

Health Atlas Ireland



Health Intelligence, HSE

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- Health Research Board grant **2004**
- European Union tender process **2005** Restricted → framework 
- Kick off **2006** **Project Board**
- Iterative process **6 m → 3 wk** **On time & within budget ✓**



NUI MAYNOOTH
Ollscoil na hÉireann Má Nuall




Historical context



| Water Company | Number of households | Cholera deaths | Deaths per 10,000 households |
|--|----------------------|----------------|------------------------------|
| Southwark and Vauxhall Company (inlet remained in London section of river) | 40,046 | 1,263 | 315 |
| Lambeth Company (had moved inlet to cleaner upriver location) | 26,107 | 98 | 37 |
| Rest of London | 256,423 | 1,422 | 59 |



Dr John Snow - mid 1800s - cholera
 Observation, deduction,
 simple numbers + stories & crystal clear maps
 power to save a city & change the world HJ 2008

Builds on this legacy



Concept of Health Atlas Ireland



THE PEOPLE

Plan

Evaluate

Patterns

Blue light

Research

Front line

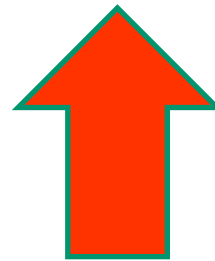
With no special skills
any desk anytime to
access data & collaborate

THE TOOL

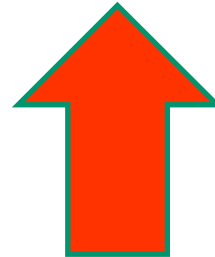
Simple to use
Powerful
Web enabled

Evolve

Tables Maps

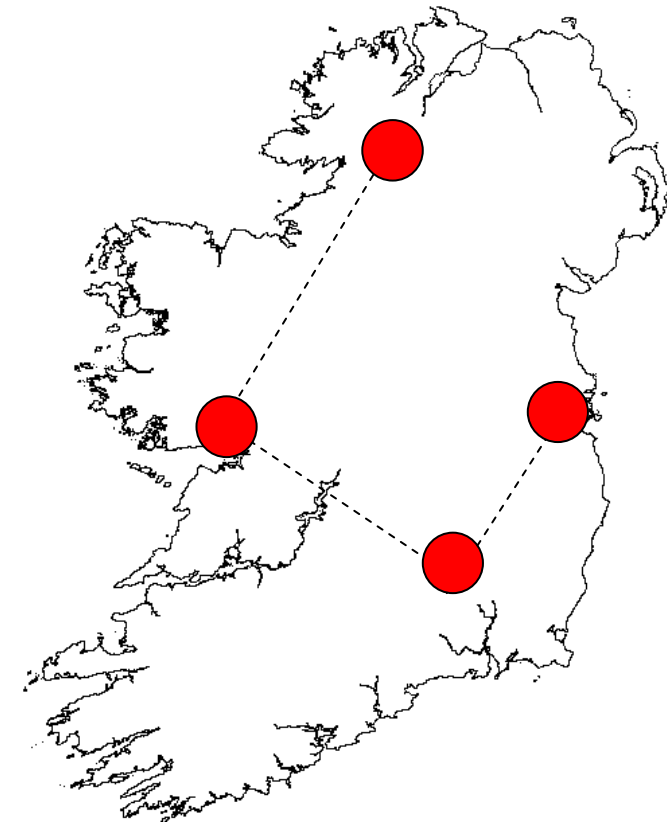


Analysis



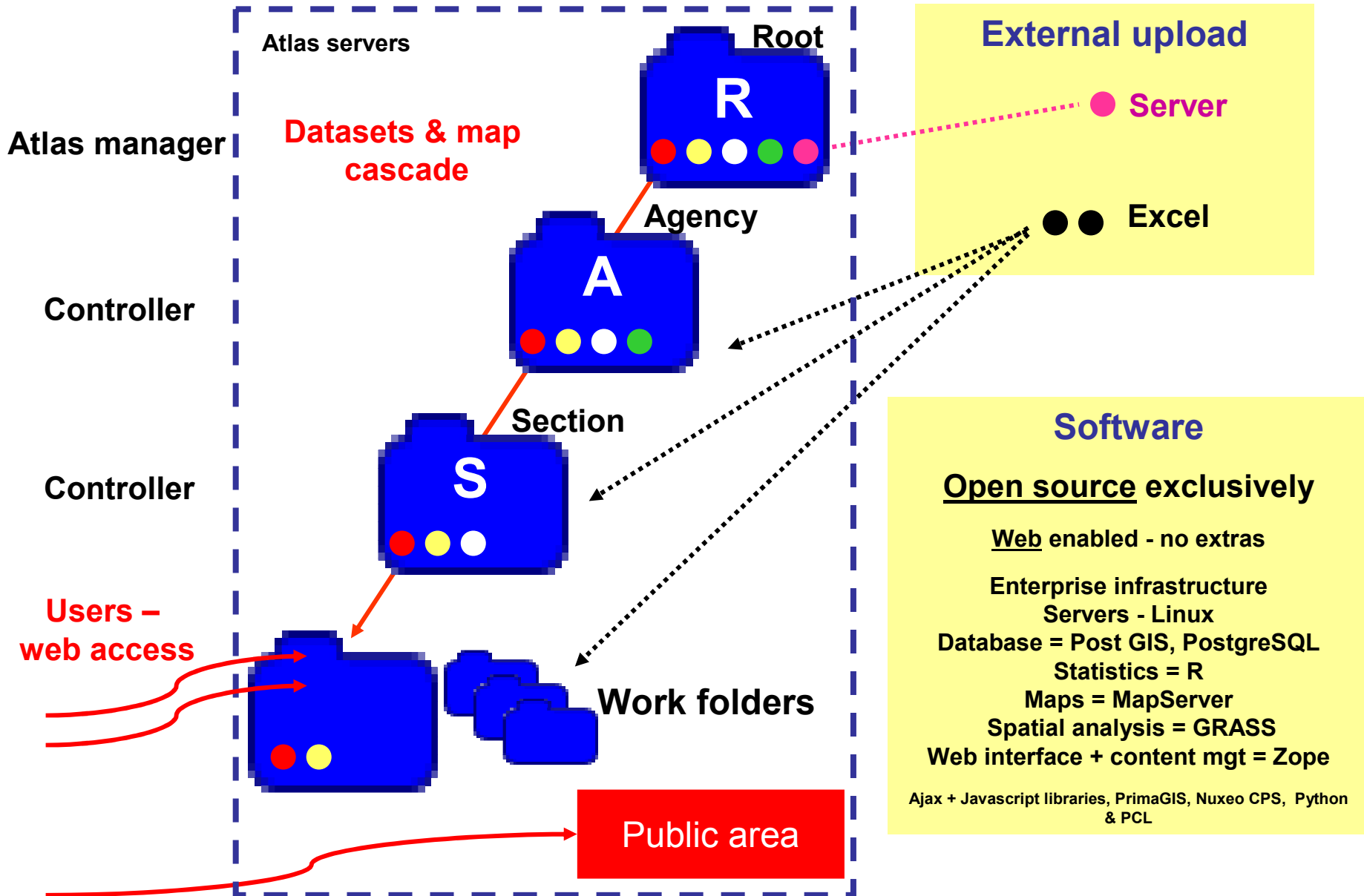
Raw health data

Census
Hospital
Community
Registry
Other



Better health intelligence
=
better health

Under the bonnet



Datasets & maps

Datasets

Census
 HIPE (hospital activity)
 Births
 Mortality
 Cancer
 Perinatal
 Road collision

...

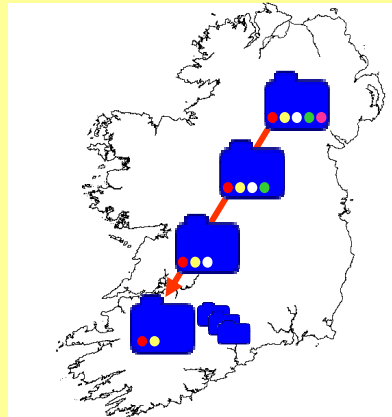
Prescribing

...

Vaccination
 Financial & HR
 Environmental
 Disability

...

Immediate updates
 New datasets ...



Geocoding

XY

County

Postal area

Electoral division – ED
 Service catchment area

Non-unique addresses 40%

Address zipcode?

GeoDirectory

Residential
 Business

Maps

Ordnance Survey Ireland
 Country to house level
 Transport

...

Satellite & aerial

...

World

Boundaries

County, electoral division,
 local health office,
 service networks ...







Buildings + services

Hospitals
 Health centres
 Nursing homes
 Family doctors ...

Locator

- ✓ Care staff - home visits
- ✓ Public - find services
- ✓ Distances & directions

Select the local health service(s) you are interested in

 General Hospitals
  Maternity Hospitals
  Other Hospitals
  Health Centres
  Nursing Homes
  GPs


And then enter an address in the search field or click the link to make a [selection from the map](#)

Get Directions Print Email Link

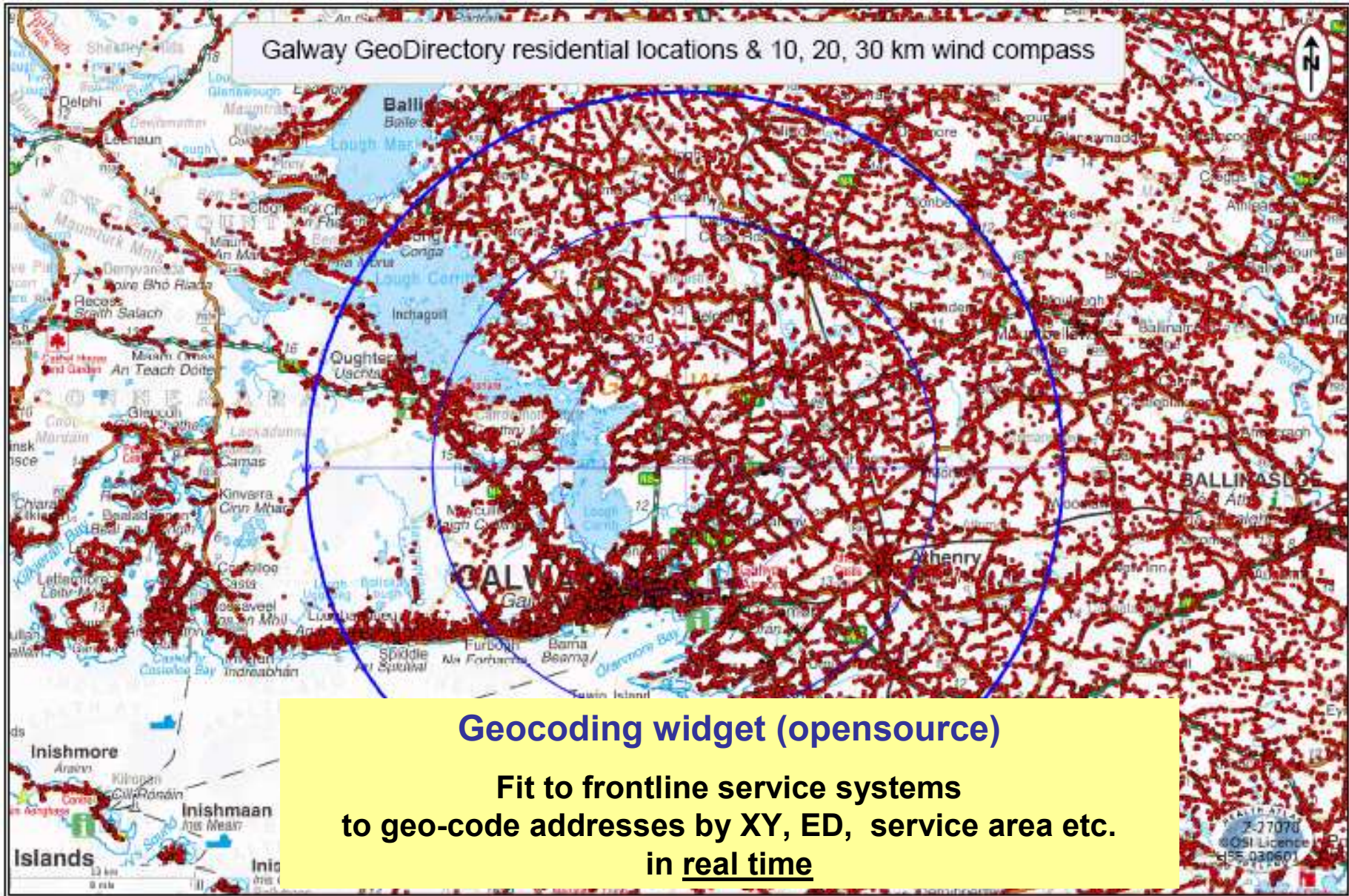
A APARTMENT 21 HAZELBROOK, KILMACUD ROAD UPPER, DUNDRUM, DU
 B General Hospital, St. Vincents Univ.

By:

| | | |
|----|---|--------|
| 2. | Slight right at Drummartin Rd | 0.2 km |
| 3. | Continue on Kilmacud Rd | 0.3 km |
| 4. | Turn right at Mount Anville Rd/R112 Continue to follow R112 | 2.0 km |
| 5. | Turn left at N11/ Stillorgan Rd | 1.5 km |
| 6. | Turn right at Nutley Ln (signs for Ospidéal/ Hospital) | 0.7 km |
| 7. | Turn right at Merrion Rd | 0.2 km |



Geocoding





Moving parts



The screenshot shows the Health Atlas Ireland web application interface. At the top, there is a navigation bar with links for Home, Search, Manuals, Lookup tables, Training, About us, and Contact us. Below this is a breadcrumb trail: Workspaces > HSE-Heal...lligence > HIU > National...tal Plan. The main content area is divided into several sections:

- Geo layers:** A section on the left containing a 'Project' dropdown menu (currently showing 'Paediatric service I...') and a 'Dataset' dropdown menu.
- Data layers:** A list of layers on the right side of the map, including 'Ireland Maps', 'Boundaries', 'Buildings', 'Transport', 'Other', and 'Analysis + Geo layers'. Each layer has a checkbox next to it.
- Maps:** A central map of Ireland showing regional boundaries and major cities. The map includes a navigation toolbar on the left and a 'Zoom to...' input field at the top.
- Boundaries:** A yellow box highlighting the 'Boundaries' layer in the list.
- Buildings:** A yellow box highlighting the 'Buildings' layer in the list.
- Transport:** A yellow box highlighting the 'Transport' layer in the list.
- Outputs:** A large yellow box on the right side of the interface listing various output options: 'Tables, maps, charts', 'Snapshots + bookmarks', 'PDF, hardcopy', 'A4 - A0+', and 'Export, email'.
- Analysis & map done "on the fly":** A red banner at the bottom of the map area.



Foedhmeannacht na Seirbhíse Sláinte
Health Service Executive

Census – 3 steps



Parameters
Year, geography

Analysis
Age, gender
Density
Deprivation

Results
Table
Thematic
Cartogram

Age

Total

Density

Tertiles
Top
Mid
Low

Population by ED

Galway City

Table

| No rows | Aged 85-89 | Aged 90-94 | Aged 100-104 | Aged 105-109 | Total | Persons per km2 |
|----------------------|------------|------------|--------------|--------------|-------|-----------------|
| 32 | 33284 | 12039 | 279 | 10 | 45612 | |
| Geographical name | Aged 85-89 | Aged 90-94 | Aged 100-104 | Aged 105-109 | Total | Persons per km2 |
| Carlow/Kilkenny | 998 | 322 | 6 | 0 | 1326 | 0.51 |
| Cavan/Monaghan | 1200 | 417 | 6 | 0 | 1623 | 0.53 |
| Clare | 999 | 386 | 9 | 0 | 1394 | 0.54 |
| Donegal | 1435 | 567 | 7 | 1 | 2010 | 0.41 |
| Dublin North | 1040 | 359 | 5 | 0 | 1404 | 3.68 |
| Dublin North Central | 1197 | 386 | 9 | 0 | 1592 | 42.97 |
| Dublin North West | 1057 | 351 | 9 | 0 | 1417 | 12.4 |
| Dublin South | 1266 | 513 | 9 | 1 | 1789 | 29.61 |
| Dublin South City | 937 | 396 | 12 | 0 | 1345 | 45.55 |
| Dublin South East | 1144 | 464 | 10 | 1 | 1619 | 21.39 |