

THE IMPORTANCE OF ENGINEERING & INFRASTRUCTURE IN IRELAND

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Engineers Ireland is the voice of the engineering profession in Ireland.



Representing the engineering profession since 1835, one of the oldest and largest professional bodies in Ireland.



Over 23,000 members across every discipline of engineering, from engineering students to fellows of the profession.



A community of creative professionals delivering solutions for society





VALUES



<u>Progressive</u> - We constantly innovate and apply new approaches for the benefit of all.



Community - We encourage participation and teamwork.



<u>Trustworthy</u> - We always act with integrity in our dealings with all stakeholders.



Excellence - We are committed to excellence in everything that we do.



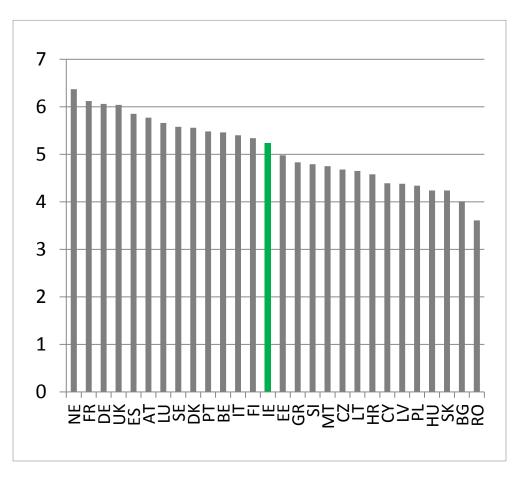
- Infrastructure is vital to enabling sustainability, health and wellbeing, and long-term prosperity
- Yet we face a 'perfect storm' of pressures on our infrastructure
 - Demographics: population is expected to increase by over 750,000 in the next 20 years
 - Climate action: greenhouse gas emissions are behind targets
 - Competitiveness: congestion and future lack of capacity will hamper growth and employment in the coming years without swift, targeted action



The 2016 Global Competitiveness Review report examining international competitiveness, ranked

"inadequate supply of infrastructure"

as the most problematic factor for doing business in Ireland



Global Competitiveness Review infrastructure scores

INCREASING INVESTMENT

- In recent years, we have been investing less than our historical average in infrastructure – an increase in capital investment is essential
- The Capital Plan 'Building on Recovery' is currently under review
- The Think-Tank for Action on Social Change (TASC) report, 'The Need to be Ambitious: Greater Investment Ensures Prosperity' makes the case for an increase in capital investment from 2% to 4% GDP
- This level of investment is essential to meet current infrastructure needs and to support future growth and prosperity



- Planning and delivery of our infrastructure is currently spread across Government departments, each competing for finite funding with little central oversight
- An independent assessment of our long-term infrastructure needs is required – particularly in the context of challenges such as Brexit
- A single infrastructure unit could be charged with sustainably planning and integrating investment in key critical areas like transport, education, health, energy and the digital economy – decoupled from the electoral cycle
- The forthcoming National Planning Framework (Ireland 2040) is a welcome step

SKILLED LABOUR FORCE

- To enable long-term planning and sustainable infrastructure, a skilled labour force of engineers is crucial
- The current shortage of engineering graduates is seriously threatening our infrastructure plans in housing, transport and elsewhere
- Engineers Ireland is actively involved in promoting STEM subjects in primary and secondary schools and encouraging students to choose engineering at third level
- Engineering is an exciting and rewarding career prospect for young people today – we shouldn't sell ourselves short



- The ability of people to travel from home to their place of work, education or recreational activity by their chosen mode of transport directly affects the health and well-being of Ireland's citizens
- Any barriers to the free movement of people or goods impacts on quality of life
- Efficient transport improves productivity which in turn advances national economic competitiveness and drives inward investment
- Significant and increasing traffic congestion is evident in all urban areas in recent years, with lengthy delays and very unreliable journey times at peak times



- Ireland's road network is the backbone of Ireland's land transport infrastructure as the primary private and public transport mode, including almost all freight
- Amidst the economic recovery, capacity is becoming a major issue on key roads - particularly the M50
- 'Big data' and ITS can lead to major improvements in safety, network management and integration
- Smart vehicles and autonomous driving will have a significant role to play and could be the missing piece of the puzzle when it comes to shifting commuters from private cars to public transport



If Ireland is to overcome a 'perfect storm' of challenges, we need:

- A dramatic increase in investment and priority given to infrastructure
- Long-term planning and institutional change
- A skilled and innovative engineering labour force
- Professional communities and knowledge exchange

Engineers Ireland would like to wish the Institute of Asphalt Technology a productive and enjoyable conference



