



Community Growth



Urban growth and change places a heavy demand on state and local governments to seek better planning and management approaches. Increasing urbanization puts pressure on natural resources and existing infrastructure. Elected officials in state and local governments require timely information products to support policy decisions on issues that are often interrelated and span several political boundaries. Growth assessment, infrastructure inventory and planning, environmental assessment, and risk management impact and drive policy decisions for these managers.

Societal Benefits - Tracking change within a jurisdiction allows local government officials to monitor growth and development in an organized fashion. This is especially true for areas without zoning regulations. This has allowed communities to coarsely monitor and assess issues such as urban green space, zoning implications, prioritizing site assessments for storm water runoff taxation, flood plain encroachment, and simple land cover assessments. Knowing these development patterns allows resources, both fiscal and human, to be managed in more cost effective ways.

NASA's Unique Capacity and Contributions – NASA's continuing support of the Landsat series has made change detection an operational opportunity for many communities. This imagery and its derived

information products has enabled communities to track and quantify the type of change taking place at the urban/rural interface and within the urban areas themselves. An example would be a transition from agricultural and/or forested land to impervious surface along the urban/rural interface. The temporal frequency is greater than those that are financially feasible through conventional aerial survey. The incorporation of these imagery products and derived products has empowered these communities to 'think outside

of the box' and find new applications of these imagery products through combination with their GIS data applications. By appropriately modeling the change detected a surrogate for a population estimate can be created. This has opened the doors to many applications in the realms of homeland security, risk assessment and exposure, as well as true growth monitoring.

Decision Support Solutions – Decision-makers



within government must deal with a wide-variety of issues that have economic, social, and political consequences. These imagery products will support risk assessment applications in Homeland Security, Health and Disease Monitoring, and numerous other

environmental, planning, and demographic applications occurring at local levels that affect the citizenry. Tracking change within their jurisdiction allows them to monitor growth and development in an organized fashion and deploy resources more effectively.