Ireland 2040 Spatial Macro Plan

Economic and Political Context 2017 and Urban Context 2017 – New Model - Investment Payback Timeline

Transport Context 2017 – Irish Policy / Opportunity


KSW Urban Proposal 2016 – Solution - Inclusions


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Economic Context 2017
Global Physical + Virtual Networks
Local Physical + Virtual Networks

Political Context 2017
Trade Networks
Movement Networks
Border Networks
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Urban Context 2017
Economic + Political Investment Model 2017
Comprehensive Solution – re Crisis Growth

1. Demographic Population Accommodation
2. Optimal Building Lands
3. Scaled Systems Building
4. National Urban Models
5. Multi-Services Location
6. Civic Participation

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This Investment Payback Timeline indicates **opportunity** levels proposed (UCD) in 2011. Payback follows and surpasses investment.
‘Dispersed spatial patterns of development have now effectively ‘locked-in’ acute car dependency and, in the context of the much changed economic circumstances, are very unfavourable to efficient and sustainable transport provision...’

The Atlas of the Island of Ireland (2015, AIRO, ICLRD Chapter 6 Transportation)
The Centre for Neighbourhood Technology (CNT), US, Housing and Transportation (H+T®) Affordability Index offers an expanded view of affordability, that combines housing and transportation costs and sets the benchmark at no more than 45% of household income.

The traditional measure of affordability recommends that housing cost no more than 30% of household income. Under this view, a little over half (55%) of U.S. neighbourhoods are considered “affordable” for the typical household. However, that benchmark fails to take into account transportation costs, which are typically a household’s second-largest expenditure. When transportation costs are factored into the equation, the number of affordable neighbourhoods drops to 26%, resulting in a net loss of 59,768 neighbourhoods that Americans can truly afford.
This graphic highlights the poverty trap created by car-reliant housing – as outer-suburban and ribbon estates lose easy access to work opportunity in urban centres.
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Housing Context 2017

H+T Spatial Housing + Services Network Growth Pattern

Irish Housing Crisis / Opportunity

This graphic depicts Ireland’s *car-reliant* housing distribution *pattern* featuring *decreasing* service network provision - limiting work opportunity and prosperity with distance from Urban Centres
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KSW Urban Proposal 2016

Solution

1. Housing and Transportation - **Affordable**
2. Phased PPP **Regeneration** of Specified Urban Centres
3. Development of Irish **Services** Networks
4. Utilisation of Existing **Rail and Public Lands**
5. Improves Urban **Park** Facilities
6. Prioritises **Farm** Access to **Urban Centres**
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Inclusions

Abstract

Initial Phased Developments (Mapped)
*Specified Affordable Housing Groups
Health, Security, Education workers etc.

Metrics

CO2 Emissions
Barriers to Change
Investment Fund Ratio
Housing + Transport

Metropolitan Dublin Plan Proposal 2016

Abstract: Ireland's Transportation Network in 2016 provided insufficiently for current public movement requirements and for future demographic needs by prioritising expensive road housing, failing to link dense housing by bus, rail or other public alternative modes and thus to operate at economic scale. While Irish suburbanization matches US sprawl patterns and debt level closely, it can be rationalised by re-design of our existing urban centres. Dublin can operate more effectively as the island's main economic driver andwill immediately draw investment towards major transport projects if a visionary urban rural plan is implemented soon and with efficiency.

We recommend the following mapped urban design solution – featuring clustered housing with accompanying transportation corridors and backed by private and semi-private green space. A variety of schemes are generated within – and based on a proposed Dublin metropolitan plan. Major rail link upgrades to key cities and towns are included (e.g. Betyst, Drogheda, Mullingar, Navan, Trim, Clara and Trilane - accompanied by a number of individual urban proposals. Central to the plan is an international 2-Stop Airport-Broadstone fast rail link, continuing on to connect major hospital and educational, as well as, new and existing commercial sites. Domestic and International Air Link proposals are included. (KSW Urban Group)

Major Urban Rural Developments using under-utilised state owned resources; rail, waterway, industrial, heritage, peatland, health, and educational, lands and infrastructures.

Dublin Metropolitan Area
Airport to Centre
2-Stop Fast Link
Combined Housing + Transport Metrics (Affordability)

This solution is designed specifically to counteract the higher cost burden incurred with increased distance from urban centres. It aims to increase car-free accommodation by between 30% and 40%.

1. Internal Migration
The chart below shows movers by county of origin in 2010. It shows the pressure on Dublin’suburban counties due to lack of adequate housing provision in Dublin County and highlights the need for a metropolitan plan. This trend appears to have continued since the 2011 Census, further exacerbating the situation.

The transportation sector is responsible for more than one-third of U.S. carbon dioxide emissions. Light-duty vehicles account for almost two-thirds of transportation sector emissions; medium- and heavy-duty vehicles account for almost a quarter.


3. Failure of Government Policy
The Atlas of the Island of Ireland, published by All-Island Research Observatory (AIRO) and the International Centre of Local and Regional Development (ICLRD) Chapter 6 Transportation concludes that notwithstanding Government policy to achieve modal shift away from private modes of transport, with the objective to reduce and avoid the direct costs of congestion and recognising the very high economic cost of increasing road capacity to meet ever growing demand, together with climate change, energy, environment and public health consideration that there has been further growth in the share of private transport modes for commuting and education trips with very limited potential for alternative mode.

*Dispersed spatial patterns of development have now effectively ‘locked-in’ acute car dependency and, in the context of the much changed economic circumstances, are very unfavourable to efficient and sustainable transport provision...* The Atlas of the Island of Ireland (2015, AIRO, ICLRD Chapter 6 Transportation).

4. Barriers to Change

Addressing these barriers in Ireland improves the likelihood of National authority network planning taking precedence over regional and local political concerns, which in turn kickstarts the following events:

- Immediate accelerated house building at a necessary scale.
- Two major transport projects:
  - Rail to Greenway
  - HSE lands: Major market garden network

Further lakeland development.

Fig. 1. Usual residence by area type of those who moved home in the year to April 2011.
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KSW Urban Proposal 2016
Full Planning Context 2017

Multi-Sectoral Compatibility
e.g. Agriculture, Gaeltacht, Technology, Sport, Culture, Trade, Tourism, Forestry, industry,

KSWUrban - Planning More to Travel Less
Develop policy to counteract the higher cost burden incurred with increased distance from urban centres. Objective to increase car-free accommodation by between 30% - 40%

Post-National Spatial Strategy 2002-2020 and pre-National Planning Framework, in the context of current pressures on the Irish Government to facilitate the delivery of housing, we propose this necessary Housing Delivery Game Changer, specifically for the North and Dublin, West and Midland, and South Regions.

The Collaborative Housing and Transport Development Strategy will align and coordinate sectoral initiatives to ensure benefit from complimentaries by selectively prioritising areas for different kinds of activities in line with infrastructure, demographics and local resources.

Project specialists: N Kelly (Project Co-ordination), K Woods (Urban), C Sheridan (Planning), S Dooley (Graphic Design), G Murphy/Foreau (Conservation), A+E Gray (Commercial Catering), G O'Brien (Design Quality) and KSWUrban (Project Management and Architecture). Note Continuing UCD + DIT academic collaboration potential. Proposed project map images © Google Earth 2016. Poster © KSWUrban.
This proposal is **compatible** with the HSE Public Health Medicine Environment and Health Group PHMEHG National Planning Framework Submission 2017

Proposed Sprawl + Commute Reduction + Urban Park and Services development would contribute significantly to achieving the aims of all 8 recommendations specified – e.g. in reducing Obesity, Water Contamination, Inequality, Poverty, tress but instead increase Work and Leisure Opportunity.

This proposal is **compatible** with achieving, and assisting the realisation of, envisaged ocean wealth integration developments re Irish economic recovery and sustainable growth, through coherent policy, planning and regulation management ref. *Harnessing Our Ocean’s Wealth 2012/2015*
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Social Justice Context 2017
Compatibility re Inequality, Poverty Change

Environment Context 2017
Compatibility re Climate Change - Significant CO2c, Water Waste and Energy Use reduction
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2017 National Planning Framework now presents

Opportunity for Planning Long Term
Housing + Transportation (H+T), for
Proven Maximum National Benefit /Payback

Via

KSW Urban Proposal 2016
Further Details Available

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KSWUrban

Housing + Transport

Metropolitan Dublin Plan Proposal 2016

Abstract: Currently Transportation Network in 2016 provides insufficiency for current public movement requirements and for future demographic, social, and economic development needs. It is time to re-examine and re-plan this network, taking into the present housing crisis, not in other city scale but also in the area of economic scale. Within Irish urbanisation policies 10,000-20,000 sq. units per 10 years can be formulated and can be legislated at national scale. This is achievable in one or two wave phases over a 25 years horizon.

We recommend the following mapped urban design solution – featuring clustered housing with accompanying transportation corridors and backed by private and semi-private green space. A variety of schemes are generated within – and based on a proposed Dublin metropolitan plan. Major rail link proposals were examined for: Airport to Centre, Dublin Metropolitan Area

Existing Transportation Network

- Dublin Port
- Railway Summary
- Bus Summary
- Road Network

Proposed Transformation

- Airport to Centre
- Dublin Metropolitan Area
- Tallaght Hospital
- Donnybrook Garage

Dublin Metropolitan Area

Airport to Centre

2-Stop Fast Link

Combined Housing + Transport Metrics (Affordability)

This solution is designed specifically to counteract the higher cost burden incurred with increased distance from urban centres. It aims to increase car-free accommodation by between 30% and 40%.

1. Internal Migration

The transportation sector is responsible for more than one-fifth (21.8%) of total carbon dioxide emissions. This is a similar proportion to that of the transportation sector in other OECD countries.

Fig 1.2: Urban居民s by type of area

2. CO₂ Emissions

Transportation accounts for one-fifth of the total CO₂ emissions worldwide. This is the same proportion of the transportation sector in other OECD countries.

Fig 1.2: Urban residents by type of area

3. Barriers to Change

The key barriers to sustainable urban development have been identified as: lack of government policy, lack of implementation of policy, lack of funding, lack of land, and lack of political commitment.

Fig 1.2: Urban residents by type of area

4. Barriers to Change

These barriers have been identified as: lack of government policy, lack of implementation of policy, lack of funding, lack of land, and lack of political commitment.

Fig 1.2: Urban residents by type of area

Projected Special Investment Fund (SIF) proportional spend

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<thead>
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Fig 1.2: Urban residents by type of area

KSWUrban: Planning Move to Travel Less

Dublin policy to counteract the higher cost burden incurs with increased distance from urban centres. Objectives to increase car-free accommodation by between 20% - 40%.

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