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Abu Dhabi Department of Transport Enterprise GIS Application GeoTRANS

Presenter

Nassim Al-Abed Dr.
Abu Dhabi Department of Transport
nassim.alabed@dot.abudhabi.ae

Co-Presenter

Abu Dhabi Department of Transport (DoT) has successfully completed the building of an enterprise GIS web based application called "GeoTRANS". GeoTRANS is relying on a full infrastructure consists of hardware, software, and spatial data. The major software components of which GeoTRANS web portal was founded on are the ArcGIS server and the Geocortex essentials.

Abu Dhabi DoT consists of three major sectors and they are the Surface Transport, Maritime and Aviation Sectors. In each sector there are several divisions and sections carrying the DoT mandate of providing world class transportation services to the residents of Abu Dhabi. There was a need for an enterprise GIS system that could fulfill the department needs. The built intranet web application-GeoTRANS offers services that cater the users' needs from the three sectors. Before embarking on GeoTRANS development, a comprehensive needs assessment study was carried out in order to comprehend the needs of the DoT employees in the different sectors.

A transportation model was built to address the different transportation spatial data sets available in the DoT and many GIS tools were implemented in GeoTRANS to support the DoT users in performing their daily tasks in a more efficient way, for example tools that support the modeling, safety planning, roads maintenance, maritime navigational aids condition, aviation airport boundary and facility information, parking and TIS for the modeling of development impact locations. A major tool was developed to take care of Abu Dhabi Surface Transport Master Plan (STMP) which address Abu Dhabi's transportation needs up to the year 2030, the developed tool enabled the DoT to maintain the STMP and to communicate its updates to all the employees using the intranet, this will ensure that the staff are fully aware of the latest information on the relevant infrastructure components associated with each of the action plans which cover roads, metro, tram etc.