

Ireland 2040- Our Plan: The Case for Waterford

Submission to National Planning Framework Public Consultation Process

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Executive Summary

The inclusion of Waterford City as a primary focal point to promote strong urban development in Ireland has significant merit. Like the other Irish regional cities, it has not benefited from the strong population growth experienced in the country over the last two decades. The primacy of Dublin has now approached levels that are detrimental to the economic and societal wellbeing of Ireland. This is apparent most of all in the atomization of Irish settlement patterns in Dublin's commuter belt around the midlands. The case of Waterford hinges on its resilient position in the urban hierarchy despite recent economic traumas. Arguably this is more significant due to lower levels of state investment and incentivization compared to its peer cities of Limerick-Shannon and more particularly Galway. The exceptions to this are investments in crucial infrastructure such as Roads, Water Treatment and Energy Infrastructure by private enterprise. Waterford forms a central point in an array of larger urban areas in the South East unique in the Irish Republic. Therefore, to create a strong counter-pole to the Dublin area a strategy of investment, incentivization and development should be focused on Waterford to enhance and improve the urban strength of the region. This would both capitalize on existing infrastructural investment in Waterford that has a capacity to expand its population by over 100000 people at least. It would also potentially be one of the more cost effective solutions when compared to other cities. The instrument of job creation through the IDA and Enterprise Ireland, the provision of enhanced University level educational institutions is the logical extension of the infrastructural developments in Waterford. The recognition of Waterford-Tramore, Waterford suburbs in South Kilkenny, the infrastructural nodes of Belview Port (South Kilkenny) and Great Island Power Station (Wexford) as a single urban unit would be a promotional boon the city that more reflects "facts on the ground". Administrative control of the South Kilkenny suburbs as suggested by the recently published Boundary Commission report is crucial. This is to enable a central local authority to co-ordinate a more holistic and efficient approach to development. More rigid oversight of planning legislation and the elimination of "get out clauses" in planning legislation is also of paramount importance to the success of the new strategy.

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Problem Definition

It is well established by now that the Irish Urban Hierarchy is massively distorted by a top-heavy primate city and an atomized settlement pattern at the bottom of the urban hierarchy. Many of the settlements at the bottom are growing at a much faster rate than the regional cities of Cork, Limerick, Galway and Waterford. There is a variance in rate and nature of this lackluster growth. Galway for example has had impressive growth rates for many years but in the absence of a competitor in the Western Region of a similar scale and the acknowledgement off the existence of potentially a large transient population then one should ask why has Galway's growth been much more? Galway, Limerick and Cork have in effect repeated the effect of Dublin's economic pull albeit on a smaller scale by the emergence of large commuter belts relative to the size of the urban areas. The challenge for Irish planners is to enhance the growth of the Irish regional cities and to restrict the atomized settlement structure which is synonymous with Dublin's commuter belt.

The motivation of this submission is to state the case for the inclusion of Waterford as a primary centre of targeted growth comparable to the "gateway status" used in the previous National Spatial Strategy (NSS) published in 2002. This is in the context of the stated aim of formulation of a replacement strategy. Ireland has a relatively low population density by European Standards. Outside of Dublin, the region with the highest population densities outside the Greater Dublin Area (GDA) commuter belt are the South West (NUTS3) region and the South East (NUTS3) region. In the case of the South East the Waterford City area forms a pivot or hub to an urban belt comprising of the following Urban centers; Clonmel, Carrick and Suir, Waterford City, Tramore , New Ross, Dungarvan and Wexford. This both illustrates the strength and weakness of the region. The strength being the Waterford has a higher level of competition from three smaller towns in the region i.e. Kilkenny/Wexford/Clonmel. Each of these towns lie at a radius of 50Km from a central point in the region. This fact demonstrates a strong correlation with the Central Place Theory put forward by geographer Walter Christaller.

Waterford and the Urban Hierarchy

When Irish cities are examined there is an almost inescapable conclusion to be made almost immediately when populations figures are looked at. That is the clear gap between Dublin and the other four cities in population terms. With approximately 1 million people it is almost five times larger than the next largest urban center in size (Cork). It is twelve times larger than the third city (Limerick), approximately fifteen times larger than Galway and over twenty times larger than Waterford. This disparity between the primary and regional urban centers is difficult to find anywhere else in Europe.

Area	Population		
	2006	2011	Actual change
Dublin city and suburbs	1,045,769	1,110,627	64,858
Cork city and suburbs	190,384	198,582	8,198
Limerick city & suburbs	90,757	91,454	697
Galway city & suburbs	72,729	76,778	4,049
Waterford city & suburbs	49,213	51,519	2,306
Towns 10,000 or over	615,925	730,414	114,489
Towns 5,000 – 9,999	272,713	297,182	24,469
Towns 3,000 – 4,999	108,555	119,705	11,150
Towns 1,500 – 2,999	128,268	170,628	42,360
Urban Total	2,574,313	2,846,889	272,576
Rural Total	1,665,535	1,741,363	75,828
Total	4,239,848	4,588,252	348,404

Figure 1. Urban Hierarchy Table (Central Statistics Office, 2012)

This type of urban disparity is more recognizable in developing countries (Chen, Orum, & Paulsen, 2013, p. 238). Why this is the case in Ireland the one has to look at historical studies which suggest that political indecision effected the development of the country negatively (Garvin, 2004).

Considering that the driver of urbanization is economic development (Chen, Orum, & Paulsen, 2013, p. 238), one can only conclude that there is a resilience to change in the

urban hierarchy. Adding to this is the extent to which the primacy of Dublin continues to increase which is currently almost 40% of the state’s population. While the strong population growth outside of the GDA is concentrated in small settlements at the bottom of the urban hierarchy. Thus, Waterford is in a unique position with regard to the other regional cities. While it’s place in the urban hierarchy continues to be maintained it shares similar sluggish growth rates to the other regional cities of Cork and Limerick. When Waterford is looked at within its own region it differs from the other cities in that it is surrounded by a cluster of towns that are located on the next rung of the urban hierarchy and with substantially higher growth rates. While in the immediate hinterland of Waterford strong population growth rates are recorded in the adjacent statistical areas.

Other academics have made headway in describing the problem with Irelands urban hierarchy deficit using the Zipf’s law formula. In short this is a proven method of calculating the short fall and ideal population size of Ireland’s regional cities. Waterford like all Irish regional cities have a dramatic shortfall when compared to the largest city.

City (*000)	Rank	2006 Population (a)	Where Dublin = 100.00	Zipf’s Law Population (b)	Zipf Target Shortfall (b)- (a)	Zipf % extent of Shortfall [(b)-(a)/ (b)]
Dublin	1	1,045.8	100.00	1,045.8	0.0	100.00
Cork	2	190.4	18.53	522.9	332.5	63.59
Limerick	3	90.8	8.66	348.6	257.8	73.95
Galway	4	72.7	6.59	261.5	188.8	72.20
Waterford	5	49.2	4.65	209.2	160.0	76.78
Aggregate embryo city population shortfall in relation to Dublin:					939.1	69.97

Figure 2. Zipf’s Law and calculation for Irish Cities (Hughes, 2010)

Waterford and the Regional Urban Hierarchy

Waterford and the South East Region (NUTS3) is somewhat unique in Ireland in that it has an urban settlement structure comparable to European norms in particular that which was observed by Walter Christaller in the urban systems of southern Germany (Hofstra University, 2017). The purely theoretical model in the graphic below identifies the hierarchy identified by Christaller.

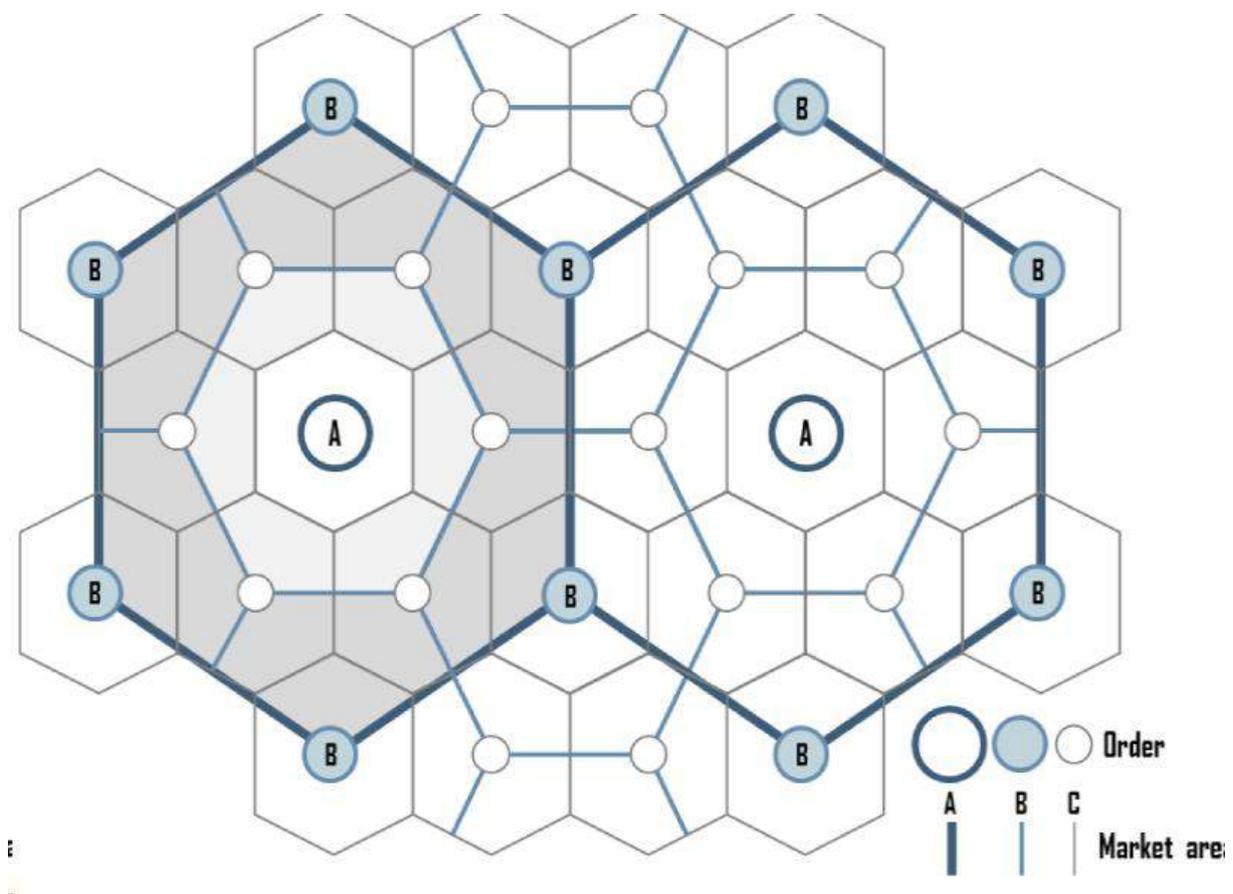


Figure 3. Central Space Theory (Hofstra University, 2017)

It is often emphasized in literature that the model seldom exists with 100% accuracy (FF UK PRAHA, 2011). This further illustrates the remarkable level of adherence the urban centers in

the South East of Ireland to the principle. This identifies the area as a distinct region in itself that is worthy of protection of the negative effects of the expansive Dublin commuter belt. A situation that is becoming more threatening in coastal areas of Wexford and also evidenced of in rising property prices in Kilkenny which appear to correlate with an increasing Dublin born populace residing in the city. The consolation being that this settlement is urban in nature unlike the settlement of Dubliners who chose to live in Wexford. The CPT models accuracy in describing the South East Region can be further illustrated using a 50km threshold and applied to Waterford and the South East.

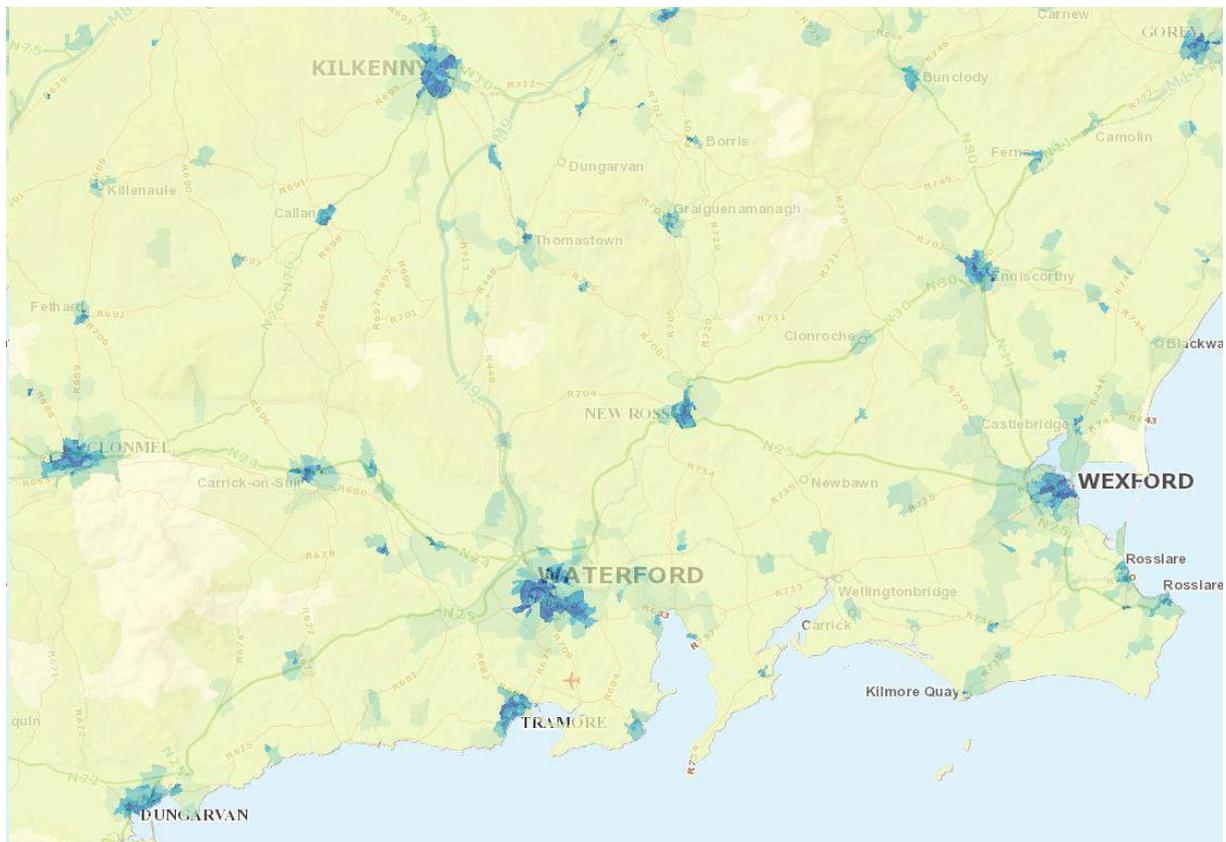


Figure 4. Central Place Theory in Ireland (All Ireland Research Observatory, 2017)

SOUTH EAST REGION (NUTS 3)

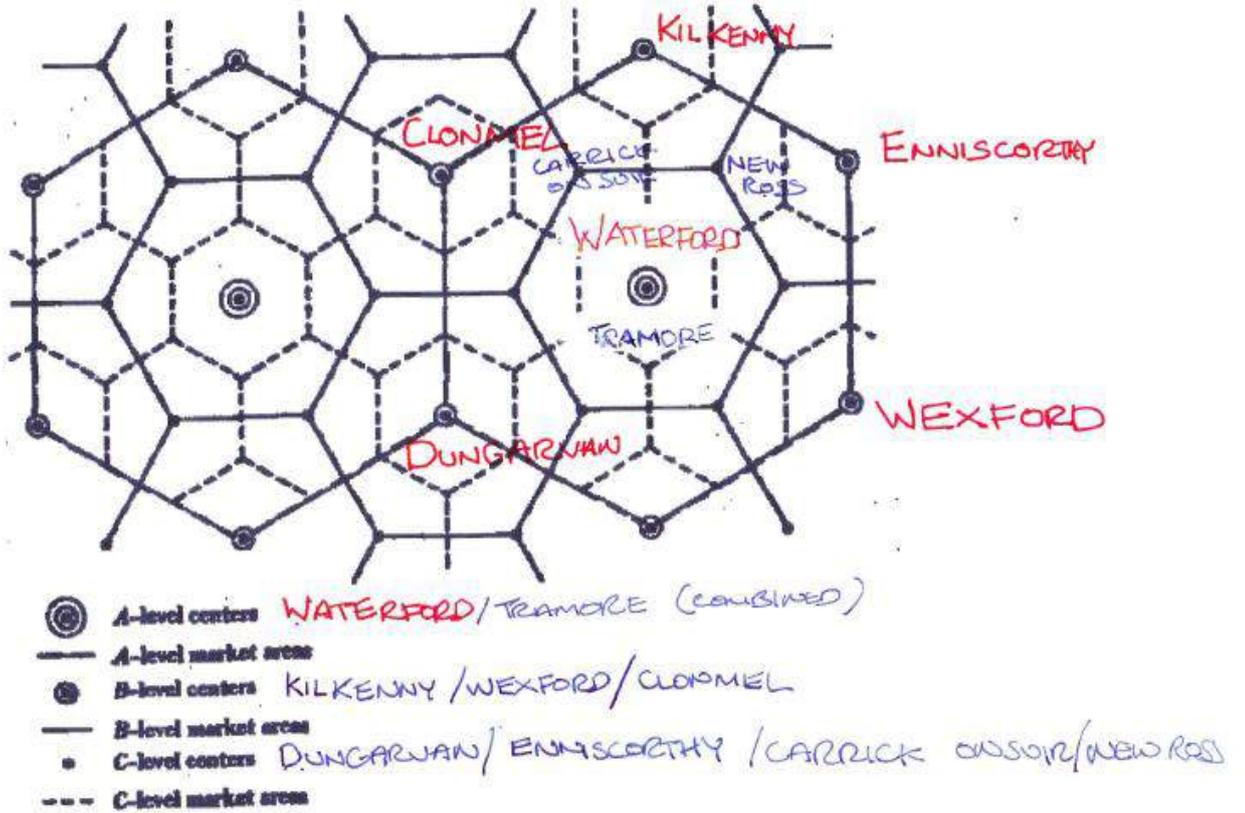


Figure 5 CPT mapped to South Eastern Towns.

Local Government and Waterford

The role of local authorities and the reforms implemented in 2014 were extremely simplistic in nature and seemed to be driven by rationalization more than delivering effective local government. The amalgamation of Waterford City and County administration as well as the similar amalgamation in Limerick City and Council did nothing to address an existing problem where both these cities lie on strategic points of Ireland's two largest river systems which also form the administrative as well as physical border with a neighboring county.

While the amalgamation of Waterford City and Council may have addressed some problems with regards to Waterford by including the second largest town in the county "Tramore" under a single administrative authority the retention of the northern boundary "as is" remains potentially problematic. Tramore as a standalone town as well as having a high dependency on Waterford functions as a residential area of Waterford City. With no more than 6km separating the outer edges of both urban centers it has to be questioned why both these urban centers are not imagined as a single entity with regards to strategic planning in the way that Limerick-Shannon is. This is even more pertinent considering that the dependency of Tramore on its larger neighbor is the highest in the country apart from Dunboyne in Co. Meath and Caragaline in Cork (Central Statistics Office, 2012).

A similar situation exists in suburban Waterford north of the River Suir. In this case the spread of Urban Waterford into the neighboring county of Kilkenny means that a distorted picture emerges where the population of Waterford City is often not reflected in headline numbers. This predicament is one that is shared with Limerick City but the other regional cities like Cork and Galway have a relatively central location within their localities. This means population growth of the urban centers is not obscured to the same degree.

Beggar Thy Neighbor Planning and Economics

It can be argued that the above phenomenon is an issue that dogs Irish planning and therefore prevents proper implementation of policy. This is evident in the local area plans created for South Kilkenny which on one hand aims to support Waterford's "Gateway Status" and on the other hand seeks to prevent retail expenditure by residents of South Kilkenny in Waterford. This contradiction is manifested physically in the building of Ferrybank Shopping Centre a facility which has yet to be occupied.

Economic Strategies pursued by Wexford also rebuke the strategy sought in previous plans like Buchanan and the NSS. This is despite the scenario that exists where the strongest population growth in Wexford has been in the North and not focused on the main urban centre in that county. It also belies the reality that regionally it is one of the satellite towns of the central urban center of the region which is Waterford City.

Material and other types of Infrastructure

Material infrastructure in the environs of the city is extremely good in comparison to the other regional cities. The M9 motorway to Dublin, Waterford City Bypass and Outer Ring Road are the most visible examples. The interchanges in the connecting the Bypass and M9 motorway north of the Suir. Other transport infrastructure currently ongoing and related to Waterford include the New Ross Bypass. This project illustrates the strategic importance of the area by the concentration of urban centers and important nodal links starting with Rosslare/Wexford Town and progressing to Cork via New Ross/New Ross Port, Waterford/Belview, Dungarvan and Youghal. Waterford is the most important strategic location being on the approximate midpoint with major transport linkages to Dublin via the urban centres of Kilkenny and Carlow, Limerick via Carrick, Clonmel, Cahir . This effectively makes Waterford one of the strategic Transport hubs in the country.

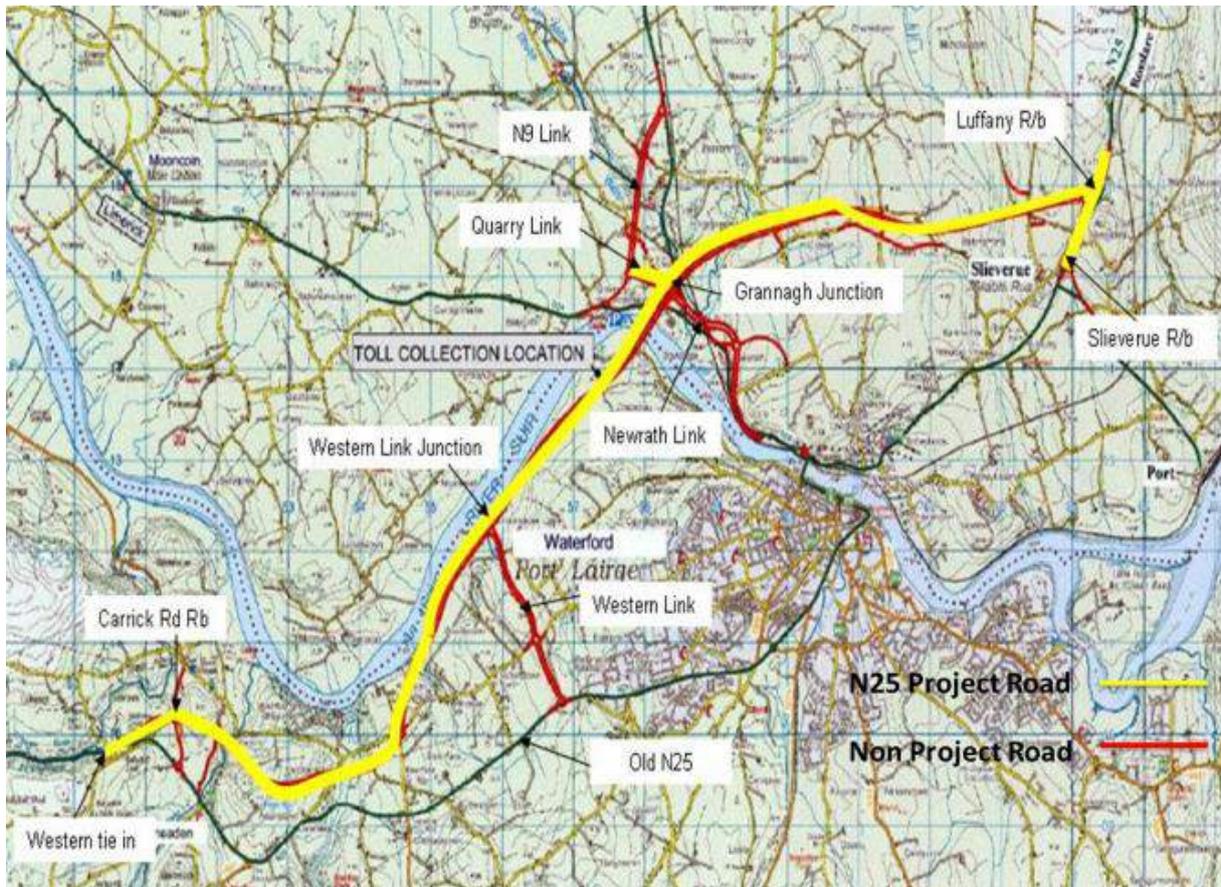


Figure 6. Waterford City Bypass (N25 South Link, 2016)

Energy and Power Transmission

The location of a combined cycle gas turbine power plant in Great Island identifies a major piece of infrastructure located near Waterford. Located geographically 7km East of the city on the confluence of the Barrow, Nore and Suir rivers also known as the “The Three Sisters”. The confluence of the three rivers also coincides with a geographic point where the administrative and physical boundaries of three counties meet. This belies a reality that the urban settlement of Waterford, South Kilkenny (Kilkuliheen) and major physical nodes like the Port of Waterford and Great Island Power Station more realistically form part of Waterford’s urban area. Thus, the true “Waterford Metropolitan Area” which includes the power station and the railway communication links to it are not reflective in a rudimentary view that often lists material infrastructure by county location.

Water Supply and Treatment

Recent investment in Water Supply Infrastructure enables the development of 240 hectares of industrial land and the supply to 10000 housing units in Waterford’s Environs in South

Kilkenny adjacent to the Port of Waterford facilities in Belview (Doyle, 2012). The capacity of these facilities alone excluding infrastructure in East Waterford serves a population in excess of 190000 (Waterford City and County Council, 2017).

Educational infrastructure

The City Possesses one of the top tier Institutes of Technology in Ireland with approximately 10000 students. This along with groups like TSSG provide a significant piece of Institutional Infrastructure for the region. This piece of institutional infrastructure is one of the items of significance that provides services at a regional level and that is not found in the other urban centres. This along with the major medical services provided in University Hospital Waterford and perhaps the Port distinctly puts Waterford at the head of the regional hierarchy. Other urban centers in Ireland such as Dundalk and Drogheda do not possess this concentration of infrastructure and services within its region.

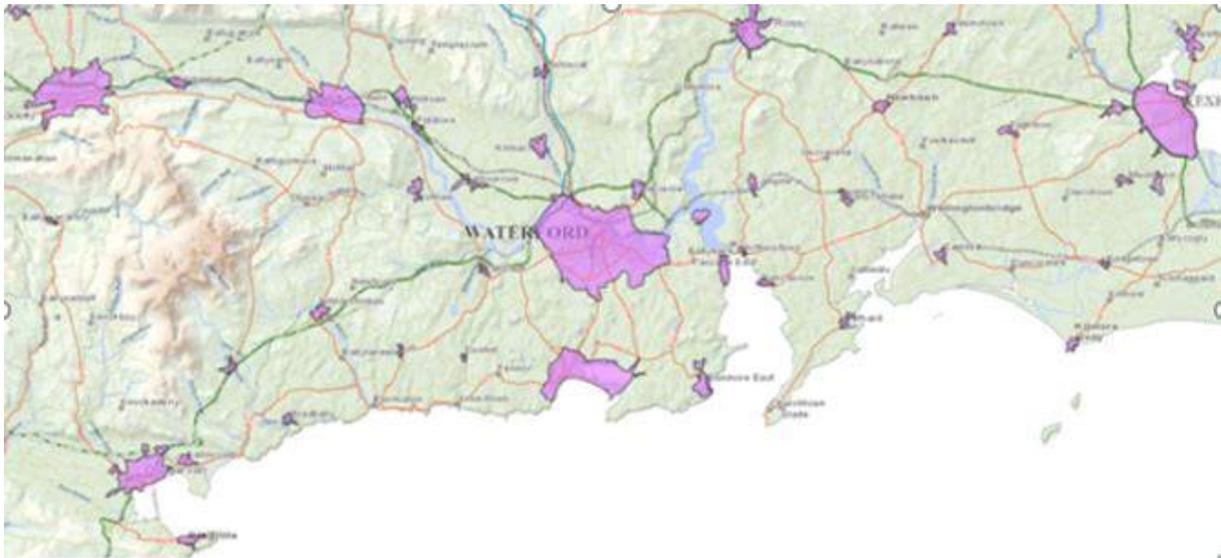


Figure 7. Urban Centres South East Region (All Ireland Research Observatory, 2017)

SWOT Analysis

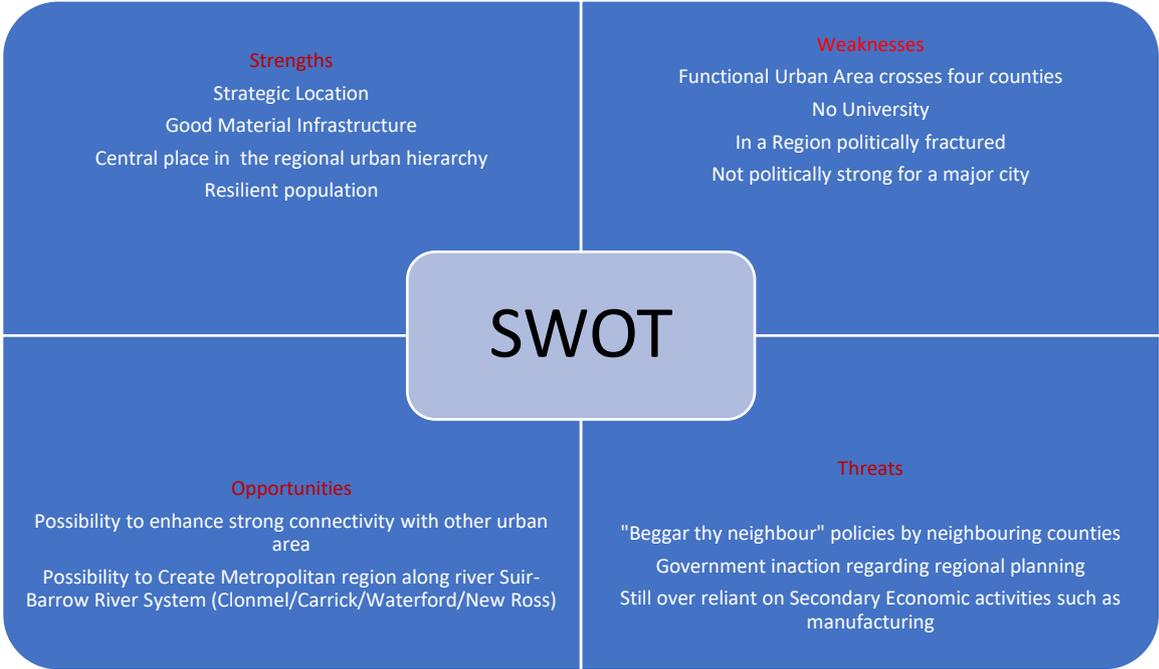


Figure 8. SWOT Analysis

Conclusions and Recommendations

The case of Waterford’s inclusion as a strategic center can be made because of its strategic advantages which has made it one of the main Irish urban centers virtually throughout Ireland’s history. Government investment in the city and wider region is often argued as being less than its larger comparable peers i.e. Galway and Limerick and Perhaps closer to its other smaller peers such as Drogheda. In Educational Infrastructure, this is most pronounced with Waterford being the only city without a University. This belies the core native born population of Waterford and Galway which remain similar at 33000 and 37000 respectively (Central Statistics Office, 2012). This is remarkable considering the levels of state investment and FDI that has been directed or attracted to the Western City. It raises the possibility that if Waterford had received comparable levels of investment then would it have been more cost effective and successful at developing a larger urban region in the South East comparable to Cork. It can be argued that the Urban Belt radiating from Waterford is the only true Polycentric region in Ireland despite not having the same levels of investment. This alone

forms a compelling case for equalizing investment in Waterford to the same levels as Galway and Limerick.

The existing strategic corridors already mentioned reinforce this case as well as the “future proofing” that already exists in the form of Water, Energy and Transport Infrastructure. Similar levels investment in Education and Services such as those in UHW are the logical extension of such a Strategy.

City	Recorded Population	Population Resident by Birth
Cork	198,582	142,032
Limerick	91,454	58,387
Galway	76,778	36,664
Waterford	51,519	32,765

Figure 9. Population Resident By Birth (Central Statistics Office, 2012)

Proper systems of enforcement and oversight are required at some level to compel local authorities to follow the Regional Planning Guidelines and Spatial Strategies and in spirit. The get out clauses that exist in the RPG’s need to be closed off completely. In order to make this fully effective Waterford at least needs to have administrative control over some parts of South Kilkenny. Means to recognize Waterford, South Kilkenny,Tramore and nodes like Belview as a complete Urban unit in the same vein as Limerick-Shannon are desirable and logical.

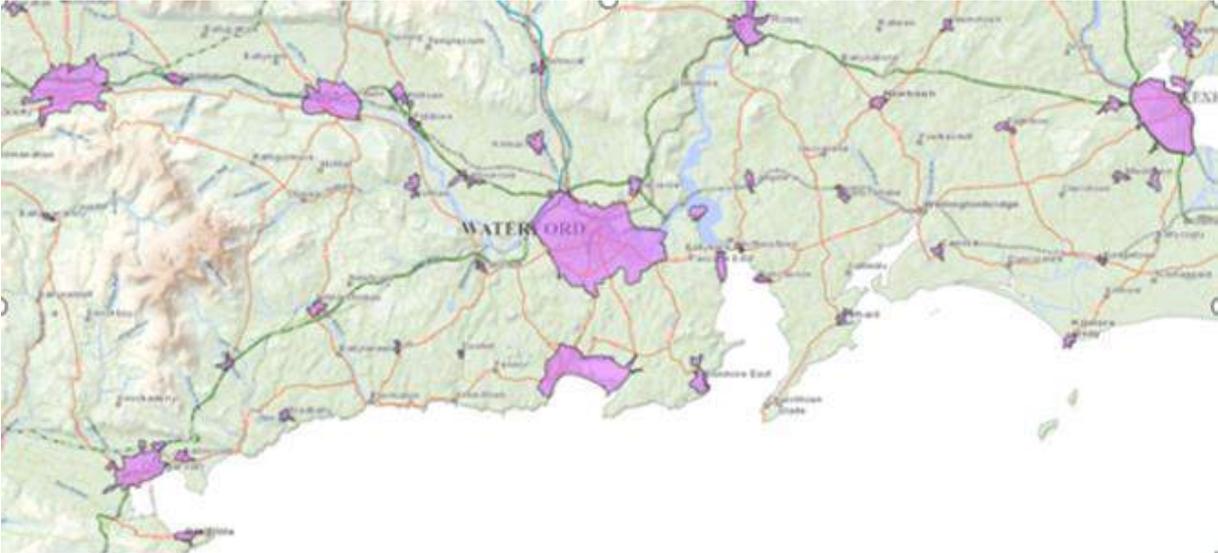


Figure 10. Urban Centres South East Region (All Ireland Research Observatory, 2017)

No other urban center in the South-East region has this potential which becomes more apparent when looked at below. The disparity in the Northern part of the South-East region resembles the more dispersed nature evident in the midlands region. The two largest urban centers in the northern half of the region are on a main route between the main centers of Dublin and Waterford. This fits the secondary center and other models of the CPT.

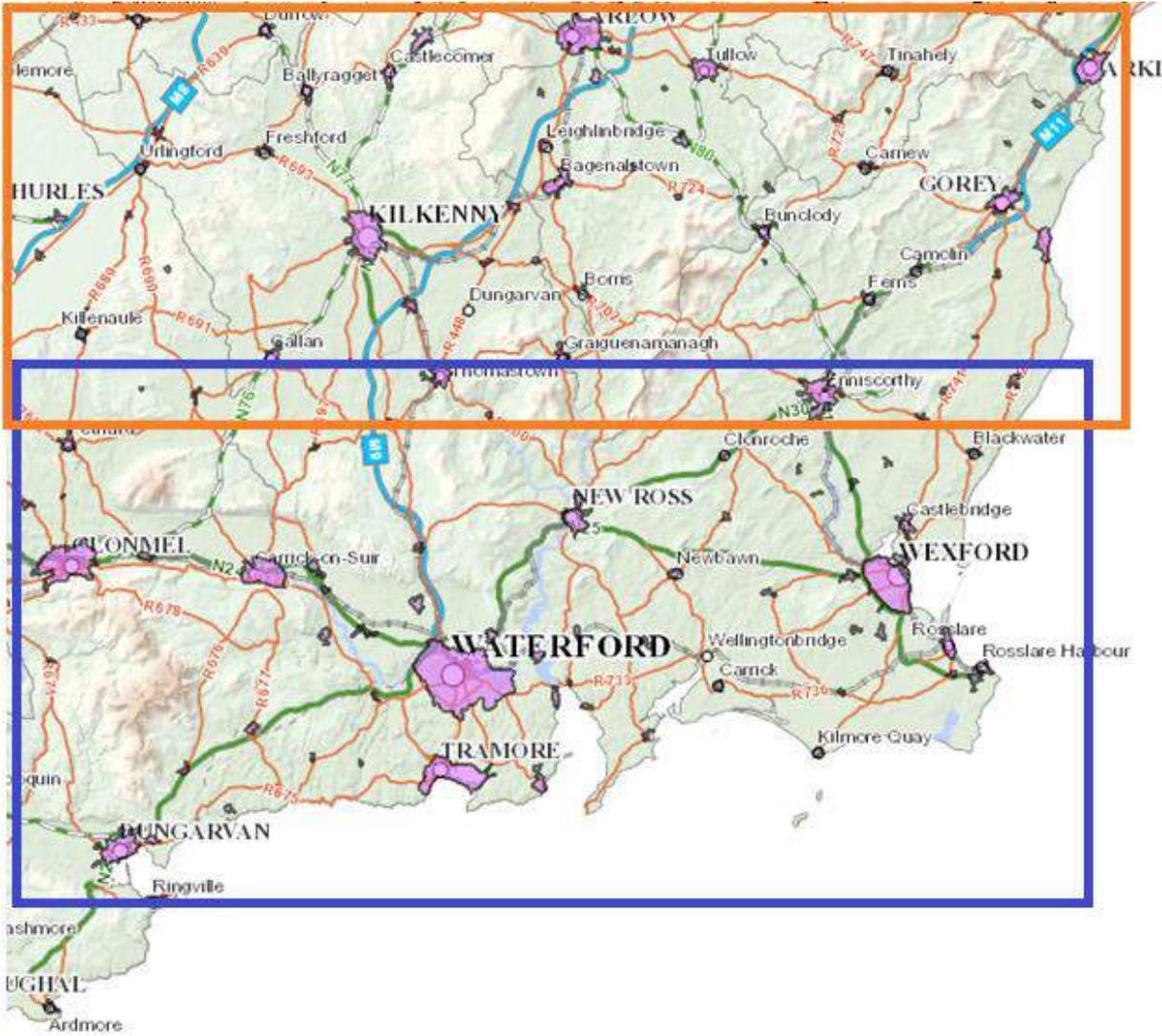


Figure 11. Urban Disparity between Northern and Southern part of SE Region

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