



The above images illustrate the utility of satellite remote sensing data for land use and land cover change detection. Shown is the growth, over a 28 year time period, of the metropolitan area of Las Vegas, Nevada. The image on the left was acquired on August 13, 1972 by the Multispectral Scanner (MSS) onboard the Landsat-1 satellite. The image on the right was acquired on August 7, 2000 by the Enhanced Thematic Mapper Plus (ETM+) onboard Landsat-7. The estimated population in the area shown was 300,000 in 1972 and 1,425,000 in 2000. As one of the fastest growing metropolitan areas in the U.S., Las Vegas has a population that is growing at the rate of 7 percent annually. Future growth will be limited by availability of water; water allocation and resource management are already subjects of great concern in this area. These images cover a 47 km by 52 km area. The image on the front cover of this book is an enlargement of the 2000 image shown above. It covers an area that is approximately 26 km by 33 km.

Image Credit: U.S. Environmental Protection Agency, Environmental Sciences Division – Las Vegas.

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