7 Socio-Economic Impacts

In this section we consider the Project's Socio-economic impacts arising from the Grangegorman development. Socio-economic impacts are of profound importance to society as a whole and the social context affects the nature of local economic foundations.

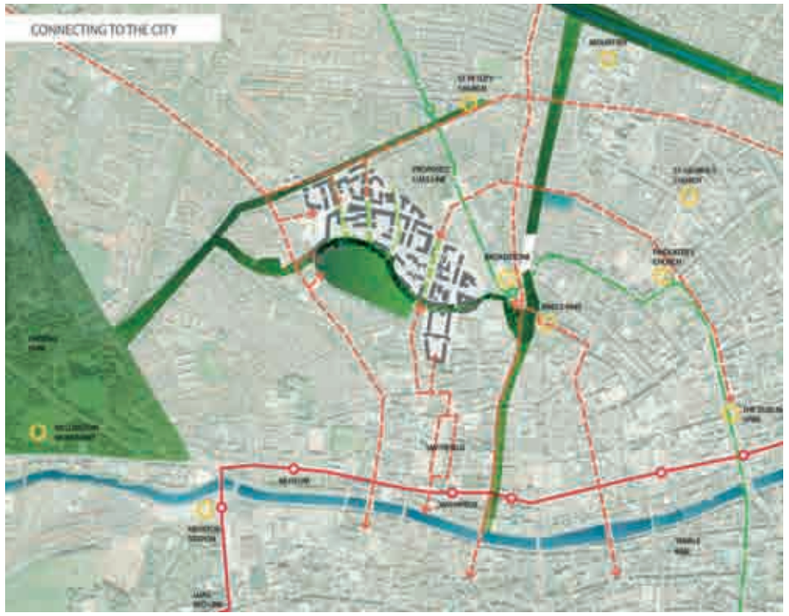
7.1 Introduction and Aims

Socio-economic Aim 1: To promote sustainable development, to maximise the potential of Grangegorman and to improve the quality of life of its residents.

Socio-economic Aim 2: To facilitate opportunities for the creation of employment in the Grangegorman area

Socio-economic Aim 3: To protect, conserve and enhance the character, appearance and amenity of Grangegorman, especially as regards its landscape quality, the built and natural environment.

Socio-economic Aim 4: To enhance the provision of effective leisure, recreational, community and other facilities and services



In this section we consider the Project's Socio-economic impacts arising from the Grangegorman development. Socio-economic impacts are of profound importance to society as a whole and the social context affects the nature of local economic foundations. It can be argued that economic forces are absolutely central to society and deeply influence its social structures.

An individual's health is influenced by various factors that operate at individual, household and community levels. Obvious factors are: diet, health behaviour, access to clean water, sanitation and health services. Fundamental health determinants of a socio-economic nature also play a role in causing vulnerability to health risks. In relation to the Grangegorman development, the key factors are income, education and employment. Though moderately correlated and mutually dependent, each of these three determinants captures distinctive aspects of the socio-economic background of the area.

There is an income gradient affecting social wellbeing[1]. Members of low income households generally suffer worse health and die younger than people with higher incomes. For example, the latter are better able to afford the goods and services that contribute to health e.g. better food and living conditions.

An individual's job opportunities tend to be enhanced by education. In so doing, education can improve income, consequently affecting health positively. Education can also give more access to knowledge about healthy lifestyles and increase the tendency to seek treatment when needed. A lower level of education, independent of individual income, is correlated with the inability to cope with stress, depression, hostility and with adverse effects on health.

Being employed tends to be better for health than being unemployed[2]. Susceptibility to health risks is increased by long-term unemployment, i.e. continuous periods without work usually for a year or longer. The socio-economic status of an individual and of his/her dependents can slide as the period of unemployment increases.

1. Martikainen P, *et al.* Income differences in mortality: a register based follow-up study of three million men and women. *Int J Epidemiol* 2001.
2. WHO (2002). *The world health report 2002 – Reducing risks, promoting healthy life.* Geneva, World Health Organization:248

7.2 Principal Areas of Impact

General economic theory suggests that where there is a gap between the social and private benefits then Government involvement in a project is justified. Society would under-provide these types of projects in the absence of Government involvement. Consequently, economic analysis suggests that the appropriate approach to deciding on the merits of a project is to evaluate whether and to what extent economic distortions or externalities exist. Externalities, which may be positive or negative, refer to the effect of an activity on costs and benefits that do not accrue directly. In other words, externalities are secondary effects or spillover effects. Such effects may justify Government intervention.

7.2.1 Employment Opportunity Benefits

Government intervention may be justified to address the economic and social difficulties caused by unemployment. In evaluating the overall economic impact of a project it is important to determine the value placed on employment.

As at June 2010 the national employment rate stood at 13.4%. The long term unemployment rate has more than doubled from 2.2% in the first quarter of 2009 to 5.3% in the first quarter of 2010. The largest decline in employment was in the construction sector where the numbers employed fell by 50,800 over the 12 months to March 2010. Employment in the construction sector has now fallen by over 50% since its peak in the second half of 2007[3].

The entire Grangegorman development is a major construction-related investment in a core national economic infrastructure. Furthermore the employment generated to construct this development will lead to wider benefits as the labour would not have been employed in other sectors of the economy if the project did not proceed. Using projections based on information provided by the CSO detailing the activity of private building and construction firms it is expected that 9 employees would be required for every €1m of construction turnover. There is potential in practical terms to generate an average of 450 FTE per annum for a sustained period of 10 years (approximately) commencing in 2010. It is not envisaged there will be any significant opportunity costs of such labour in the short to medium term given the current economic environment and the availability of labour particularly in the construction sector.

7.2.2 Employment Study

On 25th May 2009 a study on the employment potential of the Grangegorman project, called **Joining up the Dots** was launched by the Taoiseach Mr. Brian Cowen. The study was commissioned by a number of organisations including the HSE, DIT, the GDA, the North West Inner City Network, the City of Dublin Vocational Educational Committee and FÁS.

Joining up the Dots firstly examined the Grangegorman neighbourhood and identified it as one of Dublin's most deprived, using standard indicators such as educational attainment, unemployment levels, Lone parent numbers and affluence levels in the area. However there were many positives and strengths identified within the area, such as its history of enterprise and high level of cultural diversity.

The study identified over 5,000 new jobs arising from the project and the new quarter which will be in place and set out a number of recommendations to ensure the people in the Grangegorman area will benefit from these new positions as much as possible.

The Employment study concluded with a number of recommendations and sets out what the priorities should be in relation to employment in the area, they are;

- The need to create clear linkages between education and training and actual employment/job opportunities;
- Improving co-ordination in the provision of education and training activities within the Grangegorman area and in particular in areas targeting mature students;
- The need where possible to build on and enhance employment clusters and strengths within the Grangegorman area in such areas as retailing, legal services and logistics while targeting emerging areas such as health, campus related and science park activities;
- Supporting small and medium sized enterprises within the Grangegorman area in order to maintain and enhance their performance;
- Leveraging the concept of an 'open and inclusive campus' as a means of promoting and enhancing engagement in education and training at all levels; and
- Ensuring that community participation is maintained and promoted at all stages of planning for the new campus development.

In order to deliver on the above priorities this study identifies a number of integrated recommendations as follows;

- This study recommends the establishment of a Local Labour Partnership with the key role to oversee the implementation of the following activities:
  - Community benefit and local labour clauses;
  - Provision of pre-apprenticeship programmes where required;
  - Creation of a local skills register; and
  - Targeted training and upskilling for unemployed construction workers.
- The creation of a North West Learning Hub that will act as a focal point and coordinator of education and training provision in the Grangegorman area with a clear remit to provide an integrated strategy to adult education and training provision. This remit will extend to addressing barriers and coordination of programme delivery as well as promotion of collaboration and co-operation between providers; and
- The need to support enterprise development and entrepreneurship is a key recommendation arising from this study. This support to business extends from supporting local businesses and emerging entrepreneurs within the Grangegorman area to optimising and leveraging the incubation facilities and science park facilities available on and off campus.

7.2.3 Wider Economic Benefits

In order to estimate economic benefits, we need to determine the multiplier effects and adjust for opportunity costs. The opportunity costs of the labour and resources that would be needed to meet this additional demand, as many or most of these have alternative uses, the alternative use foregone (i.e. opportunity costs) must be estimated to reduce these gross benefits. In addition, we need to consider multiplier effects. These are considered in detail below.

7.2.2.1 Multiplier Impacts

The current and capital costs of a project will have direct, indirect and induced impacts on the economy as a whole and part of these could actually be considered as economic benefits. The expenditures incurred by the Grangegorman development will include expenditure on various inputs that give rise to a multiplier effect throughout the economy.

[3] All sourced from the Quarterly National Household Survey Quarter 1 2010

Socio-Economic Impacts

The overall economic impact will include direct, indirect and induced impacts. As described above, the 'multiplier effect' relates to the impact of indirect and second and subsequent round impacts arising out of the direct expenditure incurred on goods and services produced elsewhere in the economy. The multiplier is concerned with how national income changes as a result of a change in investment in a given area of the economy. The size of any multiplier impacts is determined by the extent of 'leakages' from an economy, these include imports and taxation.

The investment in the Grangegorman development represents a cost to the economy. However, when an individual, company or public body spends money, it generates "ripple effects" of activity through the economy which boost incomes elsewhere. Thus some element of the cost of a particular investment can generate indirect benefits elsewhere in the economy. This concept was developed by Keynes whose model of economic activity proposes that any increase to injections into the economy (i.e. investment, government expenditure or exports) would lead to a proportionally bigger increase in National Income.

If there is an increase in final demand for a particular product, we can assume that there will be an increase in the output of that product but also an increase in demand for other products (i.e. the intermediate consumption needed for the production of that product) and so on down the supply chain. The Value Added Multiplier or Leontief inverse multiplier is derived from the CSO Input-Output Tables[4]. The value added multiple illustrates the direct plus indirect effect on other inputs per €1 final demand. The multiple takes into account the sum of the coefficients of imports, taxes less subsidies, compensation of employees, consumption of fixed capital and net operating surplus.

The value added multiplier gives an indication of the effect on the domestic economy of an extra Euro of final demand for home produced products.

- 0.913 for Education.
- 0.735 for Construction

The multiple for education is greater due to the smaller impact of import multipliers in contrast to construction. It should be borne in mind that these multipliers refer only to the effect of an extra Euro of final demand for home produced products and describe the effects of marginal increases in final demand recognising the interdependence of the various sectors of the economy.

7.2.2.2 Tax Benefits

There is likely to be corporate and income taxation arising from the development in addition to VAT on construction expenditures. While not all of the increased corporate taxes or income taxes represent a net benefit, the increased overall direct and indirect taxes represent a major benefit.

The capital and current expenditure associated with the project will result in increased direct taxation for the exchequer arising from increased VAT and excise duties. There is also likely to be corporate and income taxation arising from the venture in addition to VAT on construction expenditures. With regard to the tax component, this is comprised of taxes from a number of different sources, namely:

- VAT
- Income tax on immigrant wages
- Income tax on Irish wages
- Tax on overseas profits and
- Tax on Irish profits.

In line with other research, the additional tax contributions represent a benefit to the Irish economy.

4. CSO, "Supply and Use and Input-Output Tables March 2009"

7.3 Additional Benefits

Of course, there may be additional economic benefits that are not captured in the previous analysis. It could be argued that the additional activity arising from Grangegorman would be of higher added value and provide better paying jobs. There are also additional spillover effects if say a number of multi nationals were attracted to the campus forming links with DIT resulting in investment decisions of importance to the economy. Furthermore, there will also be urban regeneration benefits but these are not quantifiable at this stage.

7.3.1 Benefit to Labour Market and Exchequer

The employment opportunities resulting from the Grangegorman Development, in stimulating the construction industry would reduce the numbers claiming jobseeker benefits/allowances and present secondary benefits to the Exchequer arising from the resulting income and corporation tax. The Live Register as of June 2010 is in excess of 450,000. In comparison the figures are up 230,00 or almost 105% from 2008. It is estimated that each additional 10,000 workers on the Live Register costs the exchequer around €150,000,000 per annum in social welfare benefits and income tax revenue. Based on this working assumption we anticipate that the direct construction employment stemming from the development will benefit the exchequer in social welfare savings and income tax revenues of approximately €7m per annum. There will also be additional savings for the Exchequer due to the employment opportunity "ripple effects" impacting on the economy boosting incomes elsewhere.

Construction workers who are signed on the Live Register can be classified as "job ready" as they do not require any further training or qualifications. There would be no time delay or additional cost incurred from training apprenticeships due to the skilled resources currently listed on the Live Register. With an estimated construction period spanning a 10 year period this would equate to 20% of a construction employee's working life (based upon a working life of 49 years, commencing at 16 and retiring at 65 years of age).

DIT, GDA, HSE, FÁS, City of Dublin VEC and the North West Inner City Network have come together and already devised an integrated strategy to support and promote employment opportunities in the local area arising from the development.

7.3.2 Benefit of Additional Graduates

The benefits of additional student capacity resulting from investment in higher education infrastructure can be established through;

- Additional graduate numbers; and
- Additional incomes generated in the economy by these graduates.

Based on the available evidence and taking into account the need to adjust for factors such as socio-economic background, economic recommendations suggest that a figure of 20% is appropriate in relation to the earnings premium for Higher Education graduates.

This income premium should be related to the current prevailing level of average incomes, as measured by the CSO average industrial earnings (€32,500 in 2007 prices). Based on the assumption that higher education graduates earn a premium of 20% on average, this suggests a differential of €6,500 per annum. It is assumed that Postgraduates earn a premium of 30% on average suggesting a differential of €9,750 per annum between average annual earnings among higher education graduates and the rest of the economy.

These income premiums form a very important part of cost benefit analyses outlined in section 7.4.

7.3.3 Benefits of Up-Skilling the Workforce

During the high unemployment period of the 1980s it was Government policy to keep training individuals in spite of limited opportunities available at the time. This enabled the workforce to take full advantage of the upturn when the economy recovered. Both the National Development Plan 2007 – 2013 and the National Skills Strategy aim to develop Ireland as a high-skilled knowledge economy whilst also permitting social inclusion.

The FÁS Irish Market Review 2008 emphasises the importance of up-skilling on the road to recovery "through export-led growth based on competitive internationally-traded goods and services. Productivity improvements will be vital to improve competitiveness and improvements in skills across all levels of management, professional, technical, craft and operative jobs are a proven ways of increasing productivity." By relocating to Grangegorman DIT's student population can increase thereby enabling DIT to support more individuals move up the qualification ladder.

7.3.4 Social Inclusion

HSE and DIT are key bodies for the delivery of services that support social inclusion and are both implementing programmes that will contribute to the delivery of the National Action Plan for Social Inclusion 2007-2016. Further detail on their programmes and policies in this area are set out in sections 2 and 6 of this Plan. This development contributes to delivering on key social inclusion objectives.

7.3.5 Additional Health Benefits to the Public

Additional health benefits to the public, arise from more treatments, better clinical outcomes, reduced waiting lists/waiting time, better hospital experience, etc. There is a benefit if patients can return to work and be more productive as a result of better clinical outcomes and shorter waiting times for treatment.

The deprivation index, developed by SAHRU[6], assesses the level of disadvantage amongst the population living in different areas. The rating is affected by factors such as the number of public housing estates and the average age for the area. The Grangegorman area is marked as Network 2. The area has a score of 10 which denotes an area of high disadvantage. It is envisaged that the development of mental health care and support facilities will improve the level of disadvantage currently experienced in the Grangegorman area.

The benefits of improved health facilities are often expressed as an increase in Quality Adjusted Life Years (QALY), put simply additional years of healthy living. The two main approaches in economics to valuing the benefits of additional year of healthy living are:

- Human Capital approach - measures increased earnings over expected remaining life. The drawback of this approach is that it does not assess how patients actually value the benefits of improved health. It is also does not make an allowance for retired persons or children who might not enter the workforce for many years
- Contingent Valuation Method (CVM) – whereby the public surveys indicate their hypothetical valuation of or willingness to pay for a range of benefits. The drawback of this approach is that it is expensive and time consuming.

6. Small Area Health Research Unit, SAHRU, "The National Deprivation Index For Health & Health Services Research."

It is difficult to measure QALY without carrying out a full assessment, however the qualitative improvements and access to health facilities for the area is self-evident.

7.4 Cost Benefit Analysis

A Cost Benefit Analysis (CBA) is an analysis tool commonly used for projects seeking public funding, and attempts to identify the net socio-economic benefit of a project. A CBA is an important procedure for the comparison of the costs and benefits associated with alternative ways of achieving a specific objective. It is the process of weighing the total expected costs against the total expected benefits of one or more actions in order to choose the best or most profitable option. The technique attempts to put all expected costs and revenues in a common temporal footing by discounting future cash flows at an agreed rate to give present values on which to assess each option.

Separate Cost Benefit Analysis (CBA) documents have been prepared for the DIT core academic development, that would consolidate all its activities on the Grangegorman site, and HSE redevelopment, that would provide replacement mental health and local clinical services in addition to enhanced primary care facilities, at the Grangegorman site.

Each concluded that the implementation of the plan is the most economically advantageous option, generating substantial socio-economic benefits and representing good value for money for the Exchequer.

7.4.1 DIT CBA

This CBA clearly indicated that DIT, as a major provider of higher education in Ireland, is currently occupying facilities that restricts its ability to fully discharge its mission and that refurbishment of existing infrastructure will not adequately address these deficiencies. The short list of options included refurbishment of existing DIT locations, the complete relocation to Grangegorman and a partial relocation to Grangegorman (excluding Bolton Street). The preferred option was a complete relocation to Grangegorman allowing DIT to fully implement its Strategic Plan by, amongst others, promoting operational efficiency through removing duplication in areas such as libraries, administration and modular provision.

Another option involving relocation of DIT facilities to the Grangegorman site, with the exception of Bolton St. and nearby allied premises, was the second least costly option and returned substantially better value for money than the base case. This option would provide facilities at Grangegorman to house 22 of DIT's 27 Schools which would yield very substantial consolidation of DIT activities on the Grangegorman site. This consolidation would provide significant gains in DIT's organizational effectiveness and efficiency and would facilitate major reform of curricular areas.

DIT's functions that are located at Bolton St. and environs are within close proximity to the Grangegorman site and would be within easy walking distance of the new campus. This proximity would enable the DIT schools in the Bolton St. area to be integrated with the new learning and research paradigm which would unfold on the consolidated Grangegorman campus. This interim arrangement would be congruent with the full relocation option and would provide the flexibility for making a decision at a later point in time to implement fully the complete relocation of DIT through the transfer of Bolton St. facilities to the Grangegorman site.

7.4.2 HSE CBA

The HSE currently utilises the Grangegorman site for the provision of mental health and primary care services. The CBA focuses on the refurbishment and renovation of existing accommodation in comparison to new replacement accommodation at Grangegorman. The preferred option is to redevelop accommodation at the Grangegorman site compliant with Healthcare standards of best practice and flexible enough to respond to future healthcare changes. Furthermore, the site would be developed in such a way as to permit further phased development of healthcare services. Considered particularly important is that in providing the new accommodation, the design and layout of the build would actively seek to make provision for the needs of the patients in line with Government requirements and guidelines.

Socio-economic Objective 1: GDA will work with DIT to seek to ensure the provision of its required educational facilities so as to create opportunities to sections of the community that have been unable to access third level education opportunities.

Socio-economic Objective 2: GDA will work with HSE to seek to ensure the improvement of primary healthcare services available to the population of the Grangegorman area.

Socio-economic Objective 3: GDA will work with transportation bodies to promote the Quarter through stronger communication links with road and rail networks to encourage and facilitate economic growth and contribute to wealth creation.

Socio-economic Objective 4: GDA will explore the means to create local employment opportunity in the construction of the Quarter

Socio-economic Objective 5: GDA will seek to ensure the creation of employment in the Grangegorman area through the creation of jobs in the services sector.

Socio-economic Objective 6: GDA will seek to create an area attractive to new economic development to assist in achieving the socio-economic aims of the development.

Socio-economic Objective 7: GDA will work particularly with DIT and Enterprise Ireland to seek to help attract inward investment thus assisting in the economic regeneration of the area in achieving the socio-economic aims of the development.

Socio-economic Objective 8: GDA will seek to ensure the provision of leisure, recreational, community and other facilities and services in line with the socio-economic objectives to improve the quality of life for local residents, DIT students and staff, HSE staff and service users.

Socio-economic Objective 9: GDA will seek to ensure improvement in the provision of local facilities and services.

Socio-ecomomic Objective 10: The GDA will explore means of prioritising job opportunities for people with disabilities during construction and operation phases.