



How do your bike lanes glow? A Texas A&M Case Study

Debbie Hoffmann, M.S., CAPP
Associate Director

Texas A&M University Transportation Services
dhoffmann@tamu.edu

Ron Steedly, M. Ed, CAPP, LCI

Manager, Alternative Transportation
Texas A&M University Transportation Services
rsteedly@tamu.edu

Download the IPI2017 mobile app to provide feedback on this session/speaker.



- **Project Overview**
- **Educational Outreach and Communication Campaign**
- **Partnerships for Student Research**
- **How successful is it?**

- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*





- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*



16
Permit
Required
ENFORCED:
Violations will be towed







RESERVED
PARKING



RESERVED
PARKING



RESERVED
PARKING



RAM 1500

- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*





Download the IPI2017 mobile app to provide feedback on this session/speaker.





Langford
Architecture
Accessible Entrance
→

AZIMUTH



FIRE LANE

NO PARKING

TOW AWAY ZONE

- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*
 - *Bike paths*





Download the IPI2017 mobile app to provide feedback on this session/speaker.





Ernest Langford Architecture Center

- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*
 - *Bike paths*
 - *Motorcycle parking*





- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*
 - *Bike paths*
 - *Motorcycle parking*
 - *General access paths to buildings*







- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*
 - *Bike paths*
 - *Motorcycle parking*
 - *General access paths to buildings*
 - *Interstitial space between buildings*

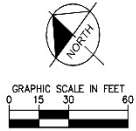
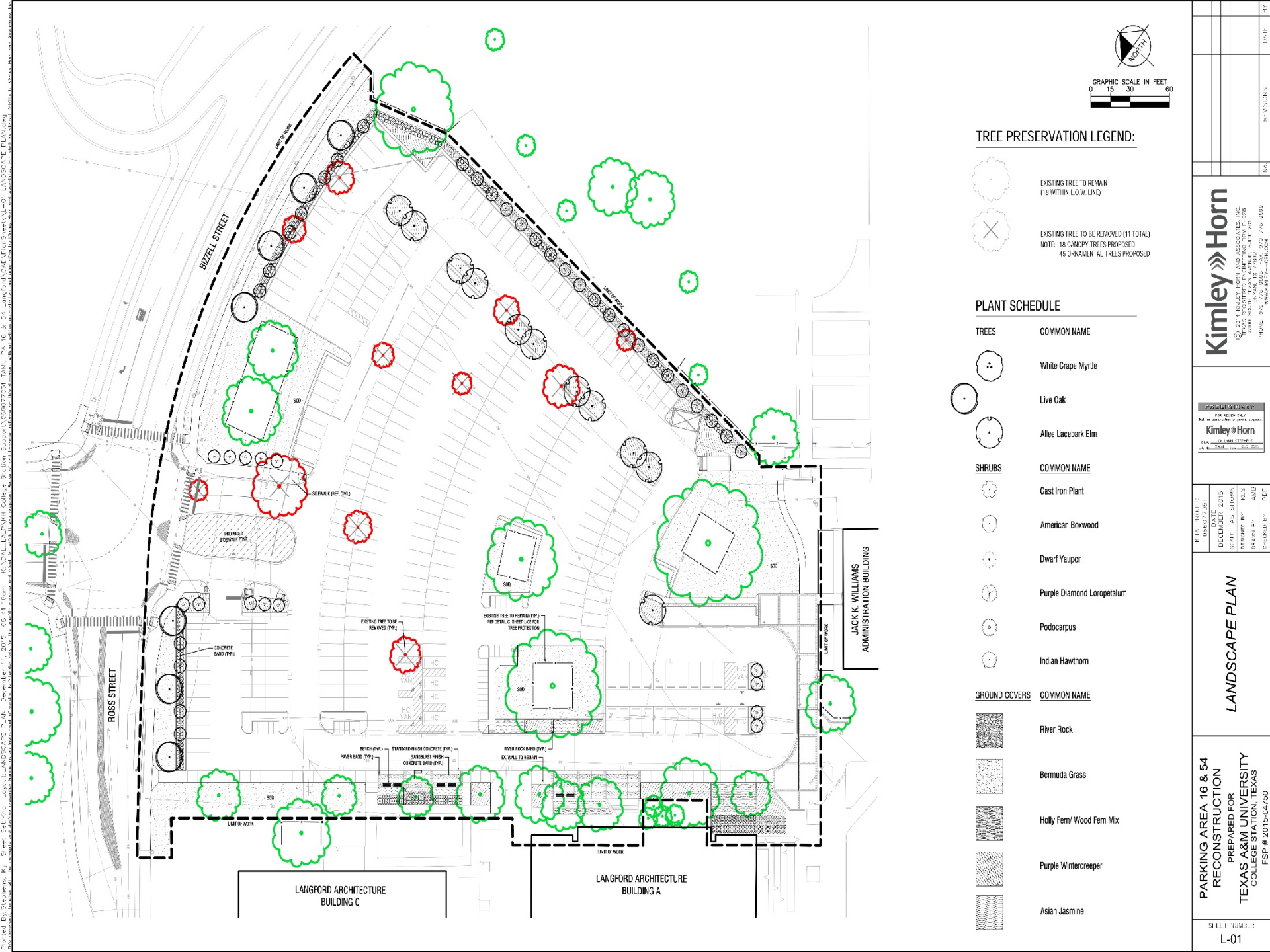


Download the **IPI2017 mobile app** to provide feedback on this session/speaker.





- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*
 - *Bike paths*
 - *Motorcycle parking*
 - *General access paths to buildings*
 - *Interstitial space between buildings*
 - *Sustainability in landscape*



TREE PRESERVATION LEGEND:

- EXISTING TREE TO REMAIN (18 WITHIN L.O.W. LINE)
- EXISTING TREE TO BE REMOVED (11 TOTAL)
NOTE: 18 CANOPY TREES PROPOSED
45 ORNAMENTAL TREES PROPOSED

PLANT SCHEDULE

TREES	COMMON NAME
	White Crape Myrtle
	Live Oak
	Allee Lacebark Elm

SHRUBS	COMMON NAME
	Cast Iron Plant
	American Boxwood
	Dwarf Yaupon
	Purple Diamond Loropetalum
	Podocarpus
	Indian Hawthorn

GROUND COVERS	COMMON NAME
	River Rock
	Bermuda Grass
	Holly Fern/ Wood Fern Mix
	Purple Wintercreeper
	Asian Jasmine

Kimley»Horn
 © 2014 KIMLEY HORN AND ASSOCIATES, INC.
 TEXAS REGISTERED PROFESSIONAL ENGINEER #4656
 2800 SHILOH DRIVE, SUITE 200
 HOUSTON, TEXAS 77057
 PHONE: 281.416.7000 FAX: 281.416.7001
 WWW.KH.COM

Kimley»Horn
 K.H.A. 2014-2015
 2800 SHILOH DRIVE, SUITE 200
 HOUSTON, TEXAS 77057

PLANS PREPARED BY	DATE
FOR REVIEW ONLY	DECEMBER 2013
SCALE AS SHOWN	REVISION BY
	REVIEW BY
	CHECKED BY
	DATE

LANDSCAPE PLAN

**PARKING AREA 16 & 54
 RECONSTRUCTION**
 PREPARED FOR
TEXAS A&M UNIVERSITY
 COLLEGE STATION, TEXAS
 FSP # 2015-04750

Project: 2015-04750 - Parking Area 16 & 54 Reconstruction
 Date: 12/10/2013
 Author: JKH
 Title: Landscape Architect
 Scale: As Shown
 Status: For Review Only
 Drawing No.: 16-54-LP-01



Lampart
Architecture
Accessible Entrance
→

AZIMUTH



7732

- Parking lot renovation
- Expanded scope to look beyond curbs of parking lot
 - *Roadway intersection alignment*
 - *Americans with Disabilities Act compliance*
 - *Sidewalks*
 - *Bike paths*
 - *Motorcycle parking*
 - *General access paths to buildings*
 - *Interstitial space between buildings*
 - *Sustainability in landscape*
 - *Slow Moving Vehicle parking*



Considered:

- Project Partners
- Users
- Process
- Innovation Initiative
- Research Partners
 - *Partnering company with paint product*
 - *Undergrad and graduate research class projects*
 - *Refinement of product*

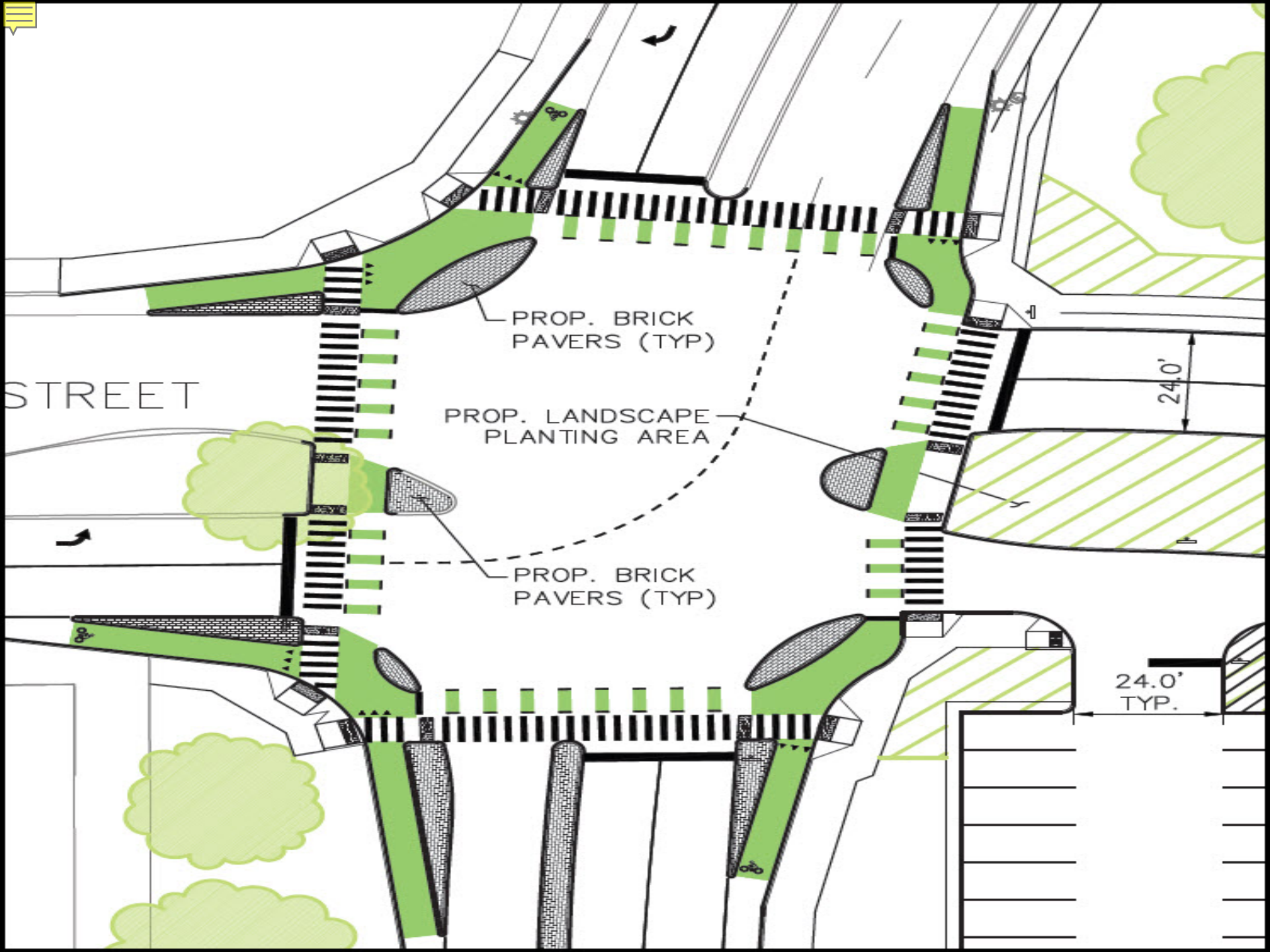
Overview

- The Dutch Junction concept and design
- Initiative to develop and construct using innovative green design
- Communications Campaign
- Outcome

- Uses protected pathways to separate cyclists from vehicles.
- Offers added protection to bicyclists in high pedestrian and vehicular traffic area on campus.
- Partnered with Kimley-Horn and Texas A&M Transportation Institute (TTI) to construct with innovative green paint.
- First in U.S. to implement unsignalized version (2016).







STREET

PROP. BRICK
PAVERS (TYP)

PROP. LANDSCAPE
PLANTING AREA

PROP. BRICK
PAVERS (TYP)

24.0'

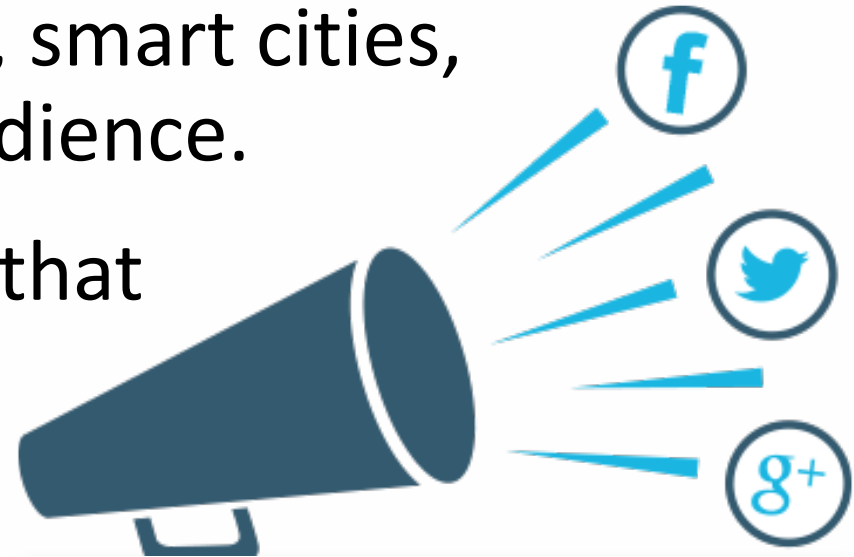
24.0'
TYP.



Dutch Junction Project



- Media outreach focused on elements of innovation (urban design, smart cities, cool factor) to draw in audience.
- Educational components that informed and sparked interest in project.
- Utilized partnership resources to maximize outreach efforts.
- Offered opportunities for research “Living Laboratory”



- Communications Plan
 - Media release
 - Social Media Strategy
 - Spokespersons
 - Creativity in design

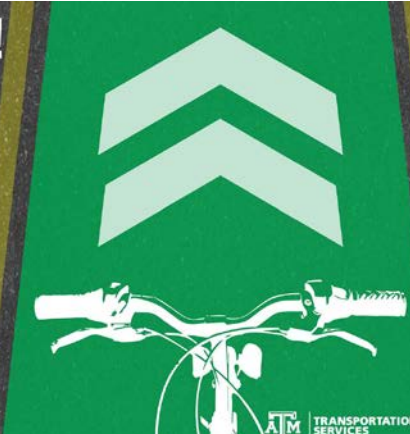


GREEN BIKE LANES ARE HERE!

Why are the new bike lanes green?
The green bike lanes denote protected lanes in intersections, driveways and other potential "conflict zones"

What makes them different?
They create designated space on the street that physically separates cyclists from traffic and pedestrian activity

Where are the green lanes?
The lanes are a part of the campus' first *Dutch Junction* at the intersection of **Bizzell Street & Ross Street**, near lots **54 & 16**



ATM TRANSPORTATION SERVICES

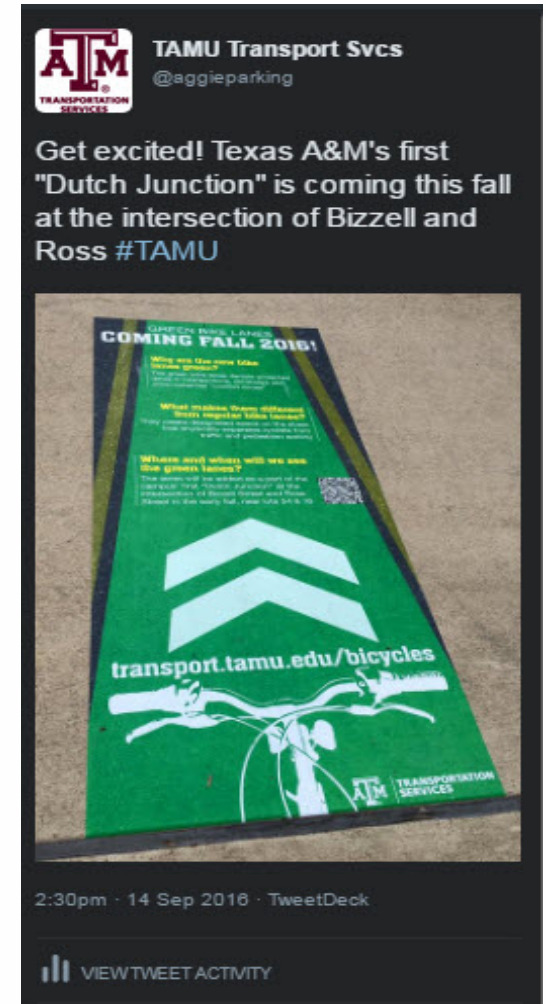
#1 Most Read Story for 2016



- Received **24,000+ page** views when published.
- **6,900 shares** to Facebook from the Texas A&M Today site alone.

Print & Online

- There were 60+ mentions in print and online news outlets.
- Netherlands Reddit forum and national/international metro transportation blogs covered story.





Netherlands Embassy  @NLintheUSA · 5 Oct 2016

.@TTI brings a Dutch-Style #traffic intersection w/ solar-lighted bicycle paths to @TAMU.

tti.tamu.edu/2016/10/04/sol... #Aggies pic.twitter.com/Q0Mrigb6vJ



GREEN BIKE LANES AT ROSS & BIZZELL

MAKING CAMPUS SAFER FOR **EVERYONE**

WHY ARE THE NEW BIKE LANES GREEN?

The green bike lanes denote protected bike lanes in intersections, driveways and other potential "conflict zones."

WHAT MAKES THEM DIFFERENT?

They create a designated space on the street for a person riding a bicycle that is physically separated from traffic and pedestrian activity.

WHAT MAKES THEM SAFER?

They create a clear and sensible environment for users on foot, on bicycles or in cars and provides more time and space for everyone to see and react to one another.



PEDESTRIANS

- 1 do not block or stand in protected bike lanes
- 2 wait in protected areas until able to cross street
- 3 cross street using white dashed lanes
- 4 watch for people on bicycles before crossing bike lanes even if you have right of way



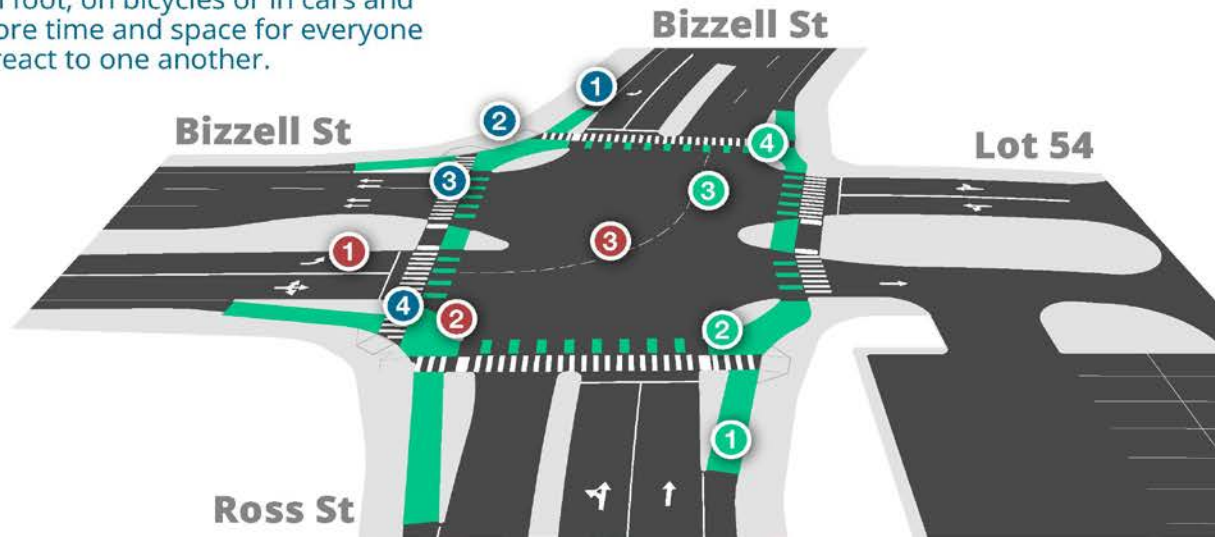
CYCLISTS

- 1 use protected green bike lanes to navigate intersection
- 2 yield to people walking at crosswalks
- 3 watch for crossing vehicle traffic at intersection
- 4 after yielding to people in crosswalks, advance to the end of the center island and cross with caution



MOTORISTS

- 1 when turning, yield to people walking and cycling
- 2 be aware of raised concrete islands in the intersection
- 3 follow the white dotted lines when making left turns



Whether you're walking, bicycling, or driving, always follow traffic laws

**GREEN BIKE LANES
COMING FALL 2016!**

Why are the new bike lanes green?
The green bike lanes denote protected lanes in intersections, driveways and other potential "conflict zones"

What makes them different from regular bike lanes?
They create designated space on the street that physically separates cyclists from traffic and pedestrian activity

Where and when will we see the green lanes?
The lanes will be added as a part of the campus' first "Dutch Junction" at the intersection of Bizzell Street and Ross Street in the early fall, near lots 54 & 16



transport.tamu.edu/bicycles



ATM TRANSPORTATION SERVICES

8ft



Why are the new bike lanes green?
The green bike lanes denote protected lanes in intersections, driveways and other potential "conflict zones"

What makes them different from regular bike lanes?
They create designated space on the street that physically separates cyclists from traffic and pedestrian activity

Where and when will we see the green lanes?
The lanes will be added as a part of the campus' first "Dutch Junction" at the intersection of Bizzell Street and Ross Street in the early fall, near lots 54 & 16



Download the IPI2017 mobile app to provide feedback on this session/speaker.



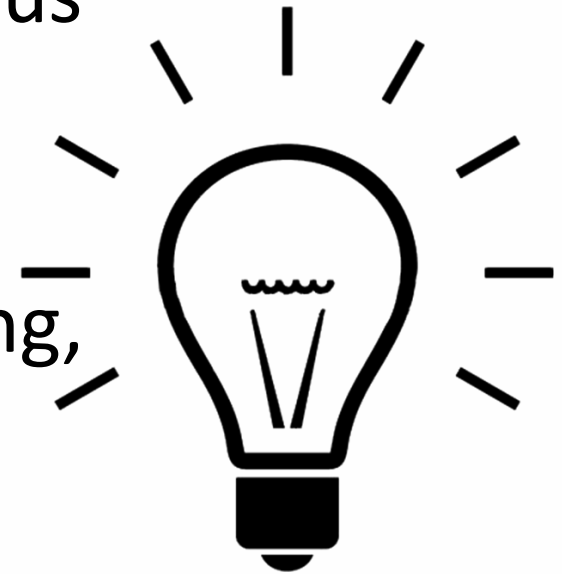


Download the IPI2017 mobile app to provide feedback on this session/speaker.



Why involve students?

- Invite students to examine various aspects of transportation.
- Real world applications for research methods, data gathering, analysis, and reporting.
- Meaningful subject matter that relates to the university—student majors and areas of interests.



Will motor vehicles yield to cyclists?

- Yes, motor vehicles actively yielded 55% of the time. Cyclists did 45% of the time.

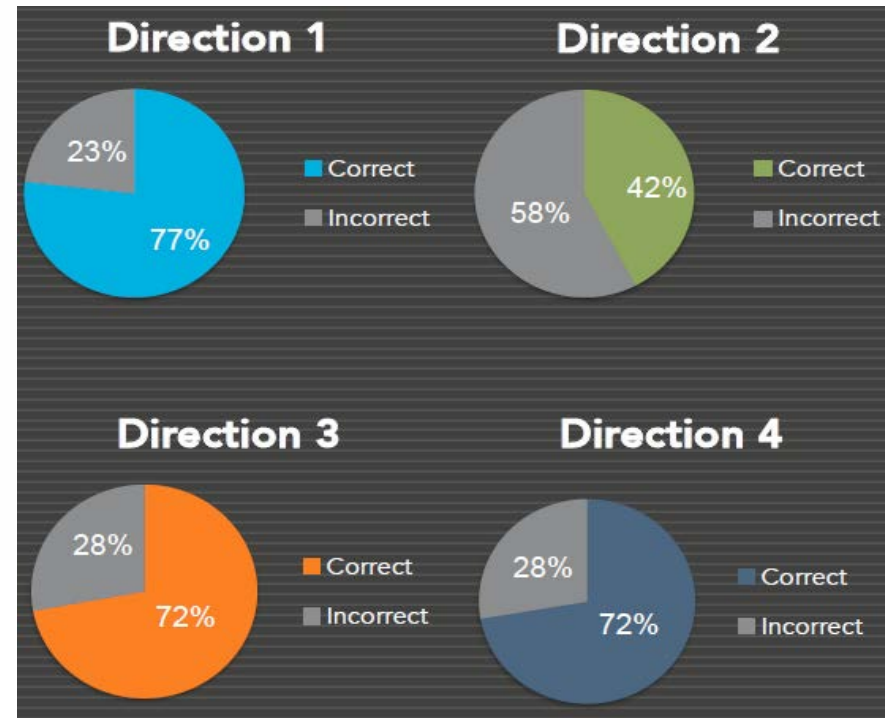
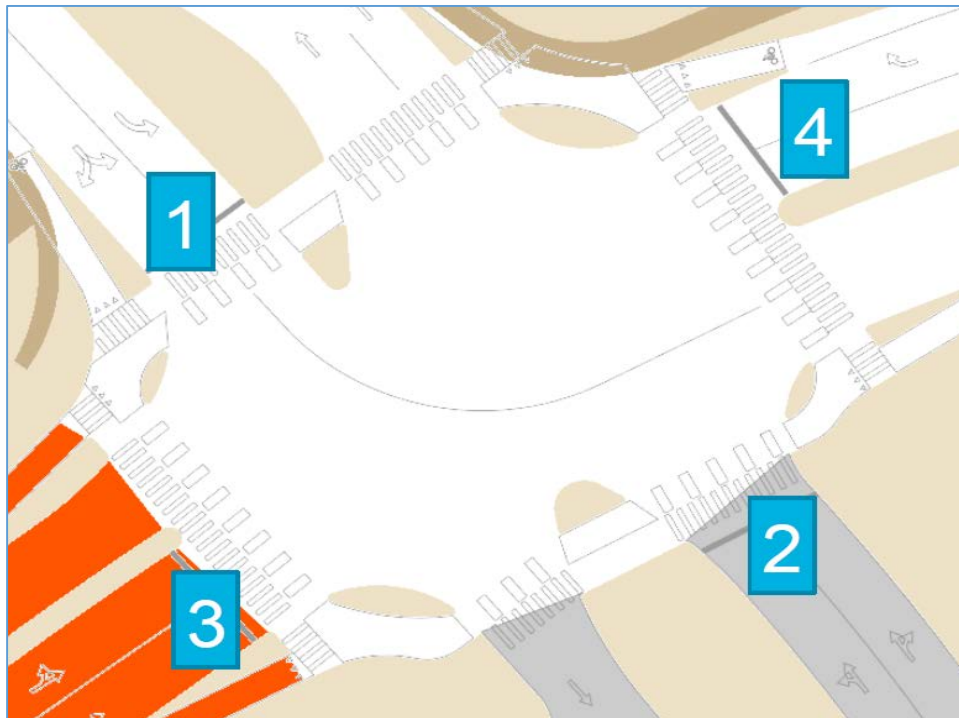
Will cyclists use the protected intersection more after green paint is applied?

- No, reason needs to be studied more.

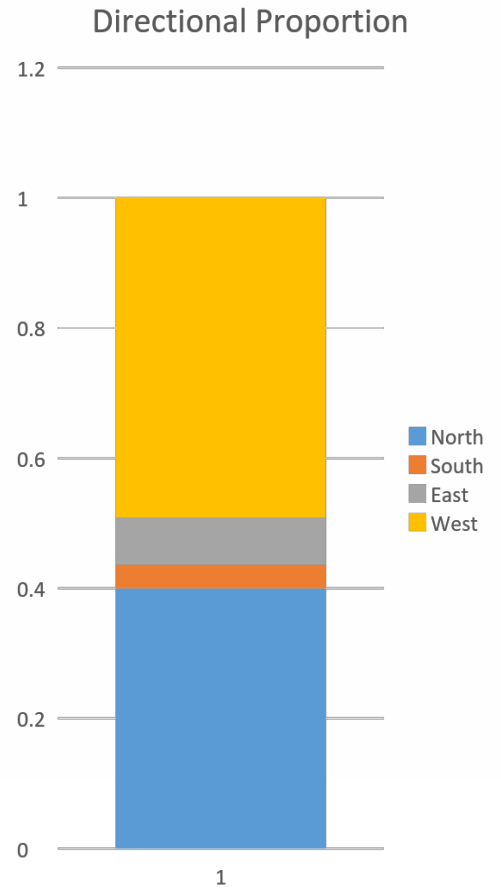
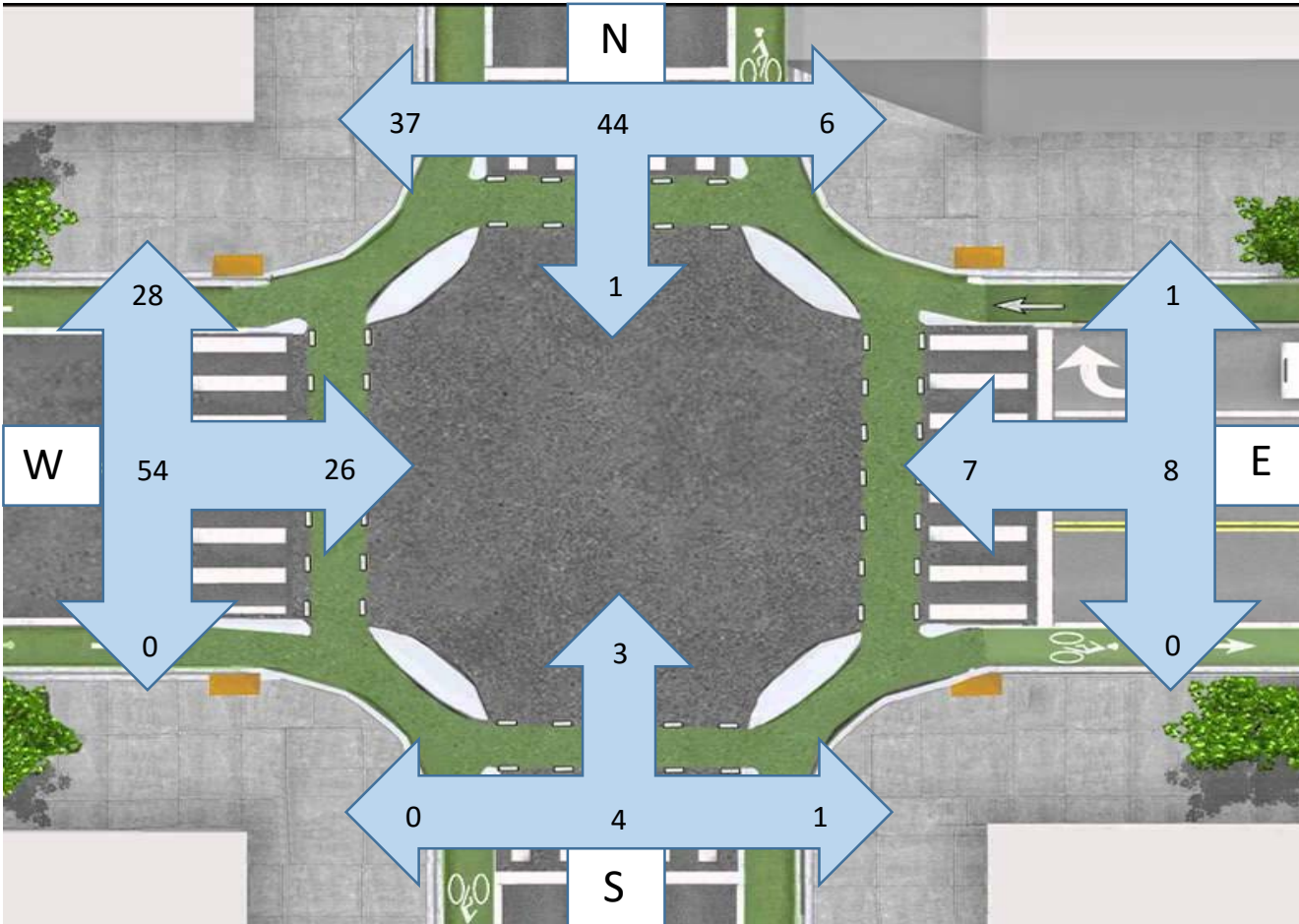


Did the direction cyclists traveled correlate with correct or incorrect usage of the protected lanes?

- Yes. In this case cyclists behaved appropriately in the protected lanes.

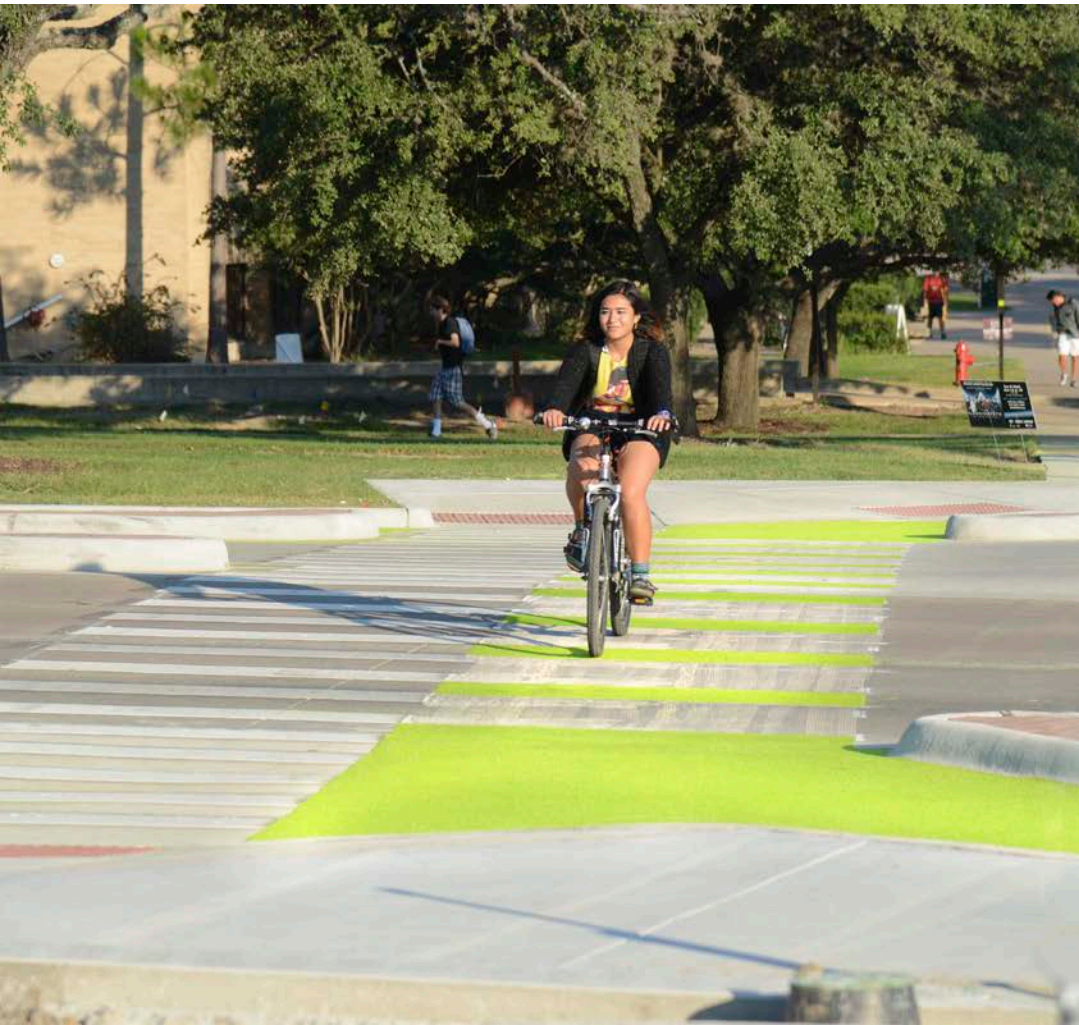


Hypothesis Examples



- Design appears to allow for easier scanning for possible conflicts to react accordingly (motor vehicles, pedestrians, and cyclists).
- Could heightened awareness at an intersection and lower the stress level where facility use is not “required” to feel safe?
- An illustrated or video ‘manual’ should be created to show appropriate usage of the facility.

“Weatherable Material”



<http://transport.tamu.edu/IPIDJ>

Download the **IPI2017 mobile app** to provide feedback on this session/speaker.





How do your bike lanes glow? A Texas A&M Case Study

Debbie Hoffmann, M.S., CAPP
Associate Director

Texas A&M University Transportation Services
dhoffmann@tamu.edu

Ron Steedly, M. Ed, CAPP, LCI

Manager, Alternative Transportation
Texas A&M University Transportation Services
rsteedly@tamu.edu

Download the IPI2017 mobile app to provide feedback on this session/speaker.

