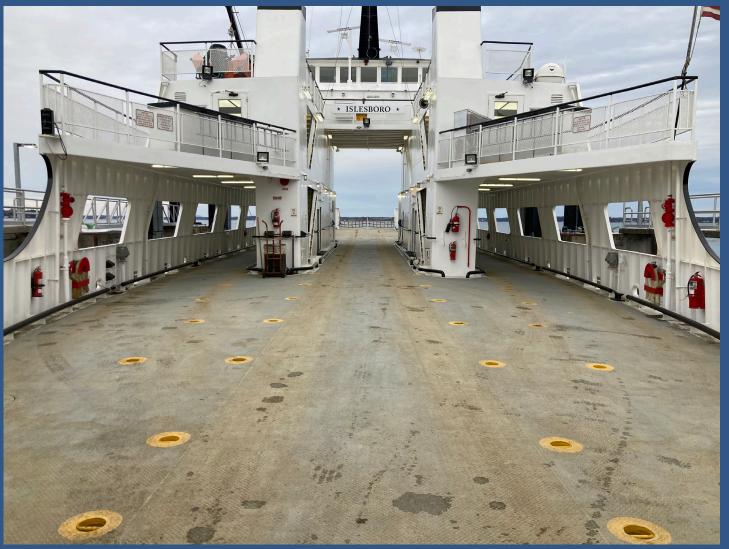
# MAINE STATE FERRY SERVICE





# WELCOME & INTRODUCTIONS



### **PURPOSE:**

To share and gain support for the Maine State Ferry Service's responsibility and desire to provide:

a safe and healthful work environment
an efficient maximized line-up process for loading
positive quality interactions between employees & customers



Continue to experience a growing number of life safety concerns for employees and customers!



# **SPECIALIZED TEAM DEVELOPED**

Occupational Health & Safety **OHuman Resources OLine Attendants OFerry Service Manager OFerry Service Business Administrator OTraffic Engineers OPublic Safety Engineers OPublic Service Managers** 



# ROCKLAND FERRY TERMINAL PARKING STUDY

### Completed in 2016





WIN 18594 Rockland Ferry Terminal, Rockland, Maine

November 7, 2016 Prepared by:

Maine Department of Transportation Bureau of Planning 16 State House Station Augusta, ME 04333-0016

1 MaineD01



...every system is designed to deliver the results given!







# TEAM RECOMMENDATIONS

### Immediate Improvements

Bus/Taxi Parking and Passenger Drop Off Location
 Trials Involving Traffic and Speed Control Devices

Short & Long Term Safety Improvements
 to the Terminal Lot

Present to MaineDOT Management

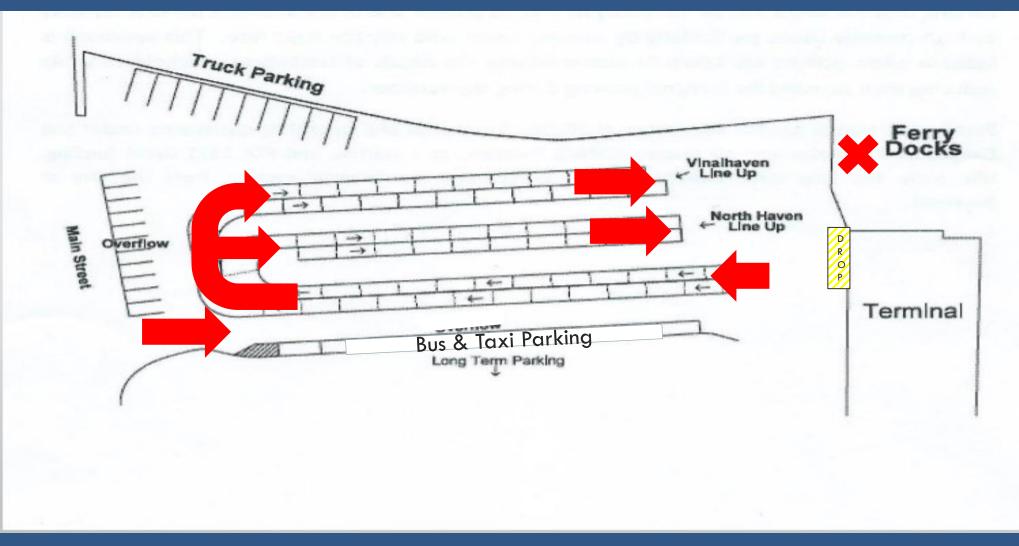
Present to Island Advisory Board

 Continue to plan and prepare for future implementations





# TRAFFIC IN THE TERMINAL LOT





## TWO WAY TRAFFIC COMING AND GOING IN THE ESTABLISHED EXIT LANE





Vehicles are directed to load the boat using the terminal lot exit lane during simultaneous exiting from the long-term parking lot.





Use of non-exit lanes to exit the terminal lot, sometimes directed to do so, because the exit lane is blocked due to boat loading.



# UNPREDICTABLE ACTIONS OF VEHICLES & PEDESTRIANS





# UNPREDICTABLE PEDESTRIAN TRAFFIC THROUGH THE TERMINAL LOT





# Other Vehicle Traffic Exposures

- •Vehicles backing up and pulling out of line up lanes (Line Vehicle Parking and others)
- Vehicles not following established traffic patterns in the terminal lot
  Excessive vehicular speed in the terminal lot
  Persons exit vehicles after entering the line-up areas
  Uncontrolled unpredictable chaotic traffic
- CongestionDistractions





# **CROSSWALKS IMPROVEMENTS - ADA**



Statewide effort to improve ADA compliance and overall safety of crosswalks



### THE MAINE STATE FERRY SERVICE IS COMMITTED TO IMPROVING

SAFETY FOR ALL,

### EFFICIENCY & MAXIMIZATION OF SPACE,

AND

### EMPLOYEE & CUSTOMER INTERACTIONS



# IMPROVEMENT GOALS

•Ensure safety is achieved by reducing risks to the lowest possible level.

•Provide an easily understood and maximized line up process.

•Provide positive experiences every day for customers and employees.



# IMPLEMENTED SAFETY IMPROVEMENTS



# BUS AND TAXI PICK-UP/DROP OFF AREA



ODecreases congestion in area of most concern • Eliminates the visibility issues caused by the bus in front of the terminal • Convenient drop off location near the pedestrian crosswalk to the terminal



# PASSENGER DROP OFF AREA



A convenient safe location to drop off passengers without exposure to traffic, effectively reducing pedestrian traffic in the terminal lot.



OTHER IMPROVEMENTS IMPLEMENTED **Olncreased Employee Awareness of Hazards** Olmproved Employee Visibility/Identification Olmproved Crosswalks (ADA Compliant) OVinalhaven Standby Line changes reducing employee exposure to traffic



# OCustomer Service Training for all Ferry Service Employees

- Electronic Ticketing Contract Awarded
- OTrialed Use of Temporary Signage & Cones to Direct Traffic

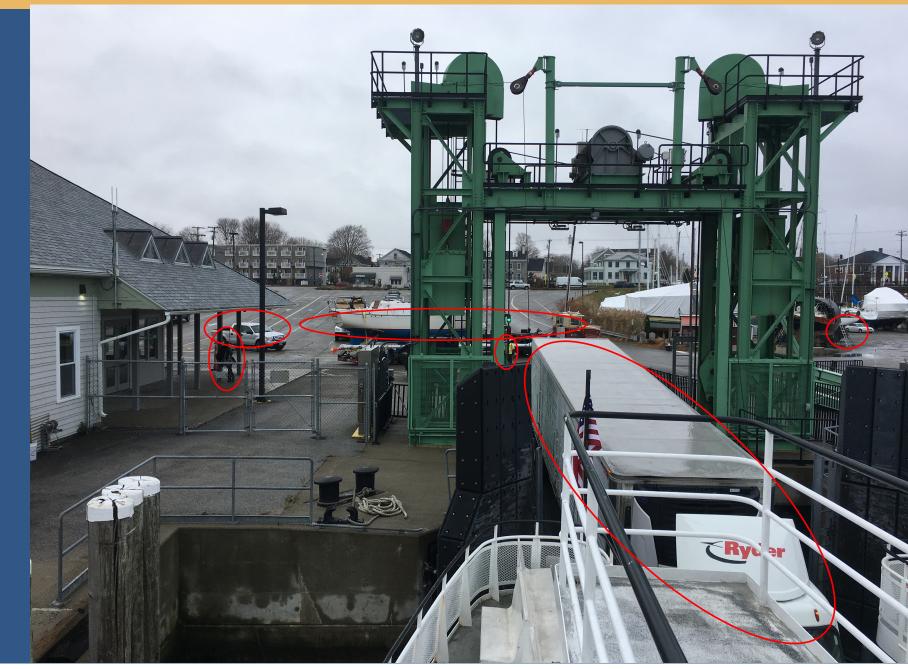
Posted Temporary Signage to Lower Speed
OUsed Temporary Speed Bumps to Slow Traffic



# ROCKLAND FERRY TERMINAL LOT CHALLENGES/OPPORTUNITIES



What potential hazards do you see?





### AREA OF GREATEST CONCERN



• Exposures to

- Line Attendant
- Pedestrian
- Exit lane congestion issues
  - Use of exit lane for loading
  - long-term parking exiting
  - Truck parking
  - Bus/Taxi/Customer exiting
- Traffic going to Knight's Marine and the Snack Shack



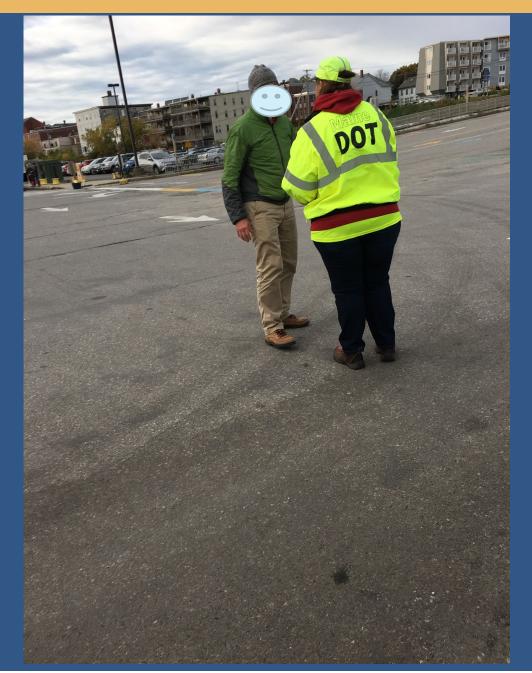
### PEDESTRIAN/LINE ATTENDANT EXPOSURES

### HAZARDS

- •Exposure to vehicular traffic.
  - Walking in vehicle traffic lanes.
  - Walking in exit lane.
- •Exposure and distraction of Line Attendant.

### CONTROLS

- Improve pedestrian walkway signage to give positive guidance.
- •Improved communication for passengers.
- •New line up procedure, providing organized transitions.
- •Eliminate the pedestrian crosswalk leading to the parking space in front of Marine Patrol.







### EXITING LONG-TERM PARKING

#### **HAZARDS**

•Pedestrian exposure to traffic crossing in front of the terminal to the area of most concern.

•Potential vehicle collisions (exit used by Line Attendants to load the boat).

#### <u>CONTROL</u>

•New exit to eliminate long-term parking to enter the area of most concern.



### EXIT LANE FROM LONG-TERM PARKING









### VEHICLES BOARDING THE FERRIES

#### **HAZARDS**

- •Traffic travels to and from the boat in the terminal lot exit lane. (Liability!)
- •Exposure of pedestrians, line attendants, and other vehicle traffic

#### CONTROLS

- •New chute style line-up
- •New exit lane to eliminate long-term parking to enter the area of most concern.



### VEHICLES & PEDESTRIANS CUTTING THROUGH PARKING LOT.

#### HAZARDS

- •Pedestrian exposure to vehicle traffic
- •Vehicle traveling in wrong direction
- •Pedestrians walking in vehicle traffic lanes <u>CONTROLS</u>
- •Change Line up to chute style line up
- •Improved
- communication to customers
- parking lot vehicle signage
- pedestrian signage





## UNAUTHORIZED PARKING & UNPREDICTABLE TRAVEL THRU TERMINAL LOT

### HAZARDS

- •Increased customer/employee confrontation
- •Vehicles parked in dangerous locations
- •Vehicles not following established traffic patterns
- •Pedestrian exposed to vehicular traffic

### CONTROLS

- •Educate public about the ferry terminal lot rules and layout
- •Provide positive guidance signage
- •Provide crosswalk and walking areas







### ACCESS TO/FROM KNIGHT'S MARINE

#### **HAZARDS**

- •Frequent tractor with boat traffic in loading area with no advance notice (increased at peak ridership)
- •Backing tractor and trailer without spotter causing exposure of potential back-over of line attendants, pedestrians and vehicles

#### 

•Control access to the Marina during loading and unloading of boats







### SNACK SHACK TRAFFIC

#### <u>HAZARDS</u>

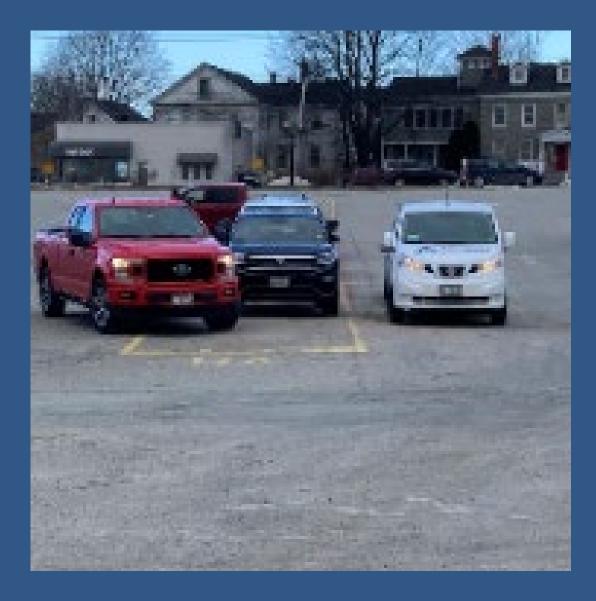
- •Pedestrian exposure to increased vehicular traffic.
- •Added congestion to a congested area.

### 

•Control access to the Snack Shack during loading and unloading of boats.







### LINE VEHICLE PARKING

#### <u>HAZARDS</u>

•Vehicles maneuvering around other vehicles
•Switching of vehicles exposing pedestrians
•Other potential vehicle struck by hazards
•Security Concern Involving Unattended Vehicle
<u>CONTROLS</u>

- •Eliminate line vehicle parking
- •Use of long term parking



### ADA ACCESS



#### HAZARD

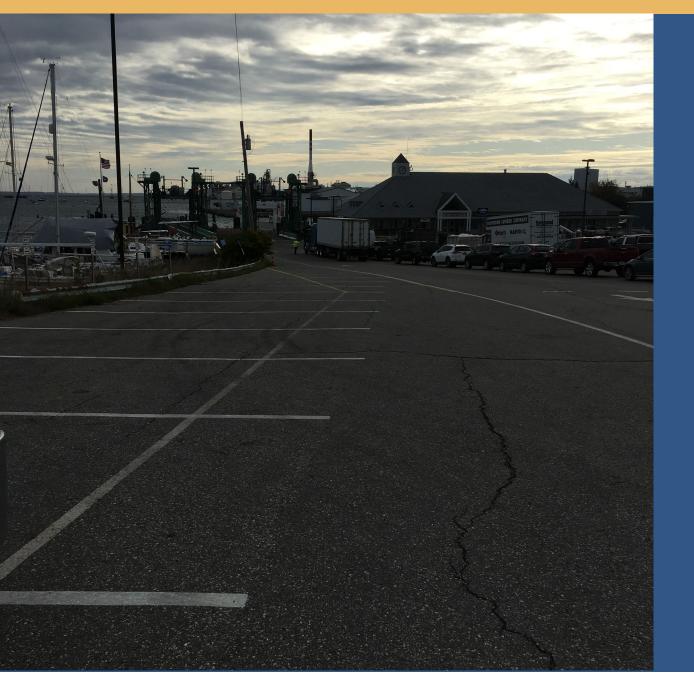
#### •Improper ADA access, and tripping hazards

#### CONTROLS

•Change cross walk location. ( has been completed)

•Improve transition area to sidewalk.





### TRUCK PARKING

#### <u>HAZARDS</u>

- •Improper truck parking, trucks parking in exit lane.
- •Trucks parked in insufficient parking spaces. <u>CONTROL</u>
- •Create a safe and efficient large truck parking area.



### COMMUNICATIONS

#### <u>Hazards</u>

- $\odot \textsc{Unclear}$  guidance for passenger
- $\odot \textsc{Blocked}$  vehicle line up lanes
- $\odot \textsc{Blocked}$  entrance and exit of terminal lot
- $\odot Unpredictable vehicle movements within terminal lot$

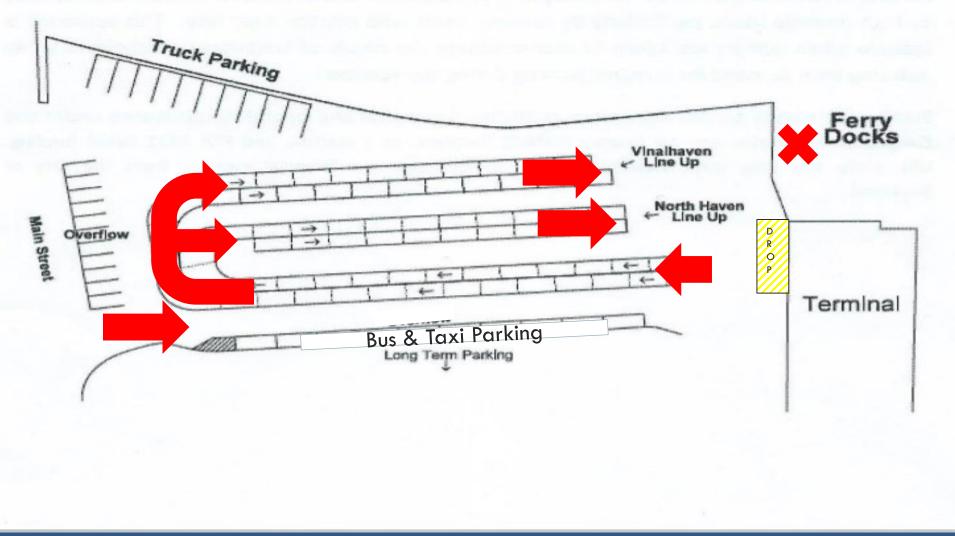
#### <u>Controls</u>

- Olmprove communication
  - •Communicate prior to arrival web based/telephonic
  - Provide positive guidance signage for:
  - $\circ$ Parking
  - $\circ$  Pedestrian
  - ○Drop off
  - ONew chute style line up





# **VEHICLES ENTERING THE TERMINAL LOT**





## SHORT-TERM IMPROVEMENTS

Chute Style Line Up to Board Ferries
 Exit Lane for Exiting the Long-Term Parking Lot
 Improved Customer Communication

 OPrior to arrival – web based/telephonic
 OPositive Guidance Signage in Terminal Lot





#### Chute Style Line-up

- Reduced Vehicle Traffic in the Terminal Lot
- Color coded Island Lanes
- Increased capacity of line-up lanes



# **POTENTIAL CAPACITY IMPROVEMENTS**

### Existing set up:

North Haven Reserve

North Haven

**Overflow Line-up** 

Vinalhaven

Vinalhaven reserve

~200 FT ~1020 FT ~275 FT ~1138 FT ~200 FT

### Proposed change:

O FT	North Haven Reserve	~215 FT
20 FT	North Haven	~1110 FT
′5 FT	Overflow Line-up	~550 FT
88 FT	Vinalhaven	~1226 FT
O FT	Vinalhaven Reserve	~244 FT



### EXAMPLES OF SIMILAR SUCCESSFUL PARALLEL FERRY TERMINAL LINE-UPS

- Manitowoc, WI
- Seattle, WA
- Cape May-Lewes, DE
- Falmouth, MA
- Nantucket, MA
- Vineyard Haven, MA
- Hatteras, NC
- Orient, NY
- Milwaukee, WI





# NEW SOUTH END EXIT



### South End Exit

- Reduces traffic by potentially eliminating 300 cars from entering the area of most concern
- Reduces congestion
- Reduces frustration



## LONG TERM IMPROVEMENTS

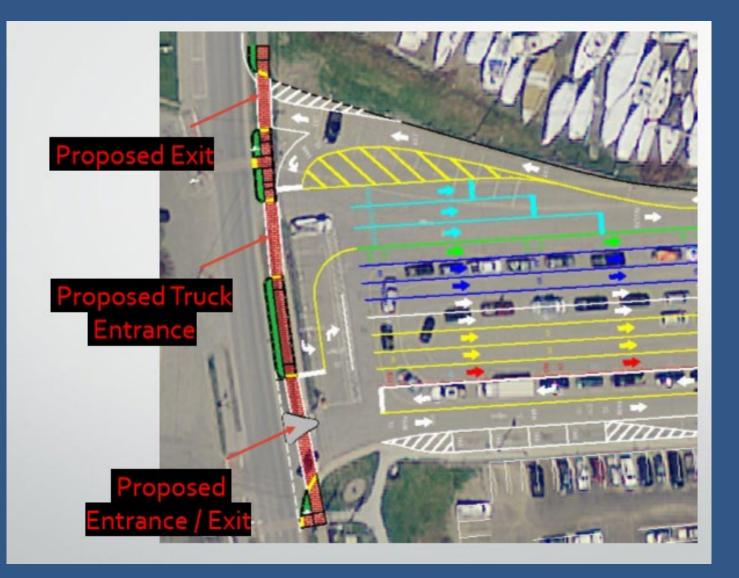
Truck Parking/Line up
Entrance Access Changes
Additional Pedestrian Safety Improvements





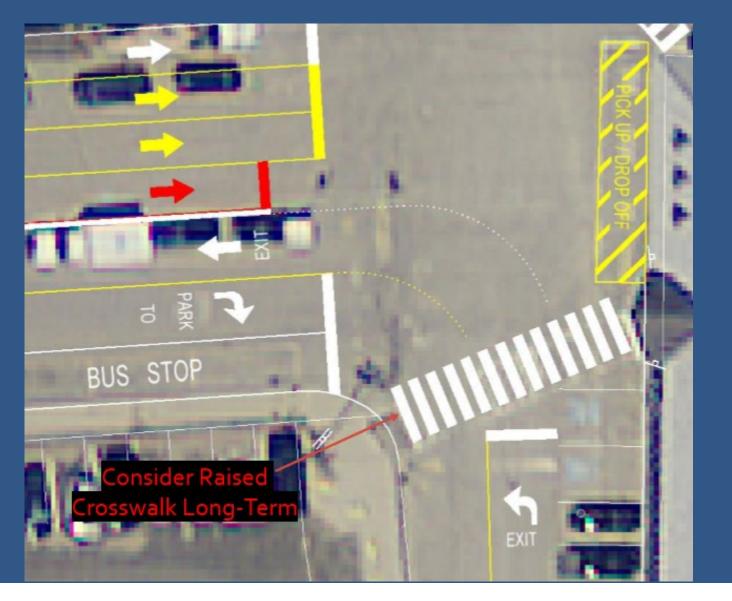


## LONG TERM IMPROVEMENTS





# LONG TERM IMPROVEMENTS





### WHAT OTHER HAZARDS ARE IN THE TERMINAL LOT?

What concerns do you identify?What would work well?



# **DISCUSSION / QUESTIONS**

