

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Historical Aerial Photography Project



Historical Aerial Photographs

The environmental assessment of a property often begins with a historical review of a property's history, including its owners, when the property was developed, and how the property was used over time. This review sheds light on where contamination is likely to be found, in what form, and the most likely sources and responsible parties. Understanding a site's past uses enables KDHE to identify contamination issues and design the most effective remedial strategies, ones that will remove or mitigate contamination in a thorough and cost-effective manner.

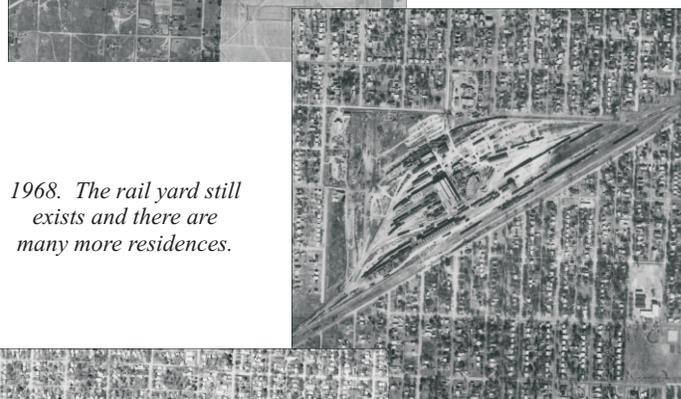
Historical aerial photographs (HAPs) are one of the tools KDHE uses to perform historical site analysis. Since the project began in 2005, KDHE has assembled a collection of HAPs for Coffeyville, El Dorado, Emporia, Galena, Great Bend, Hays, Hutchinson, Iola, Junction City, Manhattan, Pittsburg, Salina, Wichita, and Cherokee County. By July 2011, Atchison, Chanute, Dodge City, Garden City, Lansing, Leavenworth, Liberal, and Pratt will have been added to the collection. The HAP project is funded through a grant by the Environmental Protection Agency.

For each city, KDHE's HAP project team uses state and local archives, libraries, and city and local records to find aerial photographs from each decade from the 1930's through the 1980's. To be considered, each photograph has to be taken from directly above the city, rather than at an angle, and be at an appropriate scale. Once these images are located, KDHE personnel scan the images into a high resolution digital format, and import them into a geographic information system software package where the images are registered, rectified, and combined into a seamless digital image of the entire city.

Below: West Harry and Orient Boulevard in Wichita, demonstrating urban development and change.



1938. Note the rail yard and roundhouse.



1968. The rail yard still exists and there are many more residences.



2002. The rail yard has been replaced by an industrial park.



KDHE personnel digitize photographs at the Kansas State Historical Society.

Project managers can compare side-by-side photographs of the same location at different time periods. Historic features that are currently obscured, such as railway sidings, driveways, building or foundation sizes and locations, and the size and extent of waste storage areas can be easily determined. KDHE project managers use this information to determine which properties might be affected, plan the number and location of sampling points and monitoring wells, and communicate important site information to the public.

Use of this data is not limited to KDHE. It is also made available to other state agencies through the Kansas Data Access and Support Center.