



CARIBBEAN COMMUNITY SECRETARIAT

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REGIONAL STATISTICS

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The background of the slide features a faint, stylized illustration of two hands shaking, symbolizing agreement or partnership. The hands are rendered in a light teal color, matching the overall theme of the slide.

Development of a National Policy Framework for Census Data dissemination utilising a Geographic Data Management System (GDMS)

The Vision

- All Governments in the region are attempting to move towards more efficient and effective delivery of goods and services through the use of an effective DSS.
- Due to the cost and complexity of data collection and analysis of a Population and Housing Census however, the tasks involved in achieving these objectives are both very expensive and time consuming

PROBLEM OVERVIEW

- The Governments of the Region collect and maintain large amounts of information from a Population and Housing Census and are mandated by Acts and Regulations to use it for day-to-day operation of Public Administration.
- A Population and Housing Census being the single most expensive data collection activity.

What is a GDMS?

- A GDMS is fundamentally a concept about facilitation and coordination of the exchange and sharing of data between stakeholders from different jurisdictional levels in the spatial data community.
- A GDMS allows the coordinated sharing of data, as it enables users to save resources, time and effort when trying to acquire new datasets by avoiding duplication of expenses associated with generation and maintenance of data and their integration with other datasets.

GIS ISSUES & COST

- \$\$\$M Boundary discrepancies
- \$M Technical Staffing
- \$M Scanning vs Data Entry
- \$\$\$M Equipment funding
- \$\$\$M Software Upgrade and Cost
- \$M Relevant Official Training
- \$\$\$M Application Integration
- \$\$\$M Accurate, current data
- \$\$\$M Just-in-time digital maps

THE BIG PROBLEM

- Government Agencies using different criteria and methodologies for defining management boundaries that rarely coincide with Census Enumeration Districts make it quite difficult to share accurate, costly data spatially for the same geographic area.

DEFINING THE PROBLEM

- Administrative and political boundaries constitute essential layers that must be coordinated
- Historically many countries have divided social, economic and political responsibilities amongst a variety of Government Ministries.
- In turn, these organisations have established independent administrative, planning and political boundaries

DEFINING THE PROBLEM

- incompatible boundary alignment units used by Government and States agencies restricts the implementation of an efficient GIS and subsequently becomes a waste of valuable time and resources
- It is therefore a fundamental prerequisite to ensure that your base unit is accurate; this base unit is the Statistical department's Enumeration District.

Base Accuracy

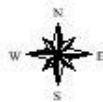
- Consequently, the accurate referencing and delineation of Enumeration Districts maps are fundamental prerequisites to ensure that Census dissemination is spatially accurate and that a National GIS is on a strong foundation for geographic hierarchical aggregation, query and analysis and data sharing

THE PROPOSAL

The Proposed Goal

- Achieving more cost-effective use of geospatial data requires concerted and creative efforts to adopt common standards and interoperability across agencies and sectors.

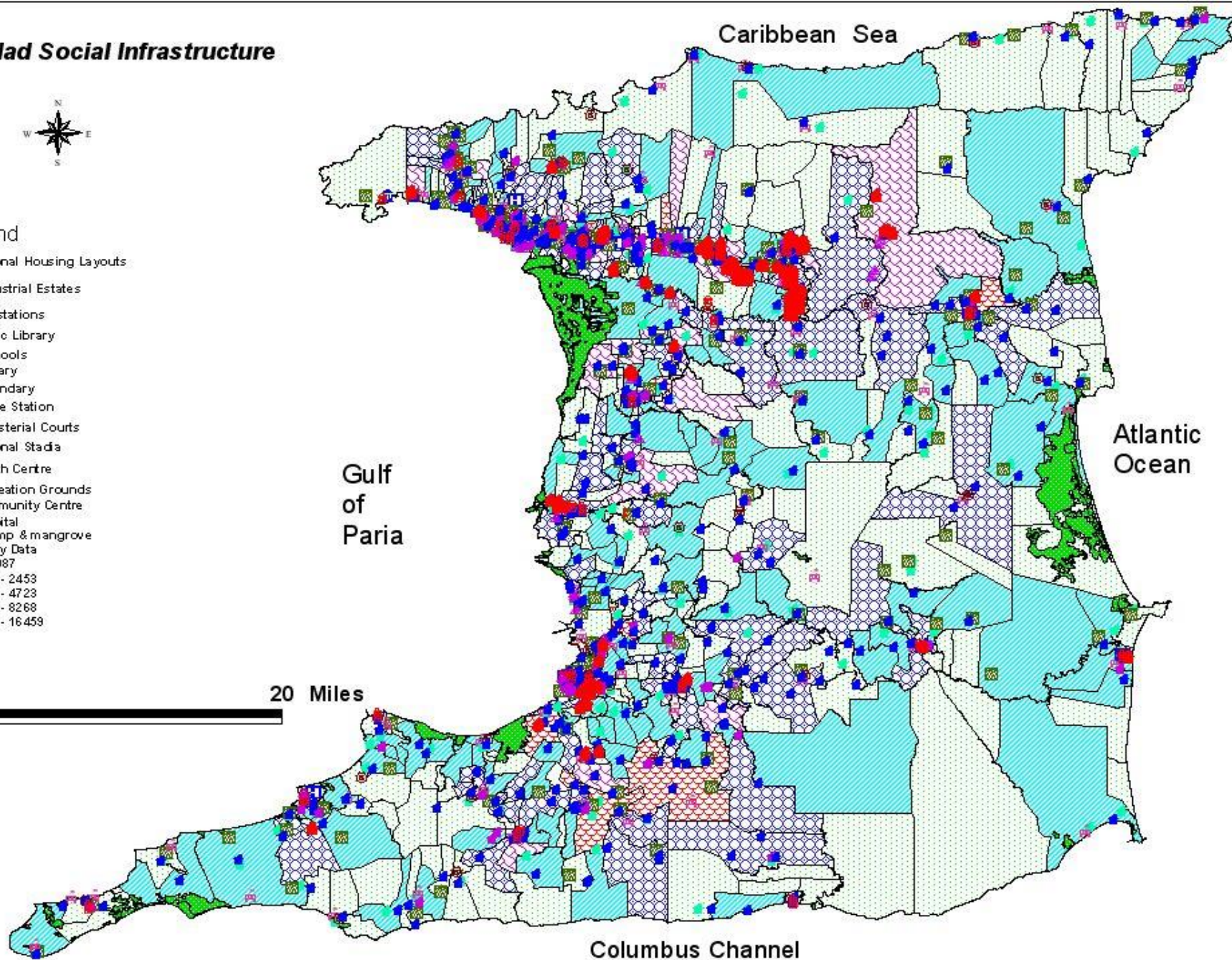
Trinidad Social Infrastructure



Legend

- National Housing Layouts
- ▲ Industrial Estates
- ⬮ Fire stations
- ⬮ Public Library
- Public Schools
 - Primary
 - Secondary
- ⬮ Police Station
- ⬮ Magisterial Courts
- ⬮ National Stadia
- ⬮ Health Centre
- ⬮ Recreation Grounds
- ⬮ Community Centre
- ⬮ Hospital
- Swamp & mangrove
- Community Data
 - 3 - 1087
 - 1087 - 2453
 - 2453 - 4723
 - 4723 - 8268
 - 8268 - 16459

0 20 Miles

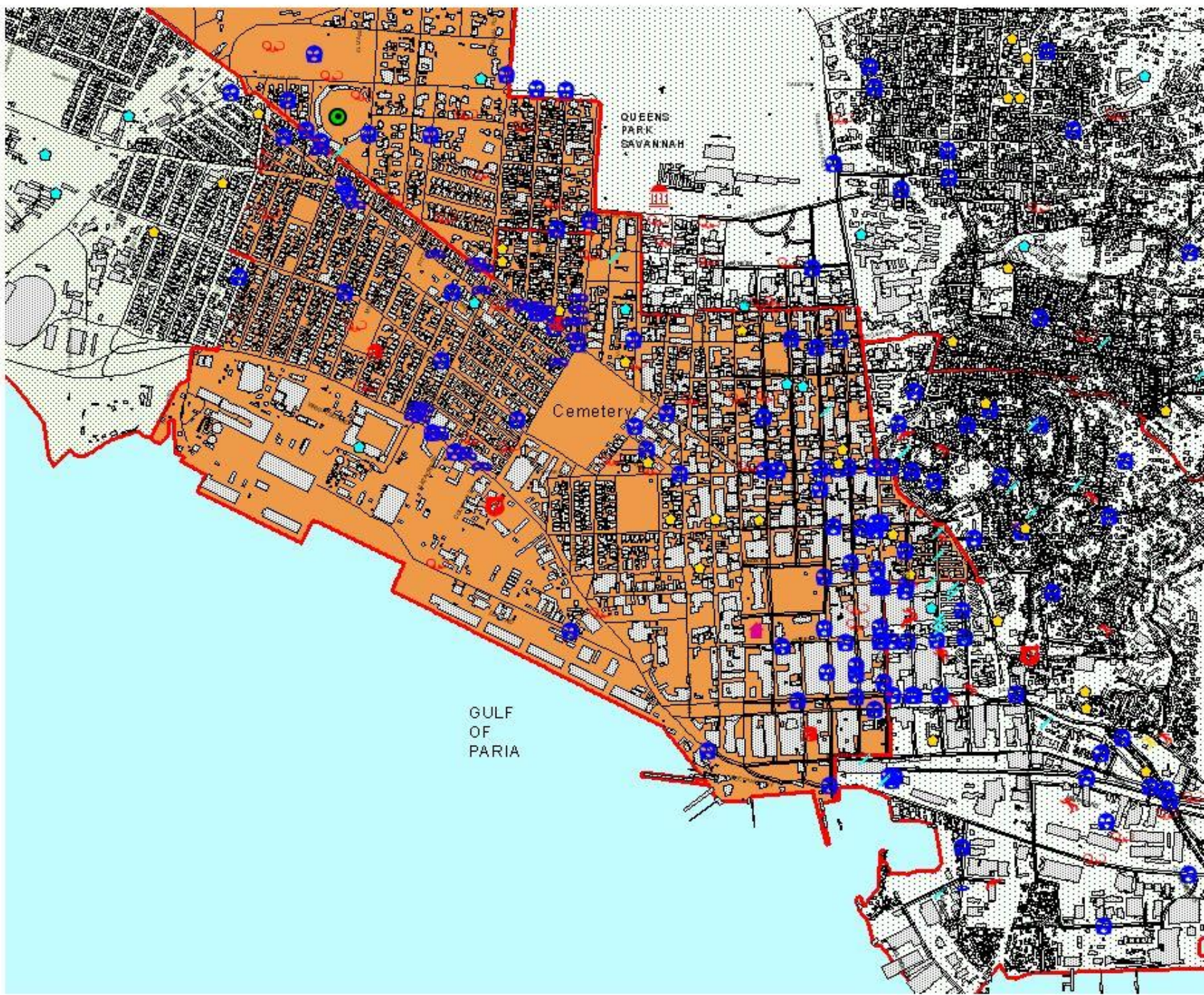


Columbus Channel

Crime Statistics



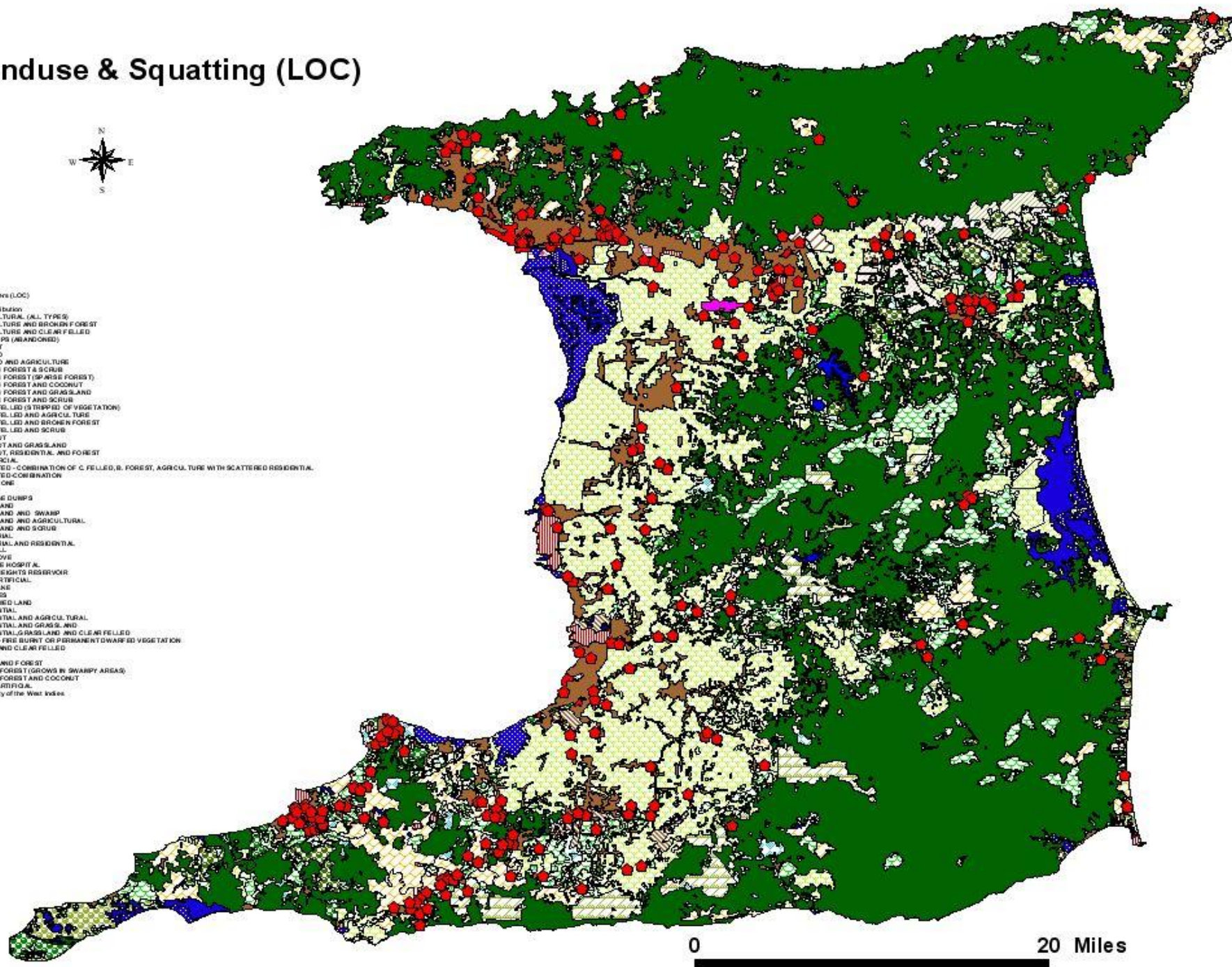
- Burglaries
- Grand Theft
- Queen's Park Oval
- Schools
 - Primary
 - Secondary
- Public Library
- Republic Bank
- Wounding
- Larceny
- Shooting
- Robberies
- Murders
- Crime_becoon_dip
- Attempted Murders
- Man slayings
- Murders
- Wounding
- Police Station
- Buildings
- Clients
- Surfside to n bound date
- Major roads
- New_becoon_rd s, dip
- New_becoon_rd s, dip
- Police
- Police
 - 10 - 4171
 - 4172 - 8219
 - 8220 - 16887
 - 16888 - 40377
 - 40378 - 83188
- Police
 - 1 - 1087
 - 1087 - 2463
 - 2463 - 4723
 - 4723 - 8288
 - 8288 - 16468



Landuse & Squatting (LOC)



- Squatters (LOC)
- Landuse Distribution**
- AGRICULTURAL (ALL TYPES)
 - AGRICULTURE AND BROWN FOREST
 - AGRICULTURE AND CLEAR FIELDED
 - AIR STRIPS (ABANDONED)
 - AIRPORT
 - BAMBOO
 - BAMBOO AND AGRICULTURE
 - BROWN FOREST & SCRUB
 - BROWN FOREST (SPARSE FOREST)
 - BROWN FOREST AND COCONUT
 - BROWN FOREST AND GRASSLAND
 - BROWN FOREST AND SCRUB
 - CLEAR FIELDED (THIRDS OF VEGETATION)
 - CLEAR FIELDED AND AGRICULTURE
 - CLEAR FIELDED AND BROWN FOREST
 - CLEAR FIELDED AND SCRUB
 - COCONUT
 - COCONUT AND GRASSLAND
 - COCONUT, RESIDENTIAL AND FOREST
 - COMMERCIAL
 - DISRUPTED - COMBINATION OF C. FIELDED, B. FOREST, AGRICULTURE WITH SCATTERED RESIDENTIAL
 - DISRUPTED-COMBINATION
 - FACE STONE
 - FOREST
 - GARBAGE DUMPS
 - GRASSLAND
 - GRASSLAND AND SWAMP
 - GRASSLAND AND AGRICULTURAL
 - GRASSLAND AND SCRUB
 - INDUSTRIAL
 - INDUSTRIAL AND RESIDENTIAL
 - LAND FILL
 - MANGROVE
 - MT. HOPE HOSPITAL
 - NAVE THICKETS RESERVOIR
 - PINE - ARTIFICIAL
 - PIT OILS
 - QUARRIES
 - RECLAIMED LAND
 - RESIDENTIAL
 - RESIDENTIAL AND AGRICULTURAL
 - RESIDENTIAL AND GRASSLAND
 - RESIDENTIAL GRASSLAND AND CLEAR FIELDED
 - SCRUB - FIRE BURNT OR PERMANENT DWARD ED VEGETATION
 - SCRUB AND CLEAR FIELDED
 - SWAMP
 - SWAMP AND FOREST
 - SWAMP FOREST (GROWS IN SWAMPY AREAS)
 - SWAMP FOREST AND COCONUT
 - TEAM - ARTIFICIAL
 - University of the West Indies
 - WATER



0

20 Miles

ENVIRONMENTAL CONCERNS



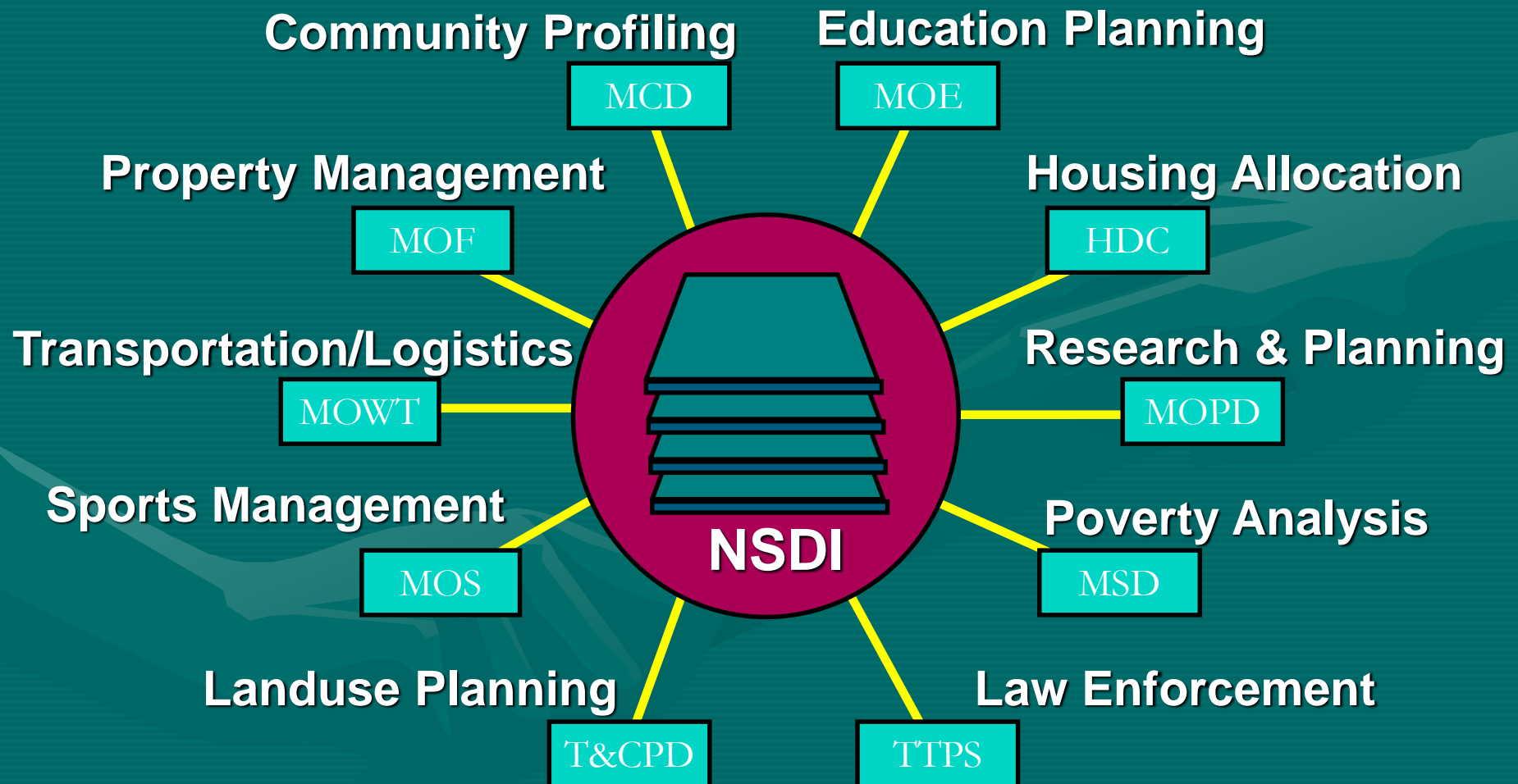
The Consensus

- The acceptance of Enumeration districts as the smallest unit of geographic query with the accompanying socio-economic and demographic data provides the basic foundation for an efficient, robust information decision support system
- However it must be noted that respective Statistical organisations must take the responsibility to ensure that their Enumeration districts are accurately delineated, if it wants other agencies to use their associated data.
- T&T Example

A National Policy Framework

- A National Policy Framework identifies the need for a GDMS to coordinate the efforts of the various agencies that have to rely on data for informed decision making to meet their administrative needs.

Application Integration



ED Readiness for GIS

It is essential that the demarcation and delineation of Enumeration Districts (EDs) are established accurately prior to a Population and Housing Census so that,

- Clear identifiable features are used as boundaries;
- EDs are geographically named and coded;
- EDs can be aggregated into communities and subsequent Administrative areas of various Ministries and demographic data accurately match local geographic areas

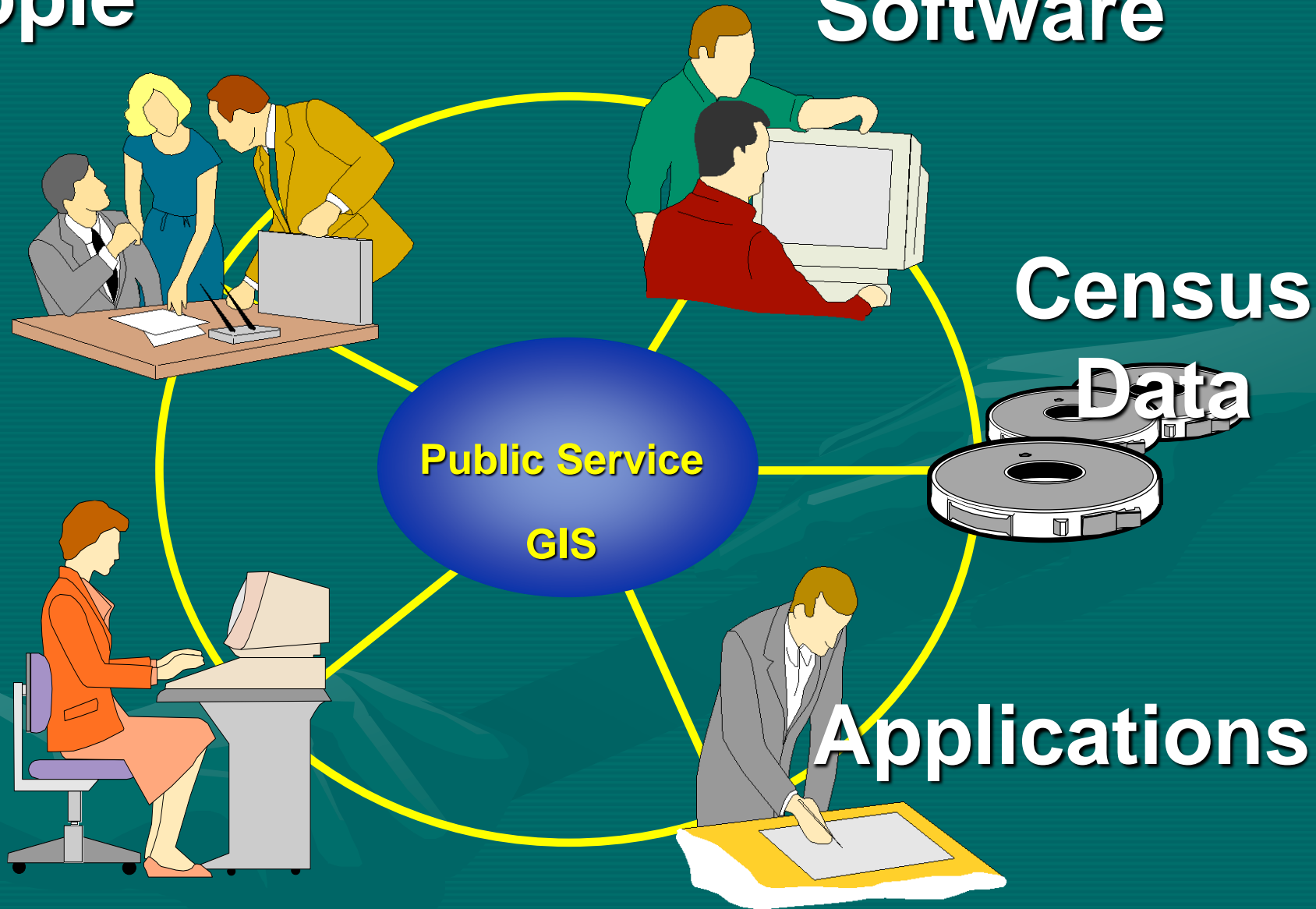
People

Software

Census Data

Applications

Hardware



Who wants to use it?



US President George W. Bush and Homeland Security Advisor, Tom Ridge after 911

Community Map



Community Map



Community Map

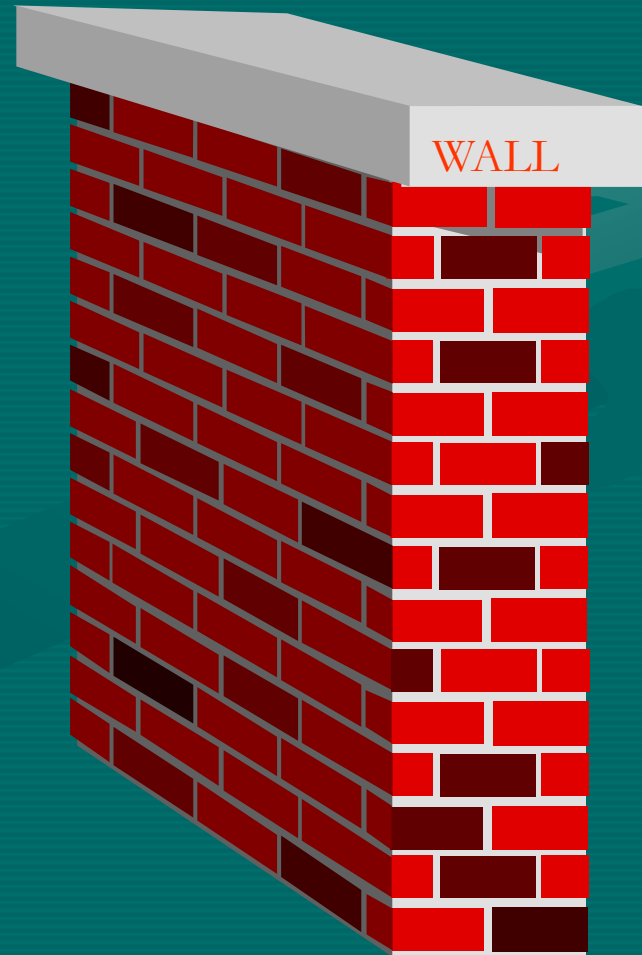


CONCLUSION

- The proposed solution is to ensure that enumeration areas or enumeration districts are accurately defined and geographically delineated on a national base map; this ensures accurate enumeration coverage and eliminates omission of census areas.

THANK YOU

— HAROLD



QUESTIONS & FEEDBACK

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