



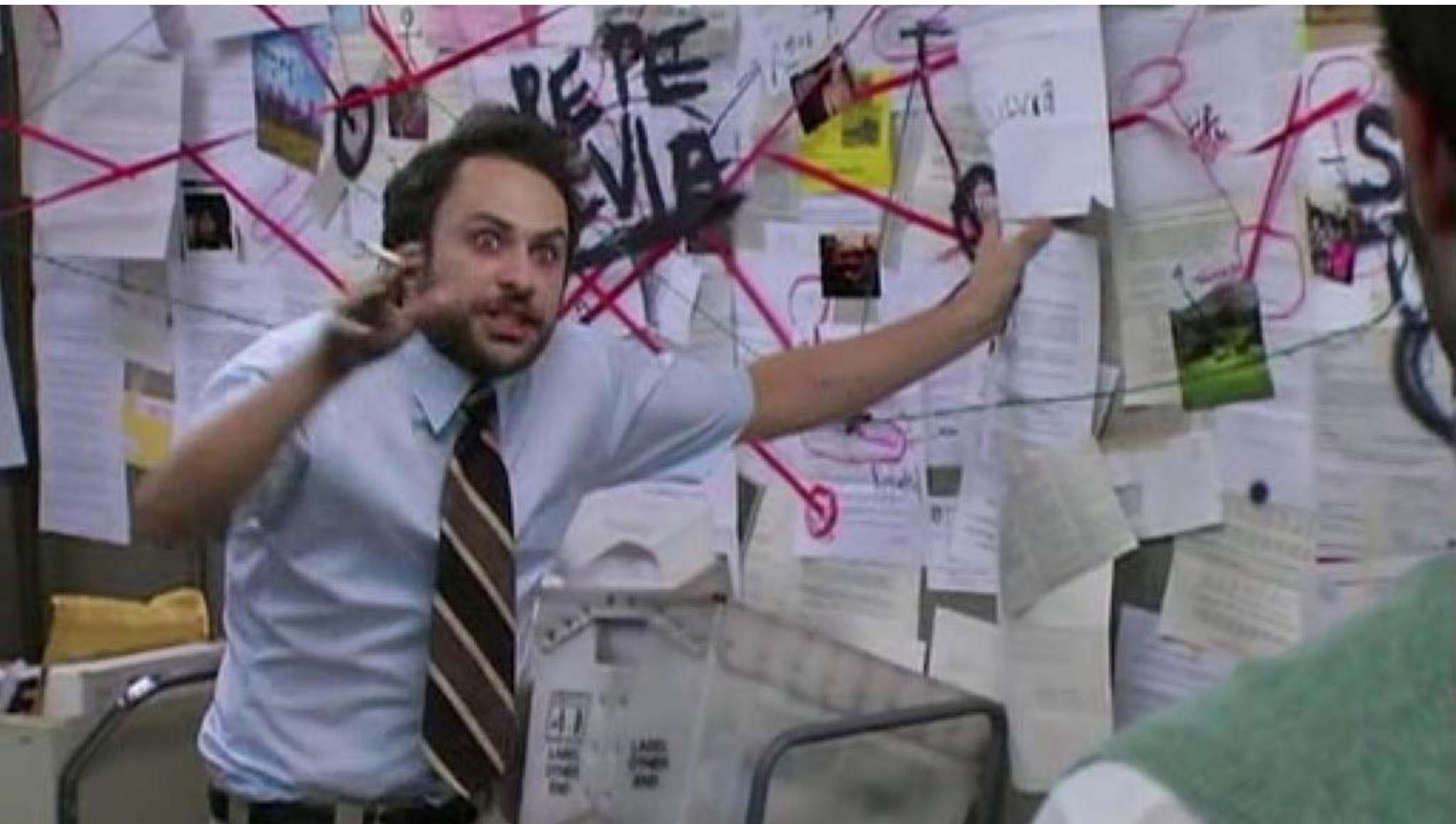
2019 APBP Conference

Edge Lane Roads
Beyond the Guidance

Michael Williams

www.advisorybikelanes.com

August 26, 2019

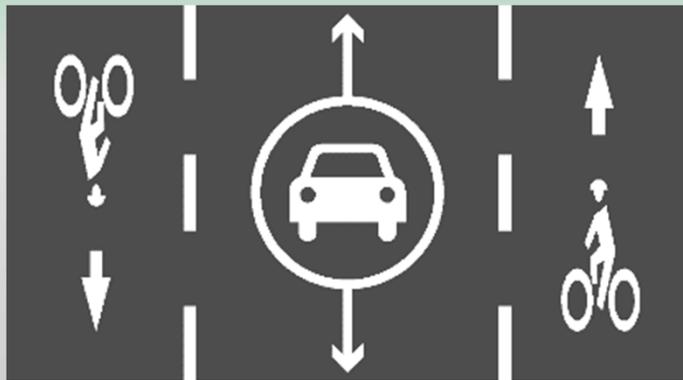


OUTLINE

- Introduction
- Beyond The Guidance
 - Better than Bike Lanes
 - Sidewalks
 - Rural, High-Speed Roads

WHAT IS AN EDGE LANE ROAD?

An ELR is a roadway which supports two-way motor vehicle and vulnerable road user travel with a center lane and edge lanes on either side. The bidirectional center lane is dedicated to motor vehicles. The unidirectional edge lanes support VRUs, such as cyclists or pedestrians. Motor vehicles may use the edge lanes, after yielding to any VRUs there, to pass oncoming vehicles.



Edge
Lane

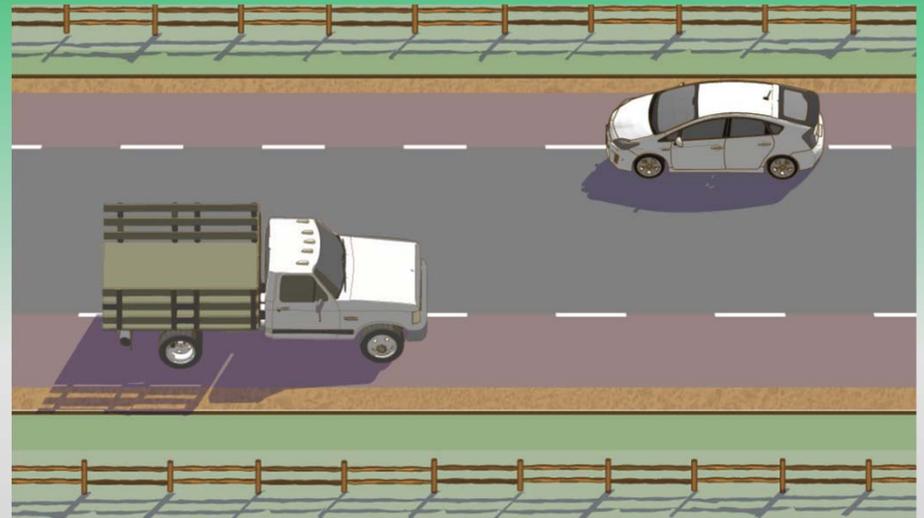
Center
Lane

Edge
Lane



ABL Design Guide, courtesy of www.advisorybikelanes.com

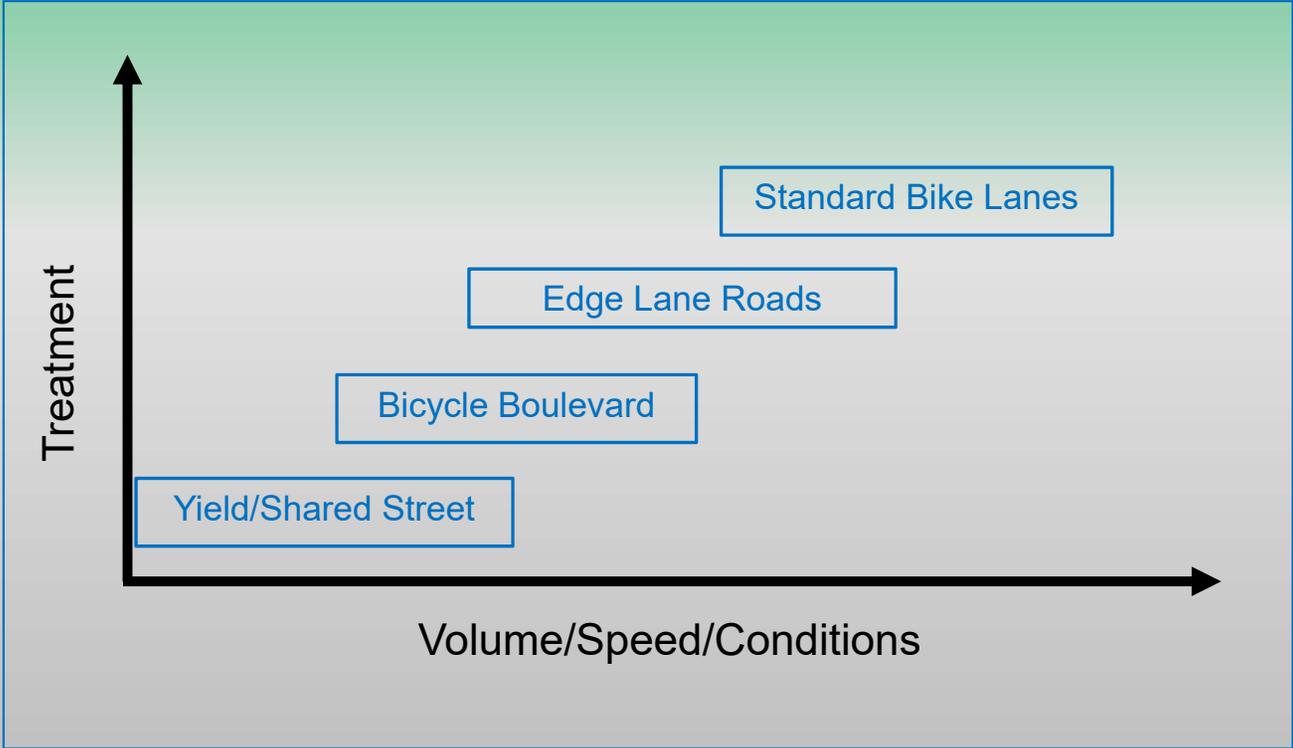
OPERATION



Courtesy FHWA Small Town & Rural Multimodal Networks

SLOW STREET SPECTRUM

Relationship of Slow Street Treatments

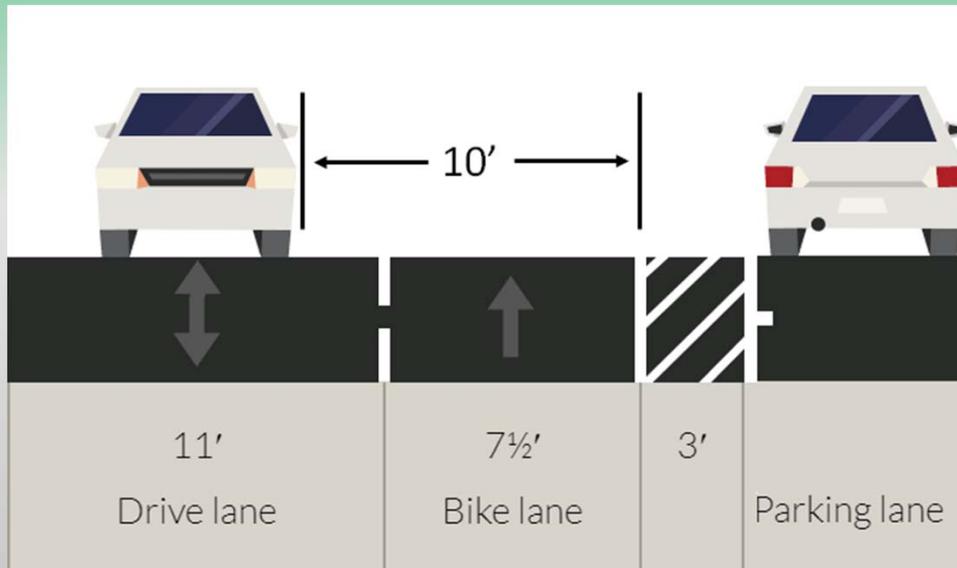


OUTLINE

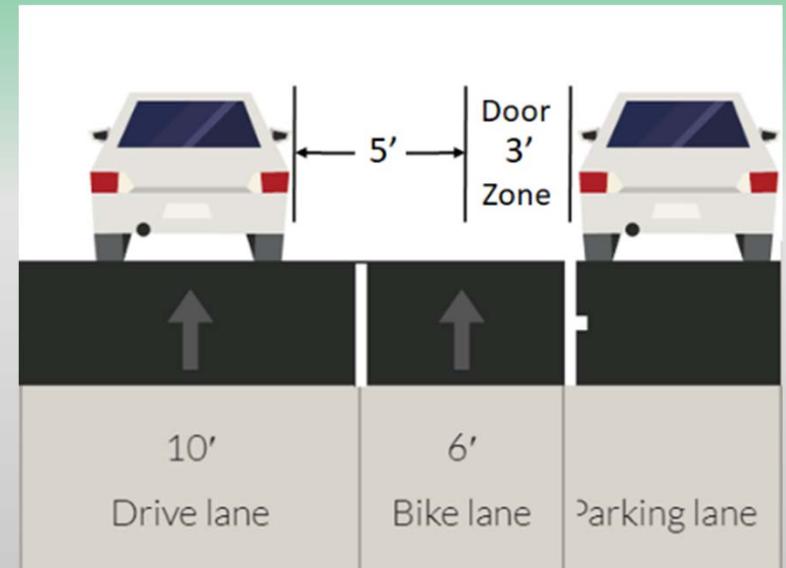
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BETTER THAN BIKE LANES

Edge Lane Roads can be better than standard bike lanes!



ELR Horizontal Separation



Door Zone Bike Lane Horizontal Separation

Example assumes 32' between parking lanes

BETTER THAN BIKE LANES

Case Study: Maliesingel, Utrecht, 2016



BEFORE

50 kph road with standard bike lanes

Courtesy: Bicycle Dutch, December 4, 2018 Blog Entry

BETTER THAN BIKE LANES

Case Study: Maliesingel, Utrecht, 2017



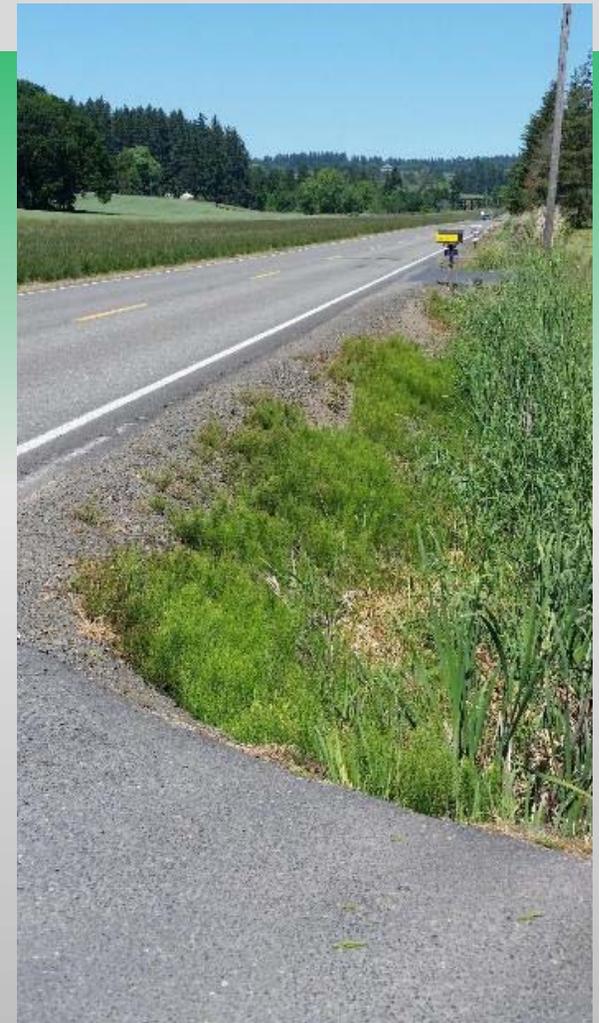
AFTER
30 kph edge lane road

	BEFORE	AFTER	
BIKES	5066	6432	↑
CARS	5998	4135	↓
SPEED	26.4 MPH	18.3 MPH	↓

Courtesy: Bicycle Dutch, December 4, 2018 Blog Entry

SIDEWALKS

- Limited guidance on ELRs for pedestrians
- Unresolved ADA issues - DWS, slopes
- Many roads will not get sidewalks for decades, if ever
- ELRs provide “pedestrian accommodations” quickly and at low cost



SIDEWALKS

Case Study: Yarmouth, Maine (BEFORE)



SIDEWALKS

Case Study: Yarmouth, Maine (AFTER)



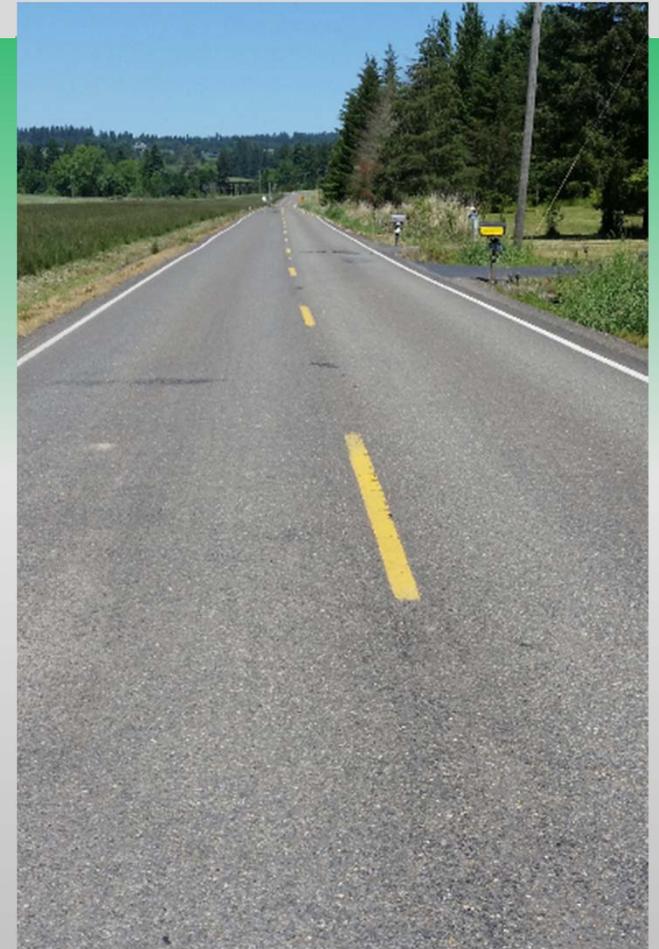
Bridge St, Yarmouth, ME
View from Southwest



Bridge St, Yarmouth, ME
View from Northeast

RURAL, HIGH-SPEED ROADS

- Despite serving only 19% of the population, rural roads see 54% of all fatalities
- 56% of crashes on rural 2-lane roads are single-vehicle, roadway departure crashes
- Rates for this crash type drop dramatically with added shoulder width but widening is expensive
- Rural fatalities tend to be randomly located requiring a systemic treatment
- Most of these roads have narrow lanes and shoulders forcing VRUs into the travel lanes



www.advisorybikelanes.com/rural-abl-project

RURAL, HIGH-SPEED ROADS

- ELRs add 5-6' of shoulder width
- 24% - 59% drop in crash rate
- Speeds drop by up to 8 MPH
- VRUs can feel more comfortable



- More details in poster session today
- Funded research beginning soon

www.advisorybikelanes.com/rural-abl-project



Thank You

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BICYCLE BOULEVARD TREATMENT

- Many bike boulevards in the US are posted at 20-25 MPH
- This creates a facility on which vehicles are passing bicycles
- Vehicles pass by shifting to the center when no opposing traffic
- This is the behavior supported by edge lane roads

BICYCLE BOULEVARD TREATMENT



BICYCLE BOULEVARD TREATMENT

BENEFITS

- Narrow center lanes can reduce vehicular speeds
- Increases BMV separation - makes higher volumes more comfortable for cyclists
- Doesn't preclude use of other tools – traffic diversion, traffic calming, stormwater treatments, etc
- Wide edge lanes support comfortable side-by-side riding, bike-bike passing, etc
- ELRs can be part of the bicycle boulevard toolkit

RURAL, HIGH-SPEED ROADS



Highway B764 in East Renfrewshire, Scotland.

Bunya Mountains Road in Alice Creek, AUS.



WHY I USE “EDGE LANE ROAD”

Problems with “Advisory Bike Lane” and “Advisory Shoulder”

- Neither bike lanes nor shoulders
Per MUTCD and state law neither are intended for vehicular travel 
- The names are not mode neutral
Emerging practice of using “ABL” for bikes and Advisory Shoulder for peds is unsustainable. What about equestrians, scooters, personal mobility devices, Amish buggies, etc?
- Are you referring to the edge lane(s) or the entire road?
Unique names do not exist for the edge lanes versus the entire road 
- The names hide the uniqueness of this road behind old jargon
Implies these edge lanes can be added to any road which is untrue.
- “Advisory Bike Lane” can create bikelash
This new treatment can experience vehement opposition, no need to give it a “bike” focus

*BONUS: It is a name already used by another country (Denmark)