

# Comprehensive Bicycle Network and Infrastructure Assessment

## Timeline

Academic Year 2026-27

## Project Scope

University District

## Scope Statement

The University of Illinois Urbana-Champaign will conduct a comprehensive assessment of its bicycle network and supporting infrastructure to evaluate the safety, connectivity, accessibility, condition, and user experience of bicycling across campus. Building on the Campus Bicycle Plan, this project will establish a current baseline of bicycle infrastructure, identify deficiencies and improvement opportunities, and develop recommendations to guide future maintenance, capital investments, and bicycle planning efforts.

The assessment will include a campus-wide evaluation of the bicycle transportation network, including on-street bicycle lanes, off-street bicycle paths, shared-use paths, bicycle crossings, and key network connections. The analysis will examine network connectivity, route continuity, access to major campus destinations, conflict points, and overall functionality. Field assessments and spot inspections will document pavement conditions, signage, striping, maintenance issues, accessibility concerns, and other infrastructure deficiencies.

In addition to the bicycle network, the project will evaluate supporting bicycle amenities, including bicycle parking, repair stations, and public air pumps. These facilities will be inventoried and assessed for condition, distribution, accessibility, capacity, and maintenance needs to identify opportunities for improvement.

To complement the physical infrastructure assessment, the project will incorporate user-centered evaluation through perception-based surveys to better understand how students, faculty, staff, and visitors experience bicycling on campus. Survey results will help identify locations where perceived safety or comfort concerns may not be evident through field observations alone and will inform recommendations for future improvements.

Data collected during the assessment will be compiled into a GIS-based inventory and used to develop maps, identify infrastructure deficiencies, prioritize improvement opportunities, and support future planning and funding initiatives. Deliverables will include a comprehensive assessment report, updated infrastructure inventory, summary of user feedback, GIS database, and prioritized recommendations for short-, medium-, and long-term improvements.

The project will be conducted throughout the 2026–2027 academic year and will serve as an applied learning opportunity for students through independent study and capstone projects. Students will assist with field data collection, GIS mapping, survey development and analysis, infrastructure inventories, and technical documentation under the guidance of Transportation Demand Management staff. In this role, Transportation Demand Management will serve as the project client and advisor, providing project oversight while fostering experiential learning in sustainable transportation planning and bicycle infrastructure assessment.