

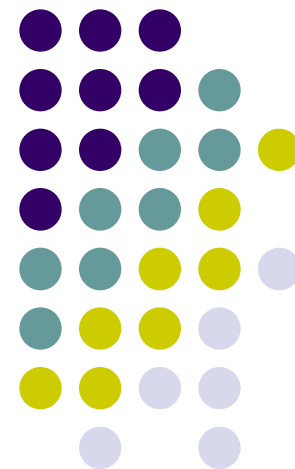
DEVELOPING LOCAL ECONOMIC STRATEGIES



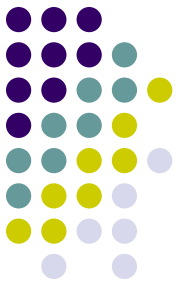
A case study of County Cork

Ross Palmer

Sinisa J. Vukicevic

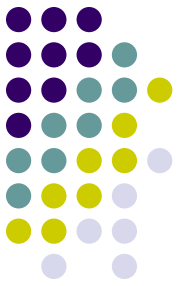


WHAT IS POWCAR ?



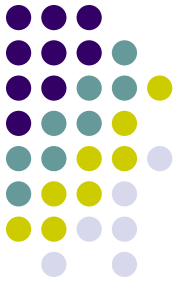
- Place Of Work Census of Anonymised Records – 2006 census
- Questions 31-33 asked where do you work, how do you get there, what type of transport do you use and what type of work do you carry out
- Results are coded by DED and easily analysed with all other census information

WHY A CASE STUDY OF COUNTY CORK ?

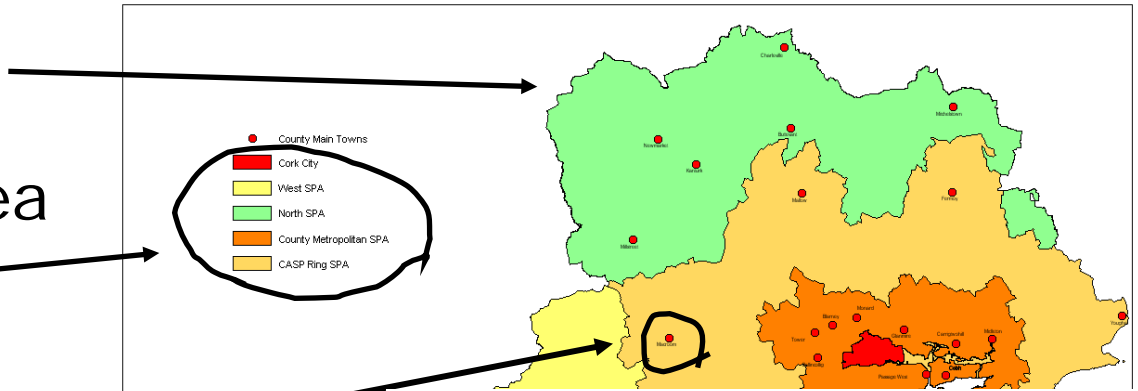


- Preparation of County Development Plan review
- Traditional employment analysis
 - Jobs vs Employees
 - Structure of economy
 - Travel to work patterns
 - Growth in economy
- Two main commuting questions:
 - “Where are the employees going?”
 - “Where are they coming from?”
 - Economic Health questions

MAIN RESEARCH AREAS

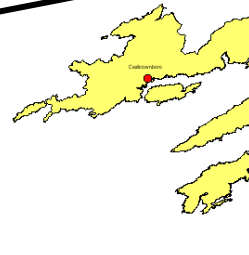


Countywide

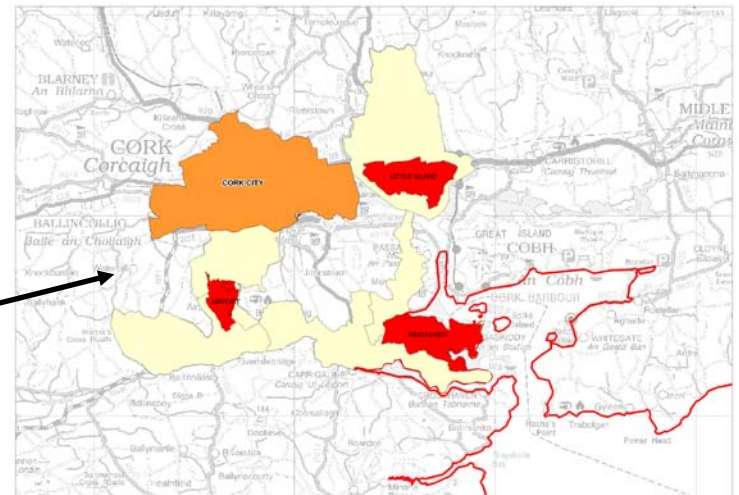


Strategic Planning Area

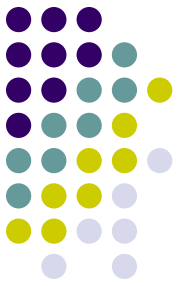
Main Towns



Strategic Employment Zones

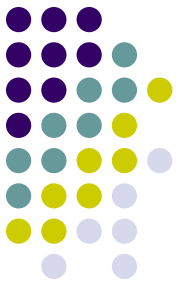


PROBLEMS ENCOUNTERED



- Disparity between DED and town development boundary
- GIS capability – resources
- Keep analysis simple
- Definitions of mobile workers, workers at home and uncoded records = +/- 7%
- Connection with Geodirectory database:
- Atomic areas (small areas) – a dataset which subdivides the existing Electoral District (ED) boundaries

FINDINGS OF CASE STUDY



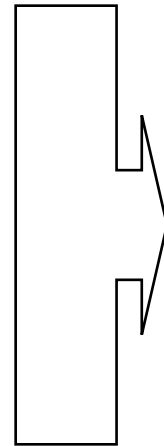
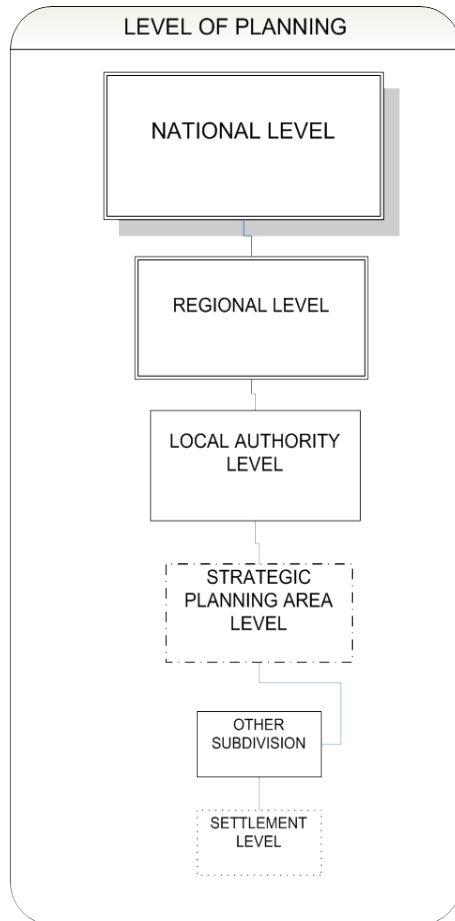
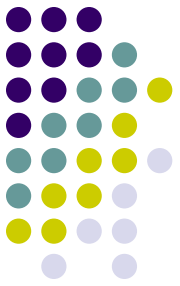
- Analysis of jobs/employees ratio indicates economic health of main towns. County Council could consider re-focussing economic investment on weaker towns in CASP Ring and North Cork,
- There is a need for more targeted investment in the creation of jobs for Mallow Hub,
- The Cork Metropolitan area's dependency on Cork City indicates need to provide more jobs in inner metropolitan towns of Ballincollig, Blarney and Tower to balance commuting to Cork City,
- Journey to work analysis shows high commuting patterns between County Metropolitan SPA and employment areas, especially to Little Island. There is a need for additional transportation links (public transport) on the busiest routes.

BENEFITS OF USING POWCAR FOR ECONOMIC ANALYSIS



- It is DED based and compatible for all data sets
- Can be used for all spatial areas
- GIS based analysis can produce thematic mapping – easily read and understood
- Can be used for defining hinterlands of towns and regions
- Can analyse economic health of towns and regions
- Can use with other levels of planning and projects

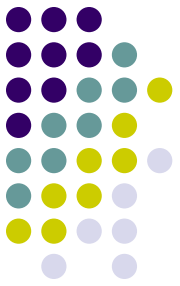
ECONOMY ISSUES IN DIFFERENT LEVELS OF PLANNING



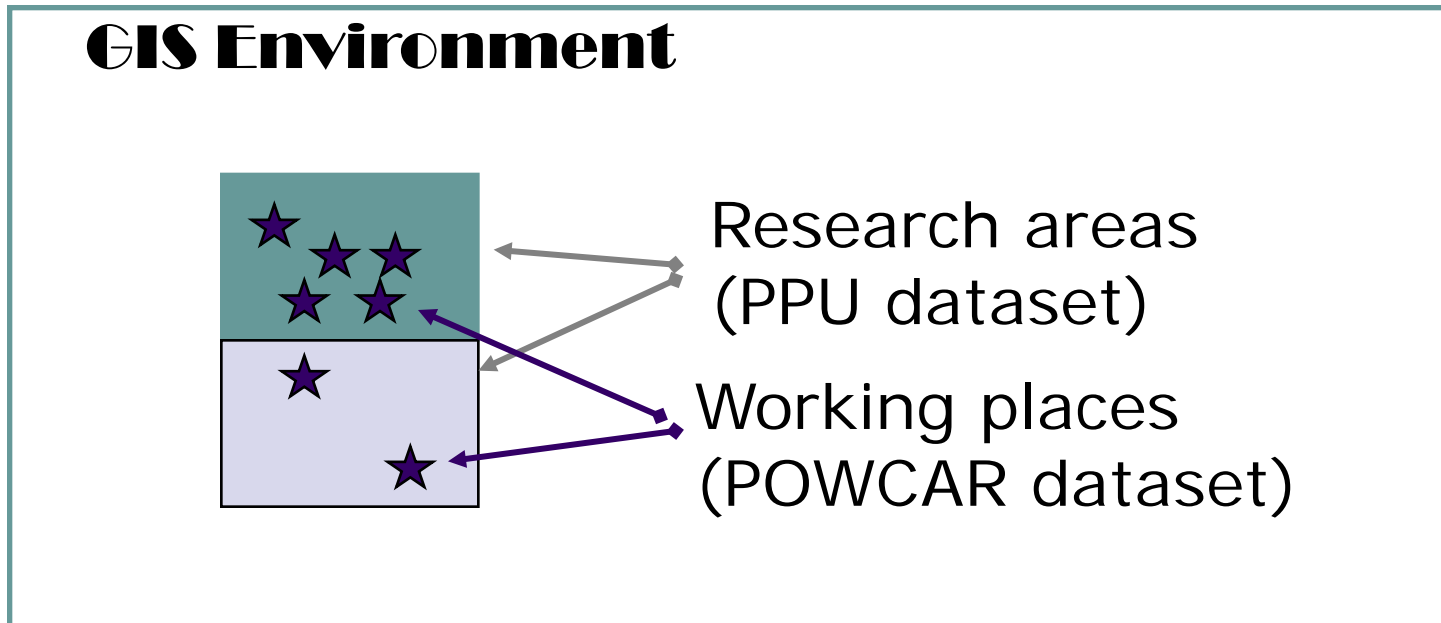
1. Economy activity comparisons
2. Economy health analysis and Economy growth analysis
3. Strategic employment zones and centres analysis
4. Commuting patterns
5. Hinterland definitions
6. Structure of economy activities

1.

ECONOMY ACTIVITY COMPARISONS

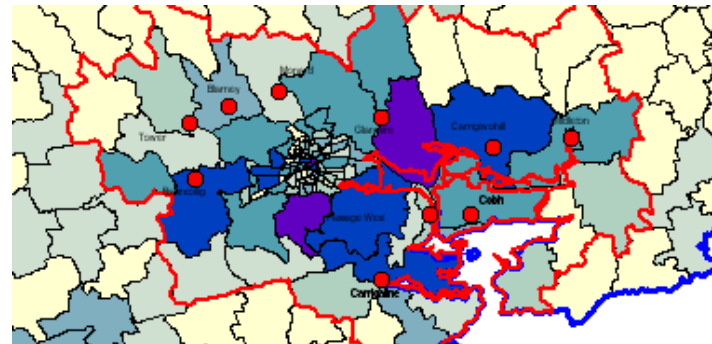
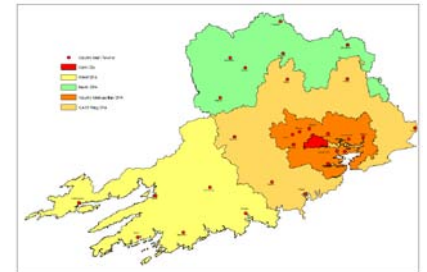
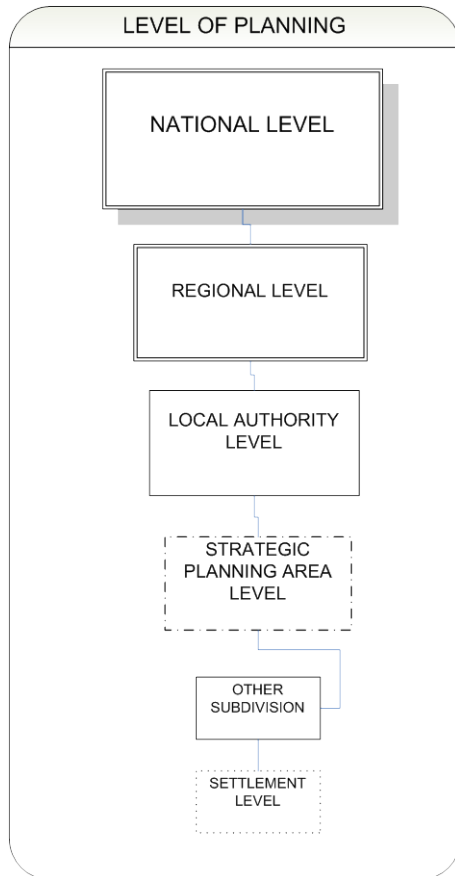
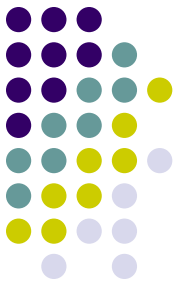


ANALYSIS IS BASED ON NUMBER OF JOBS PER RESEARCH AREA

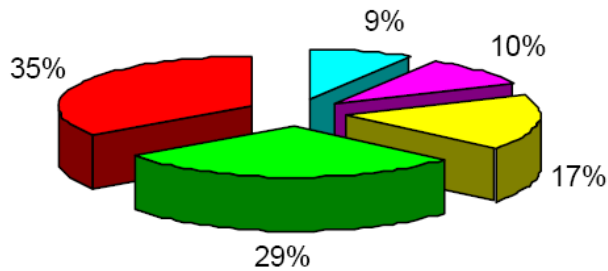


Dark colour represent where the job activity is on the higher level

ECONOMY ACTIVITY COMPARISONS

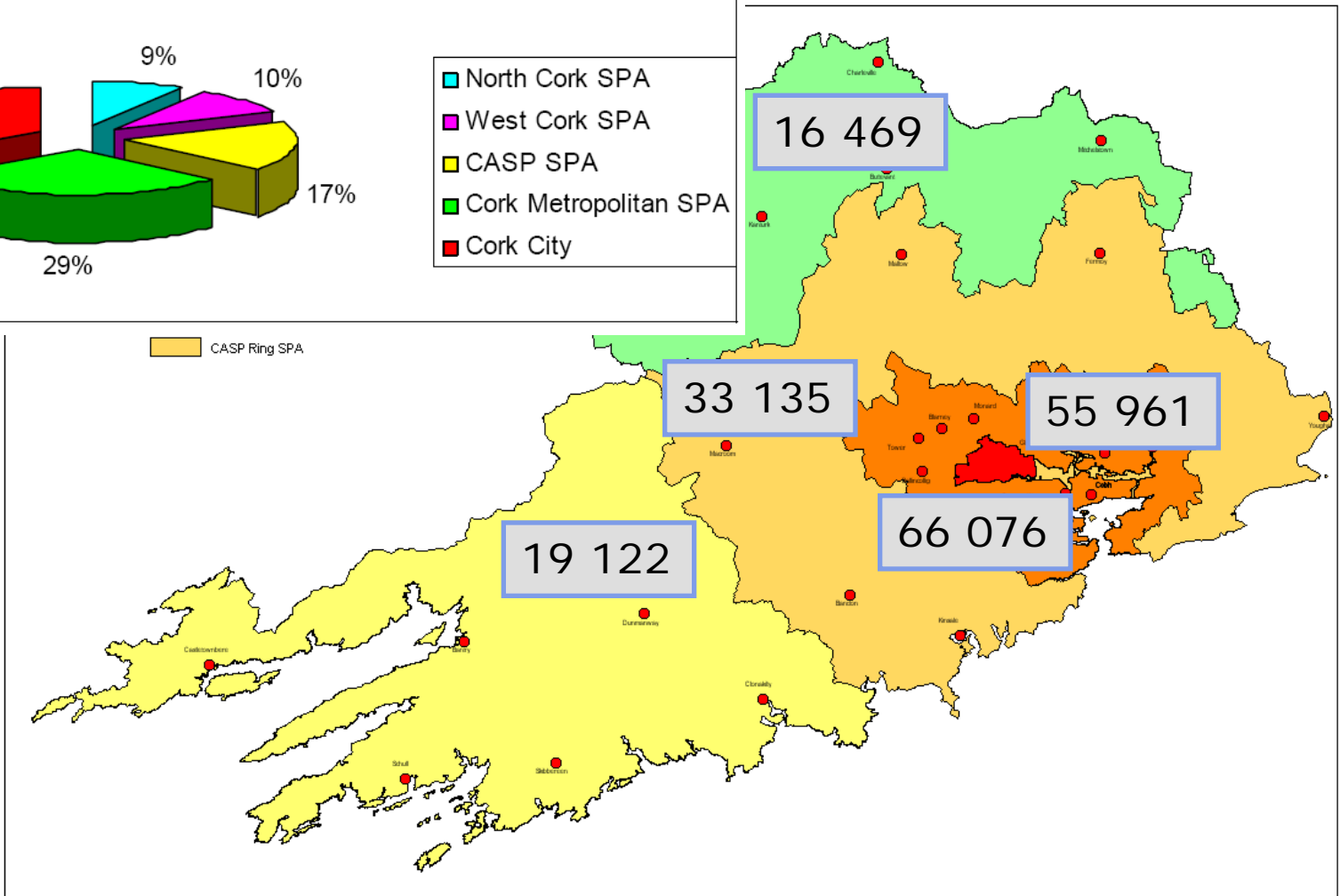


STRATEGIC PLANNING AREA LEVEL

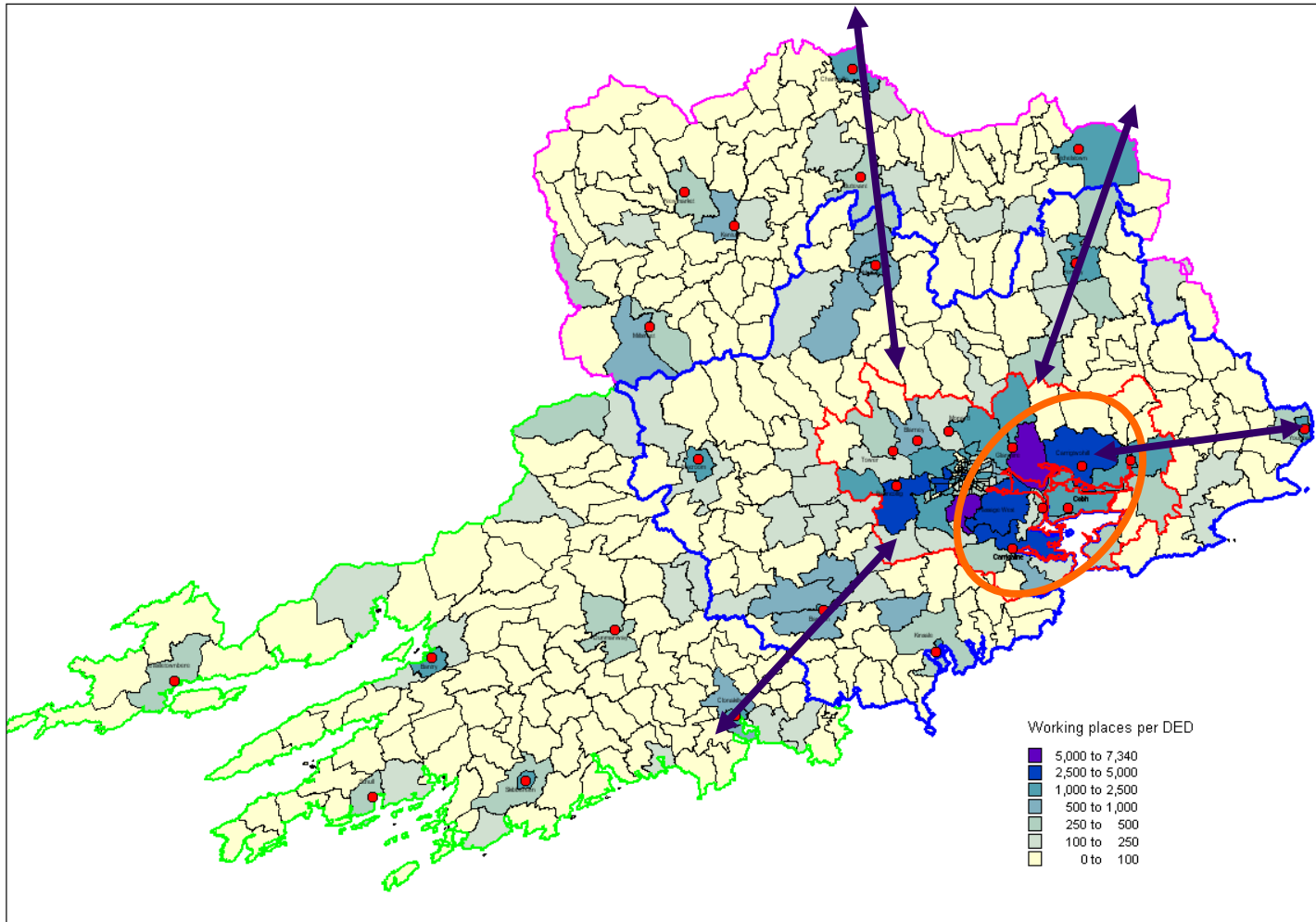
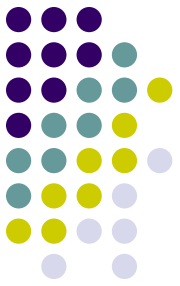


- North Cork SPA
- West Cork SPA
- CASP SPA
- Cork Metropolitan SPA
- Cork City

■ CASP Ring SPA



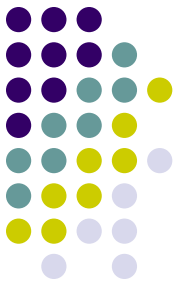
MAIN DEVELOPMENT CORRIDORS



ANALYSIS IS BASED ON NUMBER OF JOBS PER DED'S

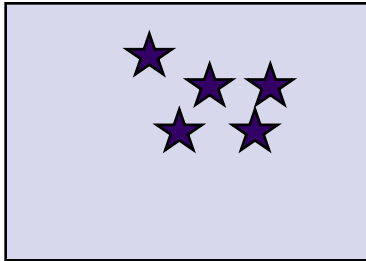
2.

ECONOMY HEALTH ANALYSIS



ANALYSIS IS BASED ON JOBS/EMPLOYEES RATIO

GIS Environment



Research area (DED based)

- ❖ Number of employees (DED based)
- ❖ Number of jobs

Definitions: *Employee in this research means a person who is living in research area and work within or out of research area.*

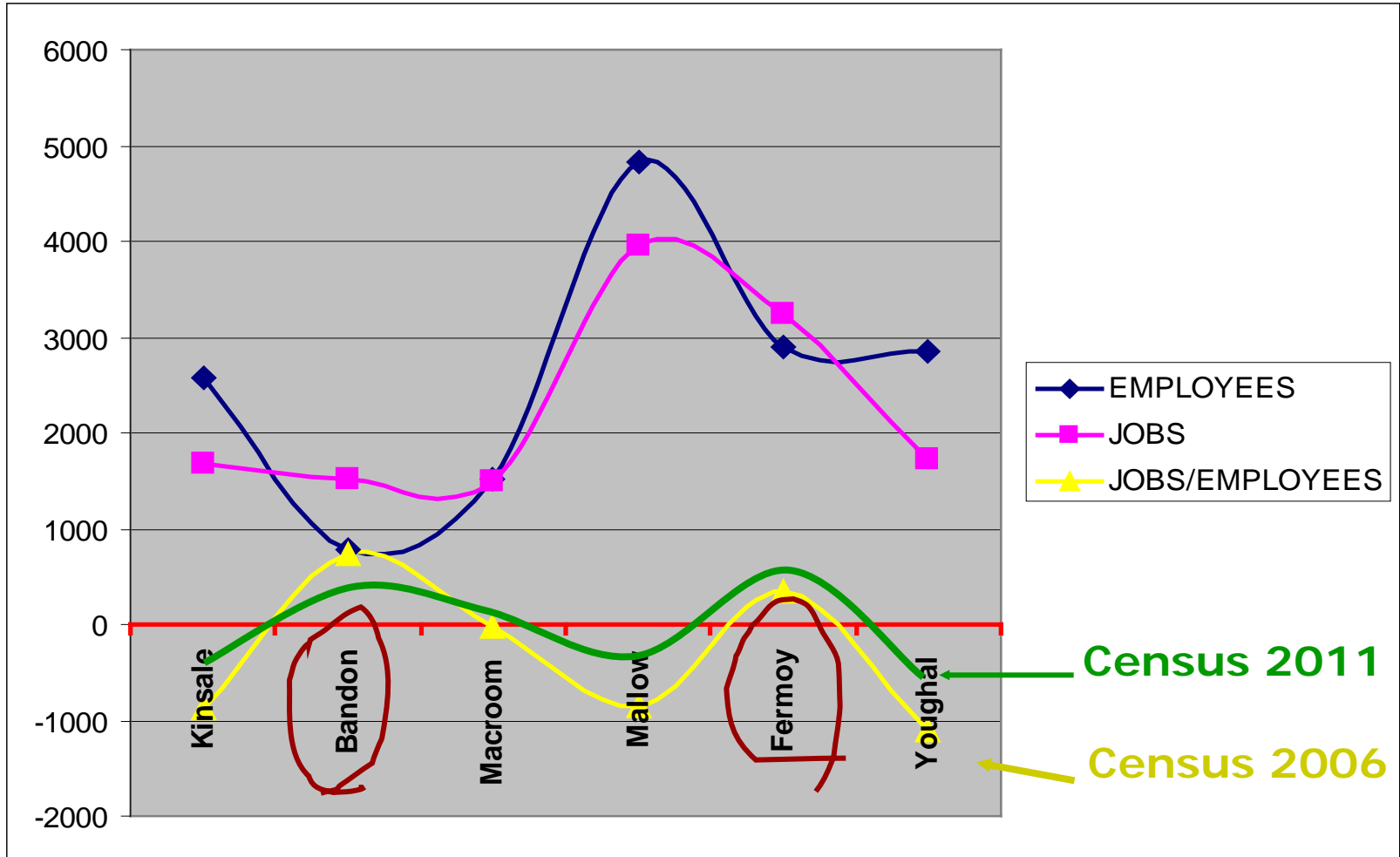
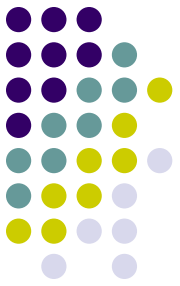
Jobs means all workers in some research area, research area is destination - “place of work”.

ECONOMY HEALTH ANALYSIS



AREA	EMPLOYEES	JOBS
County Cork (including Cork City)	205 800	190 763
North Cork Strategic Planning Area	20 101	16 469
West Cork Strategic Planning Area	22 971	19 122
CASP Ring SPA	46 282	33 135
County Metropolitan SPA	70 682	55 961
Cork City	45 764	66 076

ECONOMY HEALTH (GROWTH) ANALYSIS



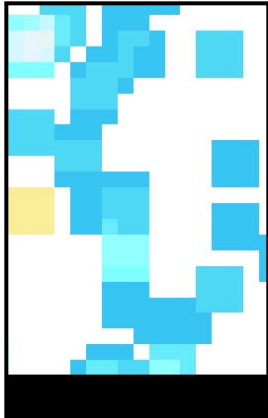
3.

STRATEGIC EMPLOYMENT ANALYSIS



ANALYSIS IS BASED ON JOBS DENSITY GRAPH

GIS Environment



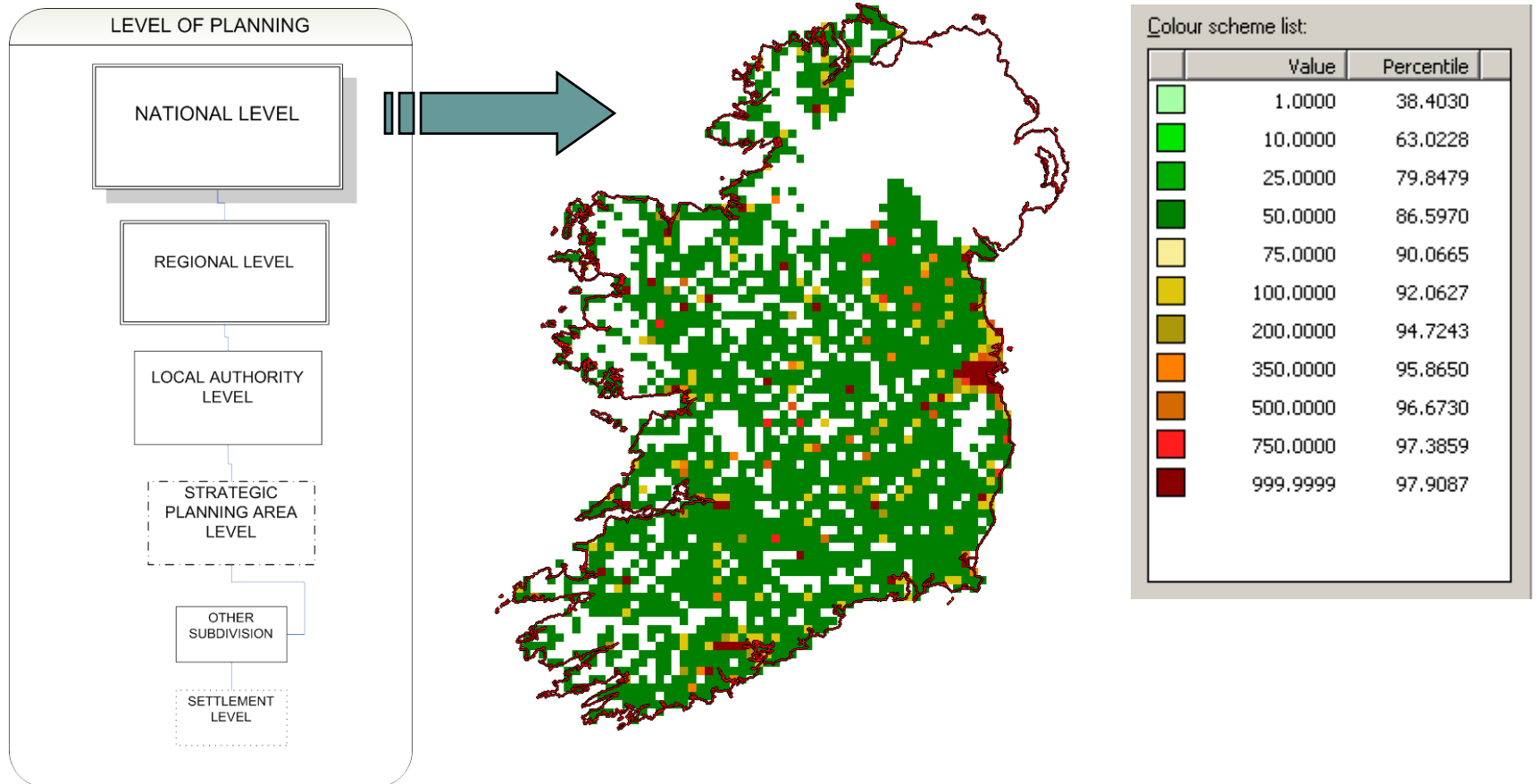
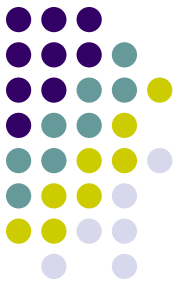
Grid analysis: jobs per squares

Size of square depend of Plan level
and details we need:

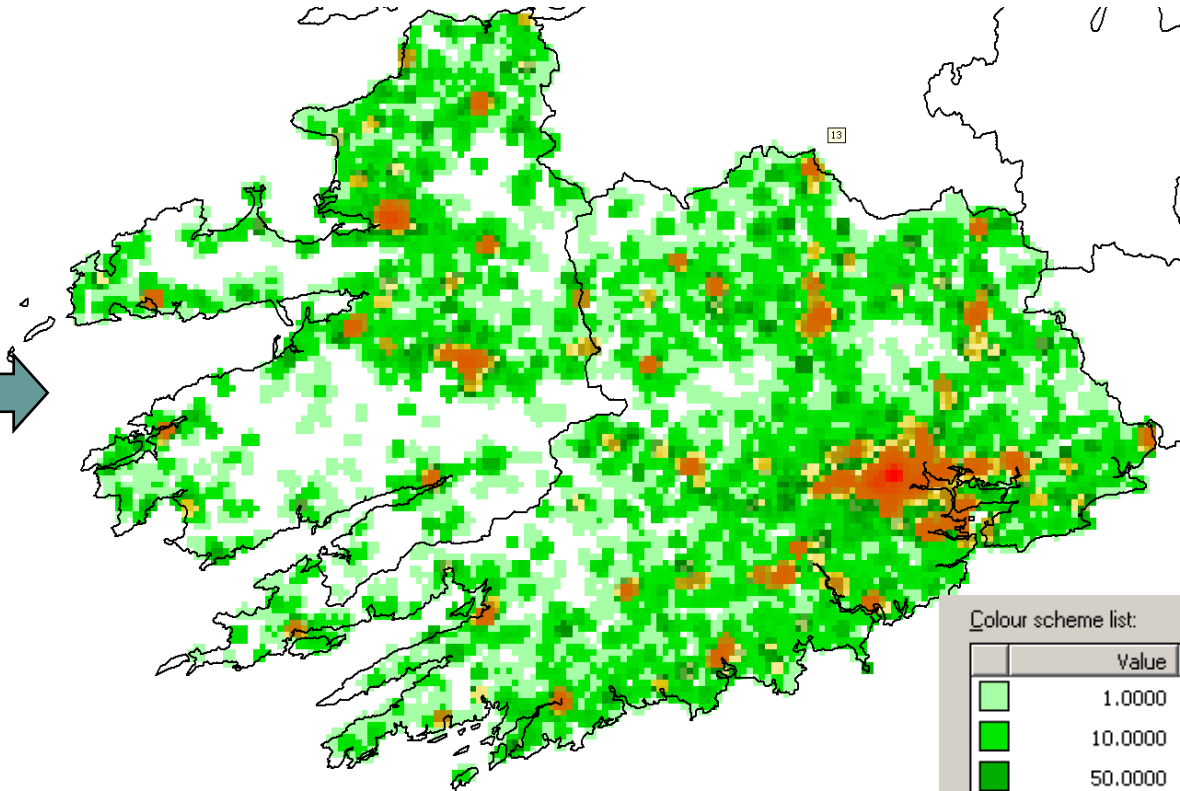
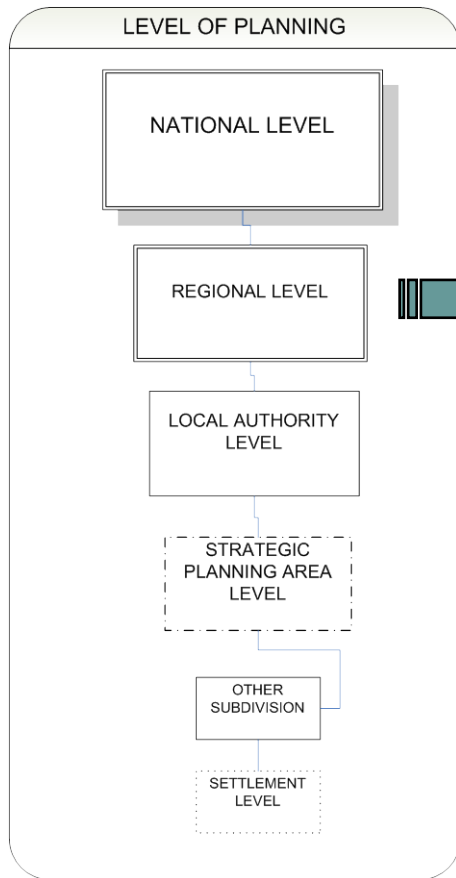
- National/Regional level: 5 km
- County level: 2.5 km
- SPA level: 1 km

Darker squares represent higher job density

STRATEGIC EMPLOYMENT ANALYSIS



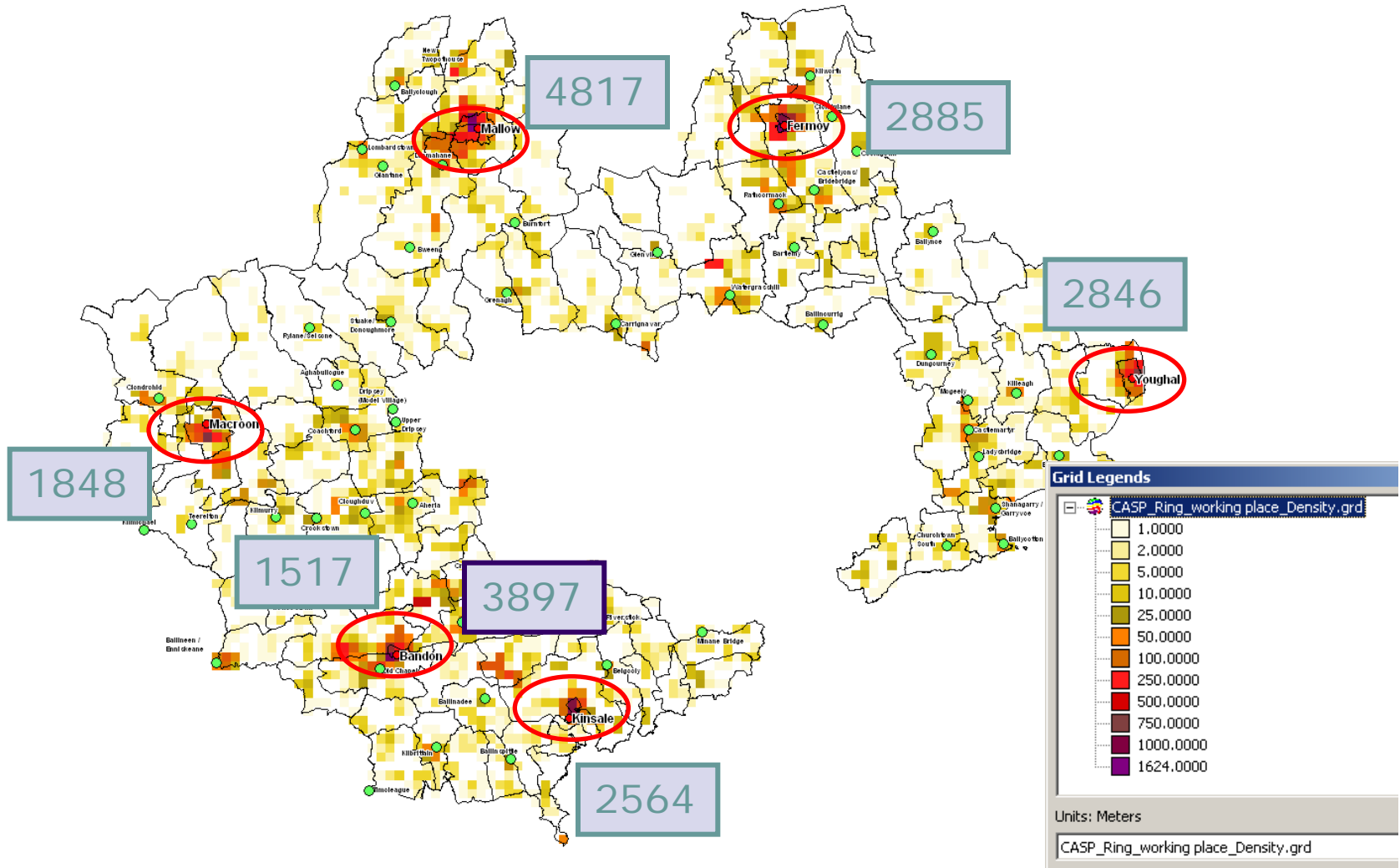
STRATEGIC EMPLOYMENT ANALYSIS



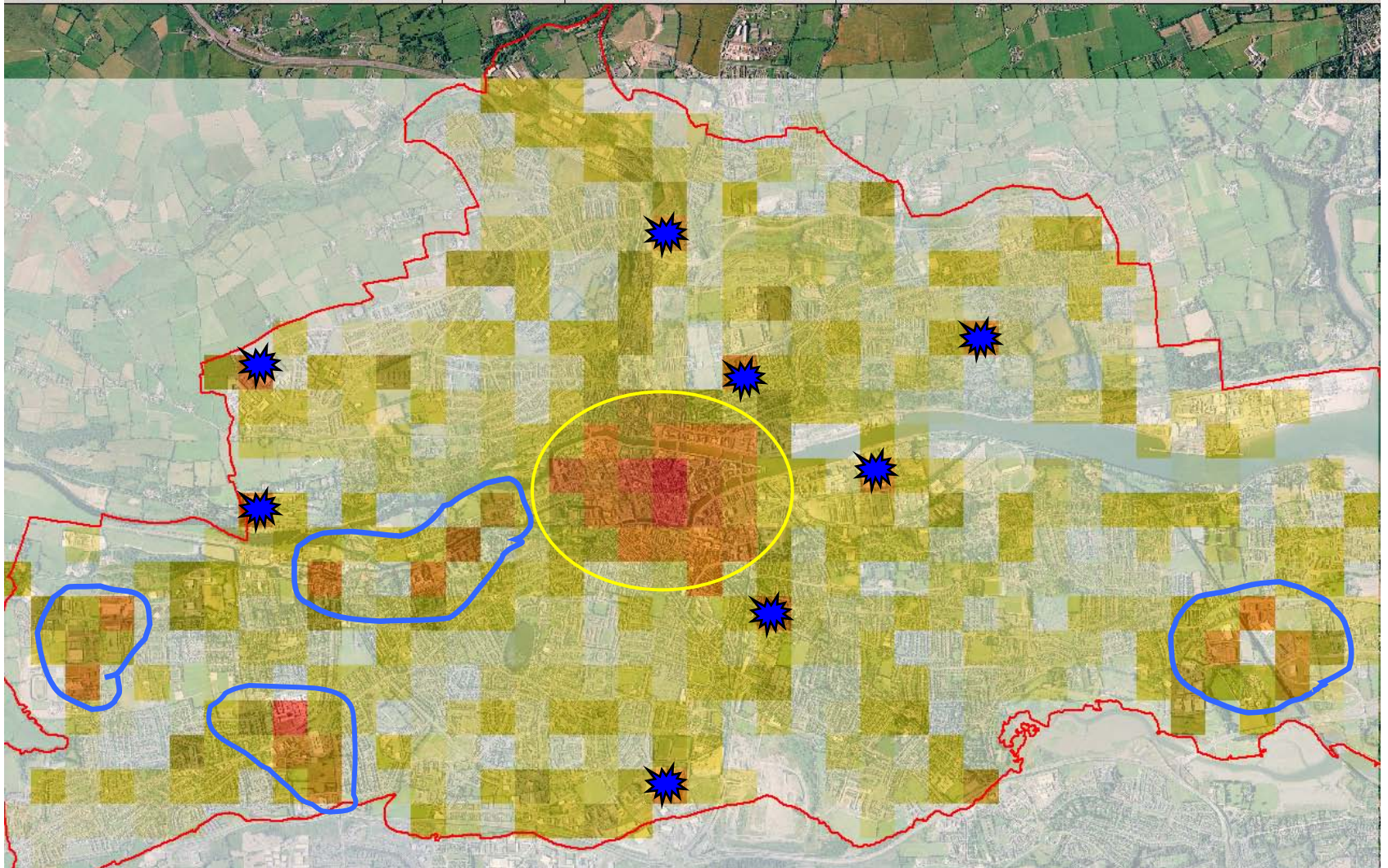
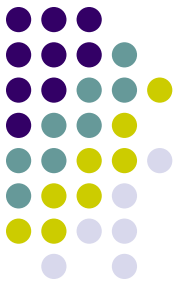
Colour scheme list:

	Value	Percentile
	1.0000	12.8909
	10.0000	55.4144
	50.0000	84.1869
	100.0000	90.3538
	150.0000	92.4844
	200.0000	93.8038
	500.0000	96.2373

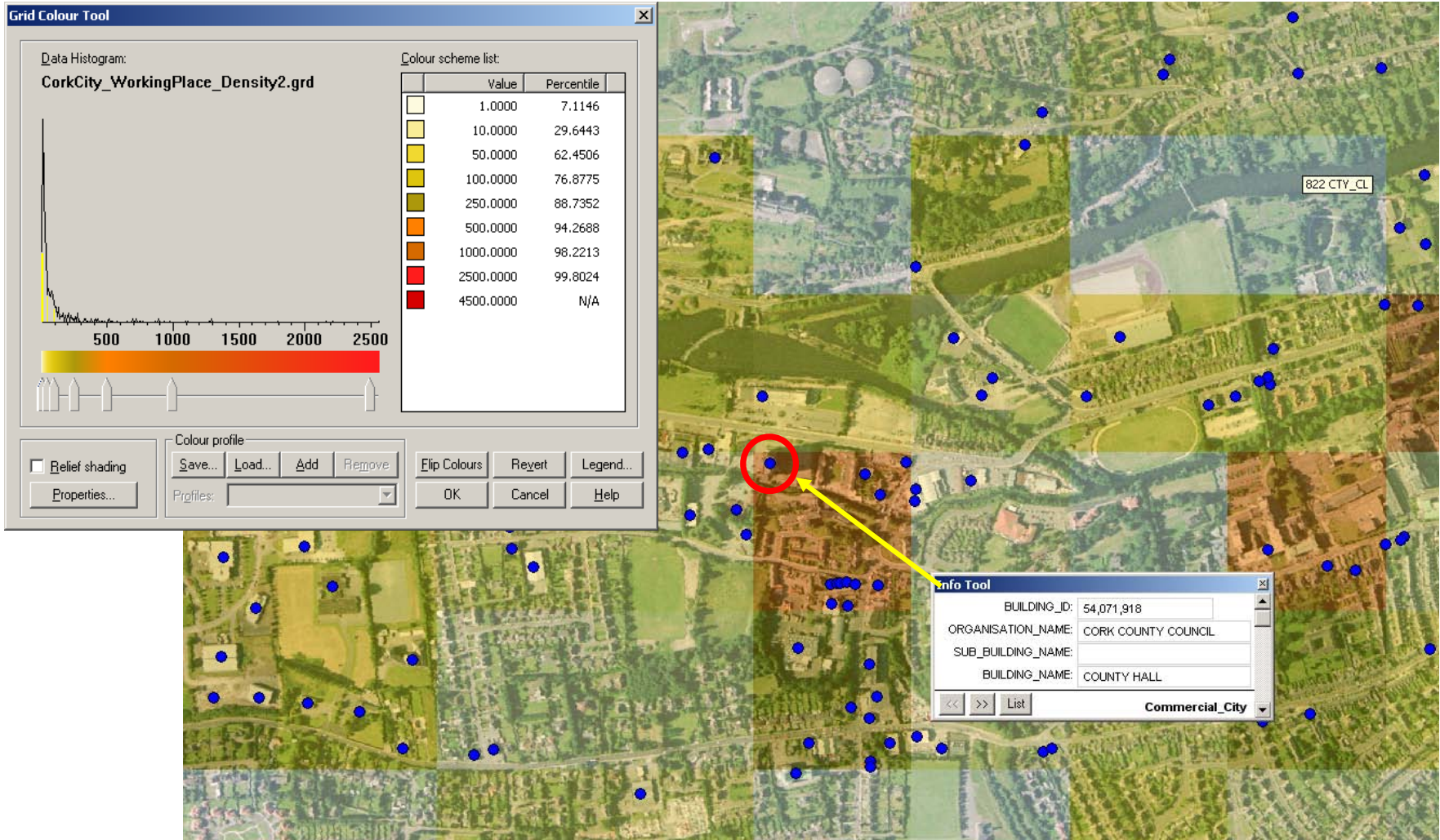
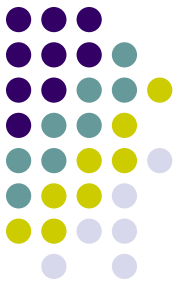
STRATEGIC EMPLOYMENT ANALYSIS – “SPA” LEVEL



STRATEGIC EMPLOYMENT ZONES ANALYSIS – CITY LEVEL

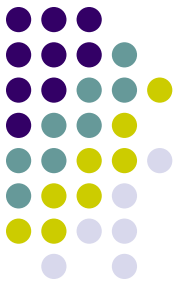


STRATEGIC EMPLOYMENT CENTRES ANALYSIS

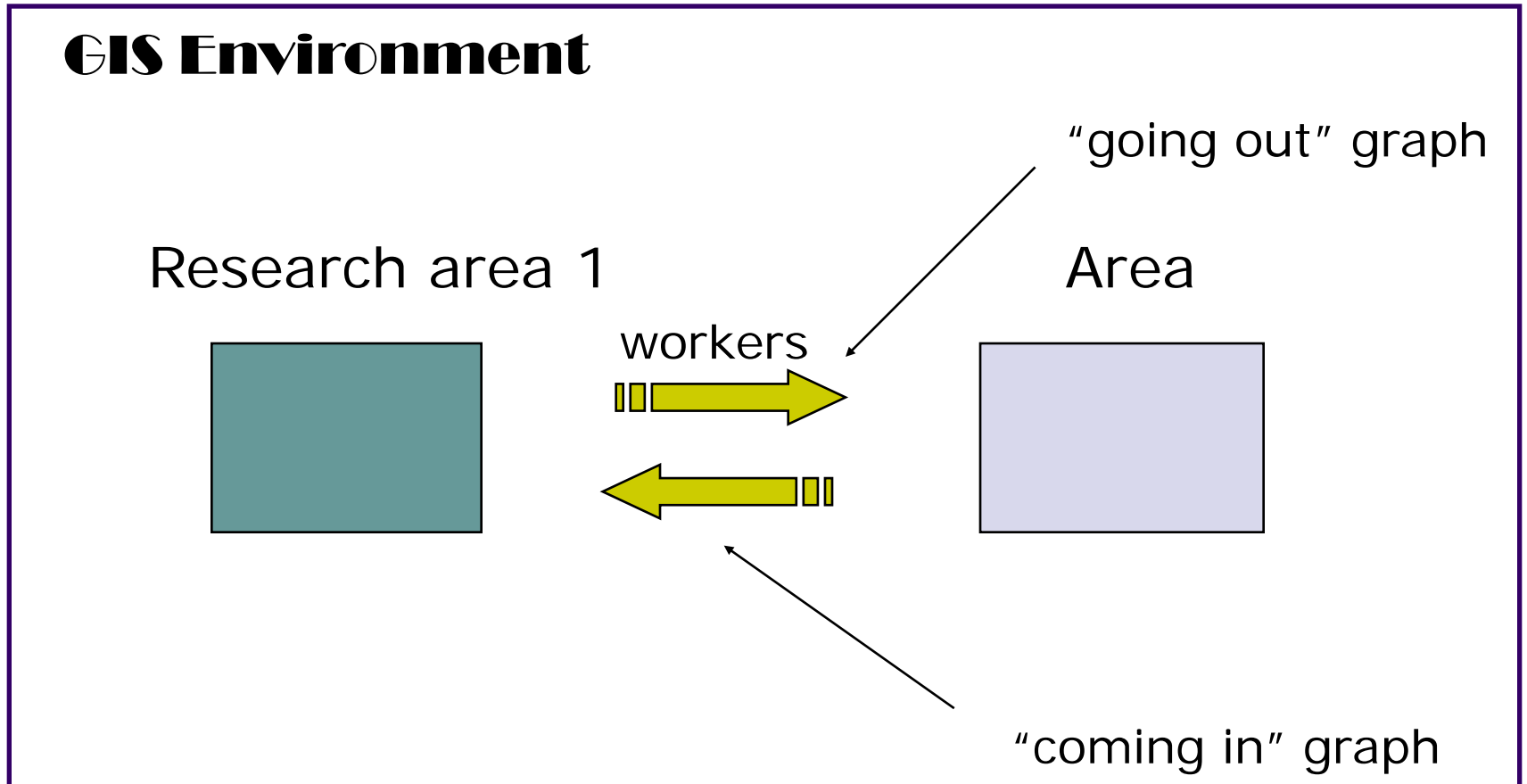


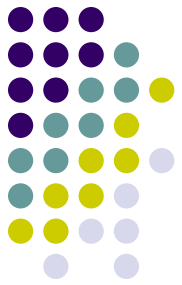
4

COMMUTING PATTERNS



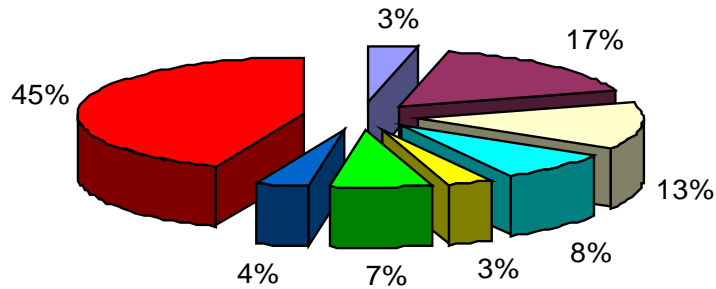
ANALYSIS IS BASED ON “COMING IN”, “GOING OUT” GRAPH



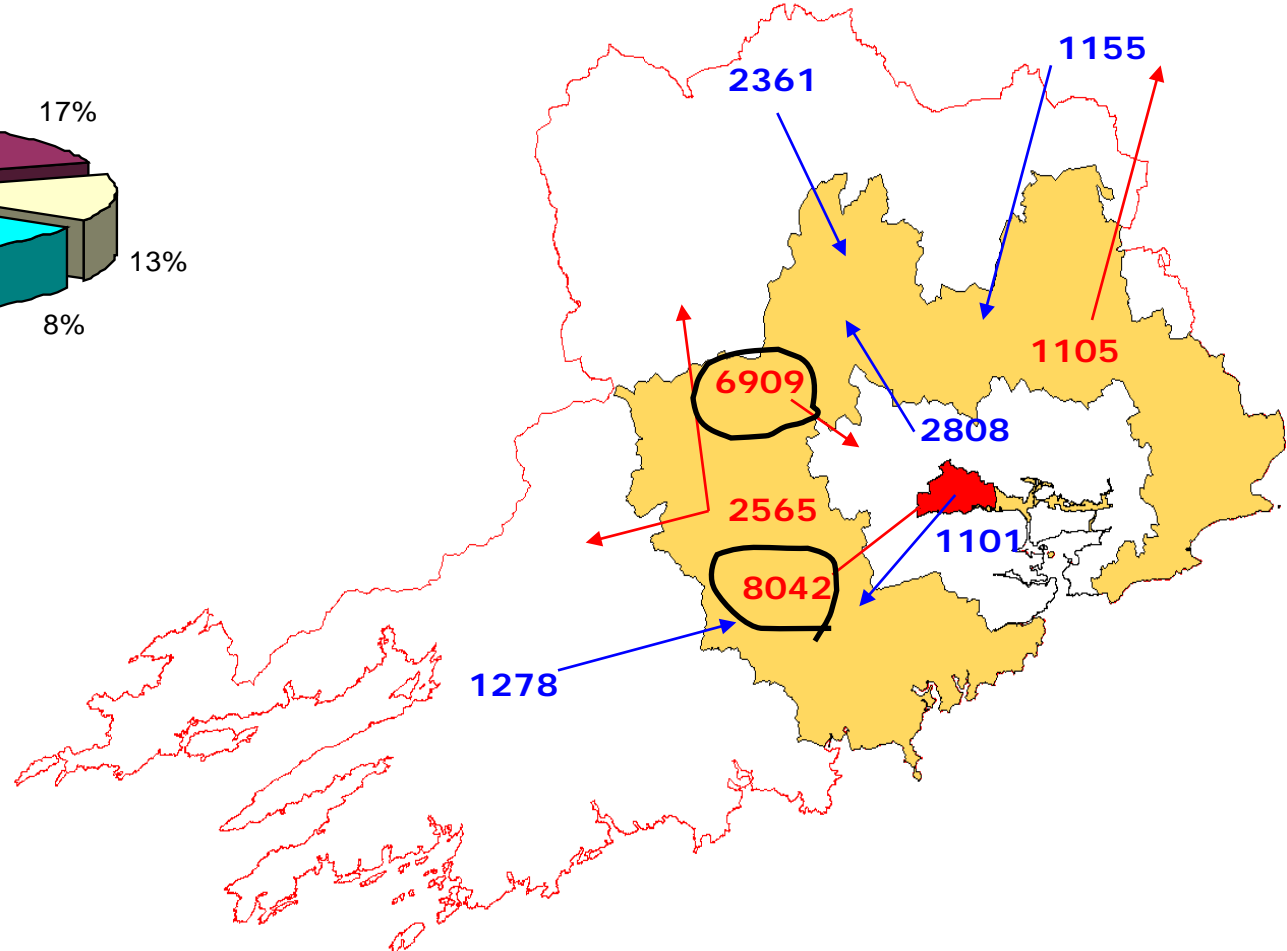


COMMUTING PATTERNS

“SPA” LEVEL



- Live out of County
- Mobile workers
- Workers at home
- Live in Cork Metropolitan SPA
- Live in Cork City
- Live in North SPA
- Live in West SPA
- Live and work in CASP SPA

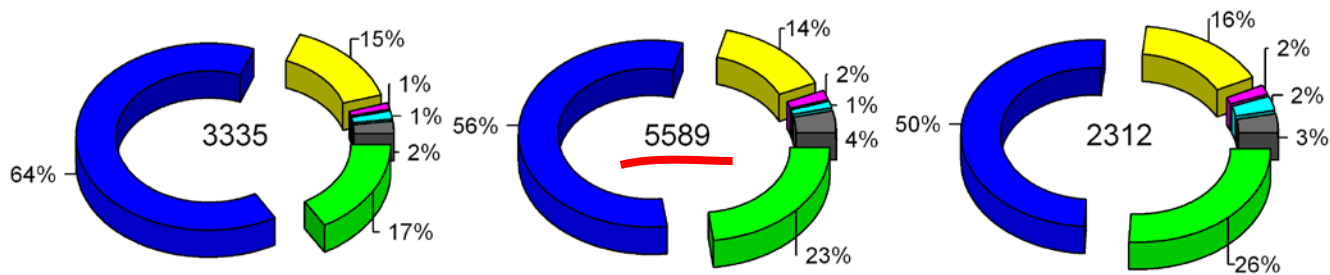


ANALYSIS IS BASED ON “COMING IN”, “GOING OUT” GRAPH

COMMUTING PATTERNS – WORKING ZONES LEVEL



Where are they coming from?



Ringaskiddy

Little_Island

Airport

Cork City

Metropolitan
Cork

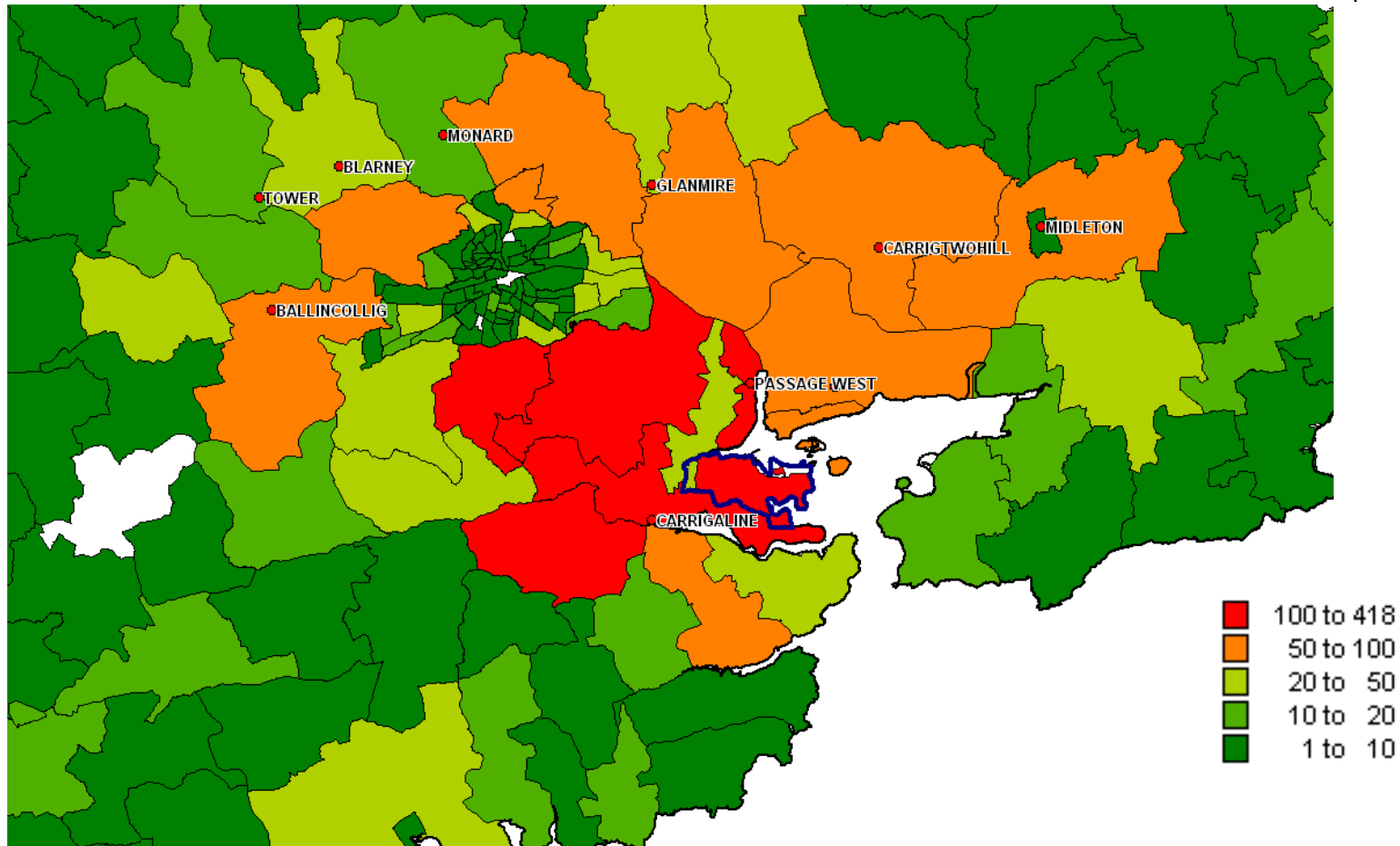
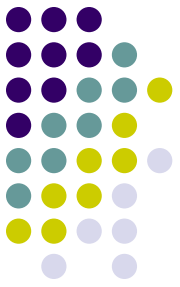
CASP Ring

Nort SPA

West SPA

Out of County

COMMUTING PATTERNS – WORKING ZONES LEVEL



**HOW MANY WORKERS COMMUTE EVERY DAY TO
RINGASKIDDY AND WHERE ARE THEY COMING FROM?**

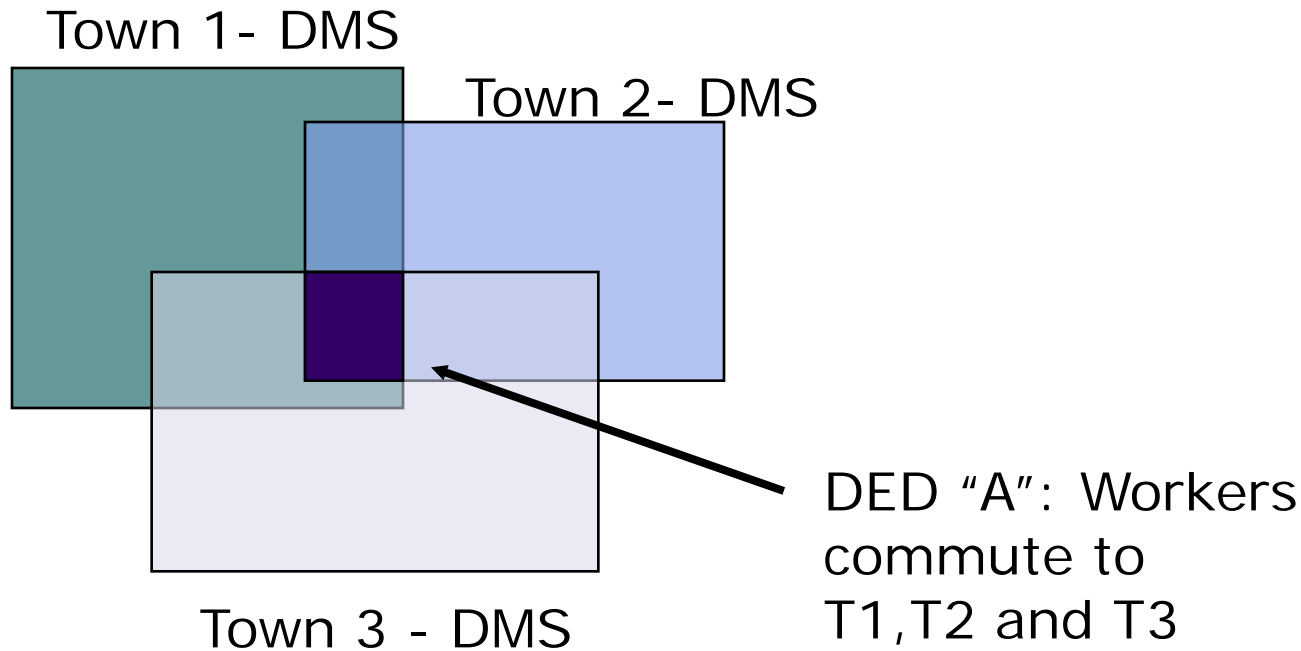
5.

DEFINITIONS OF TOWNS DAILY MIGRATION SYSTEMS



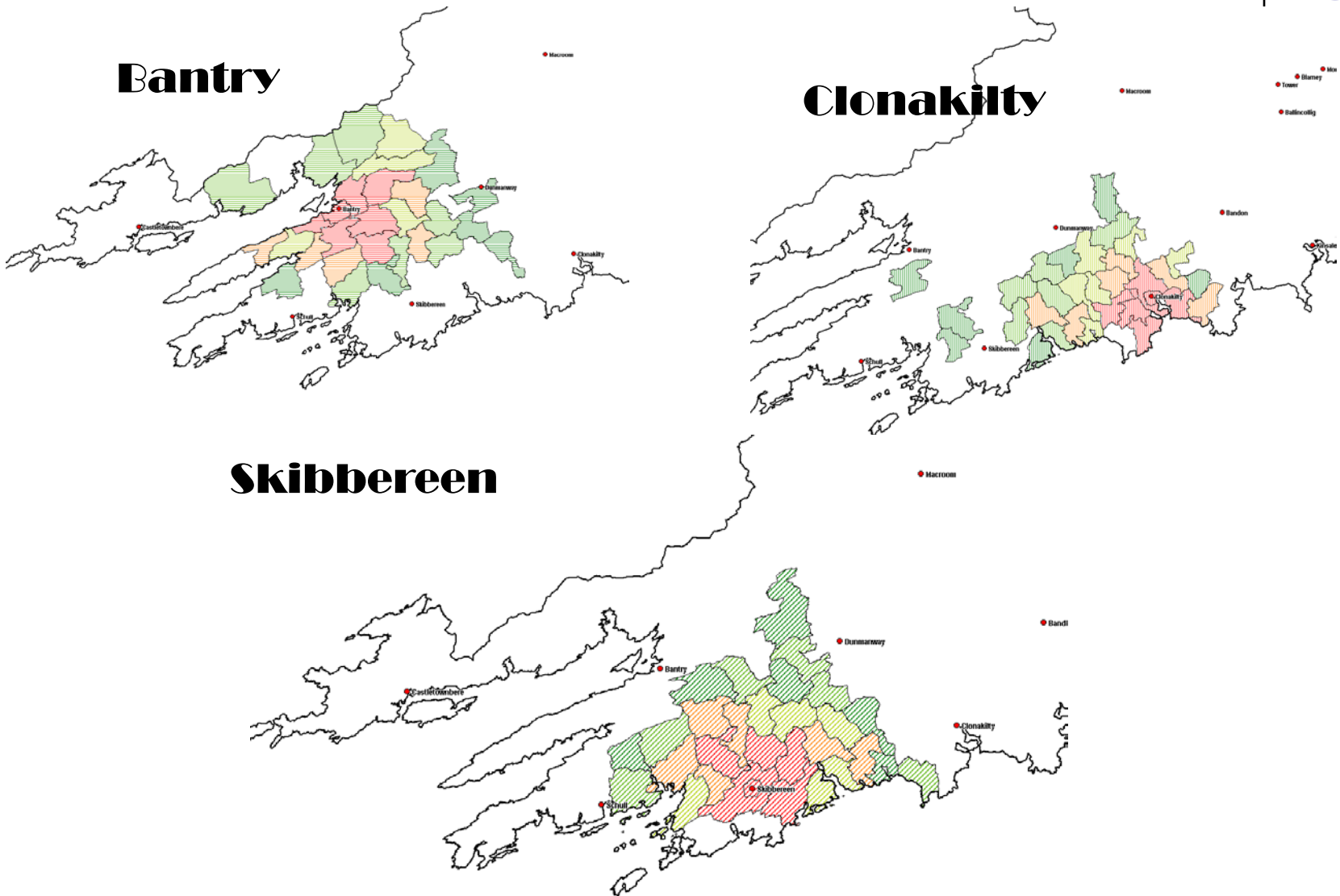
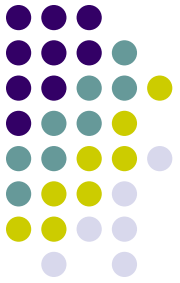
ANALYSIS IS “DED” BASED

GIS Environment



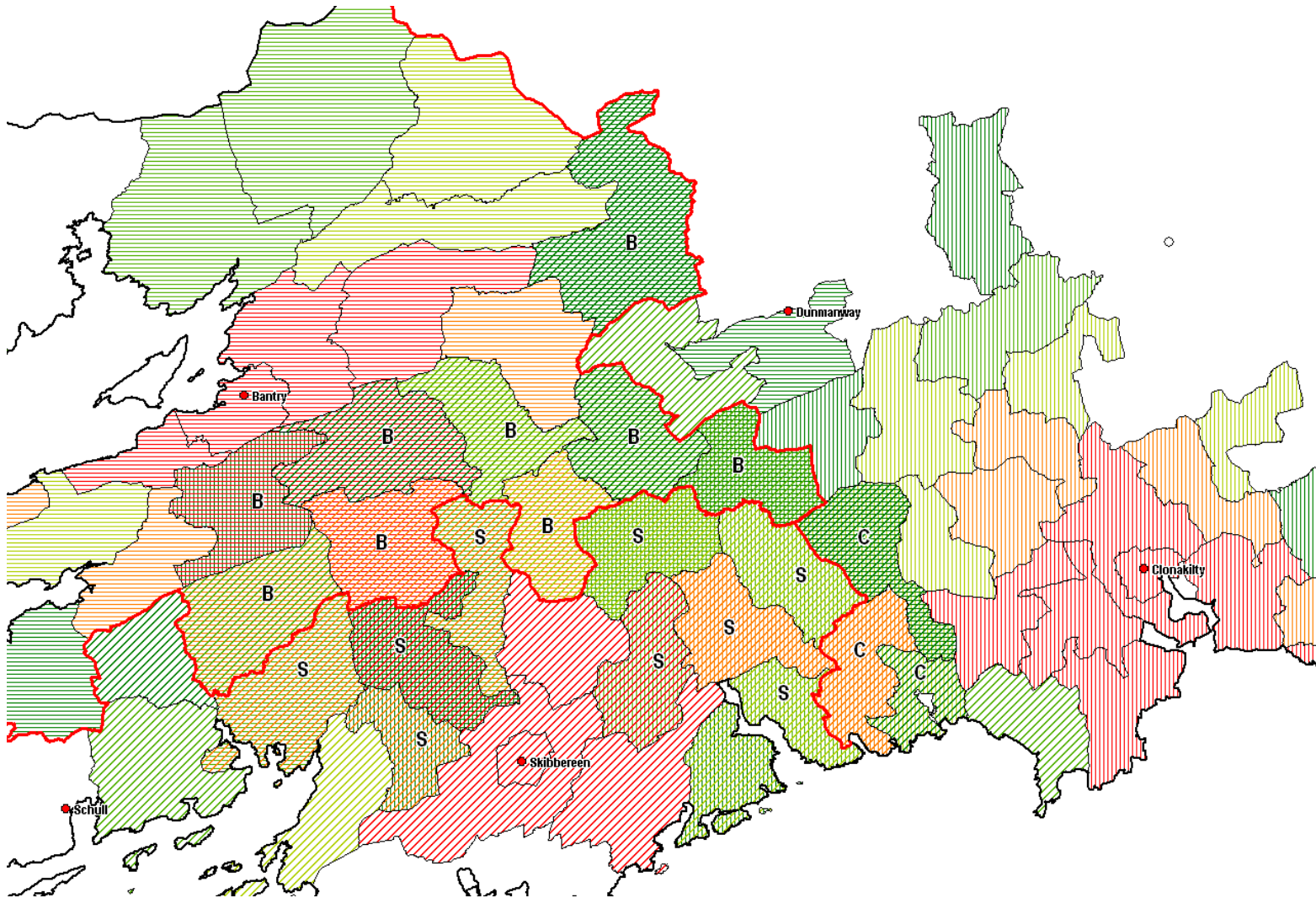
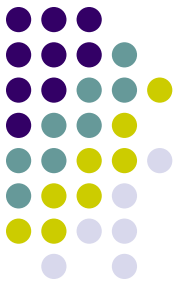
DED "A" \cap {T1; T2; T3}; DED "A" \in T, where the majority of workers commute

DEFINITIONS OF TOWNS DAILY MIGRATION SYSTEMS



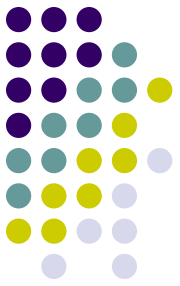
DEFINITIONS OF TOWNS

DAILY MIGRATION SYSTEMS

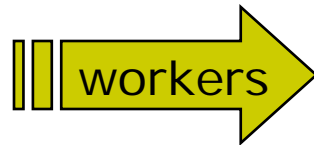
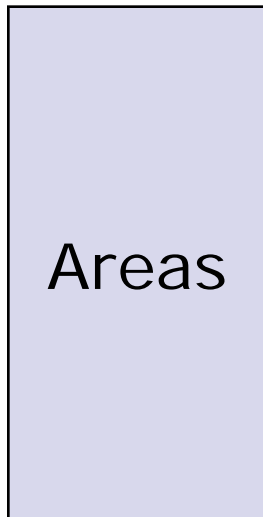


6.

STRUCTURE OF ECONOMY ACTIVITY



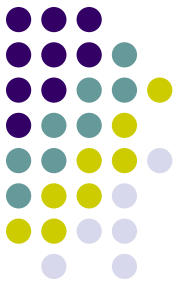
GIS Environment



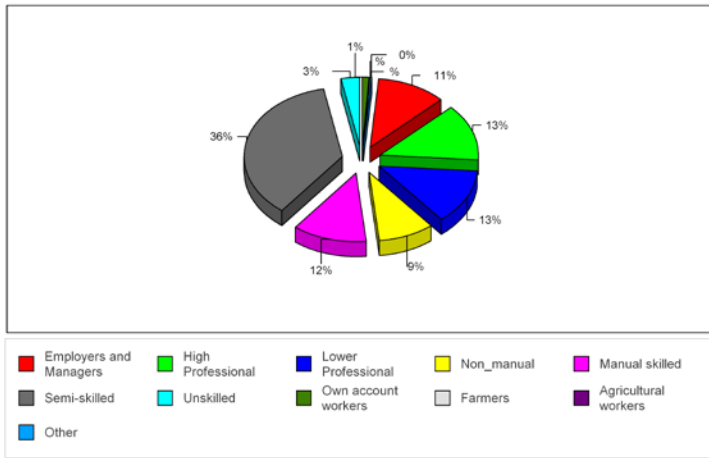
Research area



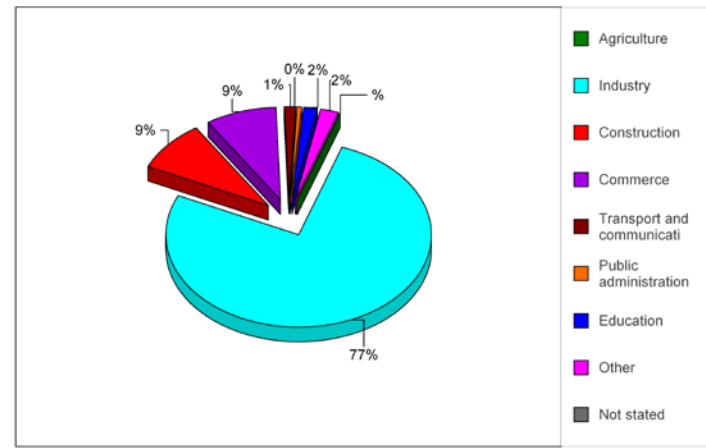
STRUCTURE OF ECONOMY ACTIVITY



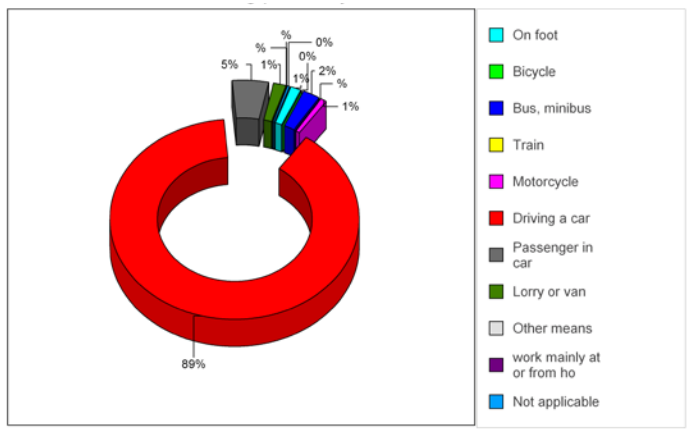
Socio-economic group



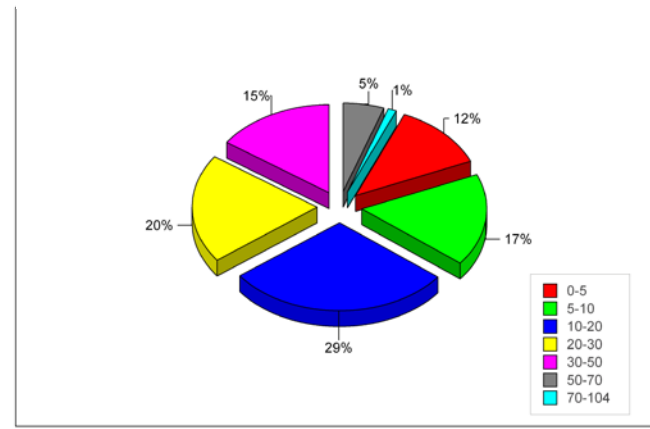
Industry group



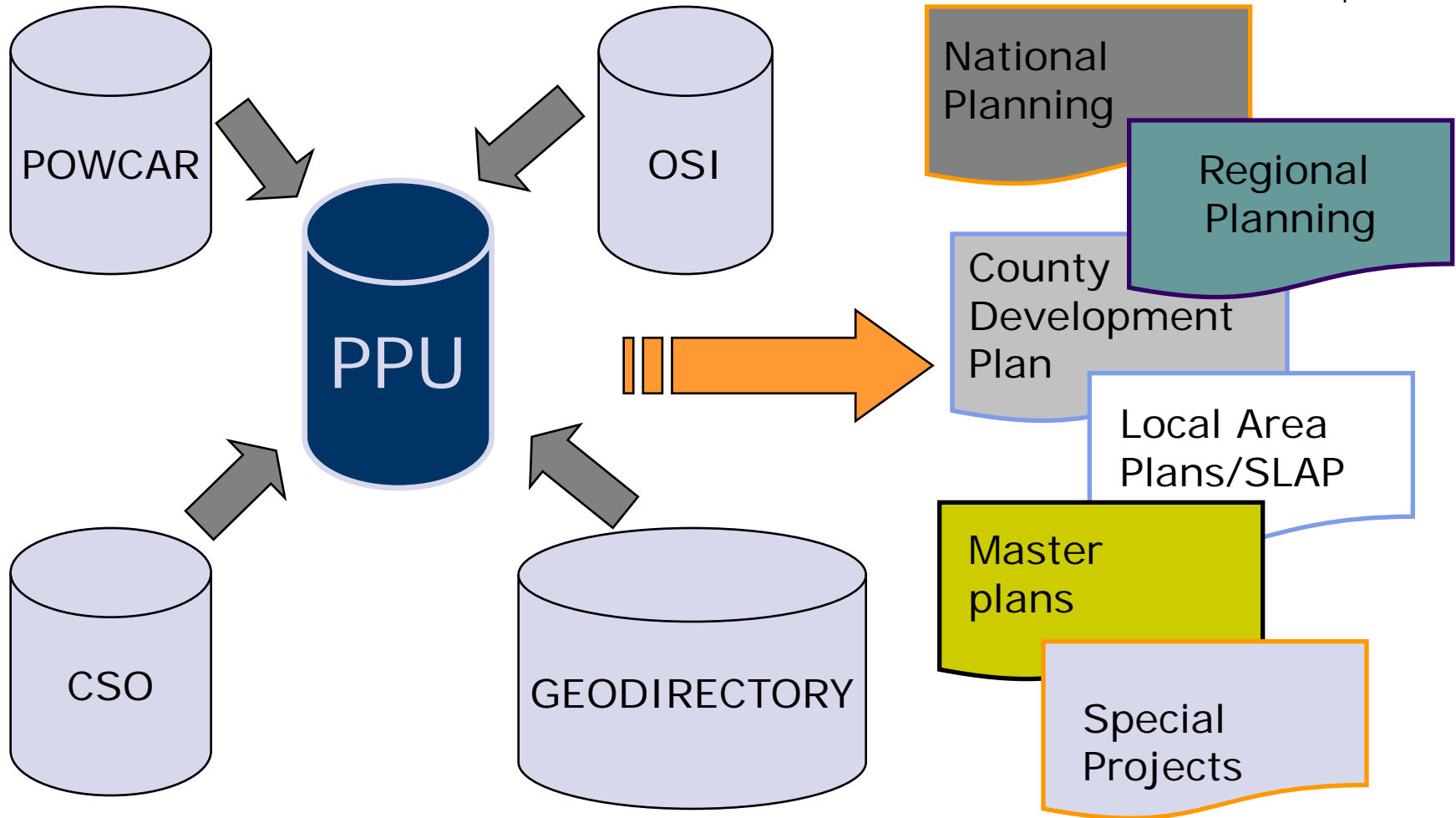
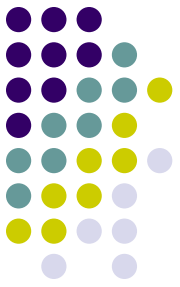
Means of travel

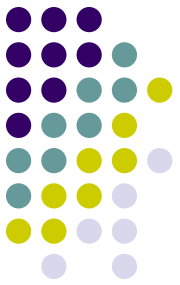


Journey by "km"



“POWCAR” DATASET WITHIN “PPU” DATABASE SYSTEM





THANKS !

Sinisa J. Vukicevic