INSTITUTE OF TRANSPORTATION ENGINEERS

MICHIGAN SECTION

Spring Technical Session – Wednesday March 16, 2022
East Lansing, Michigan

Location:

MSU Union

49 Abbot Rd, East Lansing, MI 48824

Hosted by John Engle, Michigan Department of Transportation

Michigan State ITE Student Chapter

Parking Prices and Map Attached.

Meeting Schedule

Check-In/Registration		
8:00 am	Doors Open: Registration, Coffee & Networking	
Morning Session		
Time	**Topic**	**Presenter(s)**
9:00 AM	**Opening Remarks**	**John Engle, MDOT**
9:05 AM	**Understanding the Role of Traffic Safety Culture in Moving Toward Zero Deaths**	**Ray Schneider, AECOM**
	'Traffic Safety Culture' is defined as "the shared belief system of a group of people, which influences road user behaviors and stakeholder actions that impact traffic safety". This presentation will help crystalize your understanding of Traffic Safety Culture and the role it plays in reducing traffic crashes and moving closer to Toward Zero Deaths. Organizational Safety Culture and Public Safety Culture will be described as well as what we can do both professionally and individually to advance traffic safety culture.	
9:35 AM	**MDOT ITS Initiatives**	**Collin Castle, MDOT**
	This presentation will provide an overview of current MDOT ITS Initiatives including infrastructure, systems, and technologies, as well as information on infrastructure support of Connected and Automated Vehicles.	

10:10 AM	Break	
10:25 AM	**MSU Student Poster Session**	**Various Presenters (See below)**
11:35 AM	Lunch	
	Networking activity presented by the Young Professionals Committee beginning at noon.	
Afternoon Session		
Time	**Topic**	**Presenter(s)**
12:30 PM	**ITE Great Lakes District Update**	**Jeff Young, ITE Great Lakes District Director**
	An update on initiatives and news regarding the Great Lakes District and the ITE International Board of Direction.	
1:00 PM	Break	
1:15 PM	**Re-examining Design Practices Related to Stopping Sight Distance**	**Dr. Peter Savolainen, MSU**
	Existing guidance documents used in highway design include a variety of underlying assumptions related to various driver performance measures, such as perception-reaction time and deceleration rate. Many of these assumed design parameters are based upon research that was conducted decades ago and under conditions that are not necessarily reflective of modern roadways, drivers, and real-world settings. Given emerging issues, such as the ubiquity of cell phones and other sources of in-vehicle distractions, there is a need to revisit these performance measures. Further, the existing literature has shown surprisingly little relationship between crash risk and available sight distance. This research leverages data from the second Strategic Highway Research Program Naturalistic Driving Study to improve our understanding of driving behavior with a focus on reaction time and deceleration rate. These efforts are supplemented by an analysis of high-fidelity light detection and ranging (LiDAR) that relates safety performance to available sight distance.	
1:45 PM	Break	

2:00 PM	**US-12 at M-51 Reconstruction: Right-Sizing our Infrastructure**	**Andrew Block, MDOT**
	This presentation will discuss the US-12 at M-51 reconstruction project that is being driven by the deteriorated structures carrying US-12 over M-51 in Niles Charter Township, Berrien County. As we are faced with repairing aging infrastructure, the need to investigate appropriately sizing our assets is paramount to ensure we are meeting the needs of the community and our long-term goals. In this project, we considered long-term life-cycle costs, the existing and future operational needs, and the need to provide a safe and connected facility for all users to replace an existing grade separated intersection with an at-grade, signalized intersection.	
2:30 PM	**696 Hot spots: RSA to Design**	**Devin Render, Bergmann** **Steve Russo, Bergmann**
	A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. An RSA was completed along I-696, between I-275 and Lahser Road, within Farmington Hills and Southfield, in Oakland County. This presentation will highlight the project background and specific recommendations from the RSA and how they were incorporated in the project design.	
3:00 PM	Closing Remarks	

Poster Title	**Student**
Examination of Vehicle Performance Under Autonomous Emergency Braking Test Protocols	*Akinfolarin Abatan*
How do the Type and Duration of Distraction Affect Speed Selection and Crash Risk? An Evaluation Using Naturalistic Driving Data	*Anshu Bamney*
Evaluating the Impacts of Freeway Speed Limit Increases on Various Speed Measures: Comparisons between Free-Flow and Aggregate Vehicle Speeds	*Nischal Gupta*
Crash Modification Factors for Rural Skewed Intersections	*Anthony Ingle*
Toward Smart Communities: A Mobility Technology Adoption Framework Incorporating High-Level Technical Analysis	*Farish Jazlan*
Assessing the Network-Wide Impacts of Dedicated Lanes for Connected Autonomous Vehicles	*Ehsan Kamjoo*

Macro Analysis to Estimate Electric Vehicle Fast-charging Infrastructure Requirements in Small Urban Areas	*Mohammadreza Kavianipour*
Safety Performance of Unsignalized Median U-Turn Intersections	*Jonathan Kay*
Evaluating Driver Response to a Dynamic Speed Feedback Sign at a Freeway Exit Ramp Considering the Sign Design Characteristics and Lateral Installation Position	*Md Shakir Mahmud*
Safety Evaluation of Freeway Exit Ramps with Advisory Speed Reductions	*Megat-Usamah Megat-Johari*
Effects of Electric Vehicle Adoption for State-Wide Intercity Trips on Emission Saving and Energy Consumption	*Hamid Mozafari*
Examining Methods for Identifying the Occurrence of Secondary Crashes	*Hadis Nouri*
Charging Infrastructure and Schedule Planning for a Public Transit Network with a Mixed Fleet of Electric and Diesel Buses	*Amirali Soltanpour*
An Optimization Framework for Location and Operation of Distributed Energy Resources to Support Electric Vehicles Fast Charging	*Harprinderjot Singh*

Registration: https://itemichigan.org/?page_id=12580

Continuing education credits: https://itemichigan.org/?page_id=12694

PARKING INFORMATION

DOWNTOWN EAST LANSING
DAYTIME. NIGHTTIME. ANYTIME.

Parking Information

Rates

Surface Lots: $1 per half hour, Max Daily: $20
Garages: $0.75 per half hour, Max Daily: $15
Pay-by-Space Machines: $0.75 per half hour
Meters: $0.75 per half hour

Exit lane pay stations accept credit cards and validations. Cash/coin is accepted near ground-level elevators in garages at Pay-on-Foot stations. Rates are in effect Monday-Saturday from 8 a.m.-3 a.m. (excluding Valley Court Park). Rates for Valley Court Park are in effect Monday-Saturday from 8 a.m.-6 p.m. Parking is FREE on Sundays, beginning at 8 a.m., except during special events.

Validated Parking

Numerous businesses validate parking for gated garages/lots.

Motorcycle, Moped & Bike Parking

Motorcycle parking is available in any public parking space (normal rates apply). Mopeds may park in designated areas in the Division Street, Grove Street, and Albert Street garages (permit needed or normal rates apply). Bike racks are available throughout downtown for bicycle parking.

Questions? Call (517) 337-1277 during business hours.

Gated Parking Lots & Garages

Albert Avenue Garage • 188 Albert Ave.
Exit Pay Stations | Pay-on-Foot Stations | Permit Parking

Bailey Lot • 139 Bailey St.
Exit Pay Stations | Pay-on-Foot Station | Permit Parking

Charles Street Garage • 121 Charles St.
Exit Pay Stations | Pay-on-Foot Stations | Permit Parking

Division Street Garage • 181 Division St.
Exit Pay Stations | Pay-on-Foot Stations | Permit Parking

Grove Street Garage • 330 Grove St.
Exit Pay Stations | Pay-on-Foot Stations | Permit Parking

M.A.C. Garage • 310 M.A.C. Ave.
Exit Pay Stations | Pay-on-Foot Station | Permit Parking

Metered & Permit Parking, Pay-by-Space Lots

Bailey Garage • 126 Bailey St.
Pay-by-Space Machine | Passport Mobile Pay | Permit Parking

City Hall Lot • 410 Abbot Rd.
Pay-by-Space Machine | Passport Mobile Pay

City Hall West Lot • 415 Abbot Rd.
Permit Parking

CVS Garage • 310 Albert Ave.
Pay-by-Space Machine | Passport Mobile Pay

Albert Avenue Lot • 101 Albert Ave.
Permit Parking

Valley Court Park • 280 Valley Court
Pay-by-Space Machine | Passport Mobile Pay | Permit Parking

Passport Parking

PassportParking Mobile Pay is offered at all parking meters and pay-by-space lots. The free app allows you to pay, monitor time left and add time from your mobile device: **https://ppprk.com/park/.**

Parking Meter & Garage Options

No matter what brings you to downtown East Lansing, you're sure to find parking to meet your needs:

90 minute maximum for a meal or light shopping

2 hour maximum to stroll the downtown or visit East Lansing's art galleries

15 minute maximum metered loading zone for free loading and unloading only.

15 minute or less transactions free in gated garages and lots.

Maximum time allowed in lots and garages ranges from **four hours to unlimited**.

Find additional information by visiting:
www.cityofeastlansing.com/parking

DOWNTOWN EAST LANSING
DAYTIME, NIGHTTIME, ANYTIME.
www.downtownEL.com

DOWNTOWN EAST LANSING PARKING GUIDE

LEGEND

- ENTRANCE
- GATED PAY LOT
- PASSPORT - downloadable app
- PAY STATION
- ACCESSIBLE PARKING
- ELECTRIC VEHICLE CHARGING

PARKING METER TYPE

- LOADING ZONE
- FREE 30 MINUTES
- 90 MINUTES
- 2 HOUR
- 4 HOUR
- OVERNIGHT PARKING
- PERMIT PARKING