

## **Cork Metropolitan Area Transport Strategy**

**Planning Datasheet Development Report** 

September 2018

National Transport Authority, Dun Scéine, Harcourt Lane, Dublin 2.

Document Identification Table						
Client / Project Owner National Transport Authority						
Document Title Planning Datasheet Development Report						
Task Order						
Task	Cork Metropolitan Area Transport Strategy					
Deliverable Code						
Version	V1.0					
Document Status	Draft					

## **Document Status Tables**

## Version 1

	Name	Position	Date
Originated by	Quentin O'Connor & Marjely Caneva		19/09/2018
Checked by	John Paul FitzGerald	Project Manager	20/09/2018
Approved by	John Paul FitzGerald	Project Manager	20/09/2018
NTA Review			

## Version 2

	Name	Position	Date	
Originated by				
Checked by				
Approved by				
NTA Review				

## Version 3

	Name	Position	Date	
Originated by				
Checked by				
Approved by				
NTA Review				

## **CONTENTS**

C	ONTEN	TS	i
1	Intro	duction	2
	1.1	Background	2
	1.2	Purpose of Report	2
	1.3	Report Structure	3
2	Planr	ing Datasheet Development	4
	2.1	Planning Datasheets	4
	2.2	Summary of Planning Datasheet Development Process	8
3	Deve	lopment of 2036 Core Forecast Scenario	9
	3.1	Methodology to Develop 2036 Core Forecast Scenario	9
	3.2	Methodology to Rebase 2036 Core Forecast Scenario to Census 2016	10
4	Deve	lopment of 2040 National Planning Framework Forecast Scenario	12
	4.1	Background	12
	4.2	Development of Planning Sheet at a Regional and Metropolitan Level	12
	4.3	Alignment with National Planning Framework's National Policy Objectives	13
	4.4	Distribution of National Planning Framework Growth at a Local Level	14
	4.5	Emerging Preferred Optimised Forecast Scenario	18
	4.6	Conclusions	19
Ar	nnex 1	Optimised 2040 National Planning Framework Planning Datasheets	20

## 1 Introduction

## 1.1 Background

The National Transport Authority (NTA) is a public body set up under statute and established in December 2009. The role and functions of the NTA are set out in three Acts of the Oireachtas; the Dublin Transport Authority Act 2008, the Public Transport Regulation Act 2009 and the Taxi Regulation Act 2013. In August 2015, the Department of Transport, Tourism and Sport (DTTaS) published its policy document "Investing in our Transport Future - Strategic Investment Framework for Land Transport". Action 4 of that framework states that: "Regional transport strategies will be prepared by the NTA and provide an input to regional spatial and economic strategies".

Having regard to its role in relation to transport, and the action placed upon it in the DTTaS policy document, the NTA, in collaboration with Cork County and City Councils, is developing a Transport Strategy for the Cork Metropolitan Area (CMA) covering the period 2017 to 2036. The strategy will provide a framework for the planning and delivery of transport infrastructure and services in the CMA over the next two decades. It will also provide a planning policy for which other agencies can align their future policies and infrastructure investment.

### 1.2 Purpose of Report

The methodology for the development of the Cork Metropolitan Area Transport Strategy (CMATS) 2040 is undertaken on a step by step basis, from: reviewing the existing policy and transport baseline, undertaking a detailed future demand analysis, developing transport options, optimisation of land use to align with high performing transport corridors, developing the draft Strategy for public consultation and subsequently finalising the Strategy, as shown in Figure 1-1.



Figure 1-1: Cork Metropolitan Area Transport Strategy Methodology

The purpose of this report is to present the Planning Datasheet development process and their application as part of the CMATS modelling assessments between the years 2017 and 2018. This process takes into account for the fundamental change in national policy in the form of accommodating the National Planning Framework at a Regional, Metropolitan and Local level.

The following provides a description of the contents of each section of the report;

- Section 2 describes the planning datasheets and their input to the transport modelling process for CMATS. It also provides a timeline of the process, taking into account Census 2016 and the publication of the National Planning Framework.
- Section 3 describes the methodology for the development of 2036 forecast scenario planning datasheets, including rebasing to Census 2016.
- Section 4 describes the development of 2040 National Planning Framework forecast scenario planning datasheets, including alignment with policy on a Regional, Metropolitan and Local level, the development of alternative land use optimisation scenarios and the finalisation of the Optimised 2040 NPF planning datasheet.
- The Optimised 2040 NPF planning datasheet is presented in the report's Appendix.

## 2 Planning Datasheet Development

## 2.1 Planning Datasheets

### 2.1.1 Description of Planning Datasheets

The NTA Regional Modelling System (RMS) is the model used to support the development of the CMATS. All the regional models, including the South West Regional Model (SWRM), include 3 core modelling processes (i.e. Demand Model, Road Assignment Model and Public Transport Assignment Model) which receive inputs from the National Demand Forecast Model (NDFM) and provide outputs for transport appraisal and secondary analysis. This process is shown in Figure 2-1 below.

The Planning Datasheet is one of the main inputs of the model and are used to develop the land use scenarios to be run within the model. The baseline scenario is based in data from the Census 2016 while the forecast scenario 2040 is built from the data from national and regional policy forecast growth and distributed at a local level.

The Planning Data referred to above is a national database of 99 demographic and spatial variables for each of the 18,488 Census Small Areas in the state. The main categories of planning data are:

- References and spatial definitions;
- Origin-based person types; e.g. age bands, gender, principal economic status (PES), employment type, and various combinations of categories;
- Destination-based person types; e.g. employment type or education type; and
- Households.

The **Planning Data Adjustment Tool** (PDAT) is a component of the SWRM that controls the planning data inputs. It is used to amend planning data to represent the combination of general changes over time and the relevant land-use planning scenarios.

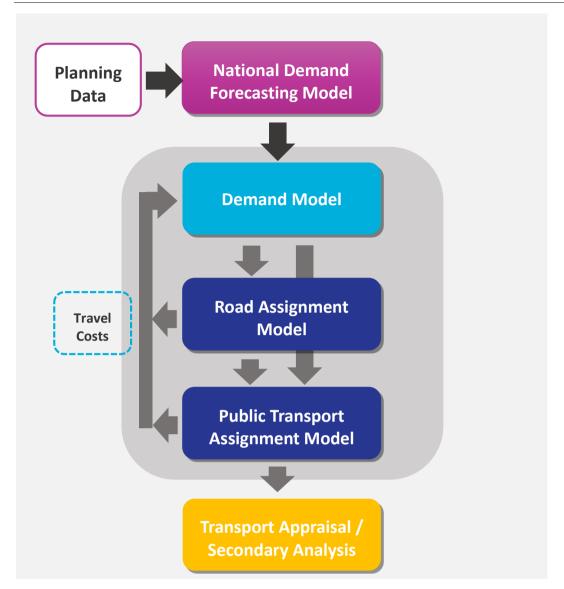


Figure 2-1: NTA South West Regional Model Structure

### 2.1.2 Mechanism for Distribution at a Regional, Metropolitan and Local Level

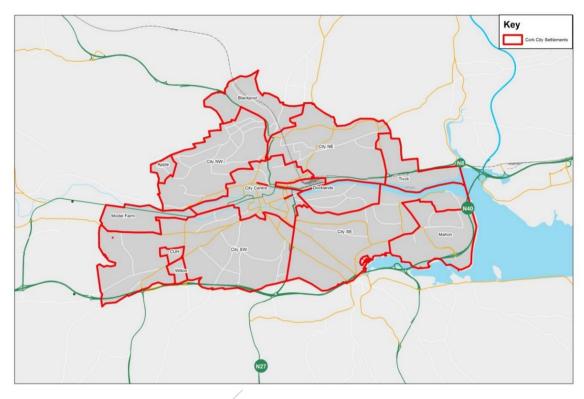
The population, employment and education data at its most disaggregated form consists of 2870 CSAs for the SWRM. In the interest of simplicity these CSAs were grouped into specific settlements that allowed for sensible analysis of these locations. The settlements do not match Electoral District boundaries but are defined based on a best match between the South West Regional Model Zoning System and the planning data at a CSA level. The settlement areas have been developed by the NTA planning team and have been used to adjust previous Planning Datasheets for example the 2035 Local Area Plan Datasheet. Additional growth is added at a settlement level in order to test future year scenarios. The settlements comprise of the following areas and are presented in Table 2-1 and illustrated in Figure 2-2 to Figure 2-4.

The table and figures below show the following breakdown of settlements:

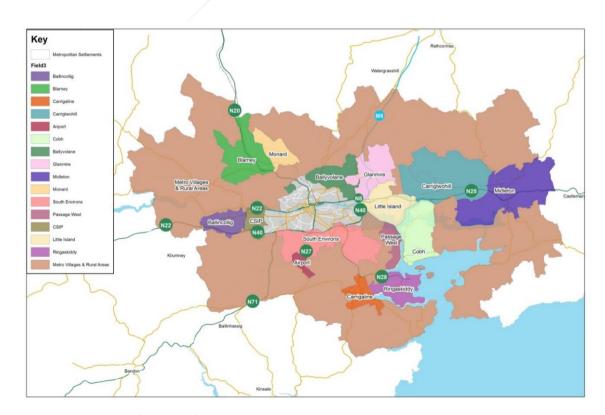
- Cork City 13 Settlements
- Cork Metropolitan 16 Settlements
- Cork County 20 Settlements
- Total 49

### **Table 2-1 Settlements**

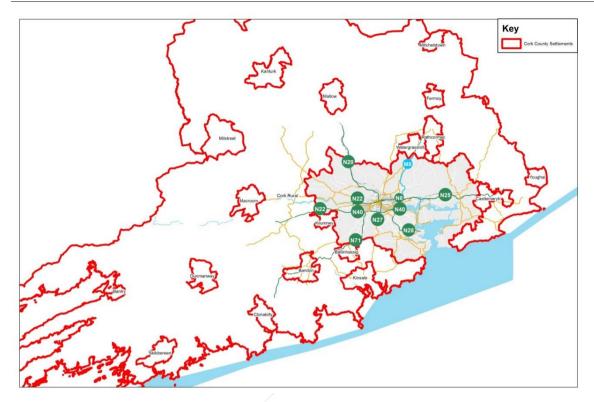
Settlements	City	Metropolitan	County
1.	City Centre	Ballincollig	Fermoy
2.	City NW	Blarney	Kinsale
3.	City NE	Carrigaline	Mallow
4.	City SE	Carrigtwohill	Bantry
5.	City SW	Cobh	Youghal
6.	Blackpool	Ballyvolane	Clonakilty
7.	Tivoli	Glanmire	Bandon
8.	Docklands	Midleton	Macroom
9.	Mahon	Monard	Mitchelstown
10.	Wilton	South Environs	Watergrasshill
11.	син	Passage West	Millstreet
12.	Model Farm	CSIP	Skibbereen
13.	Apple	Little Island	Kanturk
14.		Ringaskiddy	Dunmanway
15.		Airport	Rathcormac
16.	/	Metro Villages & Rural Areas	Castlemartyr
17.			Rathluirc
18.			Kilumney
19.			Ballinhassig
20.			Cork Rural



**Figure 2-2 City Settlements** 



**Figure 2-3 Metropolitan Settlements** 



**Figure 2-4 County Settlements** 

### 2.2 Summary of Planning Datasheet Development Process

In order to undertake the to facilitate the modelling analysis within CMATS, planning datasheets were required to be developed. During the process, many changes were made to the national dataset which included the publication of Census 2016 and a fundamental national policy shift with the National Planning Framework 2040. In response to the new policies and census and with the collaboration of the local authorities, various amendments were made to the original Planning Datasheet and to the preferred distribution scenario. This lead to the development of the finalised version of the 2040 CMATS Planning Datasheet.

The list below summarizes the Planning Datasheet Development timeline.

- 2036 Planning Datasheet presented in June 2017;
- 2016 National Census published on July 2017;
- Rebased 2036 Planning Datasheet presented in September 2017;
- 2040 National Planning Framework Draft published in September 2017;
- 2040 CMATS Planning Datasheet presented in December 2017;
  - Planning Datasheets aligned to 2040 NPF at the regional / settlement level;
  - Development of four alternative scenarios for localised distribution;
- Optimised 2040 CMATS Planning Datasheet January 2018;
- 2040 National Planning Framework published in February 2018; and
- Finalised 2040 CMATS Planning Datasheet February 2018.

## 3 Development of 2036 Core Forecast Scenario

### 3.1 Methodology to Develop 2036 Core Forecast Scenario

### 3.1.1 Population Growth and Distribution Methodology

The starting point for the development of the CMATS forecast growth scenarios were existing 2035 planning datasheets provided by the NTA. The Future Year 2035 Local Area Plan Masterplans Planning Datasheet was based on the existing Regional Planning Guidelines / Core Strategy distribution, with adjustments at sub-settlement level, to incorporate the various Masterplans expected population, employment and education yields. The Population Methodology started with the 2035 Planning Datasheet and applied the following adjustments:

- 1. Proportionally adjusted population growth to 2035 M2 F2 across the City, Metropolitan and County administrative areas;
- 2. This was applied on a simple, proportional basis, factors were applied at a settlement level growth distribution (settlements as defined in Chapter 2);
- 3. Proportionally uplifted the population from 2035 M2 F2 to 2036 M2 F2 by extrapolating the growth using the following factors: 0.8% City, 0.8% Metro and 0.2% County;
- 4. The 2036 M2 F2 Planning Datasheet reviewed and revised the distribution of growth forecasts for the non-metropolitan county settlements in order to more closely match the growth forecasts as set out in the County Development Plan 2014.
  - The County Development Plan future year (2022) growth distribution at the county non-metropolitan settlement level was applied to the growth between the total 2011 and 2036 population at settlements where the largest increase in population was experienced.
  - The smaller rural areas at the county non-metropolitan areas applied a
     percentage growth rate in line with County Development Plan percentage
     growth increases.
- 5. The 2036 M2 F2 Planning Datasheet was generated by starting with the 2035 Planning Datasheet and applying the adjustments listed above which resulted in the development of the population numbers for the 2036 M2 F2 Planning Datasheet.

### 3.1.2 Jobs / Education Growth and Distribution Methodology

The adjustment to the Job and Education numbers to develop the 2036 Planning Datasheet started with the 2035 Planning Datasheet and applied the following adjustments:

- 1. The 2036 scenario applied the 2035 LAP Planning Datasheet education numbers at a settlement level for the city, metropolitan and county areas. Adjustments were made to a small number of settlements to ensure that education growth as a percentage of population growth was sensible.
  - An average of the 2011 and 2035 education ratios was applied to ensure that there was not an over provision of education places as the population growth had been constrained to M2 F2.
  - For example, settlements applied an average education ratio in order to constrain education places to reflect the reduction in population to M2 F2 levels.
- 2. Ratios between population and job at a settlement level were reviewed for previous planning datasheets;

- 3. The 2036 employment by settlement applied an average of the 2011 and 2035 employment ratios to the majority of settlements. Manual adjustments at an individual settlement level were made based on a review of each settlement.
  - For example, at the Docklands a 2035 ratio was applied to ensure that the intensification of employment was retained in that settlement for the 2036 Planning Datasheet.
  - It is acknowledged that the 2011 employment numbers by settlement reflect the economic conditions at the time. The 2035 employment numbers reflect an employment growth that assists in the rebalancing of employment.
  - A further sense check looked at reviewing the employment growth rate was approximately 50% of the overall population growth rates. This sense check demonstrated that the city (43%), metropolitan (50%) and county (44%) is deemed to be appropriate.

## 3.2 Methodology to Rebase 2036 Core Forecast Scenario to Census 2016

### 3.2.1 Background

In July 2017, the previously developed 2036 M2F2 Planning Datasheet was revised to take into consideration the feedback from Cork City and County Councils. It was noted at the Cork Metropolitan Transport Strategy Inception meeting that the main concern was that the growth in population was underrepresented by M2F2 between 2011 and 2016. In order to respond to this, data from the then recently released Census 2016 Small Area Population Statistics (SAPS) was used to uplift the population growth and better represent the population in the planning datasheet across the city, metropolitan and county areas.

#### 3.2.2 Methodology

The methodology applied for determining the revised Planning Datasheet is outlined below:

- 1. Uplift the 2011 base planning sheets to align at a City, Metro and County level with the 2016 census levels;
  - This provided a 2016 baseline;
- 2. Taking the 2011 to 2036 M2F2 forecast growth:
  - Remove the 2011 to 2016 growth;
  - Add the M2F2 forecast growth from 2016 to 2036 back on top of the 2016 baseline.

### 3.2.3 Baseline Census Changes between 2011 and 2016

The increase in population from 2011 to 2016 is summarised below:

- City 5.39% increase in population
- Metropolitan Area 5.42% increase in population
- County (non-metropolitan area) 3.56% increase in population

The 2016 census data provided the level of population growth between 2011 and 2016 and adjustments were made to the 2036 M2F2 Planning Datasheet to capture the high growth during this period (See Figure 3-1).

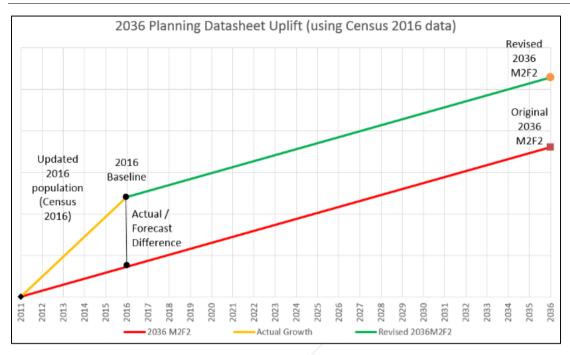


Figure 3-1: Rebasing Methodology

## 4 Development of 2040 National Planning Framework Forecast Scenario

### 4.1 Background

In September 2017, the National Planning Framework (NPF) 2040 Draft was published, setting out the planning policy framework for the next 22 years. The publication of the NPF Draft provided a major new policy emphasis on renewing and developing existing settlements, rather than continual expansion and sprawl of cities and towns into the countryside, at the expense of town centres and smaller villages.

Within the estimations of population and employment growth at the national level, the NPF Draft recognised the role that Cork and the other regional cites of Limerick, Galway and Waterford have to play in providing a counter-weight to Dublin and assigned a population growth forecast of 50-60% to each regional city.

For this reason, both the growth forecasts and the horizon timeframe for CMATS were amended to reflect these changes and to align with the published NPF 2040.

In the absence of the Regional Spatial and Economic Strategy (RSES) for the Southern Region and Metropolitan Area Strategic Plan (MASP) for Cork, assumptions were made on the distribution of growth in the CMA, taking into account the NPF National Planning Objectives and development plans of the Cork local authorities.

### 4.2 Development of Planning Sheet at a Regional and Metropolitan Level

The following outlines the methodology for determining the 2040 NPF population levels for the CMA:

- The Draft NPF outlines **375,000** population growth for Southern Region;
- The Draft NPF outlines **115,000** population growth for Cork City and Suburbs;
- The Draft NPF outlines a **52,000** and **29,000** population growth for Limerick and Waterford Cities and Suburbs, respectively;
- The remainder of the growth at a county level was apportioned across the Southern Region based on 2016 population distribution, from Census 2016;
- This method resulted in an estimate for the population growth for the rest of Cork County, (outside of the City and Suburbs) of 48,631, with a combined City and County population growth of 163,631;
- The **48,631** population growth was then apportioned between the County Metropolitan Area (outside of the City and Suburbs area) and the County's Non-Metropolitan Area, again, based on 2016 population distribution from Census 2016;
- On this basis the **14,969** was then apportioned to the Metropolitan Area outside of the Cork City and Suburbs area (the outer CMA);
- Combining the Cork City and Suburbs and Outer CMA's population growth resulted in an overall population growth of **129,969** for the entire CMA.

Table 4-1 below outline the summary 2040 NPF growth targets for the Southern Region, by geographic area.

Table 4-1 Estimated Forecast Growth between 2016 and 2040

Southern Region	Population Growth
Total Cork Metropolitan Area	129,969
Cork City and Suburbs	(115,000)
Remaining Metropolitan Area (estimate)	(14,969)
Remainder of Cork County (estimate)	33,662
Limerick City and Suburbs	52,000
Waterford City and Suburbs	29,000
Remainder of wider are growth outside of CMA, and Limerick and	130,369
Waterford City and Suburbs	
Target Population Growth	375,000

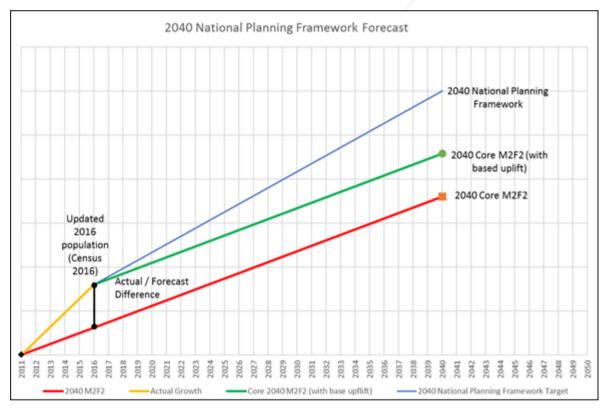


Figure 4-1: 2040 NPF Forecasting Methodology

## 4.3 Alignment with National Planning Framework's National Policy Objectives

The various policies within the NPF are structured under National Policy Objectives (NPOs). NPOs were developed following extensive analysis and consultation and set a new way forward for regional and local planning and sustainable development policy in Ireland.

The NPOs have been used as the basis to develop the land-use growth targets and distribution of growth for CMATS, along with the core strategies within the Cork City and Cork County Development Plans.

Some of the key NPOs relevant to the development of CMATS include:

- NPO 1b Southern Region population growth of between 340,000-380,000 to 2040 i.e. a target population of almost 2 million;
- NPO 1c –225,000 additional people in employment in the Southern Region i.e. 880,000 in total;
- NPO 2a A target of half (50%) of future population and employment growth will be focused in the existing five cities and their suburbs;
  - □ This translates into a targeted population growth for the Cork City and Suburbs (NPO8) of between 105,000 and 125,000 above 2016 levels.
- NPO 3 The NPF sets a target for at least 40% of all new housing to be delivered nationally within the existing built-up areas of cities, towns and villages on infill and/or brownfield sites;
  - □ This translates to 50% of the growth to be accommodated within the built-up footprints of the Cork City and Suburbs and 30% of the growth in surrounding settlements within their existing built-up footprints.
- NPO 9 In each Regional Assembly area, settlements outside of 'City and Suburbs' may be identified for significant (i.e. 30% or more) rates of population growth at regional and local planning stages;
  - The NPF makes specific reference to the fact that these settlements may lie within the commuter catchment of the city or areas that have potential for high levels of travel by sustainable modes;
  - □ For Cork, this would align with settlements along the existing rail line and future high capacity transport corridors.
- NPO 68 NPF outlines that Metropolitan Area Strategic Plans (MASPs) may enable up to 20% of the phased population growth targeted in the principal City and Suburban area, to be accommodated in the wider metropolitan area i.e. outside the city and suburbs, in addition to growth identified for the Metropolitan area. The NPF states that this should be subject to:
  - Any relocated growth being in the form of compact development, such as infill or a sustainable urban extension; and
  - Any relocated growth being served by high capacity public transport and/ or related to significant employment provision.
- NPO 69 Statutory Arrangements between spatial planning and transport planning in the Greater Dublin Area will be extended to other cities.

## 4.4 Distribution of National Planning Framework Growth at a Local Level

### 4.4.1 Approach

Following the procedure of determining the 2040 NPF population levels for the CMA, further assumptions were made for the distribution of the 2040 NPF growth at a settlement level within the CMA. The following steps were used to allocate growth at the settlement level within the CMA:

- Distribute internally to CMA based on Core Distribution for City and County;
- Optimise and intensify land-use growth along the two identified high capacity public transit corridors;
- Liaison and feedback from the Cork City and County Councils; and
- Finalised CMATS 2040 forecasts for assessment.

### 4.4.2 Development of Alternative Distribution Scenarios

Following the procedure of determining the 2040 NPF population levels for the CMA and at the settlement level, four alternative scenarios were developed to identify the potential range of development intensities. In general, these scenarios would:

- 1. Concentrate growth around the Rail Corridor and a potential East-West Public Transport Corridor; and
- 2. Provide for a less concentrated growth scenario, distributing population and employment growth more widely across the CMA.

Each of the scenarios included for the same NPF population growth levels of 129,969 between 2016 and 2040 for the CMA, with an alternate distribution of this growth for each scenario. The scenarios are listed below and are described in further detail in subsequent sections.

- Scenario 1 2040 NPF Core Growth Non-Optimised Distribution;
- Scenario 2 2040 NPF Growth Consolidated Growth Along Public Transport Corridors;
- Scenario 3 2040 NPF Growth –Consolidated Growth Along Public Transport Corridors with Targeted Growth Areas; and
- Scenario 4 2040 NPF Growth Broader distribution of Growth across the CMA.

### 4.4.3 Scenario 1 – 2040 NPF Core - Non-Optimised Distribution of Growth

### **Population**

The following outlines the methodology for the distribution of the 2040 NPF Core growth, at 'Settlement' level:

- A 2036 M2F2 growth scenario was developed, based on existing Regional Planning Guidelines / Core Strategy distribution, and constrained to a growth rate derived from the CSO M2F2 population growth scenario for the South West Region;
- The population growth distribution used in the 2036 M2F2 scenario was then applied to a higher population CMA growth target for 2040, as derived from the Draft NPF.
- The 2040 M2F2 Core Scenario also takes into consideration, the uplift in population, between 2011 and 2016 for the City and County areas, as outlined graphically in **Error!** Reference source not found., below.

### **Employment**

The following method was applied, to determine the level of employment growth and its distribution within the CMA, at 'Settlement' level:

■ The level of employment is based on an assumed ratio of the population in jobs to total population¹ at the settlement level.

Note that consideration is then given to areas where there will be expected concentrations of employment growth (e.g. Docklands, Tivoli, Little Island, Airport and CSIP).

### **Education**

The following method was applied, to determine the level of education place growth and its distribution within the CMA, at 'Settlement' level:

-

<sup>&</sup>lt;sup>1</sup> A ratio of 0.42 across CMA.

The level of education is based on an assumed ratio of the population in full time education to total population<sup>2</sup> at the settlement level.

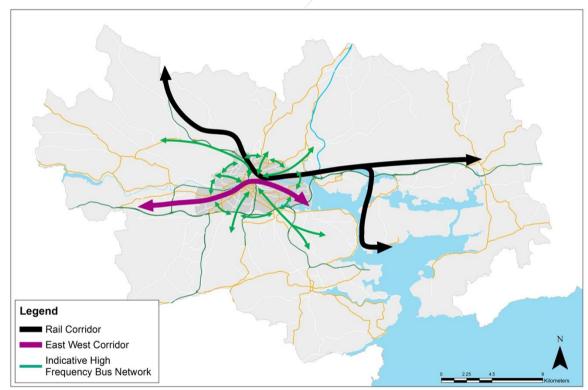
## 4.4.4 Scenario 2 – 2040 NPF Growth Distribution - Concentrated Growth along Public Transport Corridors

### **Population**

Scenario 2 concentrates the 2040 NPF growth primarily along the Rail and East-West Public Transport Corridors, as shown in Figure 4-2. These corridors have been identified in the Demand Analysis and Option Development<sup>3</sup> stages of the Cork Metropolitan Area Transport Strategy, as strategic public transport corridors with the potential to accommodate increased development, supporting sustainable travel patterns and an improved public transport mode share.

The methodology applied is as follows:

- Calculate the difference in CMA population totals between 2040 NPF and 2040 M2F2; and
- The population difference is then distributed, at 'settlement' level, into settlements which are wholly or partly located within the transport corridors, identified in the Demand Analysis / Option Development work, referred to above, the distribution between the selected settlements is based on their relative population levels.



**Figure 4-2: Public Transport Corridors** 

### **Employment**

In determining the distribution of employment growth total at 'settlement' level, the ratio of population to employment at the 'settlement' level from the 2040 Core M2F2 scenario was maintained. The distribution of the <u>difference</u> between 2040 M2F2 and 2040 NPF, is then

<sup>&</sup>lt;sup>2</sup> A ratio of 0.24 across CMA.

<sup>&</sup>lt;sup>3</sup> This was presented and discussed at the Strategy Stakeholder Meeting in September 2017.

distributed at 'settlement' level in the same manner as population, i.e. into settlements which are wholly or partly located within the transport corridors.

#### **Education**

In determining the education place growth total at CMA level, the ratio of population to education at the settlement level from the 2040 Core M2F2 scenario was maintained which ensures that education numbers grow in line with population.

## 4.4.5 Scenario 3 – 2040 NPF Growth Distribution - Concentrated Growth along Public Transport Corridors (Targeted Growth Areas)

### **Population**

Scenario 3, again, concentrates the 2040 NPF growth along the Rail and East-West Public Transport Corridor, as shown in **Error! Reference source not found.**. However, settlements have been adjusted to consider greenfield / brownfield infill sites with higher levels of expected growth, such as Docklands<sup>4</sup>.

### **Employment**

For employment, higher concentrations of growth have been assigned to Docklands, Tivoli<sup>5</sup>, Airport, Ringaskiddy and CSIP as these are defined as strategic employment growth areas. To ensure the level of employment within the CMA remains the same, the employment levels in the non-targeted settlements are reduced proportionally.

### **Education**

For education, higher concentrations of growth have been assigned to CSIP to reflect the likely concentration of Tertiary level places at this location. To ensure the level of employment within the CMA remains the same, the employment levels in the non-targeted settlements are reduced proportionally.

## 4.4.6 Scenario 4 - Alternative 2040 NPF Distribution – Wider Distribution of Growth across the City and Immediate Environs

### **Population**

Rather than concentrating growth along the public transport corridors identified in the Demand Analysis / Option Development work, it distributes the 2040 NPF growth throughout the City and Immediate Environs, based on mode share levels at 'settlement' level. This was done, using the following methodology

- Determine 24-hour mode share for settlements, based on a run of the initial Transport Strategy recommendations for Cork using the South West Regional Model (SWRM) for 2040;
- Calculate the difference in City and Immediate Environs population totals between 2040
  NPF and 2040 M2F2; and
- The difference is then allocated to 'settlements' located within City and Immediate Environs, based on mode share levels at 'settlement' level.

The use of 24-hour Car mode share as the means of distributing growth across the Metropolitan area allows for the relative performance of each 'settlement' to be captured in the land-use forecasts. Mode share also captures the relevant trip length distributions for each 'settlement',

<sup>5</sup> Tivoli Docks Issues Paper – Cork City Council 2017

<sup>&</sup>lt;sup>4</sup> Source: Docklands Issues Paper 2017

which ensures the prioritisation of 'settlements' that are closer to key trip attractor locations and/or are more conducive to the achievement of a higher non-car mode share.

### **Employment and Education**

The methodology used was to distribute employment and education growth at a 'settlement' level and this was calculated on the same basis as for Scenario 2. Employment and Education growth for Scenario 4 is distributed in a similar way to population growth, as described above.

### 4.5 Emerging Preferred Optimised Forecast Scenario

Following engagement and liaison with Cork City and County Councils permitted to identify Scenario 3 as the preferred optimization methodology and forecast scenario. Later, based on feedback obtained from the local authorities, further amendments were made for the optimization of the distribution approach, which lead to the finalised version of the 2040 CMATS Planning Datasheet aligning with the finalised NPF published in February 2018.

Table 4-2 to Table 4-4 below present a high level summary of the processes for the emergence of the finalised version.

Table 4-2: Summary of Development of Optimised Population Forecast

	2011	2036 Core	Rebased 2040 Core	2040 NPF Sc. 1	2040 NPF Sc. 2	2040 NPF Sc. 3	2040 NPF Sc. 4	Optimised 2040 NPF
City	119,230	142,426	147,925	179,428	184,660	189,585	197,276	186,850
County Metro	170,509	203,070	/211,008	255,946	250,715	245,790	238,098	246,935
County (excl. Metro)	229,293	242,718	250,350	271,124	271,124	271,124	271,124	267,551
Total	519,032	558,214	609,283	706,499	706,499	706,499	706,499	701,337

**Table 4-3: Summary of Development of Optimised Employment Forecast** 

	2011	2036 Core	Rebased 2040 Core	2040 NPF Sc. 1	2040 NPF Sc. 2	2040 NPF Sc. 3	2040 NPF Sc. 4	Optimised 2040 NPF
City	64,731	82,731	86,018	104,337	108,144	109,282	112,204	120,167
County Metro	47,415	61,002	63,553	77,088	73,281	72,143	69,221	60,596
County (excl. Metro)	44,211	47,946	49,365	53,461	53,461	53,461	53,461	52,756
Total	156,357	191,679	198,935	234,886	234,886	234,886	234,886	233,519

**Table 4-4: Summary of Development of Optimised Education Forecast** 

	2011	2036 Core	Rebased 2040 Core	2040 NPF Sc. 1	2040 NPF Sc. 2	2040 NPF Sc. 3	2040 NPF Sc. 4	Optimised 2040 NPF
City	41,337	48,444	50,742	61,549	63,589	58,889	65,895	58,627
County Metro	28,175	35,575	36,912	44,776	42,733	47,433	40,526	47,306
County (excl. Metro)	39,184	42,430	43,709	47,336	47,336	47,336	47,336	46,712
Total	108,696	126,449	131,363	153,658	153,658	153,658	153,658	152,646

### 4.6 Conclusions

The development of the CMATS Planning Datasheet and scenarios for growth distribution was a comprehensive and complex process. During this time, various changes came with the publication of Census 2016 and National Planning Framework 2040, which required real-time responses in order to align the Planning Datasheet to these policies. The optimisation of the Planning Datasheet was undertaken in collaboration of the Local Authorities, who provided feedback in different stages of the development process, intensifying development around public transport corridors. Currently, the finalised CMATS 2040 Planning Datasheet is aligned with, and capable of accurately representing, the National Planning Objectives of the NPF 2040 at a Regional, Metropolitan and Local Level.

# Annex 1 Optimised 2040 National Planning Framework Planning Datasheets

The following Table 4-5 details the Optimised 2040 National Planning Framework Planning Datasheet utilised in CMATS.

Table 4-5: Optimised 2040 National Planning Framework Planning Datasheet Used for Cork Metropolitan Area transport Strategy

Settlements	Area	(	Optimised 2040 NPF	
		Population	Employment	Education
City Centre	City	26,986	37,000	13,781
City NW	City	19,930	2,360	2,533
City NE	City	19,000	3,353	1,795
City SE	City	20,953	2,982	4,796
City SW	City	45,106	12,500	31,592
Blackpool	City	8,978	5,000	326
Tivoli	City	9,788	5,000	717
Docklands	City	23,750	23,350	574
Mahon	City	7,829	10,250	1,428
Wilton	City	729	3,157	235
CUH	City	1,352	4,520	101
Model Farm	City	2,181	7,000	723
Apple	City	268	3,695	28
TOTAL - CITY	1 1	186,850	120,167	58,627
Ballincollig	Metro	30,807	5,606	5,719
Blarney	Metro	13,100	1,005	1,949
Carrigaline	Metro	17,054	1,634	3,102
Carrigtwohill	Metró	13,695	3,535	2,816
Cobh	Metro	14,536	1,474	2,943
Ballyvolane	Metro	11,967	1,887	1,819
Glanmire	Metro	16,113	1,356	3,696
Midleton	Metro	27,942	4,611	5,877
Monard	Metro	7,655	254	940
South Environs	Metro	34,859	4,573	2,333
		6,617	215	2,333 851
Passage West	Metro	4,213	8,687	8,000
CSIP	Metro			
Little Island	Metro	2,875 1,426	10,858 5,000	397
Ringaskiddy	Metro	·		397
Airport	Metro	386	5,000	1
Metro Villages & Rural Areas	Metro	43,687	4,901	6,653
TOTAL - COUNTY METROPOLIT		246,935	60,596	47,306
TOTAL - CITY & COUNTY METR		433,786	180,763	105,933
Fermoy	County	8,722	3,127	2,903
Kinsale	County	7,903	2,327	1,889
Mallow	County	16,429	5,496	3,987
Bantry	County	5,594	2,412	1,418
Youghal	County	10,197	2,056	1,888
Clonakilty	County	7,306	3,684	2,158
Bandon	County	9,391	2,934	3,057
Macroom	County	5,612	1,976	1,418
Mitchelstown	County	5,276	1,644	1,444
Watergrasshill	County	1,500	658	3
Millstreet	County	3,432	1,332	550
Skibbereen	County	4,604	2,213	1,535
Kanturk	County	4,188	1,038	1,199
Dunmanway	County	2,909	917	962
Rathcormac	County	2,851	241	367
Castlemartyr	County	2,639	266	313
Rathluirc	County	4,555	2,485	1,384
Kilumney	County	1,788	130	0
Ballinhassig	County	791	29	158
Cork Rural	County	161,864	17,791	20,081
TOTAL - COUNTY		267,551	52,756	46,712
TOTAL - CORK CITY & COUNTY		701,337	233,519	152,646