BUILDING THE BOILERMAKERS’ BIKING INFRASTRUCTURE

March 8, 2017

Michael Gulich
Director of Campus Master Planning and Sustainability
AGENDA

1. Integrated Bicycle and Pedestrian Infrastructure Plan
2. Purdue Bike Share Program
   • Planning
   • Launch
   • Expansion
3. State Street Redevelopment Project
   Bicycling Facilities
INTEGRATED BICYCLE AND PEDESTRIAN INFRASTRUCTURE PLAN
The League of American Bicyclists

“BICYCLE FRIENDLY AMERICA”

The Five Es

- **Engineering** – Creating safe and convenient places to ride and park
- **Education** – Giving people of all ages the abilities, skills, and confidence to ride
- **Encouragement** – Creating a strong bike culture that welcomes and celebrates bicycling
- **Enforcement** – Ensuring safe roads for all users
- **Evaluation and Planning** – Planning for bicycling as a safe and viable transportation options
Enhance the safety and mobility of students, faculty, staff, and visitors who bike and/or walk to, from, and on campus through the development of a study that outlines a collective vision for bicycle infrastructure improvements and programs and identifies a priority list of projects and potential cost.
WHAT WE HEARD: MAJOR THEMES

Engineering
• Separated facilities will lead to fewer conflicts
• Consistency is needed for materials and appearance
• Continuity should be implemented for direct and continuous facilities
• Common sense should be exercised, and facilities should follow a natural/logical path

Education
• How bicyclists, pedestrians and drivers interact together with facilities

Enforcement
• Keep facilities accessible for users by requiring bicycle registration, removing abandoned bikes, etc.
• Proper implementation of Engineering and Education themes is key to reduce the need for Enforcement
EXAMPLES OF BICYCLE FACILITIES

- Bike lane
- Protected bike lane
- Cycle track
- Sharrows
- Shared service drive
- Bike path
MARTIN JISCHKE DRIVE

- Two 11’ wide travel lanes
- On-street parallel parking exists along both sides of the street for all but the area adjacent to the Córdova Recreational Sports Center

Option A (looking north)
- Add 5’ wide bike lanes on each side of the street
- Remove 59 parking spaces from west side of the street
- Narrow the travel lanes to 10’
BIKE SHARE PROGRAM
PROJECT SCOPE AND FUNDING

Scope
Develop a bike share network for Purdue with a minimum of 50 bikes within a distributed network of station locations

Funding
Alcoa Foundation provided $75,000 in funding through a grant to the Office of University Sustainability
SMART BIKE VS. SMART DOCK

Smart Bike

Smart Dock
DIMENSIONS OF CAMPUS DATA

Demand analysis

Dimensions of campus data layered to create overall heat map:

• Weekly student contact hours
• On-campus student housing
• Faculty and staff office locations
• Campus destinations/attractions
• Parking facilities and transit hubs
• Bicycle facilities
PROPOSED SYSTEM DESIGN

- 13 stations
- 130 bikes
SPONSORSHIP/BRANDING: WEBSITE

Purdue has partnered with Alcoa Foundation to bring bike sharing to campus. Bike sharing is a key contributor to the transportation options in our community and is a fun, clean, and convenient way for you to get around town.

To celebrate our launch, Purdue is giving away FREE bike helmets to the first 500 members who sign up for the Purdue Bike Share with a Yearly Membership. Just sign up and we’ll contact you with more information about picking up your helmet.
SPONSORSHIP/BRANDING: MOBILE APP
SPONSORSHIP/BRANDING: BICYCLES

Purdue University

Bike Share
zagster.com/purdue

Proud Partner

Alcoa Foundation
SPONSORSHIP/BRANDING: BIKE STATIONS
LAUNCH EVENT: PURDUE.EDU WEBSITE
LAUNCH METRICS

- August 2015
- 13 stations
- 50 bicycles
PROGRAM EXPANSION AND METRICS

- August 2016
- 21 stations
- 100 bicycles

![Graph showing trip data for Jan 1, 2016 to Dec 31, 2016 with 22192 trips, 63 avg. trips/day, and 27 mins median trip duration.]

![Purdue interface with trip data and member statistics for August 2016: 38580 trips, 621 active members, 62 bikes.]
BIKE SHARE PROGRAM: NEW FEATURES

BLUETOOTH™ RING LOCK
When engaged, the ring lock prevents the rear wheel from spinning, immobilizing the bike.

DOCKING CABLES
Two sturdy cables — one securely attached to each station dock, and one retracted inside each bike — plug into the smart lock to keep bikes grounded between trips.

ON-BIKE KEYPAD
Riders operate the lock using a compatible smartphone or by entering a single-use code into the on-bike keypad — get a code with the free Zagster app or via text message.
STATE STREET REDEVELOPMENT PROJECT BICYCLE FACILITIES
6 miles of existing integrated bicycle/pedestrian infrastructure
Additional 14.5 miles of infrastructure proposed as a result of the Integrated Bicycle and Pedestrian Infrastructure Plan (20.5 miles total)
5 miles of infrastructure to be added from State Street Redevelopment Project (11 miles total) – 80% increase in infrastructure
BICYCLE FRIENDLY UNIVERSITY - 2015

BICYCLE FRIENDLY UNIVERSITY
2015-2019
BRONZE
THE LEAGUE
OF AMERICAN BICYCLISTS
BICYCLE FRIENDLY UNIVERSITY - 2016
THANK YOU

QUESTIONS

Michael Gulich
Director of Campus Master Planning and Sustainability