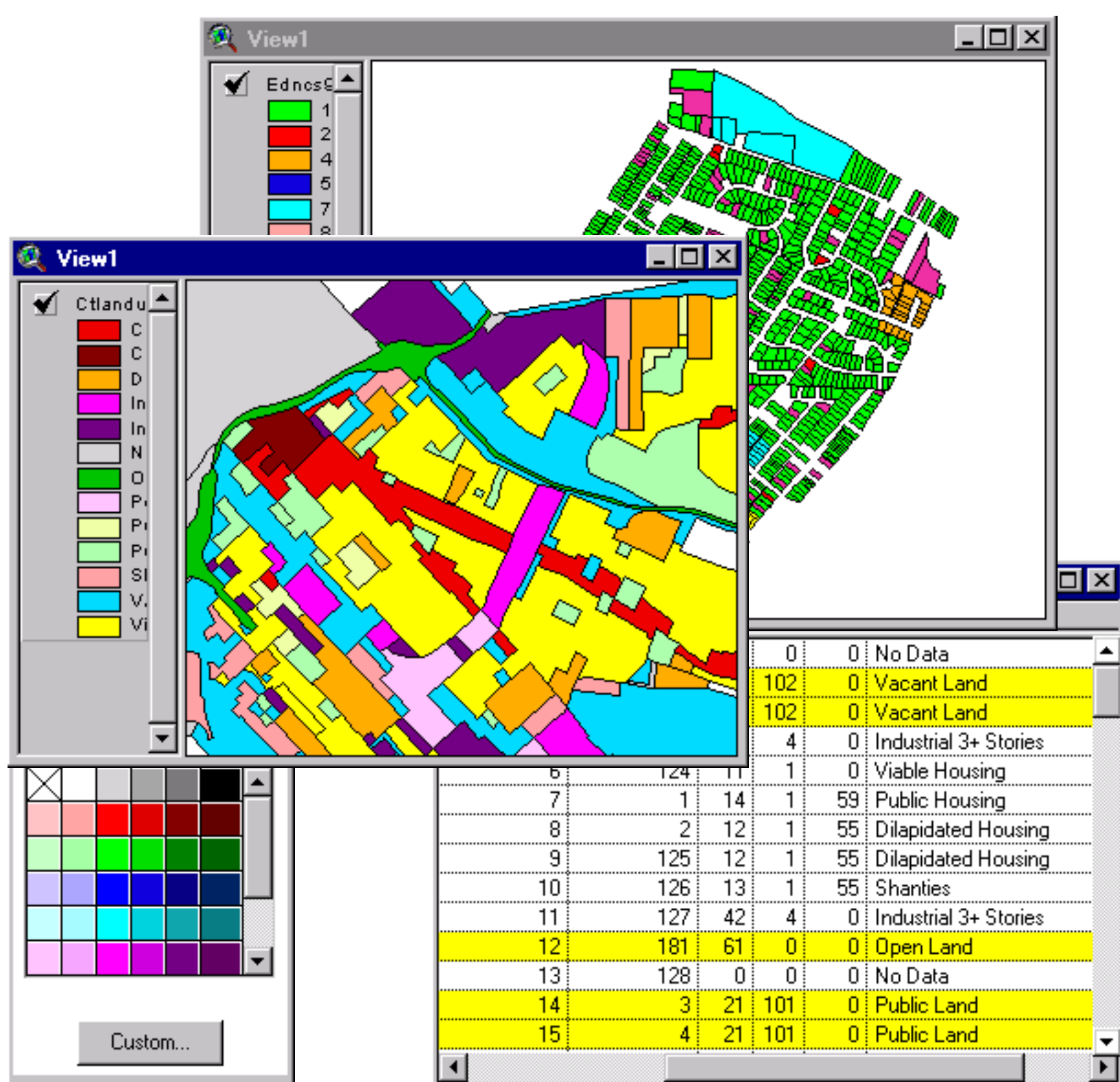


Geographic Information Systems

GIS supports community development projects

A Geographic Information System (GIS) is a computer system for **storing, maintaining and displaying geographic data**. GIS technology was first used by ESLARP in 1990 for a landscape architecture studio. Since 1994, most ESLARP classes and studios use **GIS analysis to support East St. Louis community development projects** and all of that information is available on-line.

Data developed by federal and state governments is available on the **Internet** and ESLARP uses this data for geographic analysis. **ESLARP collects and develops its own neighborhood-level and parcel-level data** from ground surveys. Rich parcel-level datasets developed by ESLARP include neighborhood parcel condition surveys and a neighborhood infrastructure condition survey.



ESLARP is developing rich parcel-level datasets from ground surveys

In order to reduce the time required for entering collected data in a digital format, students and research assistants **collecting data use computer-readable forms** - paper forms that can be marked with a pencil. These forms are scanned by a mark-reading scanner to create digital data files. The scanned digital data is stored in a GIS and can be displayed as a map.



The **Neighborhood Condition Survey** includes data on building size, material, condition, occupancy, and fire damage as well as landuse condition, trees, and sanitation code violations. The **City Infrastructure Condition Survey** datasets containing data about street condition, curb, and sidewalk condition, and street lighting are also being developed.

GIS is being used to **identify proposed new transportation routes, new land-based economic opportunities, areas for potential wetland and wildlife habitat restorations, as well as identifying suitable sites for new housing** for rental and purchase.

