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An analysis of wireless security in Columbia, MO

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The current state of wireless security in most areas can be estimated based on trends and collected data, but the complete picture is often unknown. Without collecting the information on most wireless access points in a given area, we cannot compare different areas based on their security, get an accurate view of the areas as a whole, or relate wireless security with other factors in a given region. We have performed a wireless security audit of Columbia, MO. Information was collected on thousands of access points throughout the city in hopes of understanding a large area use of wireless networking and its possible security flaws. The flaws of WEP encryption allow a supposedly secure computer to be breached and then compromised. We have demonstrated how simple it is to bypass WEP encryption using easily accessible software available on the Internet. We have determined that although Columbia's overall level of security is better than the national average, it still leaves much room for improvement.