

FY23 Achievement Report for the 2019-2024 Transportation Demand Management Plan

A Facilities & Services Plan for TDM at the University of Illinois Urbana-Champaign **January 2023**

Contents

FY23 Achievement Report for the 2019-2024 Transportation Demand Management Plan	1
Keywords.....	2
Introduction	3
TDM Strategy	4
Asset Management	4
Transportation Asset Management Plan (TAMP) for streets	4
Striping, Signage, and Traffic Control	5
New Infrastructure Projects.....	5
Projects for Existing Infrastructure	6
Programming	7
Encourage Active Modes of Transportation	7
Academic and Peer-to-Peer Collaborations.....	8
TDM Marketing Plan and Communication	9
ADA Right of Way improvement (U19132).....	10
Funding Resources	11
Transportation Asset Management Plan (TAMP)	11
Bicycle Infrastructure and Programming Fee	11
Student Sustainability Committee	11
Community Engagement	13

Keywords

TDM – Transportation Demand Management
BFU – Bicycle Friendly University
CBP – Campus Bicycle Plan
iCAP – Illinois Climate Action Plan
UIUC - University of Illinois Urbana-Champaign
F&S – Facilities & Services
TAMP – Transportation Asset Management Plan
FY – Fiscal Year
PCI – Pavement Condition Index
DOR – Division of Responsibility
LTCCS – Long Term Climate Controlled Storage
EV – Electric Vehicle
NAFA – National Association of Fleet Administrators
GHG – Greenhouse Gas
IDOT – Illinois Department of Transportation
ICT – Illinois Center for Transportation
IFSI – Illinois Fire Service Institute
CEE – Civil and Environmental Engineering
MTD – Champaign-Urbana Mass Transit District
MCORE – Multimodal Corridor Enhancement
IGA – Inter Governmental Agreement
DRES - Disability Resources & Educational Services
ISSS – International Student and Scholar Services
CUUATS – Champaign-Urbana Urbanized Area Transportation Study
RPC – Regional Planning Commission
SSC – Student Sustainability Committee
CTAC – Campus Transportation Advisory Committee
BPAC – Bicycle and Pedestrian Advisory Commission
APBP – Association of Pedestrian and Bicycle Professionals
DIA – Department of Intercollegiate Athletics

Introduction

The mission of the University of Illinois Urbana-Champaign (UIUC) is to “enhance the lives of citizens in Illinois, across the nation, and around the world through our leadership in learning, discovery, engagement, and economic development.”¹ The mission of [Facilities & Services \(F&S\)](#) is to provide and maintain “a physical environment that is conducive to supporting learning, discovery, engagement, and economic development at the University of Illinois and is an active partner in research, teaching and learning.”² The campus strategic plan “The Next 150” includes a key objective of operational excellence,³ and F&S takes that goal very seriously.

The Transportation Demand Management (TDM) department in F&S at the university is responsible for oversight of a safe integrated transportation system, creating, maintaining, and coordinating the overall transportation network for all modes of travel on campus, including walking, bicycling, transit, and vehicles. TDM works to implement campus and community policies and objectives, including the related transportation objectives in the Illinois Climate Action Plan (iCAP). The Transportation Systems Manager is the primary decision authority for issues related to the campus transportation network, on behalf of the Executive Director of F&S, with delegated authority from the Chancellor.

This document reports on progress made in FY23 towards achieving the goals listed in the TDM Plan.

TDM Prioritization Methods

The TDM department prioritizes efforts based on the following factors:

- 1) Safety for users: this includes all modes of transportation, including multi modal interactions.
- 2) Location: this refers to the impact on the overall networks and the perception of that impact.
- 3) Volume of Traffic: this reflects the number of users in the respective areas.
- 4) Condition, such as PCI: this considers the condition of the pavement and the scale of improvements needed in the respective area.
- 5) Alignment with campus plans: this considers the connections to strategic priorities and potential coordination with other campus projects.

¹ <https://illinois.edu/about/index.html>

² <https://fs.illinois.edu/about-us/MissionVisionValues>

³ <http://strategicplan.illinois.edu/>

TDM Strategy

Key Goals

The TDM Vision is to provide safe, reliable, and sustainable transportation for all modes at the University of Illinois Urbana-Champaign. The following list includes work TDM will complete by FY24.

Asset Management

Transportation Asset Management Plan (TAMP) for streets

\$4,500,000 allocated by the Provost Office in FY20 (\$1.5M per year was initially committed in FY20-22) for pavement maintenance and improvement projects.

Following are the projects that used this \$4.5M funds:

In FY21, funding is being held in reserve for potential partnership projects with City of Urbana and City of Champaign (Dorner Dr, Pennsylvania Ave, and St. Mary's Rd) – 20% local match – \$1,500,000

- 1) In FY21, reconstruction for St. Mary's Road from Neil St to Oak St – *\$134,356*
- 2) In FY22, the following projects were completed
 - Pennsylvania Ave – Asphalt patching West of Maryland: *\$98,471.81*
 - First and Peabody – Concrete patching: *\$47,866.28*
 - College Ct west bound lane near PAR – Concrete patching: *\$42,055*
 - Goodwin Ave from Kirby Ave to St. Mary's Road completed: *\$96,949*

Total amount spent in FY21-22: **\$419,698** Held in Reserve: **\$1,500,000**

- 3) In FY23, these funds have been encumbered:
 - Asphalt patching & Mill/Overlay (U23024): *\$1,660,000 (\$360,000 for design)*
 - Oak St from St. Mary's Rd to Gerty Dr: *\$300,000*
 - Gerty Dr from Griffith Dr to First St: *\$185,000*
 - Gregory Dr – east of First St: *\$50,000*
 - Gregory Dr from Fourth St to Dorner Dr: *\$500,000*
 - Goodwin Ave from Gregory Dr to Oregon St: *\$125,000*
 - Gregory St from Nevada St to Oregon St: *\$50,000*
 - Sixth St from Gregory Dr to Pennsylvania Ave: *\$150,000*
 - Campus-wide spray injection: *\$25,000*
 - PCC patches (U23042): *\$490,000 (\$49,000 for design)*
 - Gregory Dr at the Fourth St intersection: *\$75,000*
 - Lincoln Ave until 250-300 ft south of Florida Ave: *\$250,000*
 - Stadium Dr west of Neil St: *\$50,000*
 - First St near Kirby Ave: *\$50,000*

- Re-grading & Gravel: \$5,000
- Preliminary design costs (U23044) for future capital projects: \$375,000
 - Dorner Dr from Gregory Dr to Pennsylvania Ave: \$75,000
 - Pennsylvania Ave (in Urbana) from city limit to Lincoln Ave: \$65,000
 - St. Mary's Rd from First St to Fourth St: \$65,000
- Preliminary design for a roundabout at Lincoln Ave and Hazelwood (U23045): \$50,000

Total encumbered in FY23: \$2,605,000

- 4) In FY24, we will need additional funding for campus-wide HMA (In-house patching with hot mix asphalt trailer): \$200,000

Striping, Signage, and Traffic Control

- 1) The Street Jurisdiction map will be updated in spring 2023 for F&S Paint Shop to stripe and paint the university-owned streets and crosswalks
- 2) Updated the GIS map for striping of bike lanes, bike paths, and sharrows on-campus in fall 2022

New Infrastructure Projects

- 1) Ensure a shared-use path is included in the Doris Kelley Christopher Illinois Extension Center project (U21054) that will connect the bike route Lincoln Ave to Orchard Downs
- 2) A study for a potential roundabout at the intersection of Lincoln and Hazelwood. This study and potential installation will take place in coordination with with the Doris Kelley Christopher Illinois Extension Center project (U21054).

Read more in the "Transportation Asset Management Plan (TAMP) for streets" section of this document for encumbered amount in FY23 for details about this project.

- 3) Following locations have been discussed for additional Bike Shelter(s) on-campus
 - **E-15 parking garage**: Collaborating with the students from the Transportation iCAP Team to purchase a bike shelter. The students will lead the SSC funding application (in spring 2023) to purchase and install the bike shelter at this location.
 - **North of Transportation Building**: The ground-mounted bike racks in this area are in bad condition. There is no covered bike parking in this area. The bike shelter at this location will be investigated after the E-15 bike shelter project. This location has been shared with the Architecture Review Committee (ARC)
 - **Covered bike parking at Loomis Lab**: Department of Physics has requested covered bike parking at Loomis Lab along the Goodwin Ave side.
 - **Covered bike parking at Huff Hall**: Exploring options for high density covered bike parking for Huff Hall in collaboration with Joe Villanti, Brad Klein, Jon Hasselbring, Kelly Jo Hoffman, Josh Rubin, and DIA. This project is expected to move forward in fall 2023.
 - **Covered bike parking north of Main Library**

Projects for Existing Infrastructure

- 1) Developing a new maintenance matrix with Village of Savoy. This matrix is expected to be approved in spring 2023. Verbal agreement with Village of Savoy that they will mow the area around Solar Farm 2.0 along Curtis Road and UIUC will cover the snow removal on the new shared-use path on First Street from Windsor Road to Curtis Road.
- 2) Starting to update the maintenance matrices with the cities of Champaign and Urbana.
- 3) F&S TDM team worked with Facilities Information Resources (FIR) to create a draft of Level-2 Division of Responsibility (DOR) map, which identified the ownership of the campus pavement network at a micro level. The Level-2 DOR is expected to be reviewed and approved by the end of FY23.
- 4) Bicycle infrastructure projects
 - SSC funded a bike cage at ECE – 4-loop bike rack
 - Bike Parking
 - CIF SE side – completed. Replaced the ground mounted racks with standard rail mounted inverted U-loop racks
 - CIF SW side – completed. Replaced the stainless steel racks with the standard inverted U-loop racks
 - MEB East side – completed. Added 18 bike racks
 - CIF SW crushed granite – scheduled for spring 2023
 - Illini Union – replaced the donut-loop racks with standard inverted U-loop racks
 - Vet Med – replaced the donut-loop racks with standard inverted U-loop racks
 - North of Grainger Library – completed. Added 12 U-loops
 - National Soybean Research Center – scheduled for spring/summer 2023
 - Material Research Lab – replace the ladder racks under the overhang with standard rail-mounted U-loops
 - Reviewing quotes from suppliers to replace and add more bicycle repair stations outside University Housing. This project is expected to occur in spring/summer 2023
 - Bike path along Springfield Avenue from the plaza West of Grainger Library to Mathews Ave was removed and a new 10' shared-use path was installed in fall 2022
 - Amount spent – \$62,576.74
 - Lorado Taft bike path
 - Bike path removal has been delayed due to SCCIL project
- 5) Sidewalk improvement projects
 - North sidewalk along Stadium Dr from First St to Oak St was removed and a new 8' wide ADA compliant sidewalk was installed in fall 2022
 - This was completed as part of the ADA Right of Way Improvement Project (U19132)
 - Amount spent – \$143,698
- 6) Maintain the Eco-Counters

- The Eco-Counter on the West side of the Wright & Healey intersection was repaired in FY23

Programming

Encourage Active Modes of Transportation

- 1) A pilot for Commuter Program is ready to be launched in spring 2023. 15 participants will be recruited in January and the program will be launched in February 2023
- 2) A Masters in Urban Planning (MUP-2) student was working with F&S TDM department to fill out the Bicycle Friendly University (BFU) application as her capstone project in fall 2022. The BFU application is due in August 2023 and our goal is to achieve Gold-level in this cycle
- 3) Following are the locations where TDM department has installed Eco-Counters (bicycle and pedestrian counters):
 - Green Street near Illini Union: Installed in March 2020
 - Intersection of Wright Street and Healey Street: Installed in August 2021
 - Intersection of Armory Avenue and Sixth Street: Installed in April 2022
 - Intersection of Green Street and Goodwin Avenue: Installed in May 2022
 - Intersection of Wright Street and John Street: Counter purchased. Scheduled to be installed in spring 2023
 - In conversation with Eco-Counter to purchase 14 new counters to install at the seven remaining locations (as required by the MCORE project). Currently filling out an application for Single Source Justification for Eco-Counter. Expected to reach an agreement in spring 2023 with purchase and installation in FY24
- 4) F&S TDM will collaborate with MTD to hold the annual “It’s Your MTD Too!” workshop as part of the “Know Your U” program in spring 2023
- 5) Bike Education and Bike at Illinois
 - In FY22, added metal bike registration signs at 12 high traffic bike parking locations across the campus. In fall 2022, added 4 additional metal bike registration signs at high traffic bike parking locations.
 - Bike Registration digital signs published across the campus in fall 2022
 - End-of-year bicycle round up messaging across the campus in summer and fall 2022
 - Bike Week 2022
 - Bike to Work Day was held on September 14, 2022. New record for pre-registrations to attend the event (921) and walk-in registrations (150). More than 1,100 t-shirts handed out
 - Light the Night was held on September 15, 2022. Distributed and installed bike light sets to more than 800 bicycles. Nearly 575 lights were given out at Alma Mater station

- 6) There are currently 750 Veo bicycles on campus (Halo-e and Cosmo-e). Currently, working with the Procurement department to extend the contract with Veo for five years.
- 7) F&S TDM department conducted a thorough Walkability Audit of the campus in FY22
 - Presented the results from the Walkability Audit at the APBP conference 2022 in Minneapolis as a poster presentation
 - Combined the data collected during this project with the data from CUUATS and data collected for the ADA Transition Plan 2018 Supplement
 - This information is used to develop projects to make our campus more accessible

Academic and Peer-to-Peer Collaborations

- 1) Following are the academic collaboration projects/classes that the TDM department has supported in FY23
 - Bike canopy at Newmark with Ann Sychterz. SSC funded \$12,000 for this project
 - CEE 190 project based learning class
 - Bike Shelter - Pranjali Shah, Mitchell Bryant, and Tyler Swanson. Currently exploring options for E-15 parking garage structure. Other locations include - Main library and Transportation Building
 - Eco-Counter data for Elijah Mock. Gave him reader access to the Eco-Visio system in fall semester. Removed access in January 2023
 - Bike Share interview with an Economics PhD candidate – Keitaro Ninomiya
 - BFU application - Aparna Padmakumar (in fall 2022). Aparna is MUP-2 student. This was her capstone project, however, following discussion with the MUP Director, Marc Doussard, this collaboration was ended in January 2023.
 - BFU application and Mode Choice Survey analysis – James Alec McKay. Alec works as an intern for Morgan White, and he is helping with the BFU application and the analysis of Mode Choice Survey in spring 2023.
 - Low-cost Inspection and Sustainable Repair of Campus Pavements – Dr. Nishant Garg, Kabir Hossein, and Hamza Samouh
 - F&S TDM team provided them with the PCI report information, list of upcoming pavement improvement projects, etc. Also provided them the contact for APTech representative
 - Circle Cycle
 - Thomas Valencia and Briana Barr on Strong Towns SSC application

- End of year bicycle round-up (summer 2022) and donation and collection of abandoned bicycles – Nathaniel Nevins (High School senior), Campus Bike Center, and University Parking.⁴
 - Campus Bike Plan update – Nathaniel Nevins (High School senior; spring 2023), Bumsoo Lee’s undergraduate student (spring 2023), MUP capstone class (fall 2023 and spring 2024). 2014 Campus Bicycle Master Plan has to be updated every 10 years, and F&S TDM department need to develop the final draft ready for approval by the end of FY24.
 - Bike Share with Veo contract update with Law students
- 2) Following are the collaborations with regional community entities
- Safe Streets for All grant application with CUUATS
 - EV infrastructure with Gabe Lewis at Champaign County Regional Planning Commission (CCRPC) and with Robert O’Daniell (community member)
 - Bike Maps data with CCRPC
 - Sidewalk deficiency data from CCRPC
 - First Street shared-use path dedication ceremony with Village of Savoy
- 3) Following are the collaborations withing F&S
- F&S FIR
 - End of year bicycle round up and abandoned bicycles project
 - Updates to the Biking Map on Bike at Illinois website
 - Exterior Doors inventory
 - ADA ROW improvement project (U19132)
 - Pavement DOR – F&S OMA, FIR, and University Landscape Architect
 - Campus Landscape Master Plan (CLMP)
 - Various projects with F&S CRC
- 4) Following are the peer-to-peer collaborations
- Campus Biking Programmers group – biweekly phone calls to communicate with bicycle managers from universities across the country
 - Anaerobic Digester – Collaborated with Zero Waste Coordinator at F&S and the Energy Resources Center from University of Illinois Chicago (UIC)

TDM Marketing Plan and Communication

- 1) Updated the TDM website:
- The TDM biking page⁵ added and updated the list of the bicycle initiatives taken in FY22
 - Embedded the metric from the iCAP Portal for bicycle counts from Eco-Counters to the TDM biking page for

⁴ <https://icap.sustainability.illinois.edu/project-updates/3415>

⁵ <https://fs.illinois.edu/services/more-services/tdm/biking>

- Intersection of Green Street and Goodwin Avenue
 - Intersection of Armory Avenue and Sixth Street
 - Embedded the metric from the iCAP Portal for pedestrian counts from Eco-Counters to the TDM Walking & Running page⁶ for
 - Intersection of Green Street and Goodwin Avenue
 - Intersection of Armory Avenue and Sixth Street
 - Added the Commuter Program page on the TDM website⁷
- 2) Shared important transportation-related information using the F&S channels
- 3) [Near & Far Without a Car](#)
- The Car Free flyer is also promoted using any tabling events, orientations, and/or transportation-related events on campus, e.g., Light the Night, Law students orientation
 - The TDM department participates in Illinois Human Resources' (IHR's) monthly New Employee Orientation to discuss all modes of transportation available on-campus, where the Car Free flyers are handed out to the attendees
- 4) Used F&S Customer Relations and Communications (CRC) as a resource for communication with the campus and community

[ADA Right of Way improvement \(U19132\)](#)

In spring 2022, F&S TDM was awarded \$1,000,000 to address and focus on improving the deficiencies identified in the ADA Transition Plan Supplement for Priority 1 and Priority 2 buildings or other locations that need immediate attention.

In FY23, the following projects have been completed:

- North sidewalk along Stadium Drive between First Street and Oak Street – Completed in fall 2022 by Duce Construction (Out-of-house) – \$143,698.50
- West ADA entrance at the Armory Building – Completed in fall 2022 (In-house) - \$10,918.45
- West sidewalk along Oak Street – temporary fix – completed in winter 2022 (In-house) – Actual cost \$5,750

Total amount spent, to date: \$160,000

In FY23, the following projects are expected to be completed by In-house workers and their estimates:

- Sidewalks around Armory building: Northwest diagonal sidewalk (112'x8') section replace, also at the Southwest entrance bad area trip hazard to be ground or removed - \$29,000

⁶ <https://fs.illinois.edu/services/more-services/tdm/walking-and-running>

⁷ <https://fs.illinois.edu/services/more-services/tdm/commuter-program-bus-bike-and-hike>

- Sidewalk around Huff Hall: West sidewalk remove and replace (300'x8'), and along the Southwest entrance sidewalk panels to be removed and replaced (40'x14') - \$60,000
- Temporary fix (patching) for the Main Library East entrance ADA ramp - \$18,000

Total amount encumbered for In-house work: \$107,000

In FY23, the following projects are out for bid

- English Building – paver sidewalk on the south of the building. This will be an out-of-house project – \$75,000

In FY23, a retainer (DMA) hired to design the following projects (

- RWO – 1 (total budget - \$190,000)
 - West sidewalk on Oak Street from Stadium Drive to Gregory Drive
- RWO – 2 (total budget of \$375,000) –design \$31,800
 - North sidewalk on Peabody Drive from First Street to Fourth Street (and potentially to Sixth Street)
 - North sidewalk on Gregory Drive from Fourth Street to Sixth Street

Total encumbered and spent amount: \$907,750.

Funding Resources

Transportation Asset Management Plan (TAMP)

- \$4,500,000 funding allocated for pavement maintenance in FY21
- Total spent and encumbered amount: \$4,525,000

Bicycle Infrastructure and Programming Fee

- Renewing the Bike Fee for FY24-28. Student Fee Advisory Committee (SFAC) will present the proposal to renew the Bike Fee to the Board of Trustees in spring 2023.
- Collaborating with SSC to possibly increasing the Bike Fee for FY24 onwards

Student Sustainability Committee

SSC funded projects

- 1) Purchase and Install Eco-Counters project
 - SSC awarded \$20,000 to purchase and install one set of Eco-Counter in fall 2021
 - Received the counter in October 2022
 - Installation at Wright & John in spring 2023
- 2) Bicycle Registration signs projects
 - SSC awarded \$1,200 in spring 2021 and \$4,732.38 in spring 2022 to create and install metal bike registration signs at high traffic bicycle parking areas across campus
 - Project has been completed
 - Final report pending



- Installed bike registration signs at 16 high traffic bike parking locations on-campus
 - Overspent by \$543. Funds transferred from Bike Registration Fee funds to the SSC funding to balance the account
- 3) Additional bike/ped counters for MCORE corridors
- SSC awarded \$120,000 will be used for the purchase and installation of 12 counters (6 locations) in spring 2022
 - Bike Fee will be used for the 7th location
 - Working with Procurement department to obtain a sole source for Eco-Counter for this project
 - In process of purchasing 14 counters for the remaining 7 locations required to report bicycle and pedestrian activity for 5 years by MCORE project
 - In process of purchasing auto-data transmission subscription for all 24 counters (14 new and 10 existing)
- 4) Bike Cage at ECE
- SSC awarded \$3,000 to purchase and install bike racks for a bike cage at ECE in spring 2022
 - Temporarily placed one 4-loop rack in the cage
 - In process of purchasing a 3-loop and a 2-loop rack for this bike cage
- 5) Bike Canopy at Newmark Civil Engineering building
- SSC awarded \$12,000 for this project in spring 2022
- 6) Strong Towns
- SSC awarded \$2,000, in fall 2022, to bring the author of Strong Towns, Mr. Charles Marohn, to the campus for a day
 - This project was in collaboration with Thomas Valencia and Briana Barr, students at the Department of Urban & Regional Planning
- 7) Curb cut improvement at the intersection of Main St and Mathews Ave
- SSC awarded \$30,000 in fall 2022 to improve the curb cut at the intersection of Main St and Mathews Ave
- 8) EV charging stations for F&S fleet
- SSC awarded \$134,000 in fall 2022 to purchase and install level-2 dual point smart EV chargers at 7 locations –
 - 4 at Garage & Carpool
 - 2 at PPSB
 - 1 at Waste Transfer Station

Potential SSC funding requests in spring 2023

- 1) Bike Shelter purchase and installation at E-15 parking garage – \$225,000

Community Engagement

- *Champaign Urbana Urbanized Area Transportation Study (CUUATS)*
 - Transportation Systems Manager attended the CUUATS Technical and Policy Committee meetings in FY23

The TDM department was a part of the following committees through CCRPC:

- Community Safety Committee
- Several Corridor Studies throughout the region
 - Florida Avenue Corridor Study
 - Lincoln Avenue Corridor
- *Campus Transportation Advisory Committee*
 - In fall 2022, CTAC met on December 6, 2022. The primary topics of discussion were update on the Walkability Audit project and Mode Choice Survey. Learn more about this meeting here: [Campus Transportation Advisory Committee \(CTAC\) fall 2022](#)
 - In spring 2023, CTAC will meet in April or May 2023
- *Bicycle and Pedestrian Advisory Commission (BPAC)*
 - Sustainable Transportation Assistant attended the BPAC meetings in FY22/23.
- *Association of Pedestrian and Bicycle Professionals (APBP)*
 - Sustainable Transportation Assistant renewed his APBP young professional membership in January 2023.
 - Sustainable Transportation Assistant joined the APBP webinaros and membership committees as a volunteer
 - Sustainable Transportation Assistant attended the APBP conference 2022 in August 2022 held in Minneapolis, MN
- *League of American Bicyclists (LAB)*
 - Sustainable Transportation Assistant renewed his LAB membership in January 2023.
- *MTD Advisory Committee*
 - TDM attended the monthly committee meetings in FY22/23.
- *Public Safety Advisory Committee (PSAC)*
 - TDM attended the bi-monthly committee meetings in FY22/23.
- *Parking Advisory Committee (PAC)*
 - TDM attended the quarterly committee meetings in FY22/23.



- *Special Events Advisory Committee (SEAC)*
 - TDM attended the bi-weekly committee meetings in FY22/23.