Key Objectives

To develop a structured statistical training framework which would

• Build the statistical capacity of the Irish Statistical System
• Enable us to respond to internal and external pressures
• Deliver value for money on training expenditure
The CSO’s Statistical Training Framework

1. Design Statistical training model in-house in line with GSBPM

2. Internal working group setup, identify 13 Statistical High-Level Headings, International experts consulted

3. Descriptors for each statistical skill heading with requirements set out as introductory, foundation, primary, intermediate and advanced. All were peer reviewed

4. Skills Register and Role Specification mapping – skills gaps identified, learning paths can be formulated from these.

5. Training Interventions Identified – aligned to the 70:20:10 Model
The Statistical Training Framework linked to the GSBPM

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<tr>
<th>Specify Needs</th>
<th>Design</th>
<th>Build</th>
<th>Collect</th>
<th>Process</th>
<th>Analyse</th>
<th>Disseminate</th>
<th>Evaluate</th>
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**TOPICS**

1. Register Management
2. Sample & Estimation
3. Survey & Questionnaire Design
4. Imputation and non-response
5. Statistical Data Editing
6. Evaluating user statistical needs
7. Index Numbers
8. Regression
9. Time Series Analysis & Seasonal Adjustment
10. Statistical Disclosure control
11. Visualisation and Presentation of Data
12. Data Matching, Integration and Administrative Data
13. National Accounts
### Results

- **4,350**
  - Hours of statistical training were completed in 2021

- **43%**
  - Of staff increased their statistical skills by at least one level

- **197**
  - Staff members completed at least one statistical training course in 2021

- **30**
  - **Business Partnering sessions** - managers reported an increase in confidence, enhanced methodologies and more innovative staff

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**Figure 1 The Civil Service Employee Engagement Survey Results, 2020**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
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<tr>
<td>2015</td>
<td>58</td>
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<td>2017</td>
<td>62</td>
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<td>2020</td>
<td>73</td>
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I am able to access the right learning and development opportunities when I need to.
Achieved

- Gold standard model for statistical training
- Value for money – organisational & individual view
- Embedded into the existing practices of the organisation
- Enabled the Irish Statistical System to:
  - grow and develop e.g. Frontier series
  - respond quickly to support decision makers & society e.g. COVID-19 Geohive and data hub
Where to next?

- Challenges
  - Increasing demand
  - Falling response rates
  - Competitive market
    - Skills
    - Data
  - Data Stewardship
A new perspective on Statistical Training

Data Science & Engineering
- Specify Needs
- Design
- Build
- Collect
- Process

Data Analytics
- Analyse
- Disseminate
- Evaluate
Statistical & Analytical Framework for the Irish Statistical System

- Data Science & Engineering
- Irish Statistical System
- Data Analytics
- Data Linkage and Integration
- Route for administrative staff
Summary

- Statistical Training Framework
- Challenges/Pace of change
- Key drivers of change
- Re-develop
Thank you