

P8 Ferry Stakeholder Group Meeting #3

NCDOT SPOT Office, NCDOT Ferry Division, NCSU ITRE April 11, 2025

Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina

Welcome

- *Meeting will be recorded*
- Virtual meeting housekeeping reminders:
 - When you are not speaking, please mute yourself this limits disruption from background noise
 - Questions and discussion are welcome:
 - Feel free to use the "Raise Hand" feature if you have a question
 - You can also type "Q" in the chat
- Parking lot
- Team and attendee introductions

Ferry Division Scoring Changes for P8: Stakeholder Meeting, April 11, 2025

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ITRE Public Transportation Group
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Agenda

- Feedback from Vessel presentation to the Workgroup and Stakeholder Group
- Review Vessel Metrics and decide on Capacity/Congestion
- Review Facility Metrics
- SITs
- Data consistency
- Scaling categories
- Weights



Feedback

- Key takeaways from Workgroup and Stakeholder Meetings
 - Workgroup 1: for Expand, consider a Benefits metric that uses New Trips and Cost and do not double-count Capacity/Congestion
 - Stakeholder Group: for Replace, consider using engine hours and fuel costs
 - Workgroup 2: consider changing the metric weights to prioritize out of capacity situations



Vessel Metrics

All SIT numbers are existing from P7



Replace Support Vessels

- SIT 1: Replace Tug
- SIT 2: Replace Barge
- SIT 3: Replace Dredge



SIT 1-3: Replace Support Vessel

Name	Existing	Proposed
Accessibility/Connectivity Availability	# of Points of Interest	Vessel Down Days for the year / 365
Age		Age / Useful Life
Asset Condition Rating	Condition Score	Condition Score
Asset Efficiency	3 Year Maintenance Cost / 3 Year Replacement Cost	6 Year Planned and Corrective Maintenance / (New Vessel and Facility Cost to NCDOT / Useful Life)
Asset Efficiency		Engine Hours / Fuel Cost
Benefits	Driving Hours Saved	
Capacity/Congestion	% of Vehicles Left Behind	



Replace Vessels

- SIT 4: Replace River Class
- SIT 5: Replace Sound Class
- SIT 6: Replace Passenger Ferry
- SIT 7: Replace Hatteras Class



SIT 4-7: Replace Vehicle Vessels

Name	Existing	Proposed
Accessibility/Connectivity Availability	# of Points of Interest	Missed Sailings / Scheduled Sailings
Age		Age / Useful Life
Asset Condition Rating	Condition Score	Condition Score
Asset Efficiency	3 Year Maintenance Cost / 3 Year Replacement Cost	6 Year Planned and Corrective Maintenance / (New Vessel and Facility Cost to NCDOT / Useful Life)
Asset Efficiency		Engine Hours / Fuel Cost
Benefits	Driving Hours Saved	
Capacity/Congestion	% of Vehicles Left Behind	



Expand Vehicle Vessels

- SIT 8: Expand River Class
- SIT 9: Expand Sound Class
- SIT X: Expand Hatteras Class



SIT 8-9x: Expand Vehicle Vessels

Name	Existing	Proposed
Accessibility Availability	# of Points of Interest	New Vehicle Trips [10 Years] / Existing Capacity
Asset Condition Rating	Condition Score	
Asset Efficiency	3 Year Maintenance Cost / 3 Year Replacement Cost	
Benefits		New Vehicle Trips [10 Years]
Capacity/Congestion	Driving Hours Saved	Left Behind Vehicles * Wait Time to Next Sailing
Capacity/Congestion	% of Vehicles Left Behind	Vehicle Demand at 85 th Percentile / Vessel Capacity
Cost Effectiveness		(Cost to NCDOT / Useful Life) / New Vehicle Trips (10 Years)



Expand Passenger Vessels

• SIT 10: Expand Passenger Vessels



SIT 10: Expand Passenger Vessels

Name	Existing	Proposed
Accessibility Availability	# of Points of Interest	New Passenger Trips [10 Years] / Existing Capacity
Asset Condition Rating	Condition Score	
Asset Efficiency	3 Year Maintenance Cost / 3 Year Replacement Cost	
Benefits		New Passenger Trips [10 Years]
Capacity/Congestion	Driving Hours Saved	Left Behind Passengers * Wait Time to Next Sailing
Capacity/Congestion	% of Passengers Left Behind	Passenger Demand at 85 th Percentile / Vessel Capacity
Cost Effectiveness		Cost to NCDOT / Useful Life / New Passenger Trips [10 Years]



Facility Metrics

All SIT numbers are existing from P7



Replace Facility

- SIT 13: Other Terminal or Shipyard Infrastructure
- SIT 14: Terminal Replacement



SIT 13 & 14: Replace Facility

Name	Existing	Proposed
Accessibility/Connectivity Availability	# of Points of Interest	(1 / (Used Capacity / Total Capacity)) - 1
Age		Age / Useful Life
Asset Condition Rating	Condition Score	Condition Score
Asset Efficiency	3 Year Maintenance Cost / 3 Year Replacement Cost	6 Year Planned and Corrective Maintenance Cost / (New Vessel and Facility Cost to NCDOT / Useful Life)
Benefits	Driving Hours Saved	
Capacity / Congestion	% of Vehicles Left Behind	



Expand Facility

- SIT 11: New Ramp & Gantry
- SIT 12: Port Expansion
- SIT 15: New Terminal & Vessel
- SIT 16: New Terminal



SIT 11, 12, 15 & 16: Expand Facility

Name	Existing	Proposed
Accessibility Availability	# of Points of Interest	New Trips [10 Years] / Existing Capacity
Asset Condition Rating	Condition Score	
Asset Efficiency	3 Year Maintenance Cost / 3 Year Replacement Cost	
Benefits		New Trips [10 Years]
Capacity/Congestion	Driving Hours Saved	Key Unit of Demand at 85 th Percentile / Key Unit of Supply
Cost Effectiveness	% of Passengers Left Behind	(Cost to NCDOT / Useful Life) / New Trips [10 Years]



Proposed P8 SIT Structure

- Replace
 - Support
 - Vehicle
 - Passenger
 - Facilities
- Expand
 - Support
 - Vehicle
 - Passenger
 - Facilities



Proposed P8 SIT Numbers

- 1. Replace Support Vessel
- 2. Replace Vehicle Vessel
- 3. Replace Passenger Vessel
- 4. Replace Facility
- 5. Expand Support Vessel
- 6. Expand Vehicle Vessel
- 7. Expand Passenger Vessel
- 8. Expand Facility



Combining the Concepts

- Check data types, ranges and directions
- Replace and Expand categories
 - Combine vessels and facilities together
 - Scale across metrics for each category (like Public Transportation)
- Propose weights



Replace Vessels and Facilities

Name	Explains	Data Type	Direction	Regional Impact	Division Needs
Availability	Percent full	Percentage	Higher= more need	20% +	15% +
Age	Obsolescence	Ratio	Higher= more need	15% +	10% +
Asset Condition Rating	Condition	Continuous (0-5)	Higher= more need	20% +	15% +
Asset Efficiency	Maintenance \$ compared to Replacement	Ratio	Higher= more need	15%	10%
				70%	50%



Expand Vessels and Facilities

Name	Explains	Data Type	Direction	Regional Impact	Division Needs
Availability	Percent full 10 years out	Percentage	Higher= more need	20% +	15% +
Benefits	Trips	Continuous	Lower= more need	15% +	10% +
Capacity/ Congestion	Percent full today	Percentage	Higher= more need	20% +	15%
Cost Effectiveness	Annualized cost to NCDOT per trip	Continuous	Higher= more need	1 5%	10%
				70%	50%



Next Steps

- Discuss comments with the NCDOT team tomorrow
 - Explore specific use cases
- Present to the Ferry Stakeholder Group April 11
- Complete dataset for modeling
- Calculate and evaluate scores
- Present final package of proposed SITs, metrics, and weights to the Workgroup at the April 22nd meeting



Recap & Next Steps



















Next Steps

- Questions or clarifications?
- Today's slides will be distributed to the Ferry Stakeholder Group (recording available if needed)
- Feedback from Ferry Stakeholder Group will be shared with the P8 Workgroup
- Ferry Stakeholder Group will be updated once Workgroup recommendation has been reached

Thank you!

Attendance



















Meeting Attendance – virtual

<u>Name</u>	<u>Organization</u>
Sarah Lee	NCDOT SPOT Office
Kai Monast	NCSU ITRE
Cat Peele	NCDOT Ferry
Mary Miller	NCDOT Ferry
Ronnie Sawyer	Division 1
Chris Slachta	Division 1
Brooks Braswell	Division 1
Len White	Division 2
Roham Lahiji	Division 2
Heather Lane	Division 2
Mary Beth Houston	Division 2
Michelle Howes	Division 3
Trevor Carroll	Division 3

<u>Name</u>	<u>Organization</u>
Abby Lorenzo	Wilmington Urban Area MPO
Sam Singleton	Mid-East RPO, Albemarle RPO (interim)
Mickey Anderson	Down East RPO
Sam Boswell	Cape Fear RPO
Gretchen Belk	NCDOT SPOT Office
Richard Brown	NCDOT SPOT Office