



# North Carolina

## Department of Transportation

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### Ferry Division

An extension of North Carolina's Highways

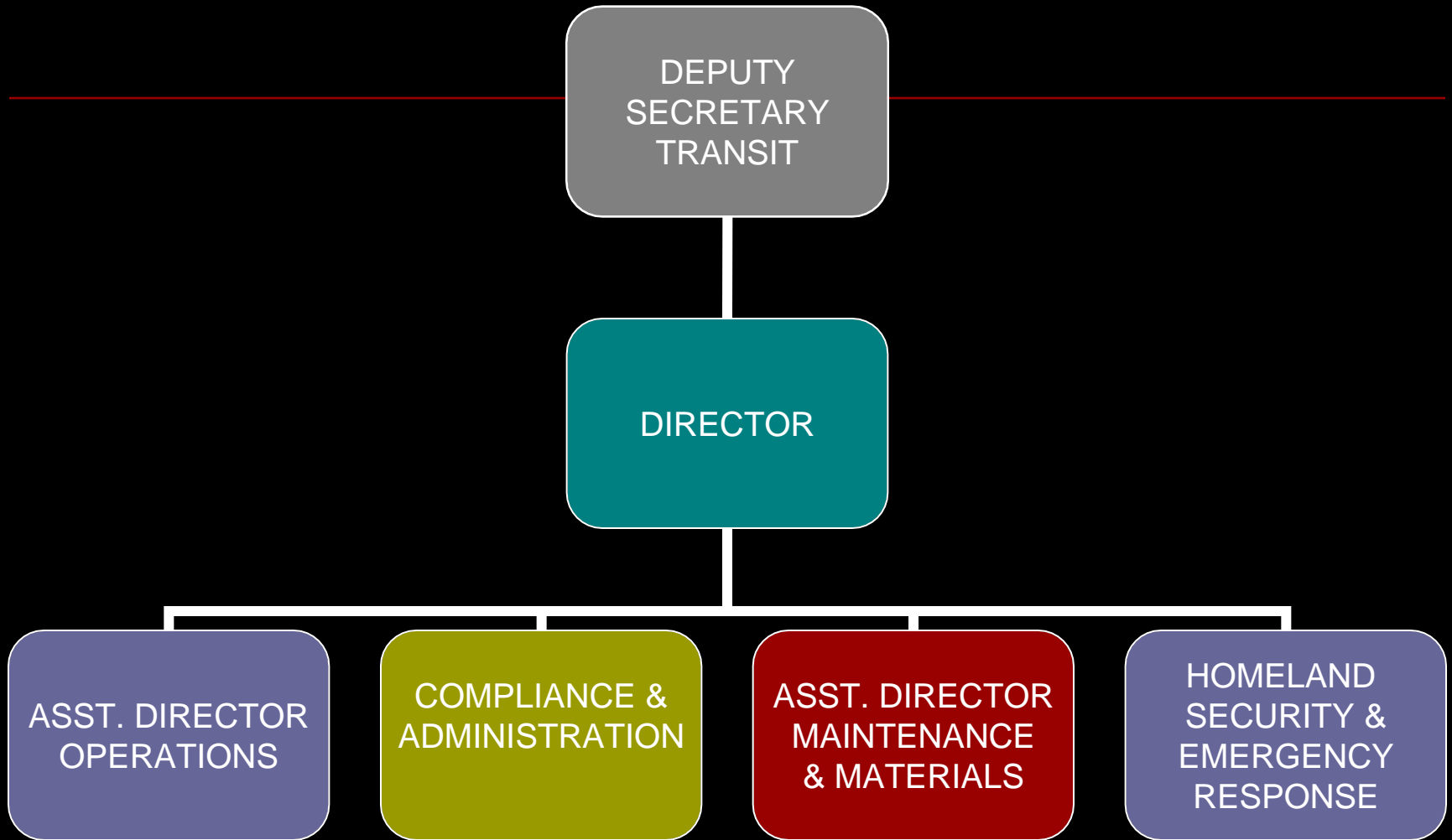
# Ferry Division: Primary Functions

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- Administration & Compliance
- Terminal Operations
- Maintenance & Materials



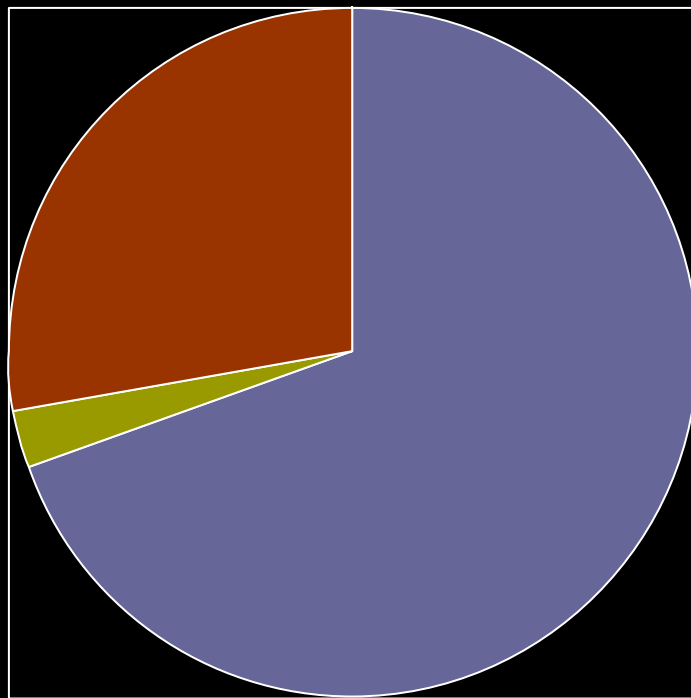
# Organization



# Division Allocated Resources

Total Budget: \$ 34,189,589

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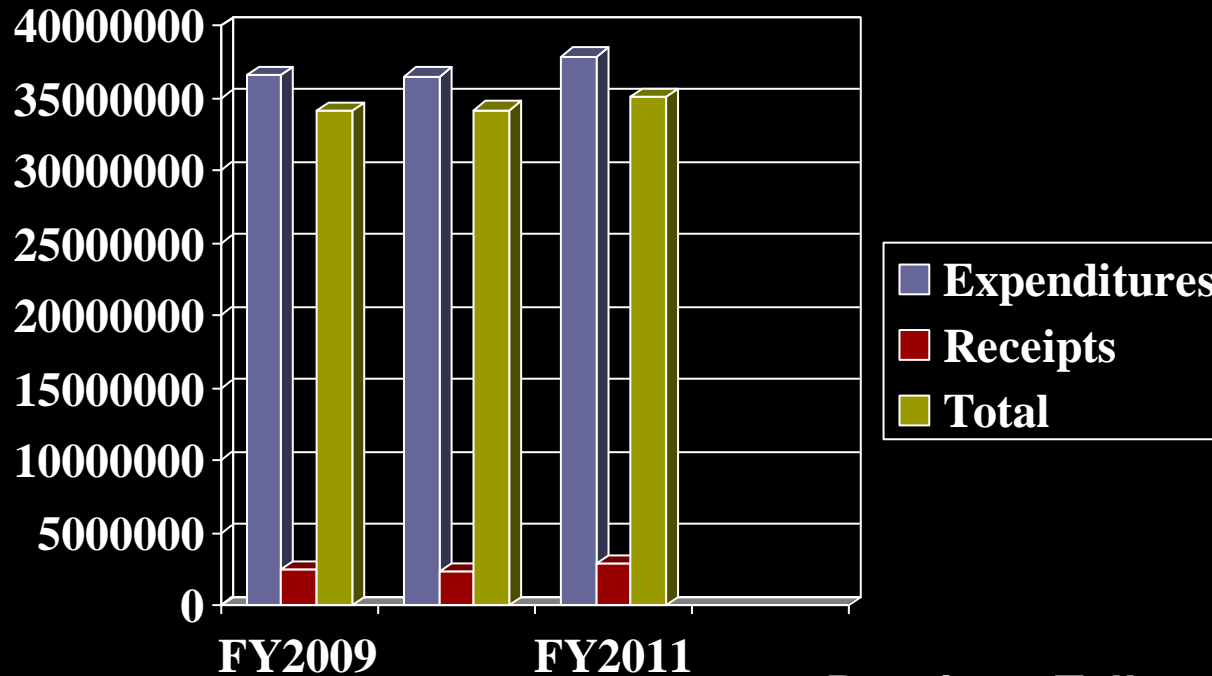


■ **Operations: 23,714,073**

■ **Compliance & Administration: 977,736**

■ **Maintenance: 9,497,780**

# Three Year Comparison



Receipts: Tolls

Memorabilia Sales

Grant Reimbursements

# OPERATIONS

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ASST. DIRECTOR  
OPERATIONS

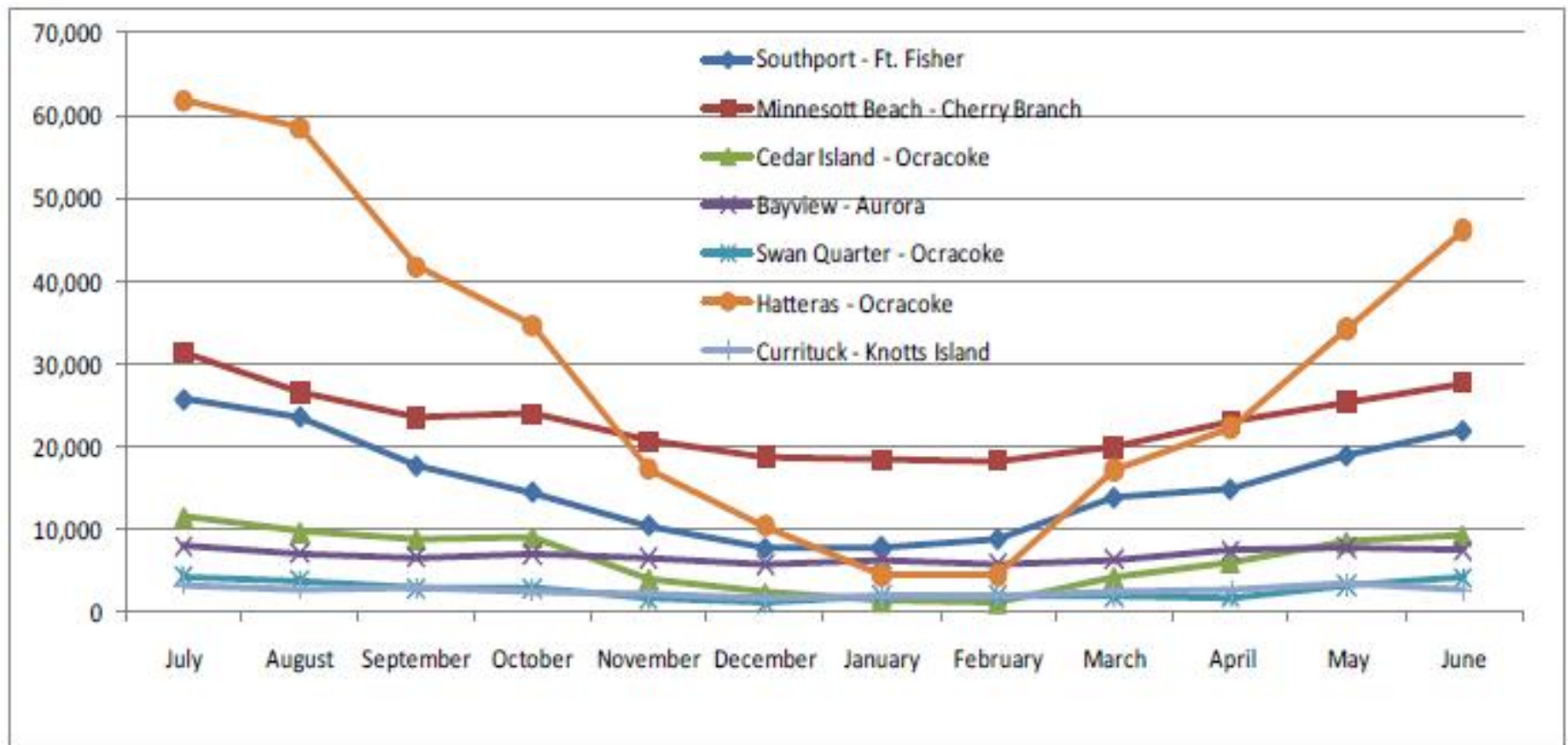
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graph TD; AD[ASST. DIRECTOR OPERATIONS] --- S1[SUPERINTENDENT DISTRICT 1]; AD --- S2[SUPERINTENDENT DISTRICT 2];
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SUPERINTENDENT  
DISTRICT 1

SUPERINTENDENT  
DISTRICT 2



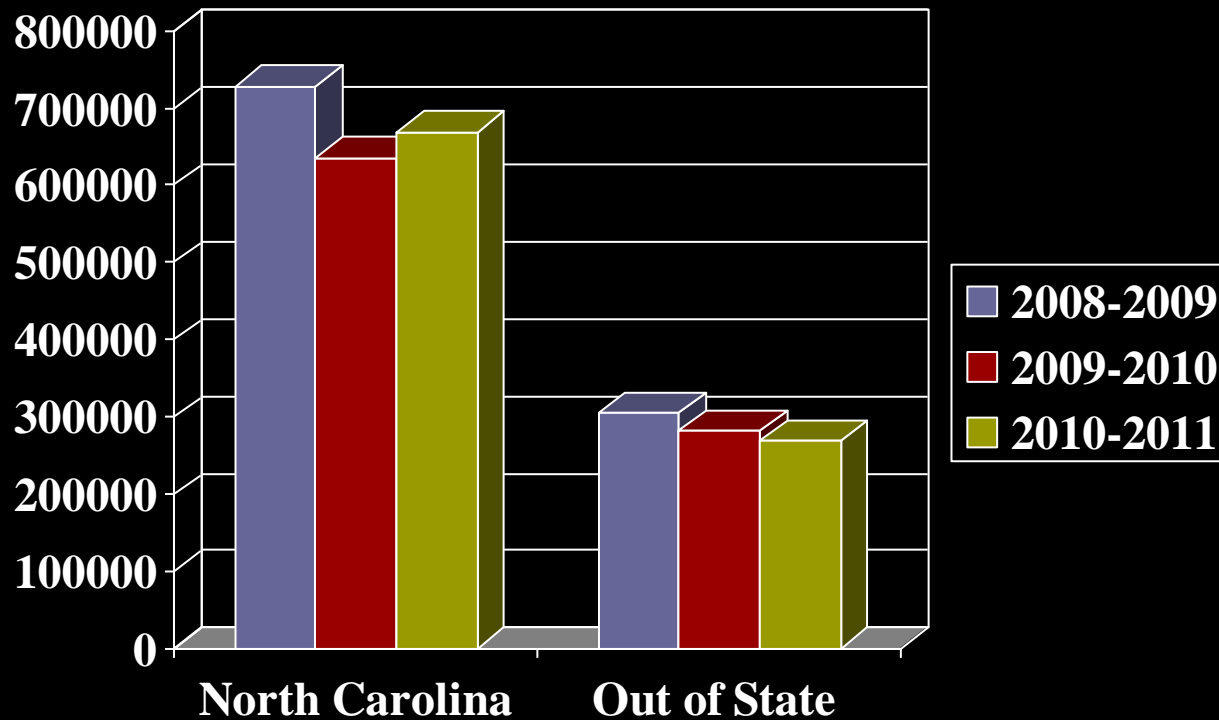
## Monthly Vehicle Count by Route





# Three Year Traffic Comparison

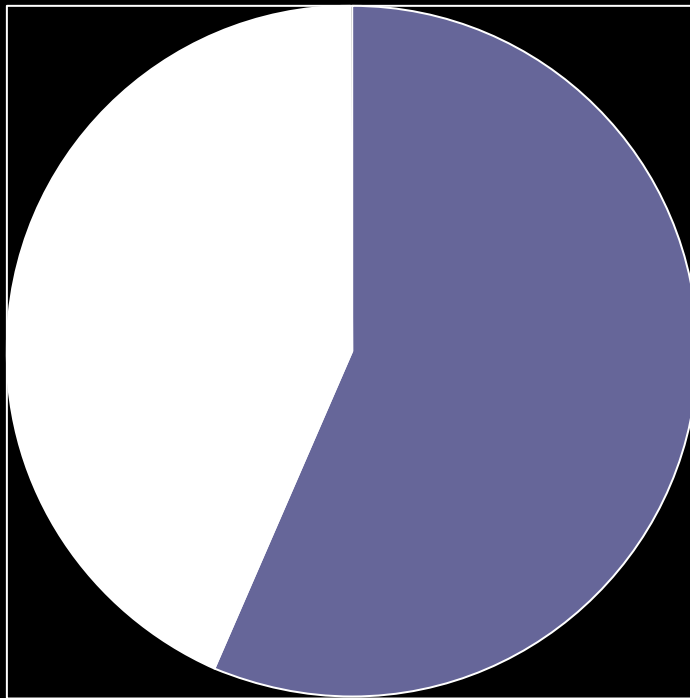
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# Operations Allocated Resources

Total Budget: \$ 23,714,073

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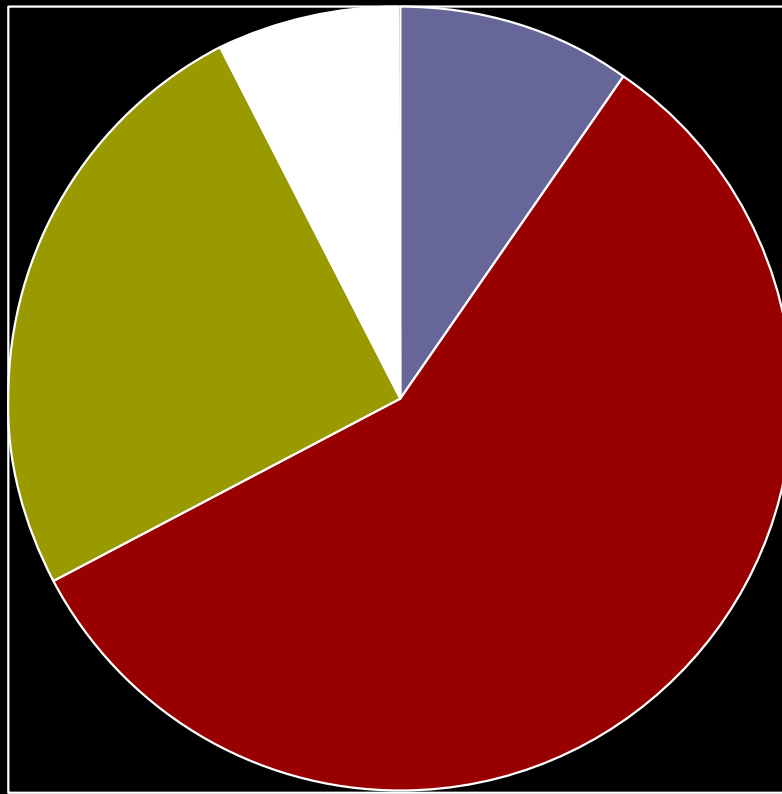
■ District 1: 13,379,159

■ District 2: 10,334,914

# OPERATIONS District 1

Allocated Resources: \$ 13,379,159

FY 2012



■ Currituck: 1,308,229

■ Hatteras Inlet: 7,666,996

■ Ocracoke: 3,399,781

■ Swan Quarter: 1,004,153

# District 1 Organization: Operations

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**District 1 Superintendent**

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graph TD; Superintendent[District 1 Superintendent] --- Currituck[Currituck Operation Manager]; Superintendent --- Hatteras[Hatteras Inlet Operation Managers]; Superintendent --- Ocracoke[Ocracoke Operation Managers]; Superintendent --- SwanQuarter[Swan Quarter Operation Manager];
```

**Currituck Operation Manager**

**Hatteras Inlet Operation Managers**

**Ocracoke Operation Managers**

**Swan Quarter Operation Manager**

# District 1 Operations: Currituck

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- Personnel Complement 15
  - Vessel Crewmembers 12
  - Shore Support 3
- Crosses Currituck Sound
  - Crossing Time 45 Minutes
- Vessel Complement 1
- Scheduling adjustment projected savings
  - \$ 95,730 yearly (Labor and Fuel)



**River Class: Governor James B. Hunt Ferry**

- **Vehicle Capacity:** 20
- **Passenger Capacity:** 149
- **Weight & Dimensions:** 462 Gross Tons, 125' Length, 40' Breadth, 5' Draft
- **University Affiliation:** UNC Greensboro

# District 1 Operations: Hatteras

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- Personnel Complement 99
  - Vessel Crewmembers 87
  - Shore Support 12
- Crosses Hatteras Inlet
  - Crossing Time 40 Minutes
- Vessel Complement 10
- Scheduling adjustment projected savings
  - \$ 68,000 yearly (Labor and Fuel)

Other Hatteras Class  
Ferries at Hatteras Inlet  
include:

- MV Frisco
- MV Cape Point
- MV Thomas Baum
- MV Roanoke
- MV Ocracoke
- MV Chicamacomico



**Hatteras Class: Kinnakeet Ferry**

- **Vehicle Capacity:** 30
- **Passenger Capacity:** 149
- **Weight & Dimensions:** 280 Gross Tons, 150' Length, 42' Breadth, 4' Draft
- **University Affiliation:** Elizabeth City State University





Other River Class Ferries  
at Hatteras Inlet include:

- MV Croatoan
- MV Stan White

**River Class: Hatteras Ferry**

- **Vehicle Capacity:** 40
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 407 Gross Tons, 180' Length, 44' Breadth, 6' Draft
- **University Affiliation:** Shaw University

# District 1 Operations: Ocracoke

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- Personnel Complement 27
  - Vessel Crewmembers 21
  - Shore Support 6
- Crosses Pamlico Sound
  - Crossing Time 2 Hours and 15 Minutes to Cedar Island
  - Crossing Time 2 Hours and 30 Minutes to Swan Quarter
- Vessel Complement 2
- Scheduling adjustment projected savings
  - \$ 146,235 yearly (Labor and Fuel)



**Sound Class: Pamlico Ferry**

- **Vehicle Capacity:** 50
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 774 Gross Tons, 220' Length, 50' Breadth, 6' Draft
- **University Affiliation:** NC School of the Arts

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Other Sound Class Ferry  
based at Ocracoke:

- MV Silver Lake
  - Sister Ship to Pamlico
- Both vessels built in 1965

# District 1 Operations: Swan Quarter

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- Personnel Complement 14
  - Vessel Crewmembers 8
  - Shore Support 6
- Crosses Pamlico Sound
  - Crossing Time 2 Hours and 30 Minutes
- Vessel Complement 1
- Scheduling adjustment projected savings
  - \$ 43,192 yearly (Labor and Fuel)



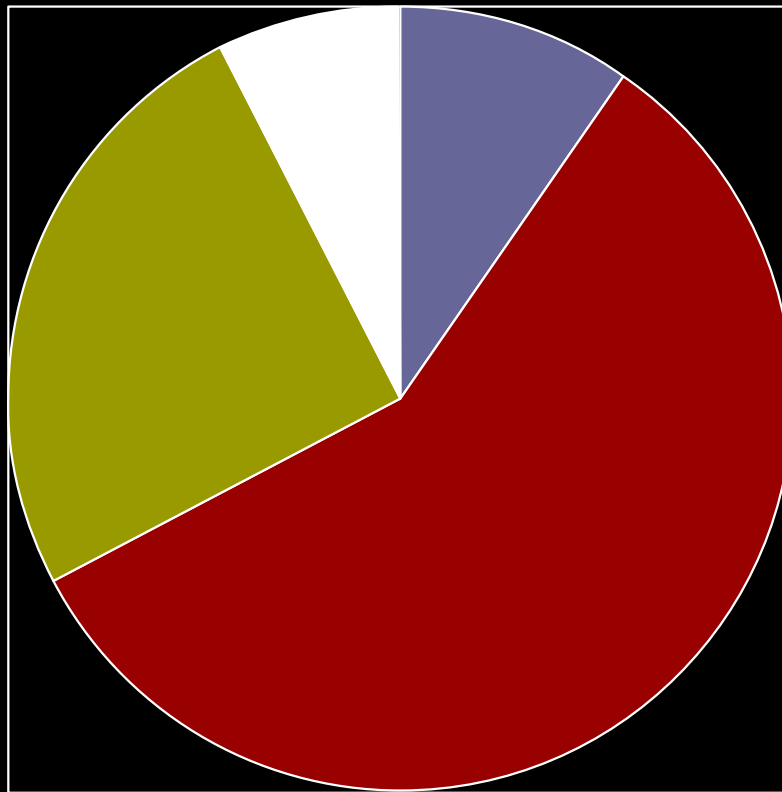
**Sound Class:** *Swan Quarter Ferry*

- **Vehicle Capacity:** 45-50
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 774 Gross Tons, 220' Length, 50' Breadth, 6' Draft
- **University Affiliation:** *Elon University*

# OPERATIONS District 2

Allocated Resources: \$ 10,334,914

FY 2012



■ Cedar Island: 2,645,681

■ Cherry Branch: 2,982,296

■ Pamlico River: 2,062,827

■ Southport: 2,644,110

# District 2 Organization: Operations

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**District 2 Superintendent**

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graph TD; A[District 2 Superintendent] --- B[Cedar Island Operation Manager]; A --- C[Pamlico River Operation Managers]; A --- D[Cherry Branch Operation Manager]; A --- E[Southport Operation Manager];
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**Cedar Island Operation Manager**

**Pamlico River Operation Managers**

**Cherry Branch Operation Manager**

**Southport Operation Manager**

# District 2 Operations: Cedar Island

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- Personnel Complement 43
  - Vessel Crewmembers 36
  - Shore Support 7
- Crosses Pamlico Sound
  - Crossing Time 2 Hours and 15 Minutes
- Vessel Complement 2
- Scheduling adjustment projected savings
  - \$ 113,799 (Labor and Fuel)





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Other Sound Class Ferry  
based at Cedar Island:

- MV Carteret

**Sound Class: Cedar Island Ferry**

- **Vehicle Capacity:** 50
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 648 Gross Tons, 220' Length, 50' Breadth, 6'6" Draft
- **University Affiliation:** East Carolina University

# District 2 Operations: Pamlico River

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- Personnel Complement 31
  - Vessel Crewmembers 24
  - Shore Support 7
- Crosses Pamlico River
  - Crossing Time 30 Minutes
- Vessel Complement 1
- Scheduling adjustment projected savings
  - \$ 69,946 (Labor and Fuel)



**River Class: Governor Daniel Russell Ferry**

- **Vehicle Capacity:** 42
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 418 Gross Tons, 180' Length, 44' Breadth, 6' Draft
- **University Affiliation:** Gardner Webb

# District 2 Operations: Cherry Branch

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- Personnel Complement 53
  - Vessel Crewmembers 49
  - Shore Support 4
- Crosses Neuse River
  - Crossing Time 20 Minutes
- Vessel Complement 2
- Scheduling adjustment projected savings
  - \$ 87,933 (Labor and Fuel)



Other River Class Ferry  
based at Cherry Branch:

- MV Floyd Lupton

**River Class: Neuse Ferry**

- **Vehicle Capacity:** 40
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 374 Gross Tons, 180' Length, 44' Breadth, 6' Draft
- **University Affiliation:** Wake Forest University

# District 2 Operations: Southport

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- Personnel Complement 40
  - Vessel Crewmembers 25
  - Shore Support 15
- Crosses Cape Fear River
  - Crossing Time 35 Minutes
- Vessel Complement 2
- Scheduling adjustment projected savings
  - \$ 77,961 (Labor and Fuel)



Other River Class Ferry  
based at Southport:

- MV Southport

**River Class: Fort Fisher Ferry**

- **Vehicle Capacity:** 40
- **Passenger Capacity:** 300
- **Weight & Dimensions:** 374 Gross Tons, 180' Length, 44' Breadth, 6' Draft
- **University Affiliation:** UNC Wilmington

# Operations

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- Recently implemented cost saving measures
  - RPM Reductions: Fuel Savings
  - Increased Hull Cleaning
  - USCG Waiver for 12.5 work hours (Hatteras)
  - Shortened summer schedule
- Projected Savings:
  - Yearly 3,640,836
  - FY12 3,210,691



# Fleet Statistics: Hatteras Class

## 7 Vessels

Vessel Name	Year Built	Age
MV Kinnakeet	1989	22
MV Frisco	1990	21
MV Chicamacomico	1990	21
MV Cape Point	1990	21
MV Ocracoke	1990	21
MV Roanoke	1993	18
MV Thomas Baum	1995	16
Average age of Hatteras Class Vessels		<u>20</u>

# Fleet Statistics: River Class 9 Vessels

**Vessel Name** | **Year Built** | **Age**

<b>MV Daniel Russell</b>	<b>1993</b>	<b>18</b>
<b>MV Southport</b>	<b>1996</b>	<b>15</b>
<b>MV Neuse</b>	<b>1998</b>	<b>13</b>
<b>MV Stanford White</b>	<b>2003</b>	<b>8</b>
<b>MV Croatoan</b>	<b>2003</b>	<b>8</b>
<b>MV Floyd Lupton</b>	<b>2000</b>	<b>11</b>
<b>MV Fort Fisher</b>	<b>2000</b>	<b>11</b>
<b>MV Hatteras</b>	<b>2006</b>	<b>5</b>
<b>MV James B. Hunt Jr</b>	<b>1984</b>	<b>27</b>
<b>Average age of River Class Vessels</b>		<b><u>13</u></b>

# Fleet Statistics: Sound Class 5 Vessels

Vessel Name	Year Built	Age
MV Silver Lake	1965	46
MV Pamlico	1965	46
MV Cedar Island	1994	17
MV Carteret	1989	22
MV Swan Quarter	2011	0
Average age of Sound Class Vessels		<u>26</u>

# Vessel Condition

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- Average age of ferry fleet: 18 years
- New Sound Class MV Sea Level is under construction
  - Anticipated delivery date: May 2012
- Dredge project bid package
  - 80% complete
  - Updated electronics: major improvement
  - Replacing 46 years old Dredge Carolina

# U. S. Coast Guard Manning Requirements



**VESSEL CLASS**  
SOUND

**ROUTES OPERATED**

Cedar Island-Ocracoke  
Ocracoke-Swan Quarter

**CREW COMPLEMENT**

1 Master  
1 Chief Engineer/DDE  
1 Oiler  
2 Able Seaman (AB) \*  
2 Ordinary Seaman (OS) \*\*  
\*One AB designated as Senior  
AB

\*\*When carrying less than  
150 passengers, one OS may  
be removed



**VESSEL CLASS**  
HATTERAS

**ROUTES OPERATED**

Hatteras Inlet

**CREW COMPLEMENT**

1 Master  
1 Chief Engineer/DDE  
1 Designated Oiler  
2 Able Seaman (AB) \*  
1 Ordinary Seaman (OS)  
\*One AB designated as Senior  
AB

***Note: USCG increased  
manning requirements  
3/9/09***



**VESSEL CLASS**  
RIVER

**ROUTES OPERATED**

Southport-Fort Fisher  
Cherry Branch-Minnesott  
Hatteras Inlet

**CREW COMPLEMENT**

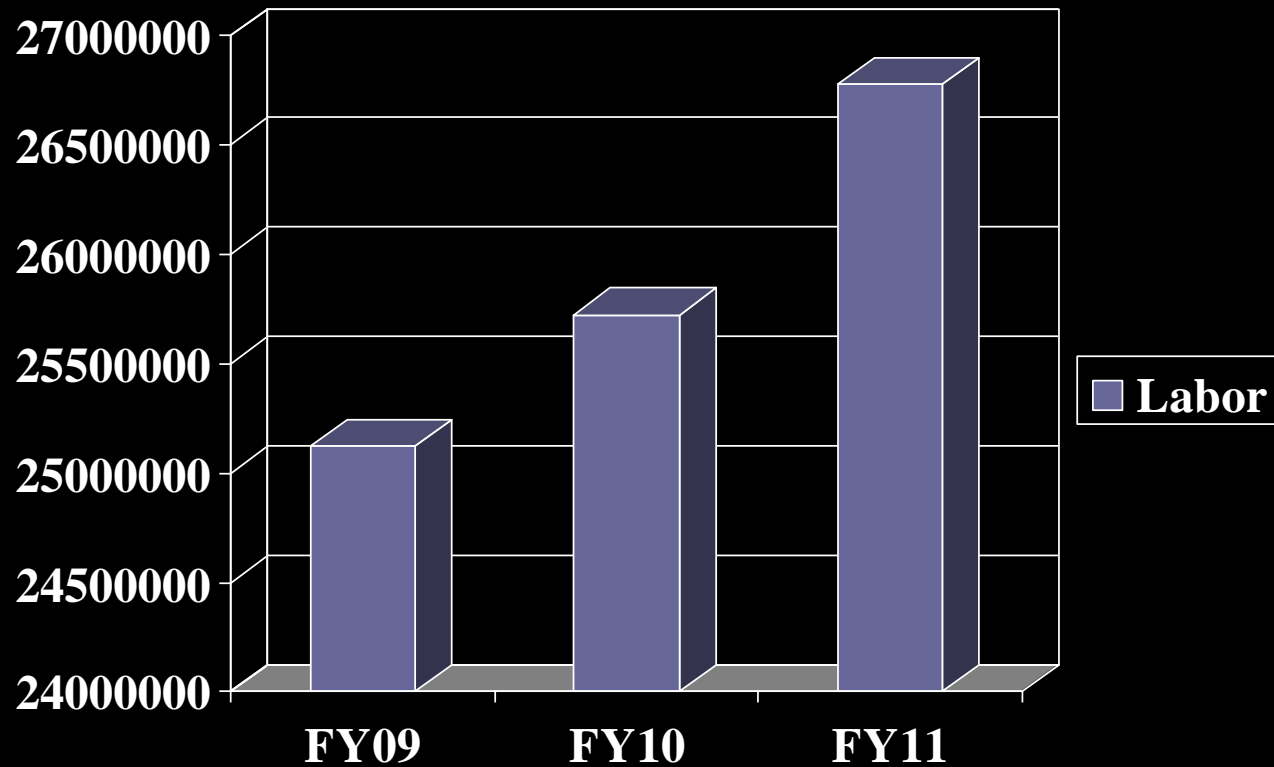
1 Master  
1 Chief Engineer/DDE  
1 Oiler  
2 Able Seaman (AB) \*  
2 Ordinary Seaman (OS) \*\*  
\*One AB designated as Senior  
AB

\*\*When carrying less than  
150 passengers, one OS may  
be removed

# Manning Requirements

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- USCG increased manning requirements 03/09/09



# Fiscal Comparison

Fiscal Years 2010 and 2011 through December

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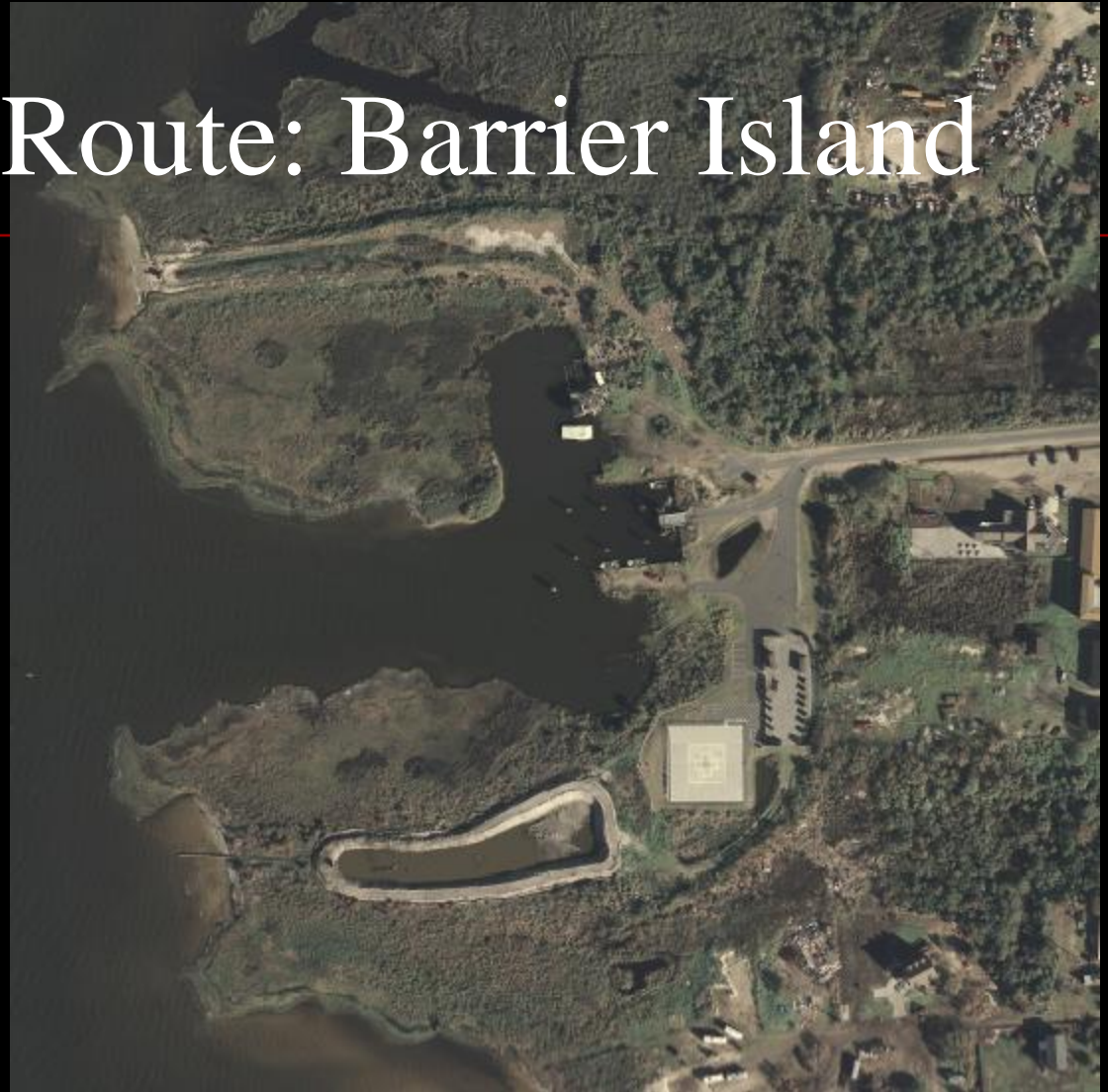
Spending through December	Amount
FY2010	17,454,098.40
FY2011	16,560,820.52
Anticipated Reimbursement*	2,425,132.38
Savings FY2011 over FY 2010	(893,277.88)

\*Anticipated Reimbursement will be based on the FEMA and Federal Highway Assistance in regards to IRENE costs. The review to determine actual costs to be reimbursed will be conducted January 18 – January 21

# Emergency Route: Barrier Island

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- Rodanthe





# Emergency Route: Mainland

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- Stumpy Point



# IRENE: Response Timeline

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- 8/23/11-8/26/11 Preparations Stage
- 8/28/11-9/14/11 Post Operations Stage
- 9/15/11-10/10/11 Emergency Operations Stage
- 10/11/11-10/13/11 Demobilization Stage
- 10/15/11-12/31/11 Repair Period
  - All Stages Combined: \$ 2,474,21801
    - FEMA Addresses: Costs, including indirect, at 75% for expenses beyond emergency route
    - FHWY (Federal Highways): 100% within 180 days of emergency for directly related costs at detour route

# Impact of Hurricane Irene Dredging

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- Shoaling at three locations
  - Hatteras – Ocracoke Inlet
  - Southport tie-up slips
  - Rodanthe channel
    - The shoaling in the Rodanthe channel is severe and would likely impede usage were another emergency to take place prior to dredging

# COMPLIANCE & ADMINISTRATION

**DIRECTOR**

**HUMAN RESOURCES**  
[Payroll, Personnel, Policy]

**BUSINESS**  
[Accounting, Processing]

**TRANSPORTATION & MARITIME**  
[Safety, Security, Environmental, Quality Assurance]

**TECHNOLOGY**

# Compliance to Federal Requirements

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- **Applicability: All Departments**
  - USCG monitors & enforces Code of Federal Regulations
    - Routine Vessel and Facility Inspections
      - Meet every 4 months with USCG Inspectors
  - US Army Corps of Engineers
    - Dredging requirements at federal channels
      - Big Foot Slough
      - Hatteras Channel

# MAINTENANCE & MATERIALS

**ASST. DIRECTOR**  
**Maintenance & Materials**

**SHIPYARD**  
[Repair, Engineer, Scheduling, Materials]

**MARINE FIELD MAINTENANCE**

**FACILITY MAINTENANCE**

**DREDGING OPERATIONS**

# Credit Drydock

- Typical Project
  - 70-80 Days (8000 hours)
    - Transport | Lift | Repairs | Launch | Test | Inspection
  - Delays
    - Inspection and test considerations
    - Inclement weather
      - Paint Building Reduced this Issue

# Federally Mandated Requirements Vessels

- Vessel Dry dock periods
  - Twice per five years
    - No period to exceed three years
- Any upgrade or change requires USCG approval
- Quarterly, Semi-annual and Annual Inspections
  - Inspections prior to shipyard departure
  - Surprise
- Dredge operations tugs need to be USCG inspected to meet US Army Corps of Engineers requirements to dredge



# Dredging Operations

- Federal Jurisdiction
  - Hatteras Inlet: Hatteras Ferry Terminal to Inlet
  - Ocracoke – ‘Big Foot Slough’
  - Cherry Branch – Minnesott
  - Emergency route –Marker #10 to adjoining ferry channel and channel at Rodanthe

# Dredging Operations

## ■ State Jurisdiction

- Currituck – Knotts Island channels
- Swan Quarter channel
- Hatteras Inlet: Hatteras Inlet to South Dock Terminal
- Cedar Island Channel
- Pamlico River – Bayview and Aurora
- Cherry Branch – Minnesott
- Southport – Fort Fisher
- Emergency route – Stumpy Point channel to Marker #10

# Dredging Operations

- Typical Project
  - Four Months
    - Mobilization | Setting up | Dredging | Demobilization
  - Both Harbors
    - Channels | Tie-up slips | Turning Basin
  - Delays
    - Spoil site needs reworking (2-3 months)
    - Inclement weather

# Dredging Equipment

- Crane barge Skyco
- Dredge Carolina
- Tugs
  - Albemarle
  - Scott-Tender
  - Buxton Jr-Tender
- Fuel Barge