junctions in the town. The street paraphernalia associated with the junction creates a hostile visual environment with vehicular traffic being dominant and the pedestrian coming second best. The phasing of the lights at the junction do not favour the pedestrian. Casual observation showed that pedestrians either ignored the signals completely or lost patience waiting for the lights to turn green for them and crossed as soon as there was a break in traffic The NRA along with Brady Shipman Martin have made proposals for a revised junction design at this point that would alleviate much of the poor pedestrian environment by extending the pedestrian space and this should be acted upon. The Athgarvan Road footpath is adequate for the volume of pedestrians. A dedicated pedestrian crossing is situated further south along the road giving access to the park. This crossing has a much more pedestrian friendly phasing. Main Street generally and particularly at this location offers a real opportunity to improve and rationalise all movement modes. Buffer planting, high quality paving and amenity furniture could all be considered as part of a civic improvement of the public realm in this location.

7.2 Cycling

There are no dedicated cycle routes in the vicinity of the cultural complex. Cycle parking facilities are not available in the immediate vicinity. The town generally has very limited cycling facilities. Both the County Development Plan and the Newbridge Local Area Plan contain policies advocating more sustainable form of transport. Main Street in particular, given its width, provides an opportunity to provide for dedicated cycle lanes and a start could be made in this location as it is such an obvious destination. Secure cycle parking is critical, and any redevelopment should incorporate such parking. The greater Dublin Area Cycling Network for Newbridge set out an appropriate network however nothing has been implemented to date.



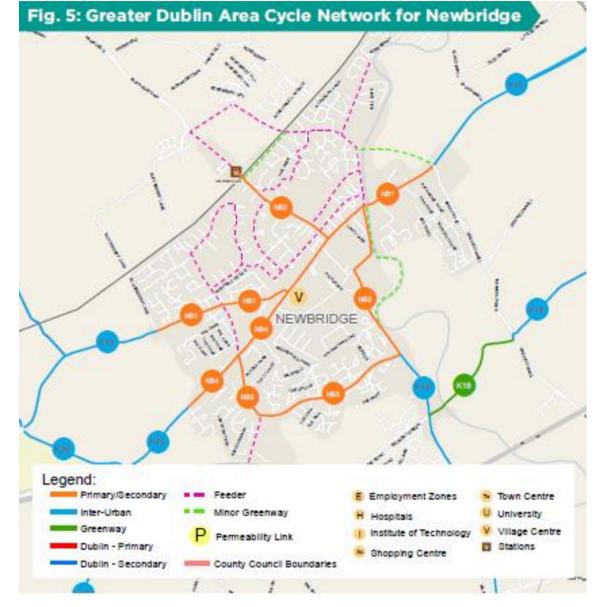


Figure 16: Proposed Cycle Network for Newbridge

(Source: National Transport Authority)

7.3 Wheelchair Access

There is no wheelchair access to the library, and any redevelopment must facilitate such access.

7.4 Public Transport

Newbridge has a range of public transport services. The railway station is located c. 800 metres north-west of the cultural complex. It captures an extensive national network including the Dublin to Cork, Limerick, Galway and Westport routes. The commuter Arrow service to Dublin provides a peak time frequency to Dublin of two trains per hour on weekdays. Bus Eireann route 126 serves Dublin, Naas, Newbridge/ Kildare/ Portlaoise and a bus stop is located on either side of Main Street at the cultural complex. There are also two local bus services the number 129



between Kilcullen and Newbridge with 15 stops within Newbridge town. Route No. 826 operating between Naas and Monasterevin has seven stops in Newbridge. In addition, there are services operated by local link Kildare South Dublin. The main spine of the town and areas to the north are well served but the south-east has limited services. This level of provision will facilitate any expansion of the cultural facilities.

Control of the contro

Figure 17: Public Transport Network in Newbridge

(Source: Metropolitan Workshop)



7.5 Vehicular Movement and Parking

Traffic management in Newbridge has undergone a major transformation in the last decade, driven largely by improvements required to facilitate town centre movement and the development of the Whitewater Shopping Centre. The 2002 Traffic Management Plan was reviewed in 2008. Many of the recommendations in the Plan have been implemented including the upgrading works to St Conleth's Bridge. A number of traffic signals have been installed and these are linked to an urban traffic control system that regulates traffic flows meaning that traffic moves comfortably within the town centre in out of peak times. Sections of the Southern Relief Road have been completed and it will further relieve any congestion in the town. Other more localised improvements will encourage more sustainable modes within the town centre.

There is extensive car parking available within the town centre both public and private in multistorey and surface car parks. There is also on-street parking available on Main Street in particular, and it is well used. It is recommended that such parking be retained as priced short-term parking to assist the survival of businesses in competition with the larger shopping centre and to maintain street animation. Loading bays also need to be retained

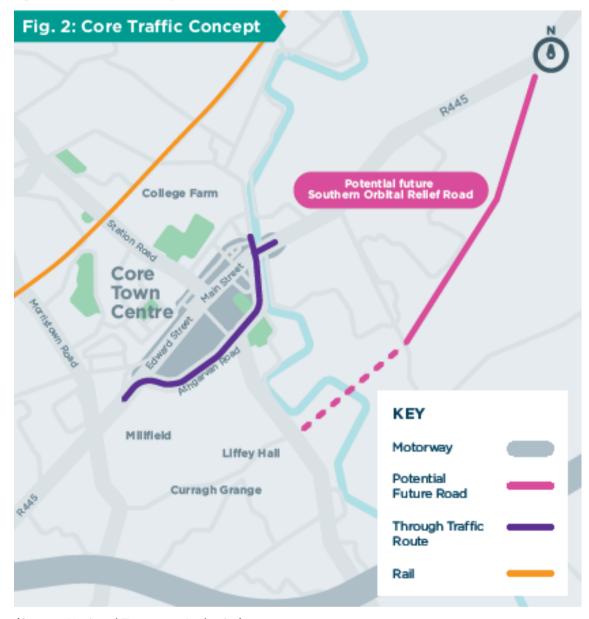
There is on-street parking available directly outside the Riverbank Theatre and this together with drop-off space should be retained in any redevelopment of the cultural complex. There is also some limited parking space within the Riverbank Arts Centre site.

The Draft Newbridge Town Transport Framework Plan 2019 re-examined the framework for the development of transport. It recognised that the traditional traffic management approach focussed on improving traffic flow and throughput did not represent a gain for the town centre and advocated a multi-modal transport approach that focussed on all transport modes in order to regenerate the town providing opportunities for business and retail to survive.

The plan set out various actions including the removal of through traffic on the Main Street/Edward Street Spine with by-pass proposals.



Figure 18: Core Traffic Concept



(Source: National Transport Authority)

It also set out a series of public realm improvement proposals including one for the Main Street and Athgarvan Road junction as well as for Main Street.

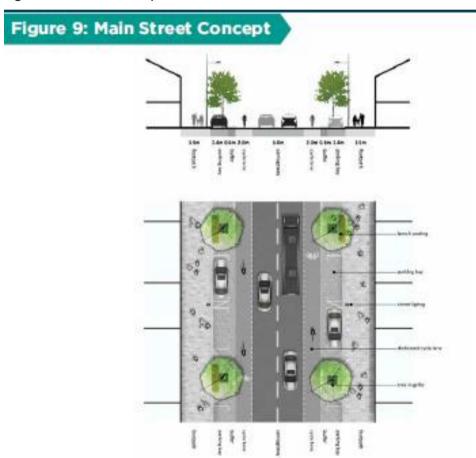


8 Public Realm

Kildare County Council sets out a broad set of design principles in relation to tactile paving, street furniture and vehicle and bicycle parking in their "Road and Street Design for All" document.

At present there are trees lining parts of Main Street and the area to the front of the Riverbank complex has been re-ordered to include landscaping, parking, public seating, surfacing and street lighting. There is a real opportunity to improve environmental conditions along the entire length of Main Street given its width. It is wide enough to accommodate footpaths, parking bays with trees at intervals and cycle lanes on either side together with a central carriageway with traffic moving in both directions. A start should be made at the cultural complex by setting a template for the future improvement of the entire length of Main Street. It could be combined with the NTA's proposals to radically improve the setting of the cultural complex at the junction of Main Street and Athgarvan Road.

Figure 19: Main Street Improvements



(Source: National Transport Authority)



Figure 17018: Before improvement







(Source: National Transport Authority)

Figure 22: Proposed improvement at junction in front of library

Figure 15: : Junction of Main Street and Athgarvan Road





Figure 22: 21Before improvement

Figure 23: 22Before improvement





A public Realm Design Manual has already been produced by Metropolitan Workshops. It covers issues of paving, tree selection, street furniture such as public lighting, seating, bollards, litter bins, signage and bicycle stands. Its application would do much to create a sense of place and bring visual order to the public realm.



9 Natural Amenity

The only area of natural amenity is the adjacent river Liffey and the riverbanks. There is a pedestrian entry point directly opposite the library and further southwards that gives access to the riverside walk as part of a riverside park. Although attractive in its own right the landscaping could be reassessed to ensure it relates meaningfully to any development of the cultural facilities. The river has no special conservation designation at this point but does provide a corridor for wildlife through the town.

Figure 24: The Town Park





10 Conclusions

- The existing complex of the library and Riverbank Centre are a vital component of the town's cultural and economic life
- The opportunity to enlarge and re-enforce cultural facilities is soundly based on a rising well-educated population
- The existing single storey extension to the library is of no architectural value and represents a poor use of valuable centrally located land. Its demolition would facilitate the construction of a greatly improved cultural facility.
- The new extension must be of the highest architectural quality given the prominence of the location at the entrance to the town facing the Liffey and the linear park.
- The protected status of the existing library must be respected, and any extension should enhance the complex.
- The library itself now needs careful assessment and should be restored to good condition fully respecting its conservation.
- Any extension should not exceed three storeys in height
- Materials finishes require careful assessment to ensure they are sensitive to the location beside a protected structure and have minimum maintenance characteristics.
- Consideration should be given to extending the project to include the immediate public realm to increase pedestrian areas at the signalled junction, introduce cycle lane provision and remove unnecessary poles, railings, signs etc. with a view to setting a template for the improvement of Main Street



APPENDICES



APPENDIX I – Survey Results

Background

In November 2021, MacCabe Durney Barnes carried out a pedestrian and observational study at Newbridge library & Cultural centre to assess pedestrian and non-motorised movements in and around the town centre. The survey investigated nine points (A-I below), to carefully assess the pedestrian footfall and activity involving movement tracing of pedestrians at intervals over two days.

Methodology

The methodology used for the study was first developed by the urban designer, Jan Gehl. 9 survey points were established as key positions located as in Figure 1 to get an understanding of activity in and around the town centre.

The key points were namely:

- A Main Street Crossing- 1
- B Traffic Island Crossing
- C Athgarvan Road Crossing
- D Main Street Crossing- 2
- E Liffey Terrace Junction
- F Into the Arts Centre
- G Main Street travelling East
- H Athgarvan Road-travelling North
- I Into the Library

The counts were carried on two days to get the flow of activity concerning a weekday and a weekend day. The chosen days were Tuesday 2nd November (10.00-17.00) and Saturday 6th November (10.00-17.00). Counts were carried for the duration of 10 minutes at each survey point every hour over the two days.

The survey information was collected manually, and data were recorded on an A4 data sheet with the map of the survey point and count table (see Appendix III). A total of five individuals recorded the footfall and traced the pedestrian movements on separate sheets for every 10 minutes throughout the survey. The counts were prioritised over the tracings during the study period.



Figure 25: Survey Points



Footfall Counts

Recorded FootFall

The recorded footfall count has been represented through graphs. See the complete set in Appendix I. The figures of the count have been extrapolated to get the hourly estimates. Extreme highs and lows have occurred in positions and at times noted as follows:

The position with highest and lowest total movements over the study period:

Highest Main Street Crossing- 2 (D)

Lowest Athgarvan Road Crossing (C)

The day with the higher and lower total movement over the study period:

Higher Tuesday 02.11.2021

Lower Saturday 06.11.2021

10-minute window with highest and lowest total movement over the study period:

Highest 15:48-15:58 on 02.11.2021 at Liffey Terrace Junction E

Lowest 11:11-11:21 on 06.11.2021 at Liffey Terrace Junction E

14:32-14:42 on 02.11.2021 at Into the Arts Centre F

15:48-15:58 on 02.11.2021 at Into the Arts Centre F



12:45-12:55 on 06.11.2021 at Into the Arts Centre F

11:17-11:27 on 06.11.2021 at Into the Library I

12:35-12:45 on 06.11.2021 at Into the Library I

Influencing Factors

Table 1 shows the recorded numbers and weather conditions each day.

Table 1: Counts on Each Day 10.00-17.00

| Date | Day | Type of Day | Count | Comment |
|------------|----------|-------------|-------|---------|
| 02.11.2021 | Tuesday | Weekday | 5,706 | |
| 06.11.2021 | Saturday | Weekend day | 4,533 | |

Another comparison of footfall count is made during the lunch hour between 13.00-15.00. See Table 2.

Table 2: Counts on Tuesday and Saturday 13:00-15.00

| Date | Day | Type of Day | Count | Comment |
|------------|----------|-------------|-------|---------|
| 02.11.2021 | Tuesday | Weekday day | 2,124 | |
| 06.11.2021 | Saturday | Weekend day | 1,470 | |

See Appendix II for the complete set of results.

Movement Tracing

A part of the study involved tracing the movement patterns of pedestrians while recording the counts to understand how people move through and inhabit the public realm. The indicative tracings combined in set taken over the study period are represented in single tracing per day included in Appendix III. Through repeat observations, patterns, desire lines and pause points became apparent.

Observed User Demographics

| Day | Pedestrians | Buggies | Bikes | Wheelchairs |
|---------------------|-------------|---------|-------|-------------|
| Tuesday 02.11.2021 | 5,376 | 150 | 156 | 24 |
| Saturday 06.11.2021 | 6,477 | 66 | 18 | 0 |



Chart 1: Breakdown by mode Tuesday 02.11.2021

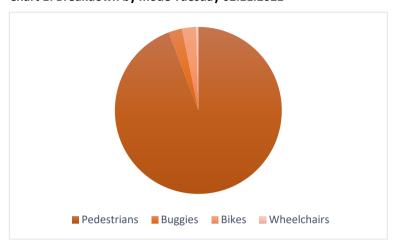
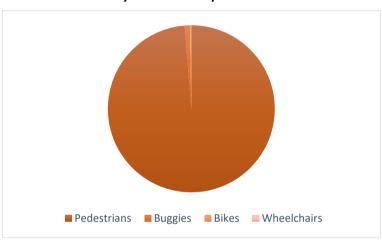
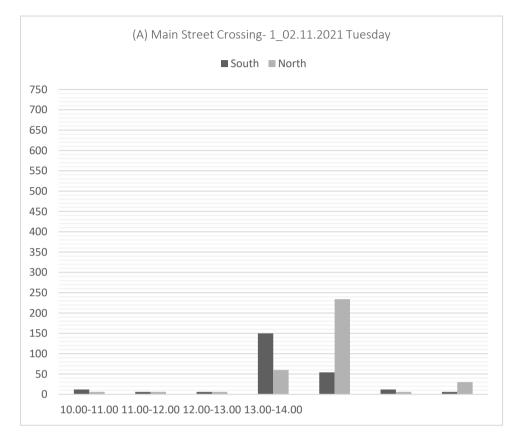


Chart 2: Breakdown by mode Saturday 06.11.2021

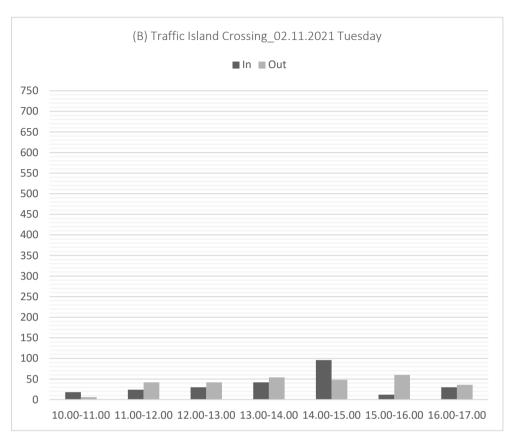


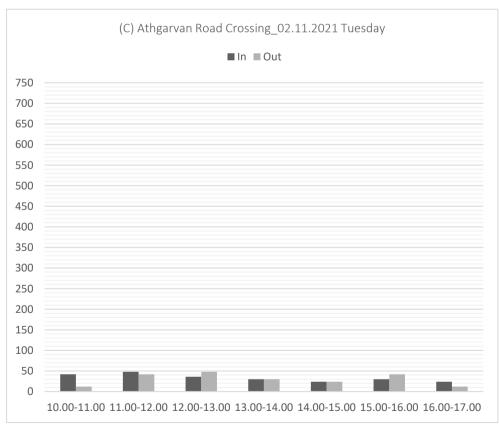


APPENDIX II – PEDESTRIAN COUNTS

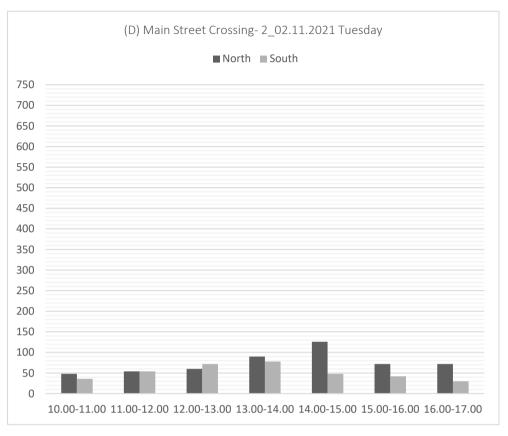


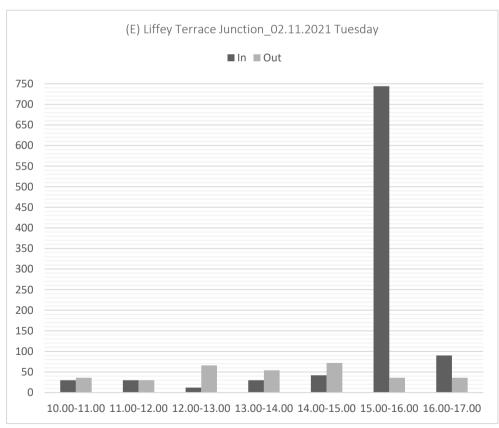




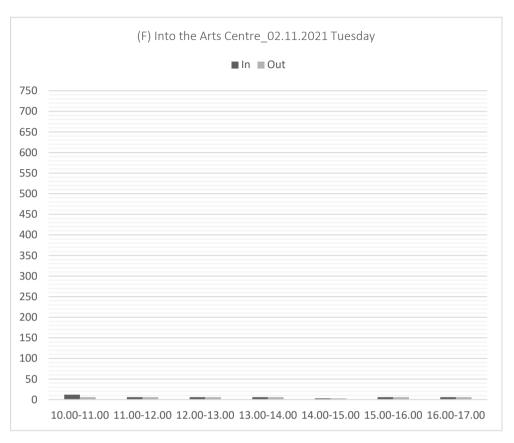


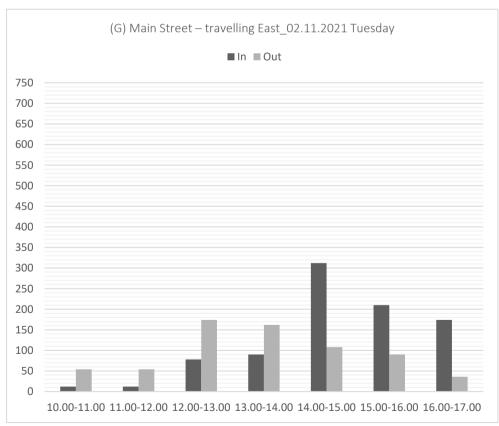




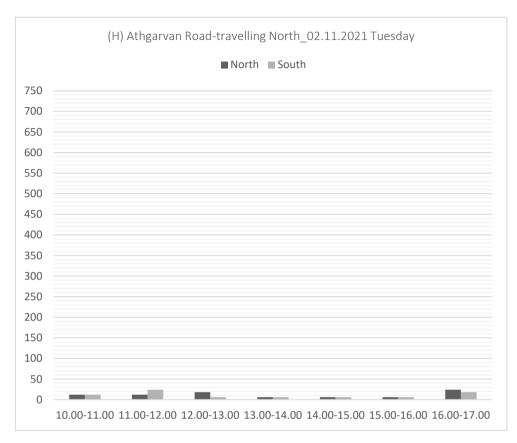


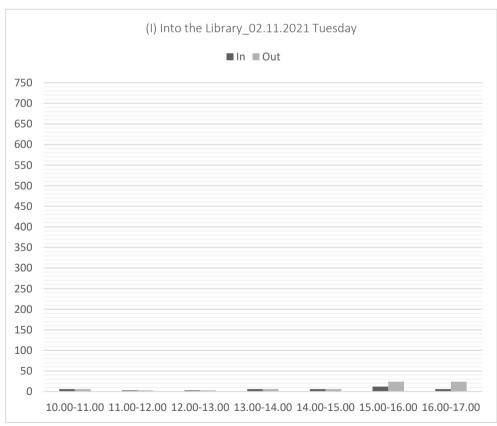




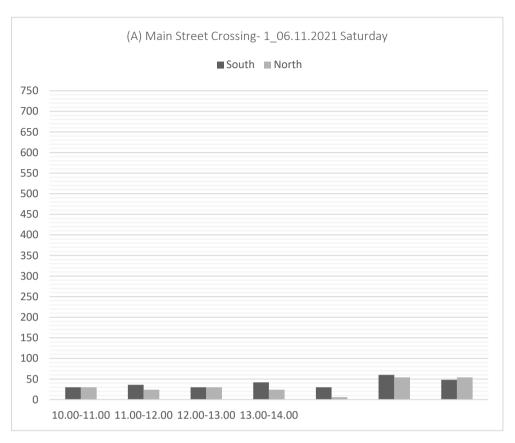


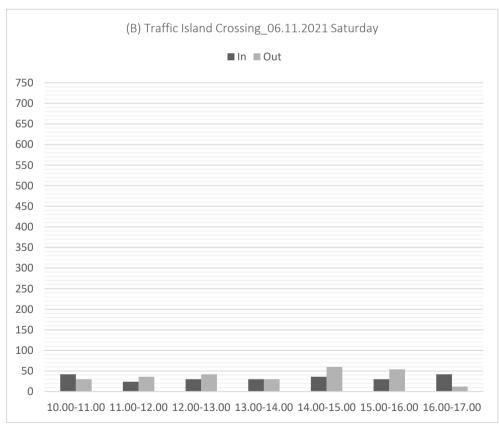




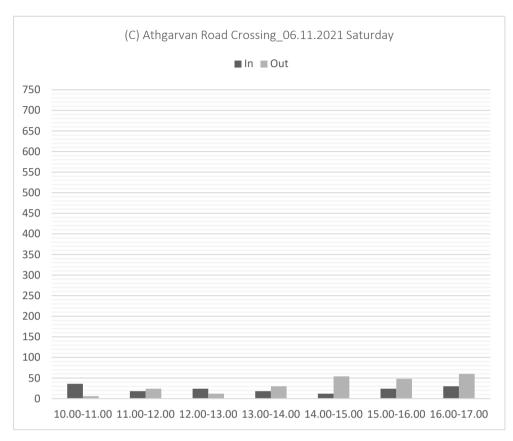


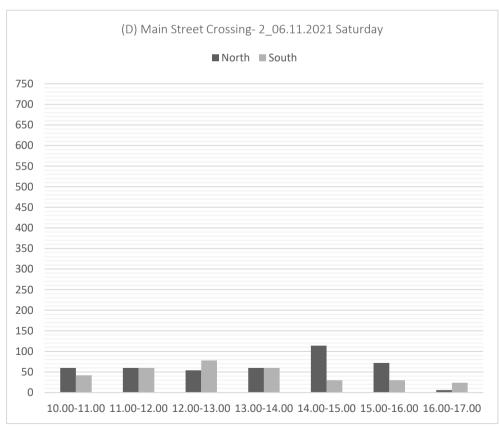




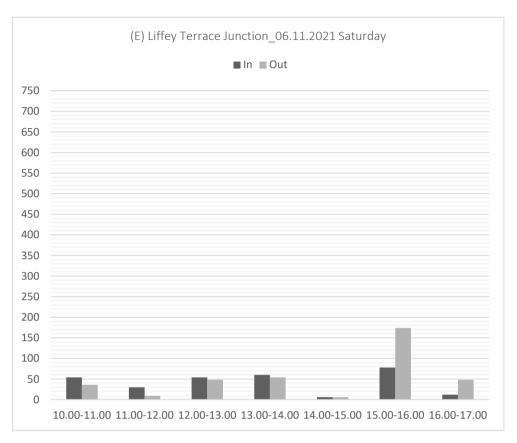


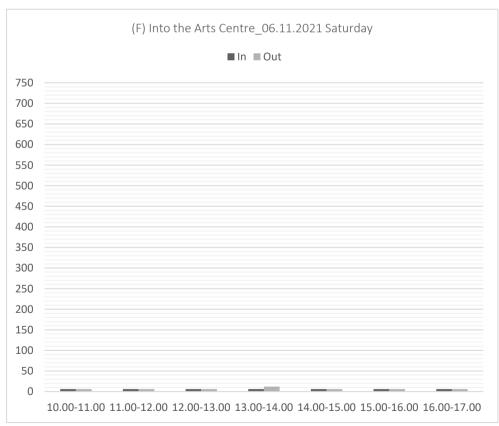




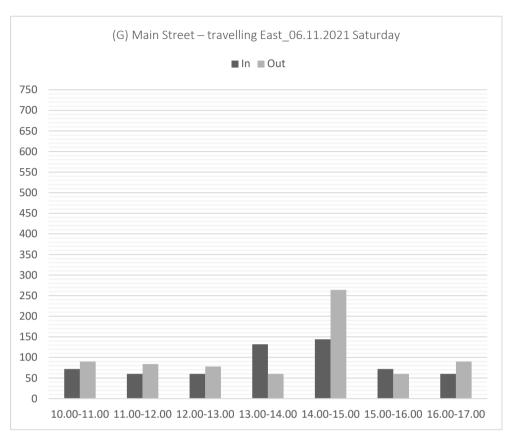






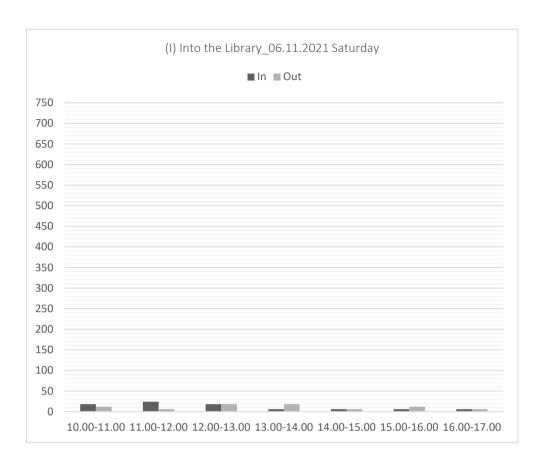








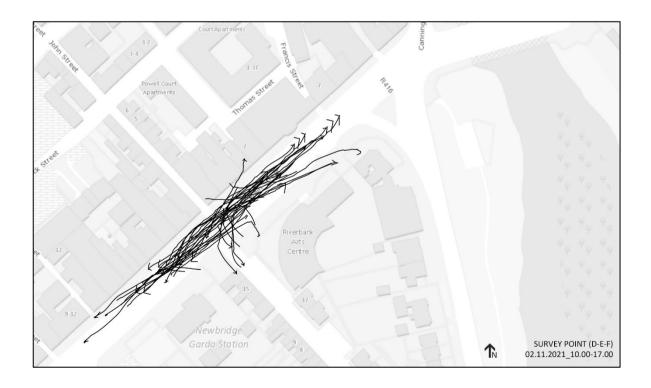




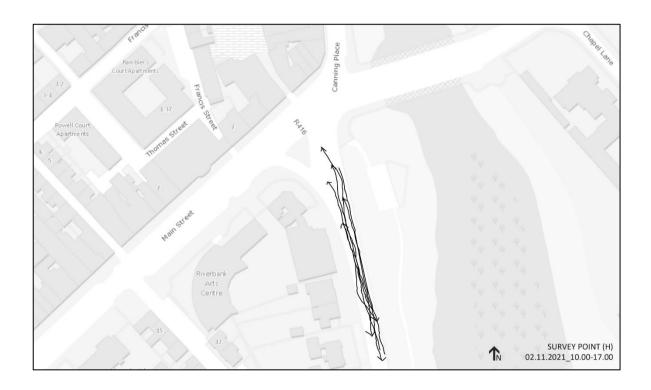


APPENDIX III - MOVEMENT TRACING



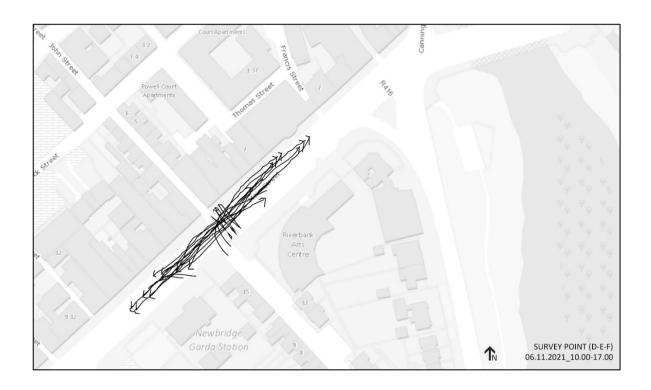








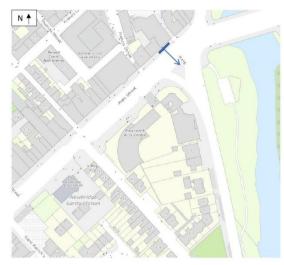








APPENDIX IV - SURVEY SHEETS



Survey point A – Main St Crossing Stand in position# Use a stopwatch - count for 10 minutes

Count all the pedestrians walking through the streets: Count pedestrians in both directions & on both sides

Count children, also children carried by parents Count buggies with symbol B

Count people on roller skates and skateboards as pedestrians Count people on bikes with symbol BK

Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

Please indicate the survey time:

| Southward | | | | | | | | | | | | | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Northward | | | | | | | | | | | | | | | | | |

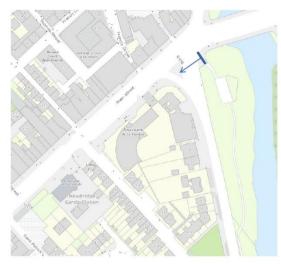


Survey point B – Traffic Island Crossing Stand in position# Use a stopwatch - count for 10 minutes

Use a stopwatch - count for 10 minutes
Count all the pedestrians walking through the streets:
Count pedestrians in both directions & on both sides
Count children, also children carried by parents
Count buggies with symbol B
Count people on roller skates and skateboards as pedestrians
Count people on bikes with symbol BK
Count wheelchairs with symbol BK
Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

| IN twd Town | | | | | | | | | | | | | | | | | | |
|-------------|--|---|---|---|---|--|--|--|--|--|---|--|--|--|--|--|--|--|
| Out of Town | | T | T | T | T | | | | | | T | | | | | | | |





Survey point C – Athgarvan Rd Crossing Stand in position# Use a stopwatch - count for 10 minutes

Count all the pedestrians walking through the streets: Count pedestrians in both directions & on both sides

Count children, also children carried by parents Count buggies with symbol B

Count people on roller skates and skateboards as pedestrians
Count people on bikes with symbol BK

Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

Please indicate the survey time:

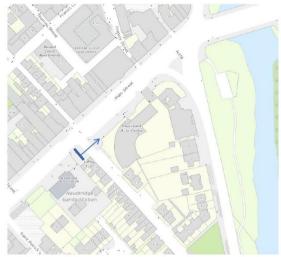
| IN twd Town | | T | | | | | | | | | | | | | | | |
|-------------|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Out of Town | | Ť | - | T | 1 | | | | | | | | | | | | |



Survey point D – Main St Crossing 2
Stand in position#
Use a stopwatch - count for 10 minutes
Count all the pedestrians walking through the streets:
Count pedestrians in both directions & on both sides
Count children, also children carried by parents
Count buggies with symbol B
Count people on roller skates and skateboards as pedestrians
Count people on biles with symbol BK
Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

| Northward | | | | | | | | | | | | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Southward | | | | | | | | | | | | | | | | |





Survey point E – Liffey Terrace Junction Stand in position#

Stand in position#
Use a stopwatch - count for 10 minutes
Count all the pedestrians walking through the streets:
Count pedestrians in both directions & on both sides
Count children, also children carried by parents

Count buggies with symbol B
Count people on roller skates and skateboards as pedestrians

Count people on bikes with symbol BK Count wheelchairs with symbol W

Don't count stationery people that have not yet crossed the line Trace direction of travel with arrow to indicate direction

Please indicate the survey time:

| IN twd Town | | | | | | | | | | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Out of Town | | | | | | | | | | | | | | | | | |



Survey point F – Into the Arts Centre Stand in position# Use a stopwatch - count for 10 minutes

Count all the pedestrians walking through the streets: Count pedestrians in both directions & on both sides

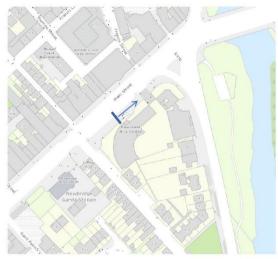
Count children, also children carried by parents Count buggies with symbol B

Count people on roller skates and skateboards as pedestrians
Count people on bikes with symbol BK

Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

| In | | | | | | | | | | | | | | | | |
|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Out | | | | | | | | | | | | | | | | |





Survey point G - Main Street - travelling east

Stand in position# Use a stopwatch - count for 10 minutes

Use a stopwatch - count for 10 minutes
Count all the pedestrians walking through the streets:
Count pedestrians in both directions & on both sides
Count children, also children carried by parents
Count buggies with symbol B
Count people on roller skates and skateboards as pedestrians
Count people on bikes with symbol BK
Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

Please indicate the survey time:

| IN twd Tow | n | | | | | | | | | | | | | | | | |
|-------------|---|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Out of Town | | | | Γ | | | | | | | | | | | | | |



Survey point H – Athgarvan Road travelling north Stand in position# Use a stopwatch - count for 10 minutes Count all the pedestrians walking through the streets:

Count pedestrians in both directions & on both sides
Count children, also children carried by parents
Count buggies with symbol B
Count people on roller skates and skateboards as pedestrians

Count people on roiler skates and skateboards as pedestrians
Count people on bikes with symbol BK
Count wheelchairs with symbol W
Don't count stationery people that have not yet crossed the line
Trace direction of travel with arrow to indicate direction

| North | | | | | | | | | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| South | | | | | | | | | | | | | | | | | |



APPENDIX V - SOCIO-DEMOGRAPHIC ANALYSIS

Population over Time

Based on an analysis of the 2016 Census, the town of Newbridge accommodates a population of 22,742 which approximates to 10% of Kildare county population. The population of Kildare have been growing rapidly and consistently over the past 30 years from 11,503 in 1986 to 22,543 in 2016.

The figure below compares growth in population of Newbridge, the County and the State over a 30-year timeframe with an index of 100% in 1996. The County and State's population has risen by 65 % and 31% respectively. During this same period, Newbridge Town and environs experienced a 59% increase in population, which is marginally below the County growth, but still higher than the State's growth.

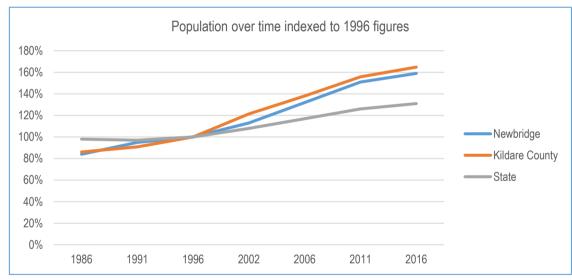


Figure 26: Population Over Time

Source: Census of Population

Age Profile

Settlement of Newbridge and the State have a broadly similar profile nearly one third of the Newbridge population is in the 0-18 age category, 68% are under 45 years of age compared to a national figure of 63% under age 45. It would be prudent to explore the future needs of these population cohorts as they age.

The figure below illustrates the under 18-year-old age cohort across the town. As expected, there is a higher percentage in this category in the suburban areas of the settlement.



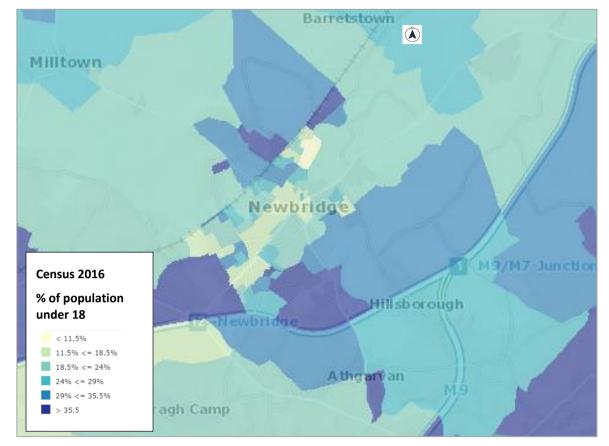


Figure 27: Percentage of 2016 Population under 18 Years of Age

Source: Census of Population 2016/Airo Mapping Module

Industry and Employment

The Census provides information on 'socio economic group' at small area level that can be useful to consider. These groups are classified from A to J based on the person's role in employment. Groupings A, B and C together shows the relative distribution of people that are employers, managers, and professionals, whereas grouping from D to J includes people with non-manual, manual, skilled, semi-skilled, farmers and agricultural workers. The percentage in the ABC group is a relatively low compared with the surrounding area.



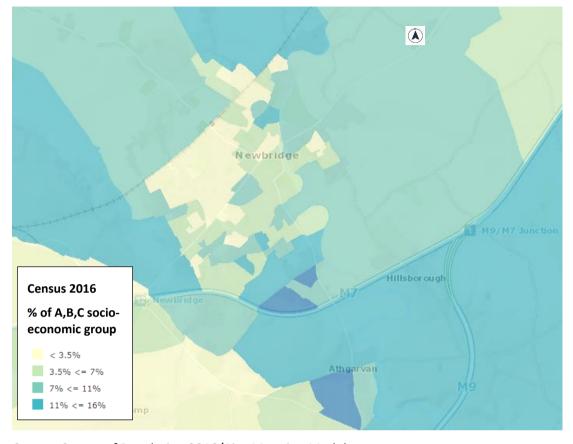


Figure 28: Percentage of ABC Socio-Economic Group in 2016

Source: Census of Population 2016/Airo Mapping Module

The table below shows the industry employing people in the County and in Newbridge Settlement. This data is extracted from the 2016 census of population. The industry of employment in the settlement is broadly aligned with that of the County except the Agriculture, forestry and fishing where there is approximately 70% difference. It shows that a slightly bigger proportion of the working population works in manufacturing and commerce and trade owing to the number of industries located in the settlement.

Table 3: Persons at work by industry

| | Kilda | re County | Newbrid | ge Settlement |
|-----------------------------------|-------|-----------|---------|---------------|
| | Total | Share | Total | Share |
| Agriculture, forestry and fishing | 3190 | 3.32 | 94 | 0.97 |
| Building and construction | 5838 | 6.08 | 501 | 5.25 |
| Manufacturing industries | 11310 | 11.79 | 1237 | 12.81 |
| Commerce and trade | 25524 | 26.60 | 2736 | 28.83 |
| Transport and communications | 8272 | 8.62 | 804 | 8.32 |
| Public administration | 6163 | 6.42 | 668 | 6.91 |
| Professional services | 21919 | 22.84 | 1987 | 20.57 |
| Other | 13731 | 14.31 | 1629 | 16.87 |
| Total | 95947 | 100 | 9656 | 100 |



Of the 22,742 persons that reside in Newbridge Settlement 9,656 persons are at work and 1734 persons are at school or college. Table 2 provides a breakdown of the occupation of residents in Newbridge and is compared with Kildare County.

Households and Housing Tenure

There are 7,664 households recorded in Newbridge. In 2016, 5,179 were households with 2-4 persons, c.38% had children under 15 years of age.

Figure 24 illustrates the percentage of owner-occupied houses in the town. It can be seen that there is quite a high percentage of owner-occupiers in the town.

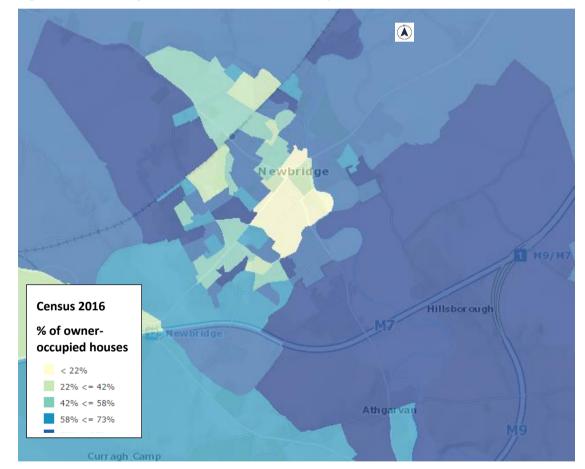


Figure 28: Percentage of ABC Socio-Economic Group in 2016

Source: Census of Population 2016/Airo Mapping Module

Means of Travel

The means of travel to work, school or college is broadly in line with the rest of the County. The predominant form of travel in the settlement is by car, either as driver or passenger with a combined overall figure of 56.69%. The share of people cycling to work or school in the settlement is marginally below that of the county average of 2%. Given that it is an urban area, it might have been expected that a higher percentage than that of the County as a whole would



travel by foot. However, Newbridge is marginally below the county average, with 1.87% travelling by bike. Given that it is an urban area, a higher percentage of persons travelling on foot is expected than that of the County as a whole. A difference of 7 percentage points is witnessed for travel on foot when the Settlement is compared to the County.

Table 4: Means of Travel by Residents in 2016

| Means of Travel | Kild | are County | Newbridge | ? |
|------------------------|---------|------------|-----------|-------|
| On foot | 20,384 | 13% | 3148 | 20.87 |
| Bicycle | 2,425 | 2% | 282 | 1.87 |
| Bus, minibus or coach | 14,338 | 9% | 905 | 6.0 |
| Train, DART or LUAS | 6,096 | 4% | 764 | 5.06 |
| Motorcycle or scooter | 422 | 0% | 34 | 0.22 |
| Motor car: Driver | 64,341 | 43% | 5867 | 38.91 |
| Motor car: Passenger | 28,170 | 19% | 2681 | 17.78 |
| Van | 6,020 | 4% | 499 | 3.30 |
| Other, incl. lorry | 561 | 0% | 18 | 0.11 |
| Work mainly at or from | 3,852 | 3% | | |
| home | | | 221 | 1.46 |
| Not stated | 4,683 | 3% | 659 | 4.37 |
| Total | 151,292 | 100% | 15078 | 100 |

Source: Census of Population 2016

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