

# Tracking Land Cover Changes in the San Fernando Valley, California



**Topic:** Environmental management

**Problem Statement:** As the Valley continues to experience population growth and industrial expansion, regional planners and city officials will require accurate maps of land cover for successful future planning.

**Level:** RS: Beginner, GIS: Intermediate

**Software:** MultiSpec©, ArcGIS, PowerPoint

**Description:** In the past several decades, the San Fernando Valley, located in the north-west section of the city of Los Angeles, was transformed from small farms to suburbs to completely urban landscapes. Miles of previously open space and farmland were occupied by tens of thousands of families. The objective of this Learning Unit is to integrate remote sensing with GIS in order to identify land cover changes in the Valley. Students are guided through the steps for classifying, interpreting and examining changes in the study area. GIS data from Los Angeles County will show unique features within the Valley for comparison and change. Students will also have the option to use GPS Units to acquire location data for specific areas of study.

**Key words:** Land cover, MultiSpec, image processing, unsupervised classification, GPS, GIS integration

