

**Professor:**

*Ramón E. Vásquez, Dean of Engineering*

Phone 787-832-4040 x. 3508

[reve@ece.uprm.edu](mailto:reve@ece.uprm.edu)

*Pieter Van der Meer*

Telephone 787-832-4040 x.3573

[pvander@ece.uprm.edu](mailto:pvander@ece.uprm.edu)

**Student:**

*Carlos M. Serrano Vergara*

**Visualization of Infrastructure Elements in West Puerto Rico using Arc View**

The Techno Economic Corridor, located in West Puerto Rico, is an effort to advance high technology development in the Caribbean region. Government, Universities and Private Companies are working together in an integrated and united manner to not only form a consensus to pool resources but also to attract new business and develop an entrepreneurial culture. Geographic Information Systems (GIS) and Arc View help us to organize data about infrastructure, elements such as water systems, water treatment plants, wastewater treatment plants, highways, roadways, boundaries of municipalities, power lines and numerous communication facilities. The use of GIS and Arc View enables us to understand spatial (about location) relationships, providing a basis for making more sensitive and intelligent decisions.

The objective of the project is to produce a digital map with a database about the existing infrastructure in West Puerto Rico for purposes of visualization, planning and decision-making. The database includes information about the infrastructure elements represented in digital form in Arc View with their respective attributes using legends and symbols. The digital maps and databases created with Arc View Program provide data visualization, query, analysis, and integration capabilities along with the ability to create and edit geographic data.