## Land uses . . . satisfying the planner's need to know

Land-use activity mapping through remote sensing enables professional planners and decision-makers to study how land is used, how uses change over time, and how such uses have an impact on the environment. It permits orderly planning of future applications that are compatible with present activities.

Remote sensing data users save money, in comparison with traditional methods, and benefit from greatly increased efficiency. Remote sensing imagery is much less costly than that achieved with ground methods. It is easier and faster to interpret than black and white photos at similar or even much larger scales. The result is more accurate landuse classification maps in permanent form. Nearly instantaneous views of land-use activities over large areas are provided. An added benefit is that a single set of remotely sensed images can serve a wide variety of uses. Biophysical mapping, surficial geology, forest type mapping, environmental impact assessment and vegetation damage assessment are but a few examples.

## Consequences of human settlement

As populations grow, as people migrate, competition is created for available lands. Riverbanks and coastal shorelines become the scenes of conflict, regardless of their specific suitability for settlement and exploitation. Urban areas expand to devour valuable farmlands and forests.





Land is the basic resource, the finite asset. The land-use planner must see to its protection, to the allocation of resources, must choose sites for specific development, create essential services, provide for disposal of wastes. And the planner must analyze present and future stresses on water supplies.

**R**emote sensing has become the planner's best new tool.

Canadian development of more powerful and reliable instrumentation, systems and software continues to make remote sensing for land-use inventories, planning and updates more accessible to users in other countries.

> Land-use and land-core information at the edge of cities is easily mapped from this Thematic Mapper image of Windsor, Canada, and Detroit, U.S.A.

Remote sensing image analysis and airphoto interpretation are combined for a wide range of applications in land-use management. (Photo.from Hunter and Associates.)

## Research, testing and operational applications

The methods developed in Canada have been thoroughly researched, tested and evaluated during years of operational applications. The Canadian remote sensing industry competes successfully in the delivery of its services, instrumentation and products to many countries.

**B**oth new and experienced users can match their information requirements within the range of proven Canadian capabilities.