

## Heather Cooke

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Please acknowledge receipt – attachment enclosed, more to follow.

Brian Hanratty

Sent from [Mail](#) for Windows 10

[REDACTED]

## **EASTERN and MIDLANDS REGIONAL ASSEMBLY**

### **REGIONAL SPATIAL and ECONOMIC STRATEGY**

#### **SUBMISSION BY DROGHEDA CITY STATUS GROUP 23 January 2019**

##### **1. INTRODUCTION**

**Drogheda City Status Group (DSCG) welcomes the development of the Regional Spatial and Economic Strategy, which is described as “a framework ...to better manage spatial planning and economic development,” and has already engaged in the earlier stage of the process.**

**A Regional Strategy is particularly welcome and relevant for the Greater Drogheda area, as unlike County Plans, this process has the ability to transcend county boundaries to achieve best outcomes.**

**Up to now, the fact the Greater Drogheda area has been “straddling” two counties has inhibited the orderly planning and development of the naturally occurring Drogheda-LBM (Laytown-Bettystown-Mornington) catchment which is rapidly evolving into Ireland’s next city – and EU criteria for city status indicates that it has already achieved that status.**

**Work to date – in particular, the Drogheda Boundary Review – has failed to address this critical issue. For RSES to be a credible process, it needs to recognise the reality of Drogheda-LBM and immediately make recommendations to establish a senior Local Government presence in Drogheda to oversee it’s transition from TWO TOWNS to one city – failure to do so would be a dereliction of duty regarding one of the most critical issues for the RSES Plan to address.**

**Drogheda City Status Group (DSCG) was established over a decade ago. Even at that time, it was obvious that Drogheda and environs were on a trajectory to become Ireland’s next city; since then massive population growth has occurred – but without the much needed LOCAL jobs and housing required to respond to this.**

**The growing challenge of climate change, coupled with the heavy social, economic and environmental cost being paid by individuals forced into long daily commutes to work (and their families) – and the resultant loss of commerce to local businesses and vibrancy in the centre of Drogheda makes it an imperative to make substantial changes to the status quo.**

**As well as the need to be designated an IDA “Strategic Employment Centre” (like Dundalk, which does not face the same scale of challenges) to attract FDI and indigenous business, Louth and Meath – despite having some exceptional tourism assets that include a World Heritage Site – have a lacklustre performance in relation to tourism and domestic visitor development. In fact Dublin in 2017 achieved THIRTY EIGHT times the revenues from these sources that Louth and Meath COMBINED achieved – so to say that these counties have a “strong tourism and leisure offering” could be misconstrued.**

The need to prioritise LOCAL and sustainable job creation is further underscored by the rapid population growth in Drogheda-LBM as set out in Dr. Brian Hughes's paper attached. It provides irrefutable EVIDENCE (and not opinions) that Drogheda-LBM's population growth is ahead of all major urban centres, except Dublin and Cork and clearly demonstrates the urgent need for proper planning of Ireland's next city – which is already outstripping Waterford in the terms of population.

Attempts have been made to “equate” both the current and future population projections of Dundalk and Drogheda in the draft plan. In Dundalk's case, the adjacent Blackrock-Haggardstown area is “annexed” to boost it's population .... while both Louth and Meath Local Authorities and (to date) EMRA appear to deny the existence of the existing natural catchment of Drogheda-LBM and its city status, thus inflating Dundalk's population in an attempt suppress Drogheda's legitimate right to become Ireland's next city – and only the second in the EMRA Region (while there are FOUR cities in the catchment of the other two Regional Authorities, which have – combined – a population similar to EMRA).

**IN THE OPINION OF DSCG AND MANY OTHERS, THIS IS A SHAMEFUL, MODERN DAY EXAMPLE OF BLATANT GERRYMANDERING – and needs to immediately cease in deference to all the communities involved whose development is being hindered by this bureaucratic – and now obsolete – approach.**

Drogheda's growth is being hampered to the south by this. To the North, the ongoing delays in progressing the Northern Environs Plan – within which the Northern Cross Route is a key enabler to facilitate access to lands AND create a direct route from the M1 motorway to the Port is also inexcusable. Adding to this is the perception that Drogheda is not being promoted in a manner that would reflect its rapid growth by Louth Co. Council. The simple facts – not opinions – are:

- LCC is headquartered in Dundalk, where the majority of staff/services are based
- LCC Senior Management reside in Dundalk or otherwise away from Drogheda (with the exception of one Director of Services with long service)
- LCC have no Senior Manager based in Drogheda, Ireland's largest town

**THIS NEEDS TO URGENTLY BE ADDRESSED, as apart from Economic Development for Drogheda being determined in Dundalk AND Tourism Strategy being determined by Boyne Valley Tourism in Navan, on a day to day basis, citizens and businesses in the Greater Drogheda area experience frustration and often, a lack of familiarity when forced to contact local authority staff in Dundalk and Navan in relation to local Drogheda-LBM matters).**

To date these matters

## **2. ENGAGEMENT**

The Draft RSES Plan appears to suggest that, following the end date for making submissions that “engagement and collaboration” occurred with key stakeholders. Perhaps that should read “Local Authority stakeholders” ? We are unaware if any such follow-up occurred involving community representatives, and would find it offensive that communities are not considered “key stakeholders.” This can be addressed by

engaging with groups such as DCSG following today's cut off, and whilst EMRA may be prevented from accepting additional inputs/issues not submitted to date, it would seem appropriate that EMRA could seek clarification and/or additional information from those making submissions (as we suspect happens with Local Authority stakeholders and in a similar manner to which Planning Applications proceed).

Given Drogheda is emerging as Ireland's next city, and that DCSG – having campaigned to upgrade its status for over a decade – is intimately familiar with its strengths; weaknesses; opportunities and threats - this group and its advisors are available for such community stakeholder consultation at a mutually convenient date, time and location.

### **3. SOME KEY COMMENTS/ISSUES**

Our submission will comment on the themes set out in the various chapters (some comments already set out above) of the draft report and other matters.

On page 21, it states that:

**“One of the key challenges facing the region is the need for better alignment between population growth, location of residential development and employment to create healthy and attractive places.” This encapsulates much of the challenges facing Drogheda-LBM which has the highest daily exodus to Dublin of its people daily of any large urban centre.**

Added to that is the imperative for (especially) Ireland, as a climate lagger to respond adequately to the threat of climate change which Minister for Climate Action and Environment, Richard Bruton stated will require “a revolution in how we live” (Irish Times, 7.11.2018). Drogheda's Northern Environs Plan has the potential to demonstrate a more positive Irish response to climate change by ensuring all elements are proceeded with using current best practice from a climate change perspective.

In Chapter 4, RPO 4.17 needs to be replicated for DROGHEDA-LBM which has a much greater need to create local sustainable employment than Dundalk, given the daily mass exodus of commuters.

Elsewhere, current and projected population figures for Drogheda and Dundalk, which depict two towns of almost identical population characteristics are seriously misleading. The detailed analysis (attached) by Dr. Brian Hughes, our Consultant, clearly uses an evidence based report to refute this, which has a major impact on the way Drogheda-LBM is viewed both now and for the duration of the RSES Plan.

Whilst other local organisations such as The Mill and Drogheda & District Chamber of Commerce will have a deeper perspective of Chapter 6, it is clear to DCSG that the absence of any Senior LOCAL Government staff in Drogheda, coupled with the absence of IDA; EI and LEO in Ireland's largest town and emerging city is a major inhibitor in securing FDI and indigenous business growth. This is further compounded by Drogheda-LBM being served by TWO IDA Regional Offices, reflecting the county boundary issue above – and a possible outcome is that the IDA Business Park on the south side of Drogheda (in Co.Meath) can after more than a decade only boast ONE business there, despite Drogheda's excellent infrastructure (Motorway; Dublin-Belfast

railway; Ireland's fastest broadband; 20 minutes to Dublin airport etc.). Thus the RSES Plan MUST propose that these State agencies and Local Authorities urgently address these anomalies.

As regards Chapters 6 and 7, Drogheda Port has a key role to play in developing its business, including the creation of businesses complementary to the Port's principal activities. Given its proximity to Drogheda-LBM, it must ensure it contributes to a clean and healthy environment. It also has the potential to support or develop Blue Economy opportunities, given the resource of the river; Irish Sea and excellent beaches at LBM, Baltray etc. A number of items are absent from the appropriate sections of P.124 – i.e. Drogheda as a Maritime Town; Old Mellifont and the Boyne Greenway (the latter should also be listed on P.126 among its Greenway peers).

Climate change is alluded to above in the context of the Northern Environs Plan; the epicentre of Drogheda is at risk of flooding and the FRMPs are relevant to it and low lying areas of LBM. G

As regards Chapters 7 and 8, given Drogheda's size, environmentally friendly transport options need to be urgently considered – and these (e.g. cycle lanes & the Boyne Trail Greenway) have the potential to be multi-purpose (e.g. for leisure; tourism and traffic reduction etc.).

It is incongruous that Co.Louth does not form part of the Greater Dublin Area in relation to Transport Strategy. This results in Louth commuters paying penal rail fares – Louth needs to be absorbed into the GDA (only in respect of this) and a more equitable incremental fare structure be developed for those obliged to make long commutes to work, thus enhancing the appeal and use of public transport.

As a high speed Dublin-Belfast rail link is being considered, the key intermediate stop south of the border is Drogheda, given

- The population of Drogheda-LBM
- Drogheda-LBM being a key centre for business and tourism
- Drogheda Station has an unrivalled range of onward travel options by Commuter Rail Services to and from intermediate stations (Balbriggan, Skerries etc.)

With Ireland's fastest broadband, the infrastructure of this strategic asset needs to be protected from all hazards and risks (flooding etc).

Chapter 9 addresses Quality of Life. Again, the Northern Environs Plan proposes the construction of circa 7,000 homes – more than 50% of the target cited in 9.3 !

So, while the Northern Environs Plan charts the future of one of Ireland's largest and most progressive urban centres, the heart of Drogheda features its ancient and historic past.

As mentioned above, tourism/visitor growth offers huge potential for Drogheda-LBM and Fleadh 2018 has already demonstrated how Drogheda-LBM can comfortably accommodate an influx of visitors. It's location as the Gateway to the Boyne Valley,

**coupled with its own significant heritage assets need greater recognition and action by the plethora of tourism bodies involved – perhaps requiring greater cohesion.**

**This creates an excellent backdrop for cultural activities; craft industries and the creative industries.**

**In the future, the DkIT may evolve into a new regional university – and when it transforms, it should be named to reflect it’s regional role – e.g. North East University. To the south, DCU should also consider – like DkIT – locating certain faculties/facilities in Drogheda to facilitate easier access for students in Drogheda-LBM; South Louth; Meath and Dublin, given the excellent public transport links.**

**Finally, studies and reports in recent years relevant to this submission include the following which in the instances underlined, need to be reviewed as the RSES moves towards finalisation:**

- **The Drogheda Boundary Review**  
The main recommendation of this Review recommended no change to the boundary, but instead, proposed enhanced collaboration between Louth Co.Co. and Meath Co.Co.  
This has been a spectacular failure, as confirmed by the response to a PQ submitted by Senator Ged Nash (attached). So, the outcome of this Review has resulted in Drogheda remaining as effectively TWO TOWNS rather than becoming ONE CITY – with all the administrative inefficiencies and lost opportunities that entails.  
In the past, Louth and Meath were in different planning regions. Now that they are both in the EMRA, this facilitates “transcending” local and county borders.  
**An appropriate basis that ensures the orderly, combined development of the emerging city of Drogheda-LBM (Laytown-Bettystown-Mornington) needs to be developed in the context of this RSES Plan. Failure to do so – or to recommend an early resolution would call into question the effectiveness of taking a regional planning perspective – which the EMRA is mandated to do.**
- **The National Development Plan (Draft – prequel to Ireland 2040)**  
Drogheda – Ireland’s largest town, on track to become the next city – was completely ignored in this draft report, which in the North East only focussed on the Dundalk-Newry axis. In the near future, Drogheda will be the EU city closest to the EU:UK land border. To exclude it from the draft plan was inexcusable.
- **Ireland 2040**  
This document only projected population growth for the current five cities of Dublin, Cork, Limerick, Galway and Waterford. Despite Drogheda’s rapid growth, no attempt was made to project population growth there, which sees it achieve city status (based on the 50,000 population criteria as set out by the Government and EU) when its natural catchment is considered.

That city status will also be further enhanced by the development of the “Northern Environs Plan,” which is of national importance in responding to the current

housing crisis by providing thousands of more affordable homes as well as local employment; retail and leisure facilities and the possibility of a Drogheda North Railway Station and mass transport hub, creating the possibility of a “Linear City” running from Gormanston/Laytown to the south to Drogheda North. Again, this major development plan (now even more relevant given the urgency of addressing climate change) was completely ignored in the Ireland 2040 Plan.

**It is staggering that the agglomeration of LBM – Laytown-Bettystown-Mornington was omitted from such a key document. This needs to be addressed as part of the above in the final RSES Plan.**

**A key enabler for the Northern Environs Plan is the proposed Northern Cross Route which would allow access to the assigned area for housing and other development which was planned over a decade ago. This would also create a faster route for commercial traffic to access Drogheda Port, alleviating the need for this traffic to be routed through the town centre, eliminating noise and air pollution; road safety and congestion issues there. This needs to be prioritised.**

To date, instead of collaborating with Meath Co.Council, Louth Co. Council has attempted to promote a Linear City that would run from Drogheda to Dundalk – a distance of over thirty kilometres. The southern suburbs of Drogheda are now separated from the coastal East Meath agglomeration of LBM by two fields – yet this obvious development is being ignored.

This adjacent agglomeration of Laytown-Bettystown-Mornington (LBM) – now a significant centre in its own right, and, using the EU criteria developed by Dijkstra and Poelman is seamlessly connected to Drogheda, thus adding momentum to the evolution of Drogheda as the first city in the North East and a second and new city in the EMRA. While recognising the South/North Drogheda-Dundalk-Newry axis, it has failed to recognise the equally important East/West axis where Drogheda’s current and future role as the major Regional Centre in the North East extends well into counties Meath; Cavan and Monaghan as well as Louth and North Co.Dublin.

**Within a twenty five mile catchment of Drogheda, there are circa 750,000 citizens, making it a centre serving a larger 25 mile catchment population than some of the current cities. To the north, the town of Dundalk serves circa 125,000 citizens within a similar 25 mile catchment, as well as circa 125,000 citizens of the UK in Northern Ireland. So, Drogheda has six times more citizens within a 25 mile radius than the smaller town of Dundalk.**



## RSES Evidence confirming Drogheda's City Status:

- After Dublin, the Rest of Leinster (RoL) is effectively the State's largest 'Province' –see Table 1
- Yet Munster as the third most populous Province has three cities and Connacht has Galway
- Thus, a modified RoL settlement hierarchy should have at least one city on demographic proportionality grounds, preferably located in the 'Hinterland' band of the E&M Administrative Region
- Drogheda-LBM is **this** settlement, both in terms of size and growth performance – Table 2
- Since the 2016 Census, it is no longer correct to separate Drogheda from its agglomeration with LBM, given the fusion of the two settlements and the ongoing new housing momentum, as detailed hereunder
- For no apparent reason LBM was excluded from the National Planning Framework's Appendix listing of Settlements and in that document of all town settlements, Ireland's 34<sup>th</sup> largest town apparently does not exist!
- On a population per square kilometre basis, Drogheda and LBM have agglomerated
- Their fusion is at a much higher density per square kilometre than Dundalk with Blackrock
- No one from the DCSC is denying that Blackrock is Dundalk's south eastern suburb
- Their 18-hole golf course at Haggardstown dilutes the linking Dundalk-Blackrock densities down to c. 400 per sq.km., i.e. to below the minimum EC 'intermediate' density of 500
- LBM is de facto Drogheda's south eastern suburb, on uninterrupted density grounds
- In the 2016 populations: Drogheda-LBM = 52,828 and Dundalk-Blackrock = 39,004
- Accordingly, Drogheda-LBM is 35.45% more populous than Dundalk-Blackrock in 2016
- Ireland and RoLs largest settlement is now to be examined as a city under WP 01/2014 of the EU Regio Directorate General (EUDG)
- Drogheda-LBM is less diffuse, with much higher linking densities per sq. km., the basis for this independent evaluation by the ECs EUDG for Regional and Urban Policy
- Drogheda-LBM is already a city, in as per the EUDG's Dijkstra and Poelman (2014 and 2015) criteria
- The Drogheda City Status Committee (DCSC) is asking the EU's Regio DG to so confirm this
- Likewise, DCSC's formal Petition for City Status is currently before Government, backed up with its thousands of citizens' signed formal Petition and with local politicians' endorsement
- DCSC is now discussing these matters with the Leaders of the State's main political parties
- 2.5 years post the 2016 Census, demographically and with a much higher rate of new housing completion, Drogheda-LBM is now believed to exceed Waterford's current population
- Post 2016 Census, Drogheda-LBM is completing new houses at 2.5 times that of Waterford
- Drogheda-LBM, over both five year (2011-2016) and twenty year (1996-2016), has grown faster (both population and percentage wise) than all other of the Irish cities or towns with the exceptions of Dublin and Cork, *vide* Table 2
- Accordingly, in the forthcoming 2021 Census Drogheda-LBM will have replaced Waterford as the State's fifth city

- Galway became the State's last city in the 1980s, in the precedent, wherein it had exceeded Waterford's population
- Its 2011-2016 growth of 3,361 is also 85% greater than the aggregate of the four RESE towns growth of 1,817, vide Table 2
- The Drogheda-LBM agglomeration is also physically reinforced by the new Waste-water plant, catering for a 100,000 population, which serves the former Borough together with the adjoining Louth and Meath Rural Areas.
- In aggregate, their combined population had grown by almost 80% in twenty years 1996-2016 to reach over 84,000: i.e. a scale of more than twice the population of Longford County
- Likewise this fusion is confirmed by the District-level Shopping Centre at Southgate, by major residential developments at Grangerath, Bettystown Cross, Donacorney - all served by the major waste-water treatment plant and extensive pipe network
- Furthermore, by the establishment of other Central Place facilities, including new schools, creches (Services, Industries – despite the IDA and Enterprise Ireland focus on Dundalk)
- The referred to evidence-base Tables 1 and 2 on the applied demographics show:

**Table 1: Provincial Populations - Recent Growth Performances**

5 Provinces:	Census 2011 Populations	Census 2016 Populations	2011-2016 pop. growth contributions	5-year % growth	% of State surface area	% share of Population growth
Dublin	1,273,069	1,347,359	74,290	5.848%	1.35	42.79%
Rest of Leinster	1,231,745	1,287,044	55,299	4.49%	27.26	31.85%
Munster	1,246,088	1,280,020	33,932	2.65%	35.12	19.54%
Connacht	542,547	550,688	8,141	1.50%	24.74	4.69%
Ulster (part)	294,803	296,754	1,951	1.12%	11.53	1.83%
<b>Ireland</b>	<b>4,588,252</b>	<b>4,761,865</b>	<b>173,613</b>	<b>3.70%</b>	<b>100.00</b>	<b>100.00%</b>

Source: Brian Hughes analysis of CSO 2011 Census and 2016 CSO Census Data

**Table 2: National Planning Framework**

**1996-2016**

The ten NPF-Designated Centres:

**City and Town Population Growth Comparisons:**

**Timeframe**

**1996-2016:**

The ten NPF-Designated Centres:

**2011-2016:**

The ten NPF-Designated Centres:

**Timeframe**

**2011-2016:**

**Population**

<u>Cities:</u>	<u>1996</u>	<u>2016</u>	<u>Growth</u>	<u>% Growth</u>	<u>2011</u>	<u>2016</u>	<u>Growth</u>	<u>% Growth</u>
Dublin	952,692	1,173,179	220,487	23.14%	1,110,627	1,173,179	62,552	5.63%
Cork	179,954	208,669	28,715	15.96%	198,582	208,669	10,087	5.08%
Limerick	79,137	94,192	15,055	19.02%	91,454	94,192	2,738	2.99%
Galway	57,363	79,934	22,571	39.35%	76,778	79,934	3,156	4.11%
Waterford	44,155	53,504	9,349	21.17%	51,519	53,504	1,985	3.85%

Drogheda-LBM	28,960	52,828	23,868	82.42%	49,467	52,828	3,361	6.79%
<b>Towns:</b>								
Dundalk-Blackrock	30,195	39,004	8,809	29.17%	37,816	39,004	1,188	3.14%
Athlone	15,544	21,349	5,805	37.35%	20,153	21,349	1,196	5.93%
Letterkenny	11,996	19,274	7,278	60.67%	19,588	19,274	-314	-1.60%
Sligo	18,509	19,199	690	3.73%	19,452	19,199	-253	-1.30%

Source: CSO, 1996 and 2016  
Censuses

The State population increase (1996-2016) was 31.32%.

Drogheda-LBM's 82.42% growth equates to 3.05% per annum, compound compared with Dundalk Blackrock's 29.17% in 1996-2016.

Drogheda-LBM's growth was over 1% above Dublin, the second highest percentage growth

**Conclusion:** Drogheda City Status Committee refutes the incorrect statement of the Draft RSES document, somehow, that Drogheda and Dundalk are of similar sizes. Given the above-detailed evidence, it is incredulous for its draft text to assert that Drogheda (as with Dundalk), might attain a city-level population of 50,000 by 2030, when Drogheda-LBM's population was already 52,828 in the Census of 2016, thereby meeting the EU DG REGIO criteria for city population, i.e. minimum 50,000 population with contiguous, linking densities of 500+.

Alongside the NPF document, it is therefore critical that the final RSES Plan should correctly show Drogheda, together with its LBM suburb, as the Rest of Leinster's designated city and this similarly applies to the Eastern and Midland's NUTS2 territory. The allocation of Carlow, Kilkenny and Wexford counties to the Southern NUTS2 in assessing The Eastern and Midlands Administrative Region, in terms of alternative settlement-size selection possibilities, further confirms that there are no other 'settlement rivals' of a size that come close to Drogheda-LBM in those other counties.

Specifically, the selection of Athlone is risky as it is located in the flood plain of Ireland's largest and longest river and consequently much of its surface area is subject to flood risk and is uninsurable. Furthermore, it is located in the periphery of the RSES Region, removed from both its Metropolitan and Hinterland areas and is remote to the high density east coast Dublin-Belfast Corridor.

The selection of the Athlone-Tullamore-Mullingar tri-Gateway was never viable both on population and distance decay grounds. Instead, the faster-growing and larger populated settlement of Portlaoise, linking the State's three largest cities should have been considered in a Midland Region (NUTS3) context.

Brian Hughes, January 2019

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**Assessing the Demographic Growth Momentum in Identifying the Emerging City of Drogheda with Laytown-Bettystown-Mornington (LBM).**

With final corrections

29<sup>th</sup> May 2018

*This Research Study includes an assessment of the 10 cities and towns selected in the published National Planning Framework, including Drogheda, whilst correcting a significant omission, that of Laytown-Bettystown-Mornington from the Appendix list of settlements as published in the NPF. This analysis also compares size and density parameters for Drogheda-LBM with Dundalk-Blackrock. Using the 2016 census data evidence for demographic size, growth and population density and in applying the EU-OECD 2015 methodology as described, this research paper argues that Drogheda-LBM has met the evidence-based criteria for 'city' designation.*

This study presents the application of population density grid analysis in applying the 2015-published Harmonised European Union (HEU) methodology to this emerging east-coast city. In addition to this methodology, this research also describes the intensity of current housing developments, of new housing and construction, relevant demographic tables, the map of the new city area and bibliography. It highlights the following research evidence and conclusions:

- The population grid densities confirm the physical agglomeration of Drogheda with LBM, reflecting their population size together with both the 5 and 20-year growth momentum.
- This research study confirms that the new, 2015 Harmonised, OECD and EU Measurement test of what constitutes a 'city', applies successfully to Drogheda-LBM. This relates to population per square kilometre densities.

- In the two years since the 2016 census, hundreds of newly-constructed houses have been occupied by upwards of two thousand people, adding to the combined settlement population, which stood at 52,828 in April 2016. Including current construction, some 1,700 new houses with a potential for over 4,000 (additional) population are identified in the area of agglomeration. This excludes what is being built in Drogheda itself.
- Construction is underway in dozens of new construction sites, most notably in Bettystown and Donacarney and throughout Drogheda. Accordingly, it is contended that Drogheda-LBM now has a larger population than Waterford City.

**Abstract:**

*In earlier research literature this author deployed both population size and daytime working population data as measures of potential settlements, for selection as comparable growth centres for the National Spatial Framework, vide Hughes (2013). An identified problem, encountered in defining urban settlements and that of their spatial extent, is the dilemma of opposites; of being able to distinguish between the physical ‘separation’ aspect and the agglomerating ‘contiguity’ of discrete settlements.*

*Focusing on linear distance as its principal ‘separation’ measure, the United Nations provides a limiting description, for separation, in the task of quantifying singular urban fields of agglomeration and thus in identifying processes of city formation. In contrast, The World Bank advocates three ‘D’s which, in addition to Distance and Division, includes Density (2009). Particularly for Ireland as a sparsely-populated country, this latter measure assumes particular importance, especially given its scarce number of large settlements and their linear distances from each other.*

*The Central Statistics Office (CSO) now has the facility for grid-enabled data, which can be used in distinguishing between examples of scattered morphology of sparsely-populated ribbon development in contrast to an analysis which can identify densifying urbanisation cores. It is understood however, and with concern, that the CSO does not propose to utilise ‘density’ measures for the 2016 or for the 2021 census; wherein the Harmonised European Union measure is widely used as the standardised measure for ‘cities’ in both EU and OECD countries.*

*Using the 2016 census area population results, this paper now investigates and applies population grid data measures based on updated CSO grid-based demographic data, at the square kilometre level. Applied to a real-life example, this technique facilitates the further research objective of identifying Ireland’s emerging city, the east coast agglomeration of Drogheda with Laytown-Bettystown-Mornington (LBM).*

*In its census of 2011, the CSO adopted the United Nations updated convention for Settlement distancing in its application of the ‘100 Metre’ rule for settlement separation. This is applied to habitable buildings, including both residential and non-residential structures. Prior to the 2011 census the linear distance was 200 metres.*

***The rationale for its use is ...to avoid the agglomerating of adjacent towns caused by the inclusion of low density one off dwellings on the approach routes to town, as per the CSO's 2011 Census, Area Volume, Appendix 1. The original GDA Planning Regions together with County Louth – which has two of Ireland's three largest towns, Drogheda and Dundalk – this area comprises the Republic's two million-plus population share of the dynamic Dublin-Belfast economic corridor area; in all, this corridor comprises just over 50% of the island's 6.65 million people.***

***Analysing the agglomeration of LBM with Drogheda and in comparing this with that of Blackrock with Dundalk, on the basis of the EU Grid criteria, this Paper concludes by noting the need to distinguish between physical separation and that of physical agglomeration and proximity densification under the new Harmonised European Union (The Graz methodology), especially for governance and local administration purposes as is provided for in this new Putting People First era of local governance rationalisation and post the Government's rejection of further county boundary adjustments. Post 2016 growth of Residential Developments is based on a 17th October 2017 survey with Peter Monahan and 3rd May 2018 survey with Chris Byrne, undertaken by the author.***

#### **1. Census Geography - Applied Measures:**

The CSO's evaluation of settlement size is set out in their *Population Classified by Area Volumes* of recent census results *vide* Appendix 1, *Census Geographic Definitions*, PP. 151-155, CSO (2012). It applies the linear distance rule for confirming settlement separation, applied so as to distinguish between a densely-populated urban field and an adjoining elongated ribbon of mainly housing development that often occurs on access routes to a defined city or town settlement. The objective is to provide definitive and uniform-shaped settlements, conforming with rational geographical images, thereby defining their footprints from their surrounding rural morphology to be clarified.

Such measures for 'division' are effective in statistically isolating discrete new urban areas such as Bearna from Galway City and Balrothery's separation from Balbriggan in the 2011 census, resulted in creating these new town settlements. However, the application of such tests on their own, for cases of emerging urban agglomeration are inadequate, especially where two large (+10,000 populated) settlements are expanding towards and are merging with each other and wherein, the provision of shared, linking infrastructure, the momentum of development is designed for and is resulting in the fusion of a densified agglomeration, thereby producing a much larger unified settlement, albeit as one that may have more than one central core.

The opposite effect from an inappropriate and sole application of the '100 Metre' rule can serve to ignore or overlook cases such as the emergence of bi-centric, adjacent large settlements that are in a process of agglomerating and which are thus forming a larger settlement. One conspicuous example of an Irish failure to 'see the wood from the trees' is that of Drogheda's progress in its agglomeration with nearby Laytown-Bettystown-Mornington (LBM) where a Local Government boundary proposal of late-2015, was proposed to be confined to Drogheda, with the objective of facilitating its local government administration, and which was subsequently rejected.

Yet, there has been no recognition of the bigger, emerging picture, of Drogheda's agglomeration with LBM: one that straddles the Elizabethan and subsequent multi-adjusted county boundary, encroaching further south of the River Boyne and into Co Meath.

## 2. Quest for Urban Boundary Changes and Local Governance Issues:

Notwithstanding Ireland's unusually low level of urbanisation – with a 2016 share of just 62.70% of its population living in settlements of 1,500 and over – its urban development 'catch up' process is resulting in both population growth and a spreading of its urban settlements. Accordingly, many of its cities and towns are experiencing outward growth wherein its towns and environs are spreading beyond former administrative or county boundaries. Thus existing settlement boundary lines are being breached with successive waves of outward development.

Whereas in the census of 1996 the CSO listed twenty settlements whose population overlapped into another county, by 2011 that number had extended to twenty-eight settlements, *i.e. Populations of Towns or Environs/Suburbs which are located in more than one county*. For modern-day local government administration, such geographic expansion has presented particular difficulty driven by an over-riding objective to manage single-settlement administration within a one-county authority. See Irish Times letter, P. 21, October 20<sup>th</sup> 2017: "*Local Authorities – time to move on from medieval constraints?*"

The frequency of such county-boundary 'straddling' now requires a more inclusive treatment for local governance purposes than this existing, blunt, solution of adjusting county boundaries. In implementing local governance reform since the 2011 census the first-phase in the current processes of local government has focused on the rationalisation and merging of county and city units, sometimes with considerable, unresolved, controversy and opposition, as in the case of Cork City and its county, which has also been examined by the authors of the UN-OECD methodology, Dijkstra, L. and Poelman, H. *A harmonised definition of cities and rural areas: the new degree of urbanisation*, European Commission, Working Papers (WP 01/2014).

A second phase in this process of Local Government rationalisation, addresses the dilemma of governance adjustments for some larger and expanding settlements. It is noted that the foresighted provisions of *Putting People First*, proposes flexible arrangements for cases of straddling settlements. However, such aspiration is likely to require updated, matching legislation that has not yet found its way onto the State's statute books.

Recent boundary revisions were undertaken under outdated 1991 Local Government legislation for Waterford City, Drogheda, Carlow and Athlone towns, in descending order of population size. Their objective was to contain such settlements within a single county for administrative purposes and to so do by redrawing county boundaries where considered expedient. Such administrative 'juggling' had been intended to be implemented regardless of the evident extent of local business, resident and sporting opposition. However all four proposals were firmly rejected and there that matter rests.

However, Drogheda's urbanisation is unique in Ireland – outside of the Dublin conurbation, as it is the only large town that is physically agglomerating with another (10,000+) large one,



LBM. Accordingly, there is an imperative need to recognise this new entity, especially as it is over 30 miles (50 kilometres) north of the Dublin-Galway (DG) axis, where no city exists within the State and where there is a pressing need to reinforce the Dublin-Belfast economic corridor, post Brexit. In this regard, north of the border both Lisburn and Newry have been accorded city status by the UK authorities. The need to grow towns north of the DG 'line' is emphasised both in the NSS and the NPF, aggravated by the fact that Sligo and Letterkenny (together with Tralee and Ennis), all recently lost population 2011-2016.

Yet, the National Planning Framework's own Settlement Appendix omits LBM as one of Ireland's 'large towns' and furthermore (deliberately or otherwise?) ignores its progressive agglomeration and contiguity with Ireland's largest town, which together have 52,828 in population (2016 census).

### **3. Drogheda – the grid-based evidence for a City Recognition:**

Despite the publication in 2013 of the Government's visionary *Putting People First*, Action Programme for Local Government, the Department of Housing, Planning and Local Government (DoHCLG), had intended to review Drogheda's former Borough boundary under Section 28 of the now dated Local Government Act 1991 Act, rather than implementing the principles contained in the *Putting People First* initiative, in its pursuance of the administrative objective to retain larger single settlements within a single county council area.

It is therefore necessary to distinguish the important and unique case of adjoining and merging high-density agglomeration for the immediate proximity of Drogheda and LBM, in contrast to low-density and/or geographically separated low-density ribbon development, elsewhere in Ireland.

Drogheda-LBM provides a unique situation in Ireland, where two adjoining plus-10,000 settlements are physically merging. The population growth evidence points to Drogheda continuing its demographic growth of up to three times that of the State population growth rate since 1996. Since then it became and continues to be Ireland's largest town. This ongoing agglomeration momentum is supported by the recent provision and commissioning of a 100,000 population capacity waste-water tertiary treatment plant at Marsh Road, Drogheda with its linking sewer networks of investment and likewise with the completion of the District-level Shopping Centre at Southgate together with the aforementioned residential development that are consolidating the fusion of Drogheda with LBM.

In an ongoing local government rationalisation programme, demographic scale is one of two principal issues in question of scale-size, that distinguishes the failed Boundary Review that from all previous Drogheda revisions. This would have resulted in additional 7,000 people who reside south of the Boyne being 'placed' in County Louth; resulting in over 14,000 as per the 2016 census results, south-river. This would also have involved a transfer to Louth of several additional square kilometres of what is now part of County Meath. In Drogheda's case, previous county boundary 'adjustments' on a smaller scale have already resulted in the cumulative 'transfer' of a similar sized area south of the Boyne, from County Meath to County Louth, since the 1950s.

The second issue remains unresolved: that of identifying the emergence of a new city on a demographic scale now larger than Waterford City. Unlike Waterford, Carlow and Athlone, what differentiates Drogheda is the minimal 'Distance' separation *cum* urban density and proximity of another large *i.e.* plus-10,000 town. This now is the issue requiring immediate attention and resolution for the future administration and governance of Ireland's emerging city. Waterford, Carlow and Athlone are 'stand-alone' settlements and unlike Drogheda, they do not adjoin or merge with another large settlement. Waterford's centre is some 13 km from Tramore.

Of itself fast-growing LBM in 2016 is Ireland's thirty-fourth largest town and is on a par with Ashbourne as one of Meath's principal towns. The defunct boundary review documentation showed Drogheda's proposed indicative and blue-hatched boundary line to the south of the current Borough area of Drogheda which would have resulted in the town's new boundary extending to the western edge of LBM.

To accommodate Drogheda's expansion it would also have been necessary to adjust its existing northern boundary line within County Louth, which will affect a further 2,000-plus of the town's population. The logical administrative rationalisations under the *Putting People First* initiative should result in a Louth-Meath administrative unification, with Drogheda-LBM becoming Ireland's fifth largest city.

**With the emergence of Drogheda+LBM as a city, the boundary transferral of further Meath territory into Louth becomes an administrative irrelevancy. Instead, Drogheda-LBM should become the North-East's administrative capital for Cavan, Monaghan, Louth and Meath. As Ireland's next city south of the border, it will complement the North's earlier initiative, in granting city status to both Lisburn and Newry, within the Dublin-Belfast Corridor.**

#### **4. Drogheda-LBM's Population Urban Field Grid Matrix**

The Urban Field of the Drogheda-LBM Population Density Grid on a One Sq. Km. basis is applicable to the OSI Discovery Series Map 43 (Fourth Edition, 1:50,000 scale) for the 2011 census population is set out in a population grid format, kindly provided by the CSO to this author in December 2015. The complete matrix for the twin settlement of Drogheda and LBM confirms a grid formation in a north-south depth of ten kilometre rows. The respective 2011 core populations are set out in an 'all-border' format, comprising fourteen medium-density central grids totalling 11,297 in population for LBM, located east of and next to the twenty grids totalling 37,669 for Drogheda. In all, these adjoining 34 sq. km. grids comprise a core agglomeration population of 48,996 with an average density of 1,440 people per sq. km., set out as follows:

**Drogheda-LBM 2011 census Population Spread – OSI Map Grid References:**

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Grid cells	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	Totals
16/80	131	54	86	9	28	107	58	97	40	37	-	647
15/79	26	6	27	59	58	84	52	83	5	-	-	400
14/78	20	17	61	16	449	153	79	65	99	-	-	959
13/77	74	219	2,643	3,308	2,423	10	5	80	489	306	-	9,557
12/76	1,212	1,534	3,226	3,553	823	5	46	112	275	1,059	-	11,845
11/75	1,028	3,631	3,183	2,727	2,411	2,470	673	752	748	691	-	18,314
10/74	73	553	494	705	435	861	56	13	1,224	2,162	185	6,761
9/73	42	20	80	62	45	13	106	11	90	705	392	1,566
8/72	5	25	87	-	85	5	15	20	35	443	1,378	2,098
7/71	51	25	5	61	76	43	52	253	223	21	8	818
<b>Total</b>	<b>2,662</b>	<b>6,084</b>	<b>9,892</b>	<b>10,500</b>	<b>6,833</b>	<b>3,751</b>	<b>1,142</b>	<b>1,486</b>	<b>3,228</b>	<b>5,424</b>	<b>1,963</b>	<b>52,965</b>

Footnote:  
So as to  
maintain  
local

anonymity, the CSO records a count of '5' where grids have recorded census populations of between 1 and 5. Zero-populated grids are as shown. So as to make the interpretation of the grid more manageable, it limits the matrix size to eleven kilometres in width and ten kilometres in depth. It is however recognised that this surface area is therefore somewhat smaller than that of the Drogheda and District area (population 60,646 in 2011) and somewhat smaller again than the Louth and Meath Rural Areas plus Drogheda Borough (CSO population 78,594 in 2011 and 83,317 (Preliminary) in the Census data of 2016). It is of a size that captures the adjoining Drogheda and LBM towns and their contiguous environs.

Based on the 2011 census demographic outcome, augmented by the 2011-2016 growth in population and the more recent physical evidence of real estate development, there is today, little physical or demographic separation between the settlements of Drogheda and LBM.

This is confirmed in the Ordnance Survey of Ireland Map 'spine', of an unbroken high-density 'band' of population in adjoining grids. This central 'spine' extends east-west for ten square kilometres, identified in an axis along the grid 74/75 (including from references 6/7 to 15/16), as shown in the *one-kilometre cells* of this Discovery Series, map No. 43.

This is used as the grid-base for the CSO's grid matrix of populations based on the 2011 census, The west-to-east populations along this 'spine' grid line 74/75, comprises an aggregate population of 18,314, identified in their respective one sq. km. populations which is set out in the following Greater Drogheda's Urban Field Grid Matrix, showing this consolidated 'spine' cells extract, thus:-

	<u>6/7</u>	<u>7/8</u>	<u>8/9</u>	<u>9/10</u>	<u>10/11</u>	<u>11/12</u>	<u>12/13</u>	<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>Total</u>	Source: Part of the CSO population grid one-kilometre square matrix
<u>75</u>	1,028	3,631	3,183	2,727	2,411	2,470	673	752	748	691	18,314	

dimension, as requested and kindly provided by the CSO to Brian Hughes, December 2015.

The six left-hand side Drogheda grids, east to include grid 11/12, are immediately followed by the four right-hand LBM ones from 12/13 eastwards. This agglomeration 'spine' for Drogheda-LBM conclusively presents an interfacing and **uninterrupted** population density for these adjoined settlements. Furthermore, these 'spine' data represent just one row of a ten-row deep matrix. Their spatial argument, confirming this twin-settlement merger for Drogheda-LBM, is based on this east-west spine of the 110 adjacent population grids as laid out in the full matrix grid. These identified ten adjoining 'spine' square kilometre cells have an average population density of 1,831.4 which is higher than the density of any of the four provincial cities in Ireland in that census.

A significant distinguishing feature between 'ribbon development' morphology and a dense, continuous 'urban field' is the extent and depth of development. This author avers the selection of one-kilometre-square grids which is a spatially significant one; a measure in linear terms which is ten-times that of the 100 metre UN distance. However, in evaluating the process of urbanisation for evolving large settlements and in allowing for pockets of undeveloped land or of large underdeveloped sites, it is also desirable to balance 'space' area with density, discussed as follows, in using the example of the linking of Dundalk with its adjoining seaside suburb of Blackrock, Co. Louth

### 5. Dundalk and Blackrock – a Grid Comparison with Drogheda-LBM:

For Ireland third largest town - Louth's County Town, Dundalk and its seaside suburb of Blackrock is centred to its south at some three to four kilometres remove. All together they comprised a 2011 census settlement population of 37,816, where the Blackrock area comprises 6,500 of its total population. Blackrock is adjudged to conform to the U.N. distance rule and thus to be included as the southern part of a single Dundalk settlement.

However, the one-kilometre square grid populations, when compared with the above Drogheda-LBM grid, reveals that its **linking cells** are less dense than those comparable ones for Drogheda-LBM, the latter settlement's identified linking cell density being diluted to 328, 482, 117 and 853 persons per square kilometre because of the presence of an 18-Hole golf

course at Haggardstown. They are set out in a similar OSI Grid-map Discovery Series No. 36 (2007) format including the specified grid-cell references, as follows:

**Dundalk-Blackrock 2011 Census  
Population Grid – OSI Map References:**

Cells	02/03	03/04	04/05	05/06	06/07	07/08	08/09	Totals
09/10	158	676	380	276	-	50	88	1,628
08/09	236	2,650	1,799	120	362	-	54	5,221
07/08	35	2,232	2,314	1,807	1,854	753	272	9,267
06/07	90	1,024	1,304	2,397	2,872	50	19	9,719
05/06	97	85	637	2,802	2,105	-	-	5,726
04/05	52	69	29	378	328	117	-	973
03/04	66	39	67	255	482	853	-	1,762
02/03	109	83	159	471	2,028	599	-	3,449
01/02	6	27	21	31	331	-	-	416
<b>Total</b>	<b>849</b>	<b>6,885</b>	<b>6,710</b>	<b>10,500</b>	<b>10,362</b>	<b>2,422</b>	<b>433</b>	<b>38,161</b>

Source: CSO Population 2011  
Census

Note: The boxed grids delineate the Dundalk-Blackrock ‘spine’, which runs in a north north-west south south-east axis.

The distorted result of applying the aforementioned 100 metre U.N. distance criterion on its own, instead of utilising density-proximity measurements is that it masks Ireland’s few emerging cases of urban agglomeration. Such density research is vital to the task of settlement selection in the forthcoming Regional Administrative Plans under the NPF. From a side-by-side comparing of the two sets of grid population data, the Drogheda-LBM scale and size of urban agglomeration is far superior to that of Dundalk-Blackrock. Hence, the following comparisons are instructive:

- One Km. Grid Size: Drogheda-LBM = 110 sq. km; Dundalk-Blackrock = 63 sq.km.
- Total Grid Populations: Drogheda-LBM = 52,965; Dundalk-Blackrock = 38,161.
- Linking 2-grid Populations: Drogheda-LBM = 1,425; Dundalk-Blackrock = 810
- 2011 Populations: Drogheda = 38,578; Dundalk (excluding Blackrock) = 31,316
- 2011 LBM and Blackrock Populations: LBM = 10,889; Blackrock = 6,500 (vide Grid).
- Densest LBM cell = 2,162; densest Blackrock cell = 2,028 population.
- Void cells: Drogheda-LBM = 9 cells; Dundalk-Blackrock = 9 cells.
- It is noted that some of the Dundalk-Blackrock cells are less than 500 in density, below the criterion for agglomeration in Dijkstra and Poelman (2014). Yet, no one would deny that both Blackrock and Haggardstown form part of Dundalk’s 39,002 population in the 2016 census.

From a governance standpoint given these brief empiric 2011 comparisons and their resultant evidence bases, the derisory NSS description of Drogheda's status and presumed 'function', which is officially described as a 'support town' to the Dundalk Gateway, reflects a "tail wagging dog" assessment, focused on a misguided focus of retention of the current 'county-town' *status quo* arrangement.

It also reflects a rigid local governance mind-set of one that refuses to address the density and scale-size evidence of Drogheda's agglomeration with LBM. This is buttressed in selectively using the U.N. Distance Rule, alone, for settlement separation whilst choosing to ignore the fact that Dundalk inclusive of Blackrock's 2016 population is less than that of stand-alone Drogheda at 40,956, without LBM.

### 6. Grid Spine Test: comparing Drogheda with Dundalk's contiguity:

In analysing the population densities of the central spine cells that attach the respective adjoining settlements, it is possible to clarify the respective levels of agglomeration of Drogheda+LBM compared with Dundalk including Blackrock Co Louth, in 2011.

By definition, the Dundalk-Blackrock infill typifies a ribbon infill morphology which is essentially fixed because of the aforementioned presence and hollowing-out effect of its 18-hole golf course. Along the west side of the golf course, another 'ribbon' development links Dundalk southward to Blackrock represented by the cell grids of 378 and 255 populations. In contrast, Drogheda's higher density link-cells already exhibit much superior densities, despite still having further infill-land development potential. First are shown the data of Dundalk's spine cells in the original analysis, using 2011 census data:

Dundalk's (2011) spine cells:-

<u>03/04</u>	<u>03/04</u>	<u>04/05</u>	<u>05/06</u>	<u>05/06</u>	<u>05/06</u>	<u>06/07</u>	<u>06/07</u>	<u>06/07</u>	
<u>@09/10</u>	<u>@08/09</u>	<u>@07/08</u>	<u>@06/07</u>	<u>@05/06</u>	<u>@04/05</u>	<u>@03/04</u>	<u>@02/03</u>	<u>@01/02</u>	<u>Total</u>
676	2,650	2,314	4,360	2,802	378	482	2,028	331	16,021

Source: OSI Grid-map Discovery Series No. 36 (2007): west-east first, followed by their north-south coordinates for these nine one-kilometre square populations.

For the convenience of easy comparison, the corresponding Drogheda spine cells are shown alongside, as follows:

Greater Drogheda's 2011 consolidated 'spine' cells:-

	<u>6/7</u>	<u>7/8</u>	<u>8/9</u>	<u>9/10</u>	<u>10/11</u>	<u>11/12</u>	<u>12/13</u>	<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>Total</u>
074/75	1,028	3,631	3,183	2,727	2,411	2,470	673	752	748	691	18,31

Source: Part of the CSO population grid one-kilometre square matrix dimension, as kindly provided to Brian Hughes, December 2015.

Thus Drogheda's interface with LBM is at the point shown as where cell (population) 2,470 meets 673; the corresponding Dundalk interface with Blackrock is at the point where population cell 2,802 meets 378. The next respective cells show respective populations of 482 for Dundalk's Blackrock and 752 for Drogheda's LBM.

Accordingly, the Drogheda link-cells are noted as being significantly denser in populations than those of Dundalk's. The lower densities for Dundalk's link cells are explained primarily by the positioning and location of the aforementioned golf course. Yet, the contrasting case of Drogheda's potential is noted as one where these specific cells contain residentially zoned lands which are now being developed and thus are become much denser.

Contrasting these two sets of adjoining settlements, it is noted that the NSS 2002 strategy had obviously ignored Drogheda's agglomeration with LBM as being one that then suggests linear dis-contiguity and would not have had the parallel evidence of density and proximity as adduced above. In contrast, the NSS had sought to rely solely on the formulation of far-fetched 'Linked Gateway' and 'Linked Hub' concept, where average distances are some 19 miles (30 km.) separating individual settlement populations in the 19,000 to 100,000 range (for Letterkerenny with Derry), but typically for settlements of about 14,000 to 20,000 (e.g. Athlone, Tullamore and Mullingar) with distances of up to 59 km.

It is as if the urban economic impediment of 'distance decay' did not exist or should be ignored. Little regard is had to that phenomenon of distance decay and yet a similar emphasis is repeated in the NPF's espousal of the Drogheda-Dundalk-Newry settlement linkage, instead of focusing on the 'real world' agglomeration of Drogheda-LBM.

Therefore, it is apposite to address the demographic data supporting the Drogheda-LBM agglomeration as Ireland's next city: one that matches the demographics of fifth-city Waterford, based on comparative evidence of selected growth centres, including that of Dundalk.

## **7. Recent Demographics and the Drogheda-LBM Growth Momentum:**

The Greater Drogheda Area and of its sphere-of-influence components include the Louth and Meath Rural Areas including the Drogheda Borough, all comprising a population of 83,317 in 2016, (see Appendix 3A) – *i.e.* more than twice the population of County Longford. Having been 46,451 in 1996, this increase of 36,866 represents a growth of 79.37% over that 20-year period. Due to the much faster rates of growth since the 1996 census, this Appendix confirms that population total in 2016 is almost evenly split for the north and south banks of the Boyne.

The impressive additional growth in the intervening eighteen months since the 2016 census, is augmented by the occupation of hundreds of new houses, as detailed below.

Given the locational advantages of the south bank area, including the south suburbs of Drogheda and LBM, especially given its accessibility to Dublin, the Airport and the M50, it is unsurprising that the two towns are consolidating their agglomeration with one-another,

boosted by the rate of population growth: one that is an historic multiple times that of Waterford city.

As already noted, this unique case of Drogheda-LBM is not repeated in the three other proposed boundary review cases of Waterford, Carlow or Athlone, all of which are stand-alone settlements and are not remotely adjoined to another large town. It is also observed that in the 2016 census, LBM itself was larger in population than large-towns of Enniscorthy, Tramore, Skerries and Longford or than the large county towns of Wicklow or Cavan.

Accordingly, the nature of the failed Boundary Review and its Terms of Reference, misrepresented what has been happening on the ground and would have been both short-term in effect and unfit for purpose in addressing the urgent need to manage Ireland's next city, faced with the wider demographic picture, vide Appendix 3:

### **8. The Greater Drogheda Population Urban Field:**

These data sets provide incontrovertible evidence of the Drogheda-LBM progress in their agglomeration with each other, based on recent censuses and the disposition of Greater Drogheda Area's population growth. In the twenty years 1996-2016 the former Municipal Borough of Drogheda together with the adjoining Louth and Meath Rural Areas have increased by a massive 79.37% (46,451 to 83,317) at a time when Ireland itself has grown by 31.32%.

The *Preliminary Report* on the CSO 2016 Census provided the earliest direct comparison at the Rural and Borough Electoral Districts with the populations of the 2011 Census. Given the young age profile and family formation propensity of the more recently established population growth south of river, the argument in favour of amalgamating the Greater Drogheda Area population, but especially that of Drogheda with LBM with their intrinsic growth momentum, is both a persuasive and reasonable one.

In summary, as it has been found possible for the CSO to recognise Dundalk with Blackrock (Co Louth) as being a single settlement, it is consistent to argue similarly for Drogheda and LBM's agglomeration, as a single urban field, proven on the grid density evidence of this Paper. Next is examined the relevant, internationally-applied methodology.

### **9. Harmonised European Union (HEU) Definition of 'City'**

In December 2016 this author understands that the CSO's current position, both for the 2016 and 2021 census, is that grid data methodology is not and will play any part in the assessment of settlement size and the clarification of what is a city, as advised to this writer. Furthermore, the CSO re-iterate that the United Nations 100 metre rule will continue to be used and applied to the 2021 census.

However the CSO has also advised this writer that at the end of February 2018, they plans to publish for the entire country the 1 km<sup>2</sup> grid population counts from Census 2016 using the same grid for which Census 2011 data was published.



Currently, this issue is an emerging one, especially as it was the CSO who brought ones attention to the work of the EU-OECD in developing the methodologies for grid assessment, as follows: Dijkstra, Lewis and Poelman, Hugo. (2015), *European Cities – Functional Urban Area Definition*, European Commission, DG Regio. On the basis of their grid reference and related population data as already provided to this writer by the CSO for the area, the following growth 2011-2016 for the area is set out, thus:

**Individual one kilometer cell growth, 2011-2016, for Drogheda-LBM, is shown thus: Total net growth = 3,529 or 6.66% (State = 3.78%)**

Grid cells	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	Totals
79/80	-12	-2	-2	0	-1	--8	0	-13	-6	14	0	-30
78/79	0	0	-3	1	4	3	2	8	0	0	0	15
77/78	-1	-1	6	2	26	17	0	-6	31	0	0	74
76/77	3	7	569	72	140	-3	0	15	34	-21	0	816
75/76	113	286	-111	180	18	10	-16	-1	13	31	0	523
74/75	25	25	5	151	42	138	139	70	115	51	0	761
73/74	-7	95	112	-12	90	315	8	0	195	273	41	1,110
72/73	-4	12	-5	-7	-1	0	-4	9	4	87	1	92
71/72	0	-1	-2	0	-5	0	3	-1	5	46	60	105
70/71	-5	3	0	-7	0	6	-7	54	10	6	3	63
<b>Total</b>	<b>112</b>	<b>424</b>	<b>569</b>	<b>380</b>	<b>313</b>	<b>478</b>	<b>125</b>	<b>135</b>	<b>401</b>	<b>487</b>	<b>105</b>	<b>3,529</b>

Source: Brian Hughes analysis of CSO amended 2011 and 2016 grid-population-growth.

The most significant evidence confirmed from these 2011-2016 population growth data is portrayed in the eastern grids of the spine-line 74/75, all of which had significant growth over that period. Furthermore, all of their 2016 populations exceed the 'intermediate density' figure of 500, Dijkstra, Lewis and Poelman, Hugo. (2015). Such growth continues to accelerate because of the extensive occupation of new housing developments erected since the April 2016 census and which continues apace.

The CSO has kindly provided their modified 2016 gridded populations, as follows:

### Drogheda-LBM 2016 Census Gridded Population and OSI Grid References:

Grid cells	<u>6/7</u>	<u>7/8</u>	<u>8/9</u>	<u>9/10</u>	<u>10/11</u>	<u>11/12</u>	<u>12/13</u>	<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	Totals
79/80	119	52	84	9	27	99	58	84	34	51	0	617
78/79	26	6	24	60	62	87	54	91	5	0	0	415
77/78	19	16	67	18	475	170	79	59	130			1,033
76/77	77	226	3,212	3,380	2,563	7	5	95	523	285		10,373
75/76	1,325	1,820	3,115	3,733	841	15	30	111	288	1,090		12,368
74/75	1,053	3,656	3,188	2,878	2,453	2,608	812	822	863	742		19,075
73/74	66	648	606	693	525	1,176	64	13	1,419	2,435	226	7,871
72/73	38	32	75	55	44	13	102	20	94	792	393	1,658
71/72	5	24	85	0	80	5	18	19	40	489	1,438	2,203
70/71	46	28	5	54	76	49	45	307	233	27	11	881
<b>Total</b>	<b>2,774</b>	<b>6,508</b>	<b>10,461</b>	<b>10,880</b>	<b>7,146</b>	<b>4,229</b>	<b>1,267</b>	<b>1,621</b>	<b>3,629</b>	<b>5,911</b>	<b>2,068</b>	<b>56,494</b>

Next, this Paper's research focuses on the EU's new set of rules for defining cities, kindly brought to one's attention by the CSO. Until 2015, there was no harmonized definition of 'a city' for European and other countries member of the Organization for Economic Co-operation and Development (OECD). This undermined the task of comparability, and also the credibility, of cross-country analysis of cities. To resolve this problem, the OECD and the European Commission has developed a new definition in 2015, of a city and its commuting zone.

This new definition works in four steps and is based on the presence of an ‘urban centre’ a new spatial concept based on high-density population grid cells. Source: Dijkstra, L. and Poelman, H. (2015), *European Cities – Functional Urban Area Definition*, European Commission, DG Regio

- Step 1: All grid cells with a density of more than 1 500 inhabitants per km<sup>2</sup> are selected (Map 1.1).
- Step 2: The contiguous<sup>[1]</sup> high-density cells are then clustered, gaps<sup>[2]</sup> are filled and only the clusters with a minimum population of 50 000 inhabitants (Map 1.2) are kept as an ‘urban center’.
- Step 3: All the municipalities (local administrative units level 2 (or LAU2) with at least half their population inside the urban center are selected as candidates to become part of the city (Map 1.3).
- Step 4: The city is defined ensuring that 1) there is a link to the political level, 2) that at least 50 % of the city population lives in an urban center and 3) that at least 75 % of the population of the urban center lives in a city (Map 1.4)<sup>[3]</sup>

In most cases, as for example in Graz, the last step is not necessary as the city consists of a single municipality that covers an entire urban center and the majority of the city residents live in that urban center. This is not currently the governance circumstance in Drogheda+LBM.

## 10. A Drogheda-LBM Interpretation of the Harmonised EU Measures:

In the 2011 census Drogheda+LBM had twelve grids with densities of 1,500 and over, together with a further five with 1,000-plus populations. Dundalk+Blackrock’s respective count is eleven and two. In the census of 2016 Dundalk was replaced by Swords as Ireland’s second largest town.

Applying the above 4-step test and in comparing Drogheda+LBM with Dundalk+Blackrock the following observations are noted. Dundalk+Blackrock fails on the application of the Step 2 minimum population requirement of 50,000 whereas Drogheda+LBM exceeds that minimum population criterion, but as in the anomalous case of Waterford City, only so when the matrix of all adjoining grids are included.

When the these kilometer-square grid cells of at least 1,500 population are identified, the test for ‘contiguity’ requires each of its surrounding eight cell cluster, in turn, to abut the adjoining cluster whose central cell has a population of at least 1,500 people. In this context of ‘compactness’ this ‘test’ would be satisfied for the grid cell disposition in the following extract for **Dundalk+Blackrock**, thus:



2,802	2,105	-
378	328	117
255	482	853
471	2,028	599
31	331	-

In identifying particular 'central' cells with their respective populations and their aforementioned 8-cell clusters, is noted that 'clusters' 2,105 and 2,028 are contiguous with one another at the point (line) where cells 328 and 482 abut (all 2011 census). However, Dundalk (including Blackrock) falls below the 50,000 population criterion – also used in the measure of USA cities.

Where Drogheda adjoins LBM the same test for comparable cell clusters are shown, thus:

823	5	46	112	275	1,059
2,411	2,470	673	752	748	691
435	861	56	13	1,224	2,162
45	13	106	11	90	705

In this case, the core cell clusters of 2,270 and 2,162 are

at one-remove from each other with respect to their surrounding 8-cell positioning. On that basis, Drogheda+LBM would appear to fail the second-step requirement for contiguity. However, should its specific cell, of 1,224 population of 2011, grow to equal or exceed 1,500 in a future (e.g. in the 2016 census), then the EU 50,000 minimum population criterion would appear to be satisfied, even omitting the low-density rows of cells from the top and bottom of the matrix.

Application of the HEU Rule would therefore require the 18.40% shortfall to be eliminated in that 1,224-populated cell's 2011 population. In this regard, it is noted that this cell is fully positioned within the St Mary's Electoral District, which achieved an overall 11.12% growth (2011-2016) as per the 2016 Preliminary Census results. In the 2016 census, that cell's population has increased to 1,402, a shortfall of less than 7% from the Graz Rule requirement. The CSO adjusted that cell's figure to 1,419 in their final assessment for 2016.

Importantly however, since that census, the CSO has confirmed that they are now able to finesse their grid measures to 250 metre squares as per the census data. On this same basis and applying the population densities of adjoining squares, by implementing a 'grid shuffle' adjustment of 250 metres, either westward or eastward, the remainder of the 1,419-populated square increases to more than the required 1,500 due to the 'spillover' effect from denser adjoining cells, whilst at the same time maintaining the minimum 1,500 core-cell population on the Drogheda side.

Accordingly, it is posited that the Graz measure applied to Drogheda-LBM confirms that the four step criterion for City Measurement is achieved. However, in pursuing this line of

research with the CSO, this author was advised that they were not then in a position to provide the grid shuffle data.

In the two year period that has elapsed since the 2016 census, the aggregate population of Drogheda-LBM continues to grow with added momentum and given their differentiated growth rate with that of Waterford during 2011-2016, and at the time of writing it has most likely exceeded that of Waterford City and Environs.

It is understood that Waterford’s comparable cell structure for its 2011 census grid outcome likewise presents some similar dis-continuous anomalies. However, it is understood that there exists a provision for individual EU State to be able to apply for derogation where a ‘city’ status already exists. Some six States have already availed of this Appeals’ provision.

In addition to these demographic criteria, the evidence of recent Drogheda-LBM growth and agglomeration is reinforced by the recommencement of residential development since the 2016 census. There are a number of such developments, some of which have been completed, resulting in further boosting living in the Drogheda-LBM agglomeration.

**Grid-Test Application:** Examining the adjoining nine-grid Drogheda-section grid centred on cell 2,470 as it meets the nine-grid LBM-section grid centred on cell-population 1,224, the 2011 CSO Census confirms the LBM cell to be short of the 1,500 criterion by 276 or by 18.4%. The nine Drogheda cells aggregate to 7,780, averaging 872 per cell. The nine LBM cells aggregate to 6,396, averaging 710 per cell.

### 2011 Census – The Interface of Drogheda-LBM Agglomeration Grid Area Population:

823	5	46			
2,411	2,470	673	752	748	691
435	861	56	13	1,224	2,162
			11	90	705

Part of Drogheda side.....> | <.....Part of LBM side

These 2011 cell populations are next compared with the similar cell data for the 2016 cell populations, as follows:

### 2016 Census – The Interface of Drogheda-LBM Agglomeration Grid Area Population:

841	15	30			
-----	----	----	--	--	--

2,453	2,608	812	822	863	742
525	1,176	64	13	1,419	2,435
			20	94	792

Part of Drogheda side.....>|<.....Part of LBM side

In 2016, the pivotal LBM core cell has increased to 1,402, just 98 persons short of the required 1,500 population (i.e. before any grid shuffling). In December 2017 the CSO revised upward this 2016 core cell population to 1,419 being 94.6% of 1,500. The adjoining 2,463 cell was revised downward to 2,435. The nine agglomerating Drogheda cells aggregate to 8,524, averaging 947 per cell, representing an increase of 9.56% above the 2011 outturn. Likewise the nine LBM cells aggregate to 7,200, averaging 800 per cell; an increase of 12.57%.

In applying the grid-shuffle technique, in either direction east-west, it is posited that the respective core-grids will exceed the 1,500 population threshold, on the LBM side by virtue of the (portion) of grid 2,435 spill-over.

### 11. Current Momentum of Residential Development and Population Growth in Drogheda-LBM

On 17<sup>th</sup> October 2017, this writer Brian Hughes together with Peter Monahan from the City Status Committee visited many building sites, including completed and occupied phases in the area. Since then, considerable additional residential development has occurred, as confirmed in a 2<sup>nd</sup> May 2018 re-inspection where Brian Hughes was accompanied by Chris Byrne of the City Status Group. The primary purpose of that Survey was to gauge the extent and momentum of development and specifically to assess the likely effect on population growth since the 2016 census, the extent of overall development and consequently on the progress of consolidating the agglomeration between Drogheda and LBM.

Thus data has been obtained from each of the 30-40 development sites. However, the sheer volume and extent of current development activity has resulted in a decision to provide the following collective picture rather than schedules of individual-site data. As an overview, the current level of development and its progress is more marked for LBM than for Drogheda as at mid-2018.

In the case of LBM, the major focus of development is geographically widespread, but particularly so to the north side of Bettystown and south of Donacarne Village. In aggregate terms, upward of 1,000 houses, completed since the April 2016 census, are now nearly all occupied and apart from the two years of growth to the existing settlement population since then, we estimate that upward of 2,000 additional new residents are therefore living in LBM. Clearly, this level of newly-occupied reflects evidence of affordability – an issue that is vital to

both resolving the housing crisis and to the continuance of Ireland's economic recovery and of its competitiveness. Most such completions appear to comprise private-sector units.

Phased construction is the conventional modus for ongoing work, at various stages of construction, on upwards of twenty sites. In addition, there was evidence of a number of other sites, as in the process of being opened up, with ongoing pipework connection and other utility instillation and road building. Clearly, the extent of such development reflects the availability of the major waste-water plant at Stagrennan with its extensive pipe network to these areas and, likewise, the completed District Shopping Centre at Southgate, built in anticipation of the scale of the residential development that is now underway.

Accordingly, the population of LBM should be expected to increase to 15,000-20,000 by Census 2021, to include the population of this new housing. The demographic impact of such large-scale residential developments is being reflected in the increasing population density of the above-described grid squares, which are at and close to the above-referred interface between south-east Drogheda and the north and western sections of LBM.

In regard to Drogheda, residential development has commenced at sites for up to 2,000 units, mainly on the outskirts of the town with some smaller ones comprising infill housing and some mixed ones. A number of sites were inspected during the course of the day. The major focus for Drogheda town's future expansion comprises the public sector land-bank to the north of the town, which has the potential to provide up to 5,000 housing units and an overall potential to accommodate a population increase of 20,000. Additional developments have already commenced or are about to so do, on both north and south sides of the town, encouraged by assessments of financial viability, coupled with the 'use it or lose it' lifespans of current planning permissions. These include:

- 1,000 units in Ballymakenny West and the Twenties Lane

- 400 units north of Drogheda Institute of Further Education

- 300 units on the Termonfeckin Road continuation of Aston Village

- 200 units in between Ballymakenny Road, East.

- 17 units at Bealieu Manor, Termonfeckin Road, in addition to building activity on the southside, including developments on the Donore Road, infill projects adjoining the Navan Railway Line and a recently completed and occupied residential development at Colp West in south-east Drogheda.

In addition to servicing the existing, fast-developing population, the sequential nature of providing such a large series of developments will require careful phasing for all the support services, schools, shopping and utilities, particularly the Northern Cross Road (PANCR), including enhanced port access and the proposed northern Drogheda railway station. Other developments are expected to see the recommencement of projects, as were noted during our survey, particularly on the south side of the town. Some of them had stopped abruptly, at the start of the Troika crisis.

Opportunities to provide for wide socio-economic types of housing, are reflected in medium density developments; ones providing for layouts including terrace and semi-detached



formats. However, apartment-type construction was not much in evidence, as of now – which reflects the October 2017 test for profitability for this format of development, which may be only marginally viable, see Society of Chartered Surveyors Ireland study.

The likely scale of future development throughout Drogheda-LBM should be jointly monitored and administered by the two county councils, Louth and Meath, under the *Putting People First* initiative, using the Drogheda Borough Authority as the base for this new city. The need for this type of administrative co-operation was articulated in the recent Boundary Report for Drogheda. Politically, this would be achieved with formal and continuous liaison arrangements uniting the seventeen public representatives for the three LEAs.

It is understood that no additional government funding has been allocated in 2018 for the construction and completion of the Northern Cross Route and that the major housing developments that are dependent on such prior infrastructure being undertaken are being held up as a result. However, some preliminary works have now commenced.

## **12. Research Conclusions:**

Significantly, the application of evidence-based population density grid data technique, at the standardised one square kilometre level as published in Dijkstra, L. and Poelman, L. (2015), *European Cities – Functional Urban Area Definition*, European Commission, DG Regio, now provides an internationally-recognised way of avoiding the urban classification problem for identification of emerging cities. It represents the accepted internationally recognised methodology for obtaining such insights that utilise such CSO data, that has been available only as recent as 2013. It should therefore be adopted and utilised in the process of growth settlement selection in future national and regional-level spatial strategy plan formulation for Ireland.

The evidence adduced in this research, with its application of the Harmonised EU grid test informs the emergence of Ireland's next stand-alone city, Drogheda+LBM; one that is on a scale-size with Waterford City but which is now growing at nearly three-times as fast. It was noted that the Preliminary 2016 population of 83,317 for the Greater Drogheda Area (GDRA) in 2016 represents a 79.37% growth since 1996. Together Drogheda+LBM have a 30%+ larger and denser agglomerating population than that of Dundalk+Blackrock, Co Louth.

Over 2011-2016 Waterford City and environs population increased by 1,985 to 53,504 or 3.85%, just ahead of the national growth average of 3.78%: the comparative growth for Drogheda+LBM is above twice that level, thereby eliminating the former size difference, as of the Petition date for their confirmation as Ireland's newest city. Significant built environment/ infrastructure projects and the demographic and growth-momentum data, as presented herein, articulates the progress made by Drogheda-LBM to 2011 and then to 2016 – thrice the rate of the State's population growth.

The intervening five years to 2016 has seen the 'retirement' of the defective National Spatial Strategy including its notorious failure to recognise this most significant example of an Irish urban agglomeration outside of Dublin.

There is also the underlying Regional-level data from the Planning Regional East-West split, as per Appendix 4 herunder, which contrasts the demographic growth as between the two



halves of the State, and which at the NPF-level, justifies the confirmation of another east-coast city, given the reality of Ireland's population centroid, now located as far east as Maynooth. The east-west Planning Region split of the State's population growth 2011-2016 was 135,705 versus 37,908 for the West-Planning Regions or 4.78% versus 2.17% growth (in the North-South line down to Youghal) and in dividing the Border Region into its three eastern and three western counties).

The perverse 2002 NSS classification of Drogheda, where it was neither considered to merit a 'Gateway' nor a 'Hub' designation, but which was assigned a demeaning role as a 'support town' to Dundalk in the Border Region, was deeply flawed, both on urban economic and demographic grounds. The comparative research evidence presented in this Paper confirms that such spatial classification is unwarranted and is perhaps explained as one that was adversely, politically driven. That classification also ignored the Appendix 2 definitions of Balanced Regional Development.

The fact that Drogheda-LBM is not mentioned in the National Planning Framework reflects poorly on the content of that production, or an absence of an awareness of the compelling demographics as adduced herein, and hence, questions the professionalism or, at worst, is a political decision to again deliberately ignore or suppress the emergence of Ireland's next city. The previous use and application of Small Area Population Statistics (SAPS) has the drawback of their wide surface-area variations for comparing the populations of small areas such as Electoral Districts which were of varying sizes and populations.

As was confirmed by the then Minister for the Environment, Simon Coveney at the Maynooth University launch of the National Planning Framework on 2<sup>nd</sup> February 2017, it is heralded as a process that will use evidenced-based data in its construction. Then, Minister Coveney, in response to Dr Brian Hughes' question from the audience, confirmed that he and his Department would examine and comment on this evidence base for Drogheda-LBM, when formally presented. Junior Minister, Damien English was also present and likewise gave his full endorsement to this (awaited) evidenced-based Petition. Accordingly, this Report's emerging demographic evidence of urban agglomeration, for matrix field densification purposes, in settlement size classification places Drogheda-LBM in the vanguard of Ireland's major fast-growth centres. See below Table on NPF growth centres, where Drogheda-LBM's five and twenty-year growth is third highest after Dublin and Cork.

The background theory and application of grid-based measurement has been pioneered in Ireland by CSO's Dermot Corcoran, in his DIT Masters Dissertation (2011) *Disseminating Irish Census data using grids: An example of combining spatial and statistical information*. One is grateful to Dermot for providing the Drogheda and Dundalk 2011 grid data in excel format consistent with the respective specified OSI maps, as referenced hereinabove.

Parallel to Brussels' approval of Ireland's three NUTS 2 Super Regions, as provided for in the *Putting People First* Action Programme, this research will assist the County Louth's integration into the East Region (Map at Page 191, *ibid*). The agglomeration of Drogheda-LBM opens the path for this Government to undertake the process for the grant of city status, triggered by the formal Petition that this Research Study accompanies.

It will consolidate the growth of the Dublin-Belfast Economic Corridor, commensurate with Lisburn and Newry's recent acquisition of city status north of the Border. With the

exceptions of Dublin (+62,552) and Cork (+10,087) Drogheda-LBM's growth of 3,361 (2011-2016) is the largest of all Ireland's cities and environs – greater than Limerick, Galway or Waterford Cities and environs and all of the 194 towns. This research paper presentation has tracked the 1996-2016 censuses demographic progress of Drogheda and Laytown-Bettystown-Mornington as the subsequent real estate development that represents the physical and demographic engine of growth within the fast-growing Greater Drogheda agglomeration and is size significance in the post-Brexit context.

**Appendix 5 of this research points to the relationship between local employment in the form of Daytime Working Population as a proportion of a town's population, and the need for large and expanding urban centres to match population growth with employment growth and the location of central place functions. In Drogheda's case both the IDA and Enterprise Ireland can point to the employment potential of a large and fast-increasing workforce, located within 30-40 minutes of Ireland's largest port and airport and strategically located within the Dublin-Belfast Economic Corridor.**

**These Appendix 5 data, for the Daytime Working Populations of Drogheda and LBM, at 30.18% and 6.49% respectively, as the percentages of their total residential populations, provide at both the national and regional levels, significant local employment potential. Specifically, to be able to rectify what in 2016 is a skewed land-use planning-transportation interface for this deep labour-pool of skilled employment, both for local new enterprise and corporate activity and for third-level and higher educational activity.**

**This employment outcome confirms the serious neglect by past governments to promote Drogheda-LBM's economy pro-rata with its population growth. By confirming it as Ireland's next city this will commence the process to reverse the NSS failure to recognise it. In turn, its central-place potential can then be exploited which, in turn will reverse the current intensive medium and long-distance commuting patterns of taking local employment away from Drogheda-LBM and instead, will allow the emerging to fulfil its potential as the north-east's regional capital.**

The Appendix content includes photographic evidence of completed and occupied houses, other completed or near-finished housing not yet occupied, a variety of building sites under construction and other sites where utilities and roads are under construction.

Likewise, the proposed described mapped-boundaries, comprising an area of 72 square kilometres for the new city of Drogheda-LBM, is also included in the Appendix content. For ease of reference this map also includes the same grid references in layout, prepared by Edward Phelan and Co., VCL Consultants, Drogheda.

**The research study concludes that the agglomeration of Drogheda-LBM now provides a most significant opportunity for this Government, in the national interest, to confirm this location as Ireland's next city and this evidence-based Research Study underwrites the formal submission of the accompanying Petition for City Status.**

**The near-80% population growth (+36,866) in the Greater Drogheda Area over the 1996-2016 period, together with post-2016 growth and recent residential**

developments in the intervening two years, suggest that the population growth emphasis is more than two-thirds weighted towards the southern bank (+36,866) as against the northern bank (+12,158). This growth trend differential reinforces the Drogheda-LBM agglomeration, facilitated by the existence of the District-level Southgate Shopping Centre, the major Waste Water Treatment Plant and the volumes of residential development with accelerating population currently occurring, particularly in the ‘interfacing’ Bettystown and Donacarney locations.

Furthermore, in the absence of and likely delay in the necessary infrastructure funding on the northern side of Drogheda, its natural growth progression will lead to a further south-side skewing of these demographic growth patterns.

These research conclusions note that for both the 1996-2016 and 2011-2016 periods, the absolute population growth of Drogheda-LBM is third only to Dublin and Cork cities – well ahead of the growth of the smaller cities of Limerick, Galway and Waterford and furthermore, it is also greater than the aggregate growth for the four other NPF towns.

Set out hereunder are the five and twenty-year population and growth performances of all the NPF-selected settlements. Together with the above-researched grid-density evidence confirming the agglomeration and physical fusion of Drogheda-LBM, this evidence-base of both population growth and population size enables the emerging city to be appropriately size-classified with the five other cities rather than with the four NPF towns.

This is arranged in the following tabular layout of to-day’s *de facto* six cities State together with the four nominated towns, which displays and should represent the appropriate and factual demographic grouping under the NPF, thus:

**NPF City and Town Population Growth Comparisons:**

**1996-2016**

The ten NPF-Designated Centres:  
City and Town Population Growth Comparisons:

Timeframe  
1996-2016:

The ten NPF-Designated Centres:      Population

**2011-2016:**

The ten NPF-Designated Centres:

Timeframe  
2011-2016:

Population      Population

<u>Cities:</u>	<u>1996</u>	<u>2016</u>	<u>Growth</u>	<u>% Growth</u>	<u>2011</u>	<u>2016</u>	<u>Growth</u>	<u>% Growth</u>
Dublin	952,692	1,173,179	220,487	23.14%	1,110,627	1,173,179	62,552	5.63%
Cork	179,954	208,669	28,715	15.96%	198,582	208,669	10,087	5.08%
Limerick	79,137	94,192	15,055	19.02%	91,454	94,192	2,738	2.99%
Galway	57,363	79,934	22,571	39.35%	76,778	79,934	3,156	4.11%
Waterford	44,155	53,504	9,349	21.17%	51,519	53,504	1,985	3.85%
<b>Drogheda-LBM</b>	<b>28,960</b>	<b>52,828</b>	<b>23,868</b>	<b>82.42%</b>	<b>49,467</b>	<b>52,828</b>	<b>3,361</b>	<b>6.79%</b>

Towns:

<b>Dundalk-Blackrock</b>	<b>30,195</b>	<b>39,004</b>	<b>8,809</b>	<b>29.17%</b>	<b>37,816</b>	<b>39,004</b>	<b>1,188</b>	<b>3.14%</b>
Athlone	15,544	21,349	5,805	37.35%	20,153	21,349	1,196	5.93%
Letterkenny	11,996	19,274	7,278	60.67%	19,588	19,274	-314	-1.60%
Sligo	18,509	19,199	690	3.73%	19,452	19,199	-253	-1.30%

**Source: CSO, 1996 and 2016**

**Censuses**

The State population increase (1996-2016) was 31.32%.

Drogheda-LBM's 82.42% growth equates to 3.05%

per annum compound.

CSO, 2011 and 2016 Censuses to have exceeded the State Growth.

Drogheda-LBM's growth was over 1% above Dublin, the second highest percentage growth

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## APPENDIX 1

The following 2016 Preliminary Electoral District Populations are compared herein together with the 2011 Census out-turn for the Greater Drogheda Area, thus:

### **Louth Rural Area:**

Electoral District	2011 Population	2016 Population	Population Growth	Percentage Growth
Clogher	3,031	3,237	206	6.8

Dysart	918	924	6	0.7
Monasterboice	1,342	1,373	31	2.3
Mellory	1,723	1,757	34	2.0
St. Peter's (pt)	5,173	9,721	570	6.2
Termonfeckin	<u>3,294</u>	<u>3,545</u>	<u>251</u>	<u>7.6</u>
<b>Total</b>	<b>15,481</b>	<b>20,557</b>	<b>1,098</b>	<b>5.6</b>

### **Meath Rural Area:**

Electoral District	2011 Population	2016 Population	Population Growth	Percentage Growth
Ardcath	1,911	1,949	38	2.0
Duleek	5,177	5,565	388	7.5
Julianstown	9,606	10,176	570	5.9
Mellifont	561	541	-20	-3.6
St. Mary's (part)	10,769	11,864	1,095	10.2
Stamullen	<u>4,696</u>	<u>5,009</u>	<u>313</u>	<u>6.7</u>
<b>Total</b>	<b>32,720</b>	<b>35,104</b>	<b>2,384</b>	<b>7.3</b>

### **Drogheda Borough Area:**

Electoral District	2011 Population	2016 Population	Population Growth	Percentage Growth
Fair Gate	9,806	10,424	511	6.3
St. Laurence's Gate	4,004	4,068	71	1.6
West Gate	6,042	6,305	242	4.4
St. Peter's (part)	3,978	2,099	-62	-2.9
St. Mary's (part)	<u>6,563</u>	<u>6,859</u>	<u>296</u>	<u>4.5</u>
<b>Total</b>	<b>30,393</b>	<b>27,656</b>	<b>1,241</b>	<b>4.7</b>

**Greater Drogheda Area:** 78,594                      83,317                      4,723                      6.0

Note 1: Caution is required in above comparisons because the 2016 Census data are 'preliminary', pending publication of definitive census figures, in mid-2017. Preliminary State growth 2011-2016 was 3.7%.

Note 2: Drogheda Borough's population was recorded as 30,393 in the 2011 census, some 1,817 above the ascribed figure listed in the 2016 Preliminary census. Thus the Louth Rural area is shown above as 17,298 compared with 15,481 in the 2011 Census, in the CSO Area Volume, Table 6.

The 2016 census, usually at Table 7 of the Area Volume published, confirmed the combined settlement population of Drogheda+LBM to be 52,828. This brings into play the Harmonised European Union's four-stage density and agglomeration criteria as per nine-cell cluster measure for Graz, Austria, as set out in P. 12 of this Paper. As in previous inter-censal periods, for the Meath Rural Area this again is shown as the fastest growing part of the Greater Drogheda Area, and particularly so for the double-digit percentage growth of that part of the St. Mary's Electoral District south-east of Drogheda Borough. The confirmed growth of the specific cell – population, having 1,224 in 2011, vide P. 13 *super* – then became the decisive factor in confirming the Drogheda+LBM urban agglomeration. Furthermore, and having regard to infrastructural provision, the housing crisis combined with implementation of the sequential spatial planning model for timely new and extensive mixed residential development for this already-serviced part of Drogheda will future-proof the realisation of such agglomeration. The extensive developments now underway also reinforce this fact.

## **APPENDIX 2**

### **The eight Key Concepts of Balanced Regional Development in the 2002-2020 NSS**

- The key concepts (of the NSS) are potential, critical mass, gateways, hubs, complementary roles and linkages.
- Potential is the capacity that an area possesses, or could in future possess, for development, arising from its endowment of natural resources, population, labour, its economic and social capital, infrastructure and its location relative to markets.
- Critical mass relates to size and concentration of population that enables a range of services and facilities to be supported. This in turn can attract and support higher levels of economic activity and improved quality of life.
- Gateways have a strategic location, nationally and relative to their surrounding areas, and provide national scale social, economic infrastructure and support services. Further development of the five existing gateways at Dublin, Cork, Limerick/ Shannon, Galway and Waterford is a key component of the NSS.
- **In addition, a small number of other large towns, which have the potential capacity to become gateways and lead development in their regions, will play a key role in achieving a more balanced role in regional development.**
- Hubs: A number of towns will act as hubs, supporting the national and international role of the gateways and in turn energising smaller towns and rural areas within their sphere of influence.
- Complementary roles for other towns, villages and rural areas; various medium-sized towns in each region will act as 'local capitals' providing a range of services and opportunities for employment. Within the spatial framework provided by the NSS, rural potential will draw upon local economic strengths, supported by a stronger structure of smaller towns and villages as a focus for economic and social activity and residential development.
- Linkages in terms of good transport, communications and energy networks are vitally important to enable places and areas to play to their strengths.

Source: The National Spatial Strategy (2002-2020: 12)

### APPENDIX 3

#### Greater Drogheda:– Demographic Growth Evidence from 1996-2011 Censuses

##### **Analysis of Greater Drogheda in 2011:**

SUMMARY:	Greater Drogheda: Urban and Rural North and South of Boyne							Share of
	Borough	Add non-Borough	Town+envs. [Table 7]	L-B-M	Dr.+LBM	Rural (net)	TOTAL	Total pop.
North of River	23,830	2,202	26,032	0	26,032	13,279	39,311	50.02%
South of River	<u>6,563</u>	<u>5,983</u>	<u>12,546</u>	<u>10,889</u>	<u>23,435</u>	<u>15,848</u>	<u>39,283</u>	<u>49.98%</u>
Total	30,393	8,185	38,578	10,889	49,467	29,127	78,594	100.00%
Share:	=78.78%	=21.22%	=100.00%					

#### Analysis of Greater Drogheda in 1996:

SUMMARY:	Greater Drogheda: Urban and Rural Growth North and South of Boyne							Share of
	Borough	Add non-Bor.	Town+envs	LBM	Dr.+LBM	Rural (net)	TOTAL	Total pop.
North of River	21,501	36	21,537	0	21,537	7,659	29,196	62.85%
South of River	<u>2,959</u>	<u>786</u>	<u>3,745</u>	<u>3,678</u>	<u>7,423</u>	<u>9,832</u>	<u>17,255</u>	<u>37.15%</u>
Total	24,460	822	25,282	3,678	28,960	17,491	46,451	100.00%

#### Growth in populations over the 15 years to 2011:

Borough	Add non-Bor.	Town+envs.	LBM	Dr.+LBM	Rural (net)	TOTAL	Share of Growth
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North of River	2,329	2,166	4,495	0	4,495	5,620	10,115	31.47%
South of River	<u>3,604</u>	<u>5,197</u>	<u>8,801</u>	<u>7,211</u>	<u>16,012</u>	<u>6,016</u>	<u>22,028</u>	<u>68.53%</u>
Total	5,933	7,363	13,296	7,211	20,507	11,636	32,143	100.00%

**GDrA: % Growth: 15 years to 2011:**

	Borough	Add non-Bor.	Town	LBM	Dr.+LBM	Rural (net)	TOTAL
North of River	10.83%	6016.67%	20.87%	0.00%	20.87%	73.38%	34.65%
South of River	<u>121.80%</u>	<u>661.20%</u>	<u>235.01%</u>	<u>196.06%</u>	<u>215.71%</u>	<u>61.19%</u>	<u>127.66%</u>
Total	24.26%	895.74%	52.59%	196.06%	70.81%	66.53%	69.20%

Source: Analysis of CSO censuses of 1996 and 2011, by Brian Hughes, extracted from the Area Volumes, 1.

Note: In the CSO Preliminary 2016 Census Results the 2011 figure for St Peter's Electoral District was reduced by 1,817 from that recorded in the Area Volume for the earlier census (from 30,393 to 28,576. The CSO advise that this difference reflects a population and land area issue at the Preliminary census stage, which will be rectified in the final figures for the 2016 census, when released in the spring of 2017. Accordingly, the Drogheda Borough area has appeared to 'reduced' in population, by that 1,817 figure. Accordingly, in the population growth figures in Appendix 3, below the 2016 census changes have been omitted. The relevant north Boyne EDs are: Clogher, Dysart, Monasterboice, Mullary, St. Peter's and Termonfeckin. South river the relevant EDs are: St. Mary's, Ardcath, Duleek, Julianstown, Mellifont and Stamullin. It is noted that the St. Peter and St. Mary EDs are split into their respective Borough and rural contents reflecting the current boundary review position.

**APPENDIX 3A**

**Greater Drogheda:– Demographic Growth Evidence from 1996-2016 Censuses**

**Analysis of Greater Drogheda in 2016:**

**SUMMARY: Greater Drogheda: Urban and Rural North and South of Boyne**

2016 Census	Borough	Add non-Borough	Town+envs. [Table 7]	L-B-M	Dr.+LBM	Rural Areas (including settlements)	TOTAL	Share of Total pop.
North of River	24,999	3,115	28,114	0	28,114	13,240	41,354	49.63%
South of River	<u>6,859</u>	<u>5,983</u>	<u>12,842</u>	<u>11,872</u>	<u>24,714</u>	<u>17,249</u>	<u>41,963</u>	<u>50.37%</u>
<b>Total</b>	<b>31,858</b>	<b>9,098</b>	<b>40,956</b>	<b>11,872</b>	<b>52,828</b>	<b>30,489</b>	<b>83,317</b>	<b>100.00%</b>

Share: =77.79% =22.21% =100.00%

Waterford's 53,504 = +1.28% larger than Drogheda+LBM's 52,828 population in April 2016. Since then and unlike Waterford, hundreds of new houses have been constructed and occupied, particularly in the Bettystown and Donacarney areas, that are further consolidating the agglomeration of Drogheda with LBM.

**Analysis of Greater Drogheda in 1996:**

1996 Census	Greater Drogheda: Urban and Rural Growth North and South of Boyne							Share of
	Borough	Add non-Bor.	Town+envs [Table 7]	L-B-M	Dr.+LBM	(including settlements)	TOTAL	Total pop.
North of River	21,501	36	21,537	0	21,537	7,659	29,196	62.85%
South of River	<u>2,959</u>	<u>786</u>	<u>3,745</u>	<u>3,678</u>	<u>7,423</u>	<u>9,832</u>	<u>17,255</u>	<u>37.15%</u>
<b>Total</b>	<b>24,460</b>	<b>822</b>	<b>25,282</b>	<b>3,678</b>	<b>28,960</b>	<b>17,491</b>	<b>46,451</b>	<b>100.00%</b>
Share	96.75%	3.25%	100.00%					

**Greater Drogheda: Growth in populations over the 20 years to 2016:**

	Borough	Add: Outside Borough	= 'Table 7' Town+envs.	LBM	Dr.+LBM	[Including settlements]	TOTAL	Share of Growth
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North of River	3,498	3,079	6,577	0	6,577	5,581	12,158	32.98%
South of River	<u>3,900</u>	<u>5,197</u>	<u>9,097</u>	<u>8,194</u>	<u>17,291</u>	<u>7,417</u>	<u>24,708</u>	<u>67.02%</u>
<b>Total</b>	<b>7,398</b>	<b>8,276</b>	<b>15,674</b>	<b>8,194</b>	<b>23,868</b>	<b>12,998</b>	<b>36,866</b>	<b>100.00%</b>

**GDrA: Total  
Growth: 20**

**years to 2011:** 30.24% 1006.81% 62.00% 222.70% 82.42% 74.31% 79.37%

	Borough	Add non- Bor.	Town	LBM	Dr.+LBM	Rural (net)	TOTAL
North of River	10.83%	6016.67%	20.87%	0.00%	20.87%	73.38%	34.65%
South of River	<u>121.80%</u>	<u>661.20%</u>	<u>235.01%</u>	<u>196.06%</u>	<u>215.71%</u>	<u>61.19%</u>	<u>127.66%</u>
<b>Total</b>	<b>24.26%</b>	<b>895.74%</b>	<b>52.59%</b>	<b>196.06%</b>	<b>70.81%</b>	<b>66.53%</b>	<b>69.20%</b>

**Source: Analysis of CSO censuses of 1996 and 2011, by Brian Hughes, extracted from the Area Volumes, 1.**

Note: In the CSO Preliminary 2016 Census Results the 2011 figure for St Peter's Electoral District was reduced by 1,817 from that recorded in the Area Volume for the earlier census (from 30,393 to 28,576. The CSO advise that this difference reflects a population and land area issue at the Preliminary census stage, which will be rectified in the final figures for the 2016 census, when released in the spring of 2017. Accordingly, the Drogheda Borough area has appeared to 'reduced' in population, by that 1,817 figure. Accordingly, in the population growth figures in Appendix 3, below the 2016 census changes have been omitted. The relevant north Boyne EDs are: Clogher, Dysart, Monasterboice, Mullary, St. Peter's and Termonfeckin. South river the relevant EDs are: St. Mary's, Ardcath, Duleek, Julianstown, Mellifont and Stamullin. It is noted that the St. Peter and St. Mary EDs are split into their respective Borough and rural contents reflecting the pre-boundary review position.

## Appendix 4

### The East-West Planning Region Demographic Growth Contrast:

#### 1. Overall Planning Regions:

2016 Census Planning Regions Populations

TABLE 4.1:

Total Region	2011	2016	Growth	Total % Growth
Border	514,891	523,217	8,326	1.62%
Dublin	1,273,069	1,347,359	74,290	5.84%
Mid East	531,087	559,973	28,886	5.44%
Midlands	282,410	292,301	9,891	3.50%
Mid-West	379,327	384,998	5,671	1.50%
South-East	497,578	510,333	12,755	2.56%
South-West	664,534	690,575	26,041	3.92%
West	<u>445,356</u>	<u>453,109</u>	<u>7,753</u>	<u>1.74%</u>
Total-State	4,588,252	4,761,865	173,613	3.78%

#### 4.2: Ireland's East-West Divide:

In the consideration of Ireland's growth contrasts this next Table focuses on the eight Planning Regions so as to assess the east-west population size and growth in a north-south divide line; from Youghal northward to approximately Clones. This separates the Border Region into its three eastern and three western counties (but all of Cavan county included in the East Border area).

**Table 4.2: East and West Planning Regional Population Growth - 2011-2016**

	2011	2016	Growth	Population Growth % contribution
Dublin	1,273,069	1,347,359	74,290	42.62%
Mid East	531,087	559,973	28,886	16.68%
Midlands	282,410	292,301	9,891	5.62%
South East	497,578	510,333	12,755	7.95%
East Border area	<u>256,563</u>	<u>266,446</u>	<u>9,883</u>	<u>5.41%</u>
East of State	<b>2,840,707</b>	<b>2,976,412</b>	<b>135,705</b>	<b>78.27%</b>
South West	664,534	690,575	26,041	14.86%
Mid-West	379,327	384,998	5,671	3.44%
West	445,356	453,109	7,753	4.75%
West Border area	<u>258,328</u>	<u>256,771</u>	<u>-1,557</u>	<u>-1.32%</u>
West of State	<b>1,747,545</b>	<b>1,785,453</b>	<b>37,908</b>	<b>21.73%</b>
State	4,588,252	4,761,865	173,613	100.00%

Source: Brian Hughes analysis of CSO 2011 Census and 2016 CSO Preliminary Data.

NOTE: The full Border Region's corresponding population totals during 2011 and 2016 are: 514,891 in 2011 and 523,217 in 2016, resulting in an 8,326 growth which is 1.62% uplift for that region's population growth. It is observed that all of Louth accounted for 71.9% of that region's growth.

During 2011-2016 the Greater Dublin Area alone, comprising the Dublin and Mid East regions, contributed 59.30% of the total State growth. Of note in the above data, is the contrasting east-west performance to State population growth; 78.27% versus 21.73%. The 2016 census also confirms a return to net In-migration and thus previous intercensal growth rates can be expected to resume. For instance, in 2002-2006 the State population grew by 322,645 (+8.26%) and during 2006-2011 it was up by a further 348,404 (+8.22%). Thus, in the nine years to April 2011, the State population grew by 671,049 (+17.13%) above the 2002 level, as confirmed in these twenty-first century censuses.

This analysis of the State's 2011-2016 population growth of its eight planning regions underlines the marked difference between the east and west planning regions. In summary, the east portion of State had 2.203 times the rate of growth compared with the western portion. Of the absolute State growth of 173,613, 78.17% occurred in the east with just 21.83% in the west. This pattern of population distribution is replicated in an all-island context wherein Maynooth town now marks approximately the geographic centroid for the island of Ireland.

This focus on Ireland's east-west demographic growth differential performance analysis in this Appendix is detailed so as to cast attention on the need to complement the State's existing East Planning Regional cities, Dublin and Waterford, by the inclusion of Drogheda-LBM in the north-east area, complementing the Northern Ireland initiative for strengthening the Dublin-Belfast Corridor, where Lisburn and Newry as their two new cities, north of the Border. Effectively, the Rest of Leinster needs to consolidate along this Corridor and Drogheda-LBM is the principal, logical settlement focus in doing this.

## **Appendix 5**

The excessive mono-centricity of Dublin, with comparative cities of North-western Europe, is noted in Hall and Pain (2006), when related to its sphere-of-influence towns. As a consequence, Dublin-related towns generally exhibit low levels of central place activity, Per Christaller (1933). The following listing of Ireland's +10,000 populated towns also shows their respective Daytime Working Populations (DWP) and the percentage that their DWP represents to the matching populations, thus:

### **Table A5: Daytime Working Population as % of Resident Population of city or town and environs:**

**Where Dublin City and suburbs 512,449 out of 1,173,179 = 43.68%**

And Ireland's DWP = 2,006,641 ex 4,761,865 = 42.14%.

Cork City and suburbs 102,139 out of 208,869 = 48.90%

Limerick City and suburbs 44,624 out of 94,192 = 47.38%

Galway City and suburbs 44,376 out of 79,934 = 55.52%

**Waterford City and suburbs 24,375 out of 53,504 = 45.56%**

**Drogheda 12,361 out of 40,956 = 30.18%**

Swords 15,338 out of 39,248 = 39.08%

**Dundalk 14,164 out of 39,004 = 36.31%**

Bray 8,763 out of 32,600 = 26.88%

**Navan (An Uaimh) 8,970 out of 30,173 = 29.73%**

Kilkenny 13,738 out of 26,562 = 51.72%

Ennis 10,171 out of 25,276 = 40.24%

Carlow 7,868 out of 24,272 = 32.42%

Tralee 12,517 out of 23,691 = 52.83%

Droichead Nua 6,526 out of 22,472 = 29.04%

Portlaoise 8,410 out of 22,050 = 38.14%

**Balbriggan 3,436 out of 21,722 = 15.78%**

Naas 10,999 out of 21,393 = 51.41%

Athlone 13,108 out of 21,349 = 61.40%

Mullingar 8,633 out of 20,928 = 41.25%

Celbridge 2,339 out of 20,288 = 11.53%

Wexford 11,961 out of 20,188 = 59.25%

Letterkenny 11,395 out of 19,274 = 59.12%

**Sligo 13,024 out of 19,199 = 67.84%**

**Greystones 2,514 out of 18,140 = 13.86%**

Clonmel 7,036 out of 17,140 = 41.05%

**Malahide 2,259 out of 16,550 = 13.65%**

Carrigaline 1,849 out of 15,770 = 11.72%

Leixlip 5,825 out of 15,504 = 37.57%

Tullamore 8,259 out of 14,607 = 56.54%

Maynooth 5,201 out of 14,585 = 35.66%

Killarney 7,109 out of 14,504 = 49.01%

**Arklow 3,040 out of 13,163 = 23.10%**

Cobh 1,432 out of 12,800 = 11.19%

Ashbourne 1,963 out of 12,679 = 15.48%

Midleton 3,871 out of 12,496 = 30.98%

Mallow 3,775 out of 12,459 = 30.30%

**Castlebar 9,045 out of 12,068 = 74.95%**

**Laytown-Bettystown-Mornington 771 out of 11,872 = 6.49%**

Enniscorthy 4,140 out of 11,381 = 36.38%

Cavan 5,432 out of 10,914 = 49.77%

Wicklow 2,637 out of 10,584 = 24.91%

Tramore 1,628 out of 10,381 = 15.68%

Ballina 4,810 out of 10,171 = 47.29%

**Skerries 1,433 out of 10,043 = 14.27%**

Longford 5,050 out of 10,008 = 50.46%

Accordingly, Drogheda-LBM provides the focus for the optimum demographic labour pool where their aggregate Daytime Working Population is just 13,132 out of a population total of 52,828, being just 24.86%. This is by far the lowest percentage for any 20,000-plus settlement in Ireland, with the exception of Celbridge. The potential for labour-pool source and for higher education is unique.

Drogheda-LBM has 16,877 residents at work in 2016. Significantly, the corresponding figure for Waterford is just 16,610. However only 39.47% of the 16,877 figure actually work in Drogheda-LBM itself, as compared with the 78.88% of the Waterford.. Furthermore, the CSO figures (Ref. E 6,034 'Commuting in Ireland') also confirms the extent of the daily 10,215 exodus from Drogheda-LBM, by far the largest proportionate outward commute from any settlement in the State. This representing 60.53% - those who are employed elsewhere from Drogheda, which compares with just 3,509 or 21.11% who work elsewhere from Waterford.

