



January 4, 2016



*House Select Committee on Strategic
Transportation Planning and Long Term Funding
Solutions, Secondary System Subcommittee*

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Agenda

- Secondary Road System Overview
 - Unpaved Roads Overview
 - State Roads Overview
- Bridges on Secondary Road System Overview
- Ferry System Overview
- Powell Bill Overview
- Bike & Pathways Overview



Secondary Road System Overview

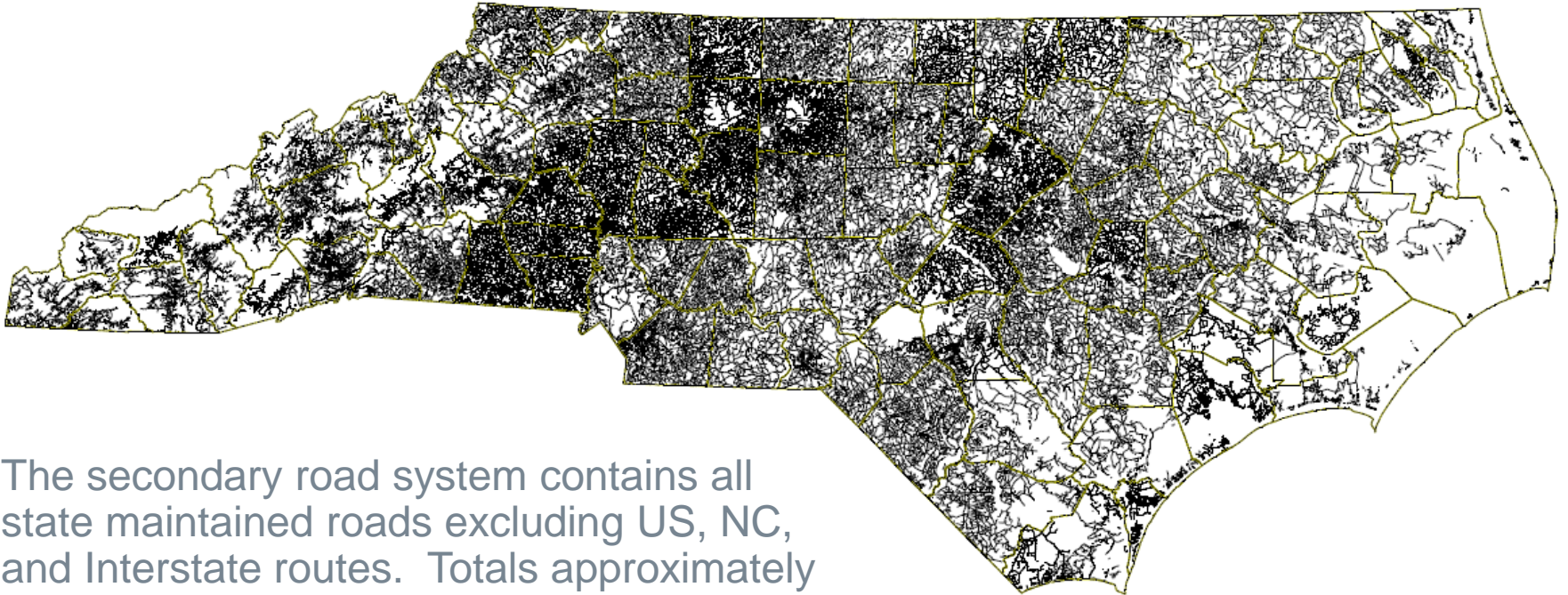
Mike Holder



Secondary Road System and Programs

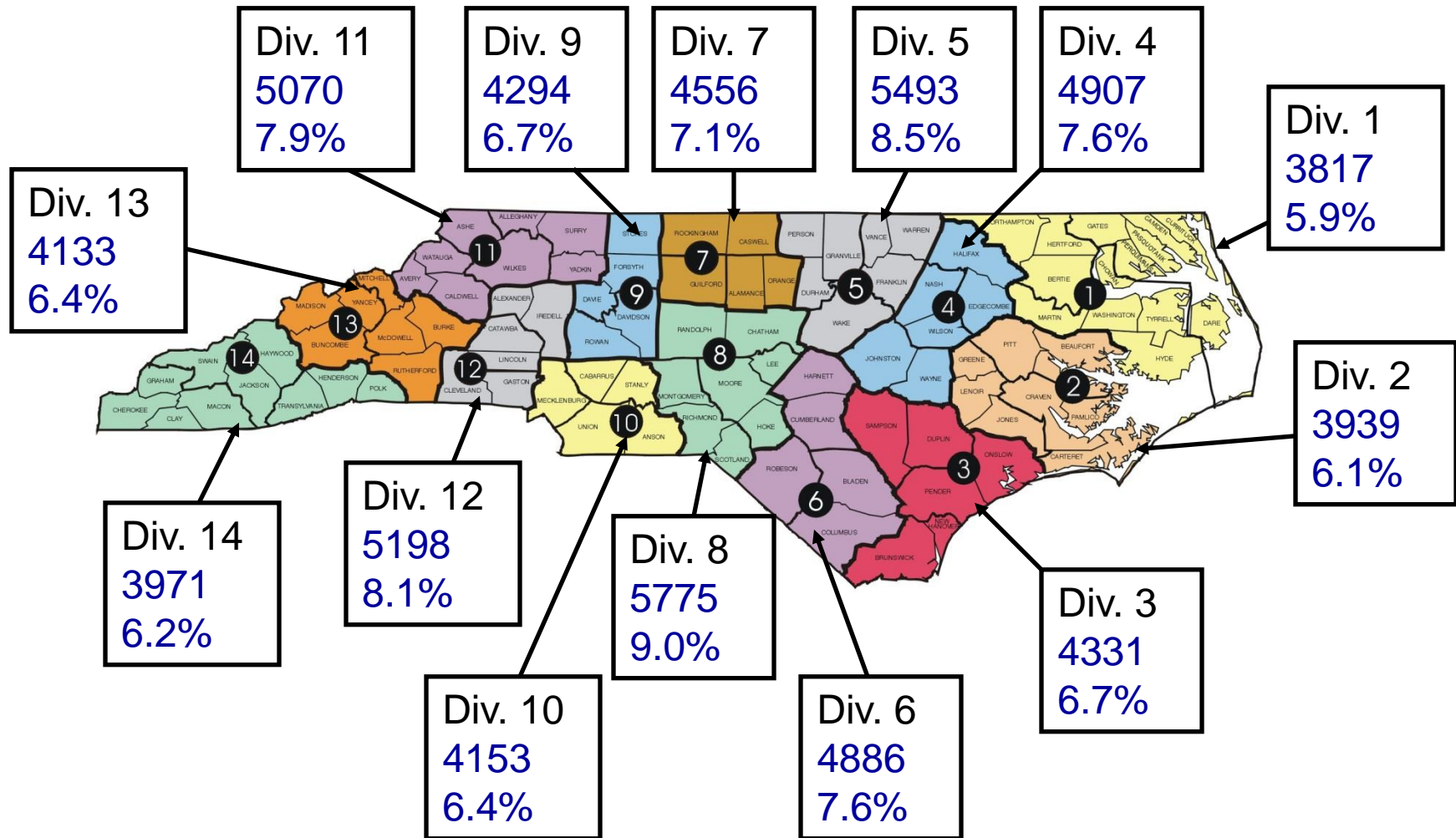


North Carolina State Secondary System



The secondary road system contains all state maintained roads excluding US, NC, and Interstate routes. Totals approximately 64,000 miles

Secondary Road System Miles by Division



Total centerline miles = 64,522

What is a Secondary Road?



Report a problem Image Date: October 2011

Some are considerably large



Urban settings





Rural



Suburban



Allocations to Maintain the Secondary Road System

	Primary	<u>Secondary</u>	Total
Pavement Preservation	\$4M	<u>\$96M</u>	\$100M
Contract Resurfacing	\$209M	<u>\$258M</u>	\$467M
Maintenance	\$144.5M	<u>\$306M</u>	\$450.5M
Secondary Road Paving Program	N/A	<u>\$12M</u>	\$12M

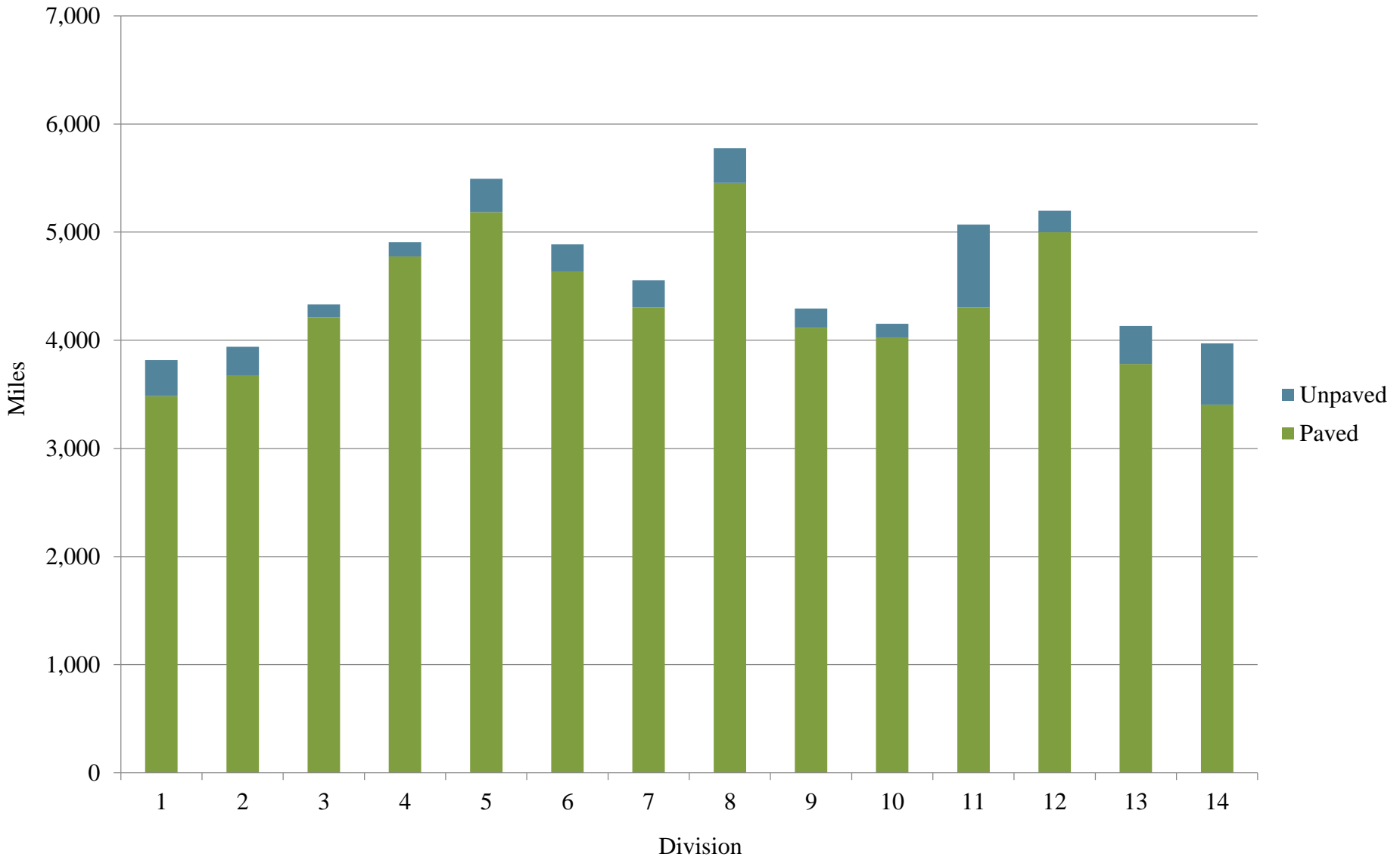
Subdivision Streets



Wide Variety of Unpaved Roads



Total Secondary Road System Miles Paved and Unpaved by Division



Unpaved Road Prioritization

Projects are identified through a priority rating system where roads are rated every 4 years using a rate sheet which looks at various route elements:

- Road characteristics
- Land use characteristics
- Traffic characteristics
- Route characteristics
- Non hold list roads*

*Roads are placed on the hold list if ROW has not been dedicated for paving.



Unpaved Road Prioritization: Rating Criteria

Land Use Characteristics

- # Homes (Full Time/Part Time) 6 pts/3pts /ea
- # Schools 10 pts/ea
- # Churches 10 pts/ea
- # Businesses 10 pts/ea
- # Industries 10 pts/ea
- # Recreation Facility 5 pts/ea

Land Use Subtotal _____
Divided by Road Length (Mi.) _____(A)

Traffic Characteristics

- School Bus Route = 10 pts
- Average 24 hour Traffic = 1pt/vehicle

Total Traffic Characteristics points _____ (B)

Route Characteristics

- County Thoroughfare: yes = 10 pts; no = 0 pts

Total Route Characteristics points _____ (C)

(A +B + C) = TOTAL POINTS _____

Statewide Road Paving Program Update

Total Priority List			Programed Last Biennium 2014/15			Programed Current Fiscal Year 2016		
Div	# Roads	# Miles	# Projects	# Miles	Amount (\$)	# Projects	# Miles	Amount (\$)
1	320	283.00	2	0.27	180,000	0	0.00	0
2	246	208.84	2	0.90	156,500	1	0.26	117,000
3	103	87.09	4	1.03	1,287,500	1	0.40	180,000
4	134	97.43	0	0.00	0	0	0.00	0
5	300	212.38	5	6.15	100,000	5	5.16	2,255,000
6	231	188.96	6	2.21	1,545,000	0	0.00	0
7	488	198.31	4	0.88	430,000	2	0.30	135,000
8	388	283.27	2	0.35	316,000	0	0.00	0
9	365	148.64	10	1.31	1,421,000	8	2.22	999,000
10	143	84.79	1	0.20	50,000	1	0.14	63,000
11	964	739.00	19	21.89	8,092,500	13	15.95	4,965,000
12	318	170.87	5	1.00	680,000	2	0.67	301,500
13	464	262.96	12	3.21	2,111,690	6	1.91	864,500
14	656	467.17	32	17.49	6,396,000	5	3.43	1,010,000
	5120	3432.71	104	56.89	22,766,190	44	30.44	10,890,000

General Road Addition Requirements

Subdivision Roads

- Dedicated right-of-way, free of charge to NCDOT
- At least 20% of the lots bordering the street must be individually owned
- Minimum of 4 homes fronting the street and at least 2 homes for each one-tenth mile
- The construction of subdivision streets must meet the minimum construction standards of the Division of Highways
- Streets with right-of-way dedicated, recorded, or with preliminary approval from a County Planning Board, dated on or after October 1, 1975 must be paved to Division of Highways standards.

General Road Addition Requirements

Rural Roads

- Dedicated right-of-way, free of charge to NCDOT
- Roads less than one mile in length must have at least 5 occupied residences fronting the road with direct entrances to the road
- Roads of one or more miles in length must have an average of 5 occupied residences per mile fronting or having direct entrance to the road
- There must be at least 2 individual property owners on the road.
- The cost to put the road in acceptable maintenance condition must not be excessive for the amount of service it will render.

Survey of Non-System Roads

Session Law 2015-264, Section 29.17E.(c) requires NCDOT to conduct a survey of the paved and unpaved roads in the state that are open to the public, but are not currently a part of the State System.

Report is due Jun 30, 2016 to Joint Legislative Transportation Oversight Committee.

NCDOT is currently collecting field data in one county to determine production rate and will then evaluate the cost to collect the field data statewide.

Bridges on Secondary Road System Overview

Mike Holder



Secondary System – Current Bridge Statistics

SECONDARY SYSTEM: 8,305 BRIDGES			
FUNCTIONALLY OBSOLETE		STRUCTURALLY DEFICIENT	
2,052 BRIDGES	24.7%	1,455 BRIDGES	17.5%
FUNCTIONALLY OBSOLETE: <i>BRIDGES ARE THOSE THAT NO LONGER MEET CURRENT DESIGN STANDARDS</i>		STRUCTURALLY DEFICIENT: <i>BRIDGES THAT HAVE DETERIORATED TO POOR CONDITION</i>	

SD GOALS

10%

STATEWIDE

5%

PRIMARY

15%

SECONDARY

SD bridges are safe; SD bridges are often load posted to restrict crossing of vehicles that would be heavy enough to cause further damage to the already deteriorated bridge components.



Bridge Program

2016-2017 BRIDGE PROGRAM

SFY 2016
\$210.5 MILLION

SFY 2017
\$242 MILLION

241
REPLACEMENTS

250*
REPLACEMENTS

% SD
EFFECT

-2.9%**

% SD
EFFECT

-2.5%**

REPLACEMENTS
FUNDED IN
95 of **100**
COUNTIES

Secondary system
2016: 226 bridges
2017: 192 bridges*

* Because the 2017 program is still being developed, the handout shows 209 bridge replacements; NCDOT anticipates approximately 250 total replacements when the 2017 program is finalized.

** Decrease in SD bridges does not take into account additional bridges that will become SD during these construction years.



Secondary System – Division Bridge Statistics

	CURRENT STATISTICS			SFY 2106-2017 SECONDARY BRIDGE PROGRAM		
DIVISION	BRIDGES	SD BRIDGES	% SD	SFY 2016 REPLACEMENTS	SFY 2017 REPLACEMENTS	% SD CHANGE*
1	282	36	12.8%	2	4	-2.1%
2	328	42	12.8%	10	7	-5.2%
3	332	85	25.6%	17	13	-9.0%
4	436	65	14.9%	6	10	-3.7%
5	505	66	13.1%	10	17	-4.9%
6	382	75	19.6%	9	15	-6.3%
7	524	111	21.2%	22	4	-5.0%
8	551	64	11.6%	15	15	-5.4%
9	392	70	17.9%	12	10	-5.6%
10	487	72	14.8%	8	11	-3.9%
11	1076	263	24.4%	33	31	-5.9%
12	616	98	15.9%	18	13	-5.0%
13	1165	199	17.1%	36	21	-4.9%
14	1229	209	17.0%	28	21	-4.0%
TOTAL	8305	1455	17.5%	226	192	-5.1%

*** NOTE: % SD change does not take into account bridges that will become SD during these construction years.**



Ferry System Overview

Sterling Baker



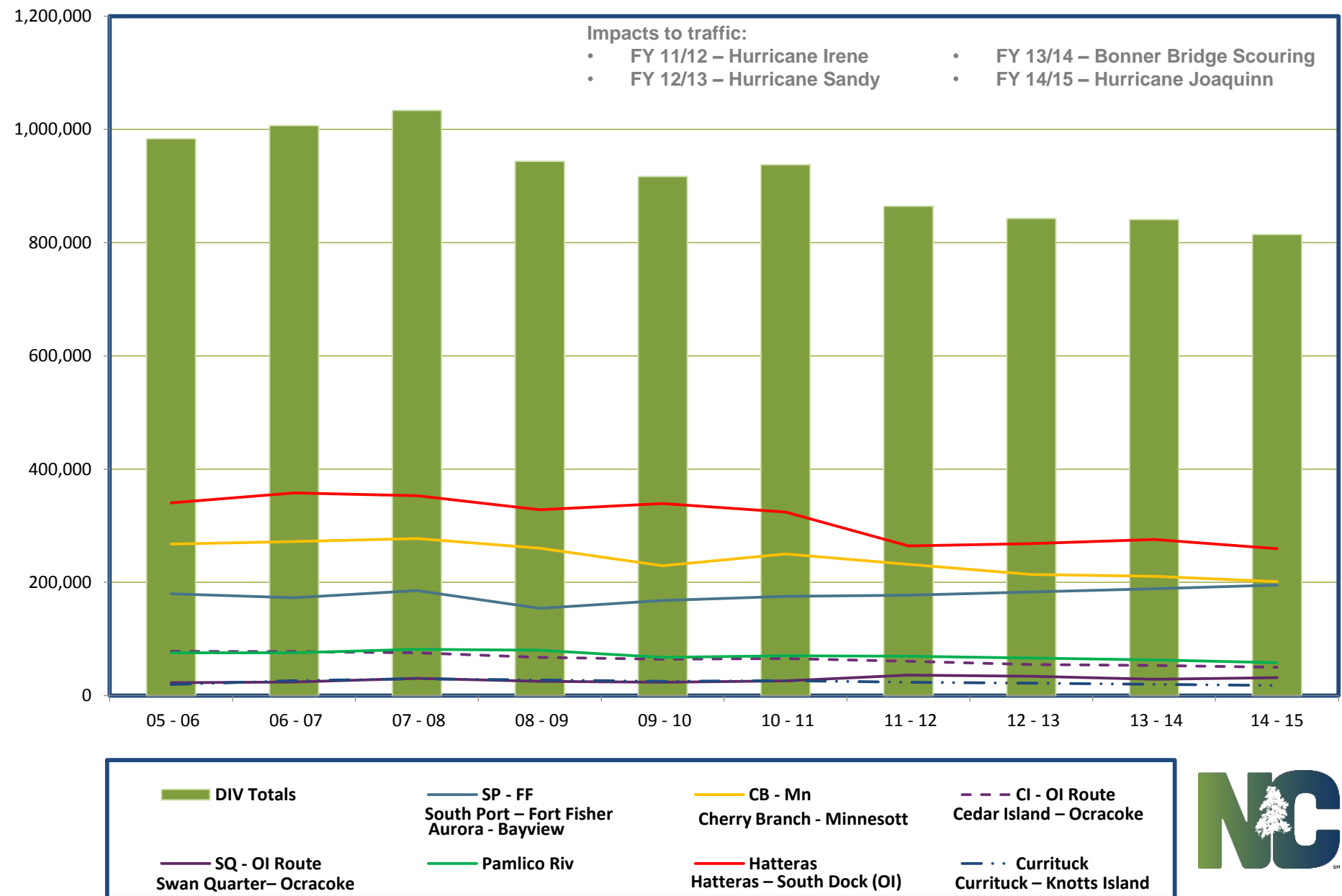
Ferry System Overview



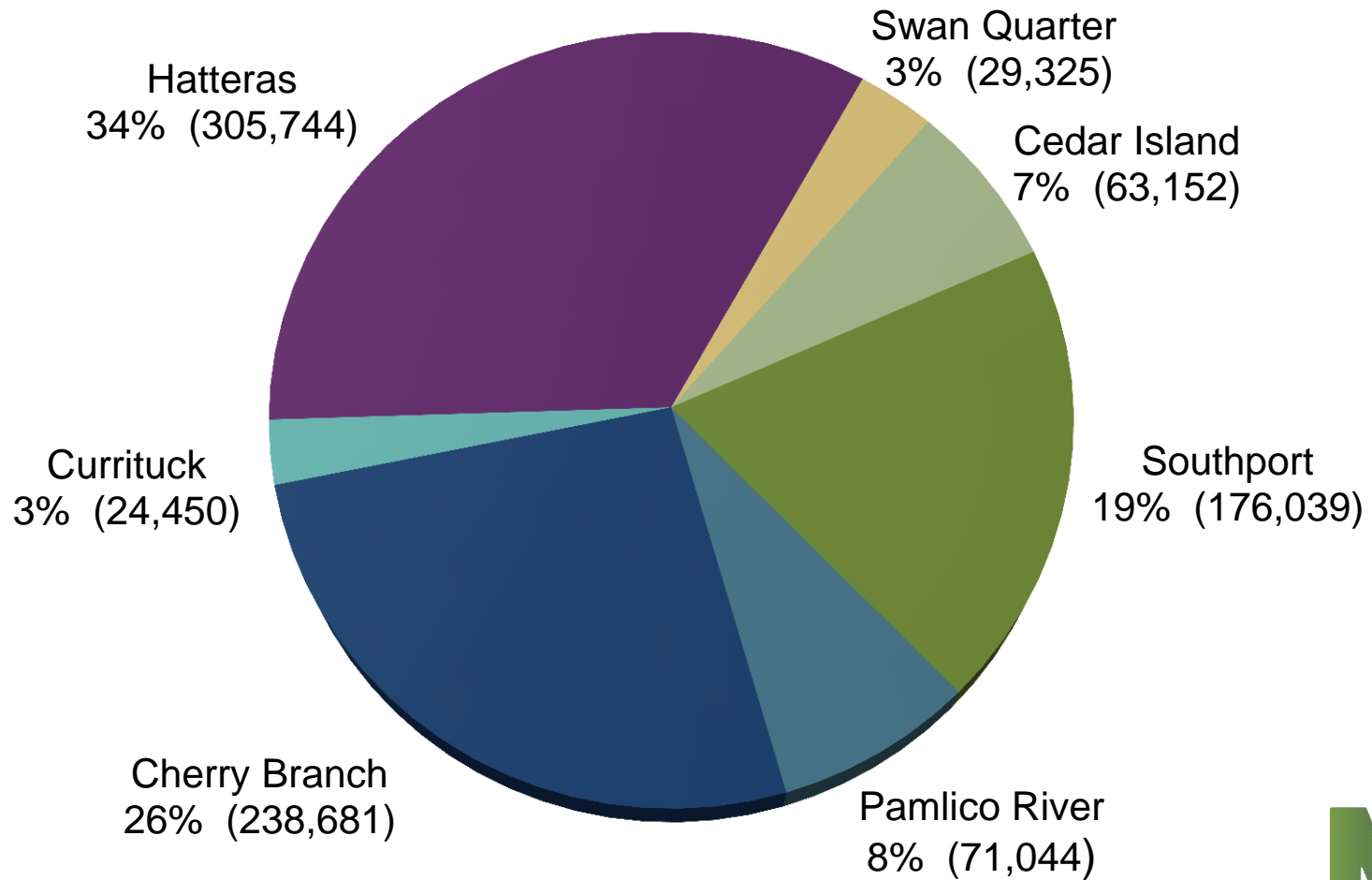
- 2nd largest state operated ferry system in the US
- 7 scheduled routes
- 1 emergency route
- 12 terminals
- State owned shipyard
- 4 field maintenance shops
- 21 ferries
- Support Fleet (4 tugs, 3 Barges, 1 crane barge, & 1 dredge)



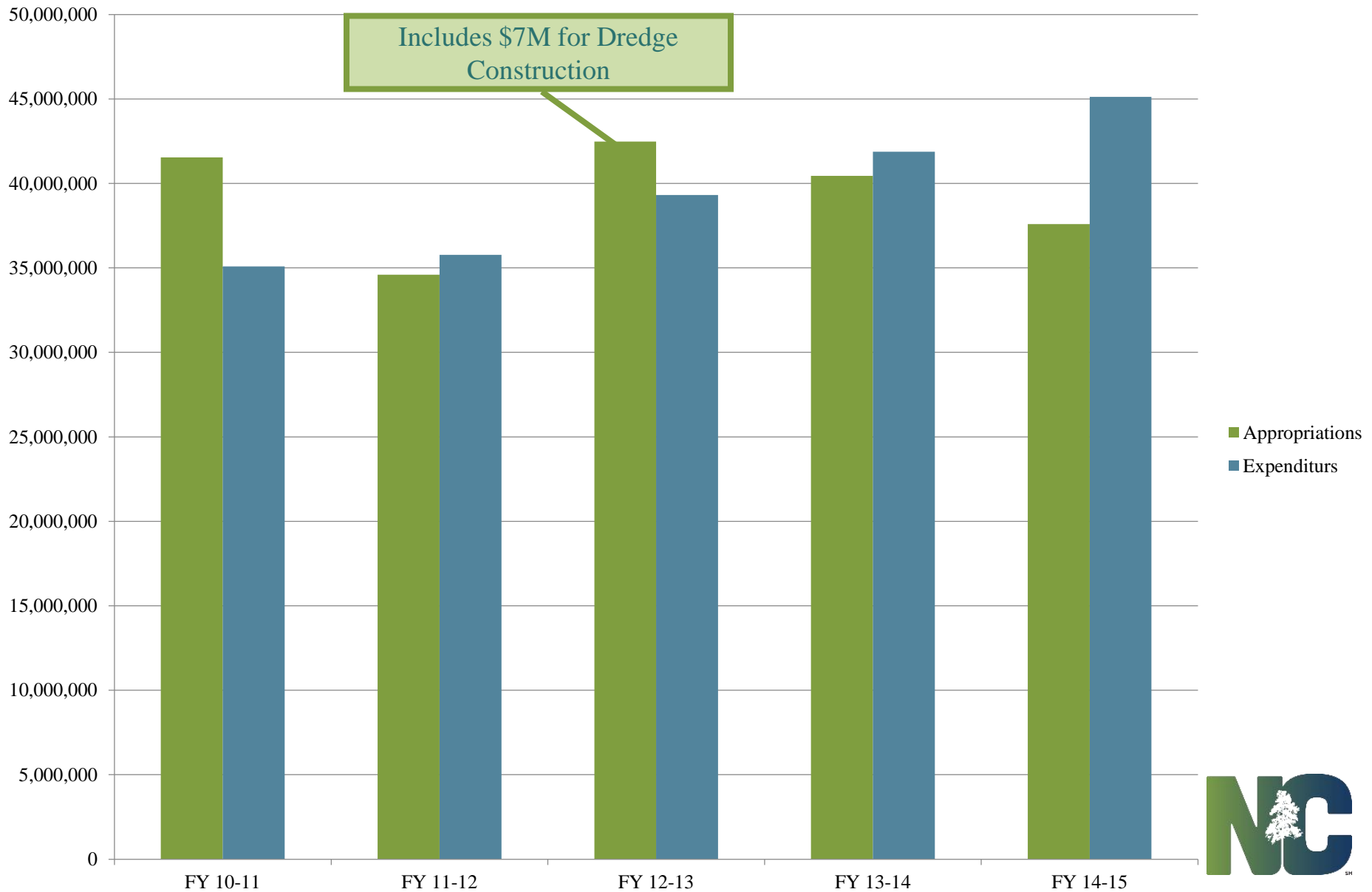
Vehicles Carried Route Comparison for FY14



Vehicles Carried Route Comparison for FY14



Appropriations vs Actual Expenditures

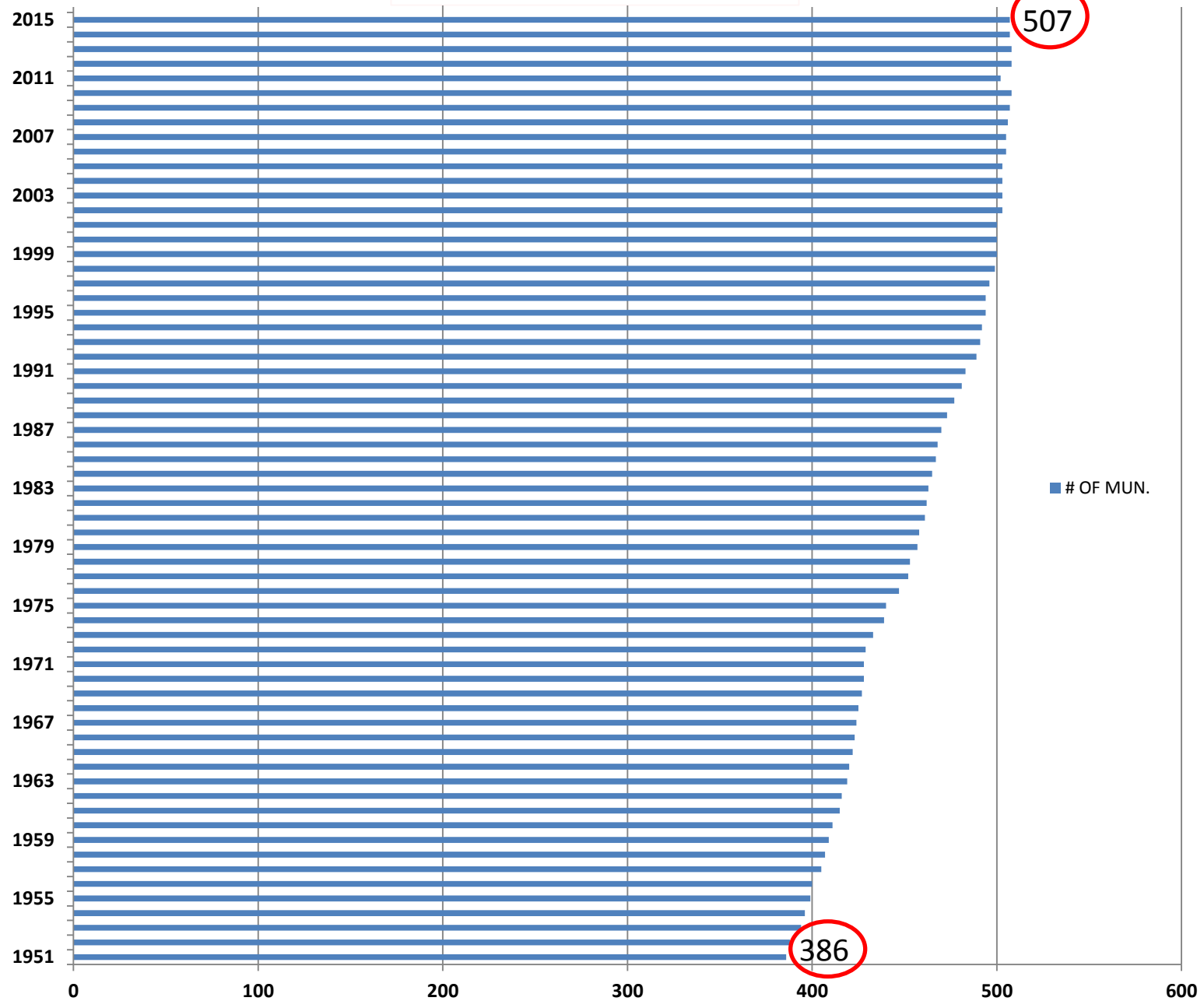




History of the Powell Bill Program

- NCGS 136-41
- Law initially passed in 1951
- The goal was to provide financial assistance to municipalities for municipally-maintained streets
- State Senator Junius K. Powell, an attorney & former Mayor of Whiteville, led the signatures on the bill as it was introduced, which resulted in the naming of the “Powell Bill” Program
- First Powell Bill funds were distributed in the Fall of 1951
@ \$4.5 million among 386 participating municipalities

Number of Municipalities



Allocation Formula

NCGS 136-141.1(a)



75%

25%



2015 Allocation

\$147,759,959.21

5,435,422 population = \$20.39 per capita

22,559.64 miles = \$1,637.44 per mile

* Mileage of the public streets which are not part of the state highway system.

Status of 2015 Distribution

- Distribution of \$147.7 million to 507 municipalities for 2015 has been completed.
 - The initial allocation of half the total (\$73,879,982.04) was sent before October 1, 2015.
 - Second half was sent just before January 1, 2016.
-

Largest and Smallest Recipients

	Municipality	County	Population	Miles	Allocation
Largest	Charlotte	Mecklenburg	803,392	2,455	\$20,399,633
Smallest	Falkland	Pitt	97	0.05	\$2,060

Eligible Activities

- ❑ Construction, planning and maintenance on streets, sidewalks, bikeways, and greenways such as:
 - Curb and gutter
 - Storm drainage
 - Patching
 - Resurfacing*
 - Widening
 - Snow removal
 - Sand and debris removal resulting from natural causes
 - Street sweeping
 - Purchase or rental of equipment
- ❑ Traffic Control such as:
 - Purchase and maintenance of traffic control devices
 - Traffic signs for proper traffic control
 - Speed bumps
 - Traffic paint for on-street parking or crosswalks
 - Traffic cones
- ❑ Municipal Street Bond Debt Service such as:
 - Current payment of principal or interest due on bonds outstanding issued exclusively for streets and sidewalks.

*SL2015-241, Section 29.17D.(b) requires Powell Bill funds to be used primarily for contract resurfacing.

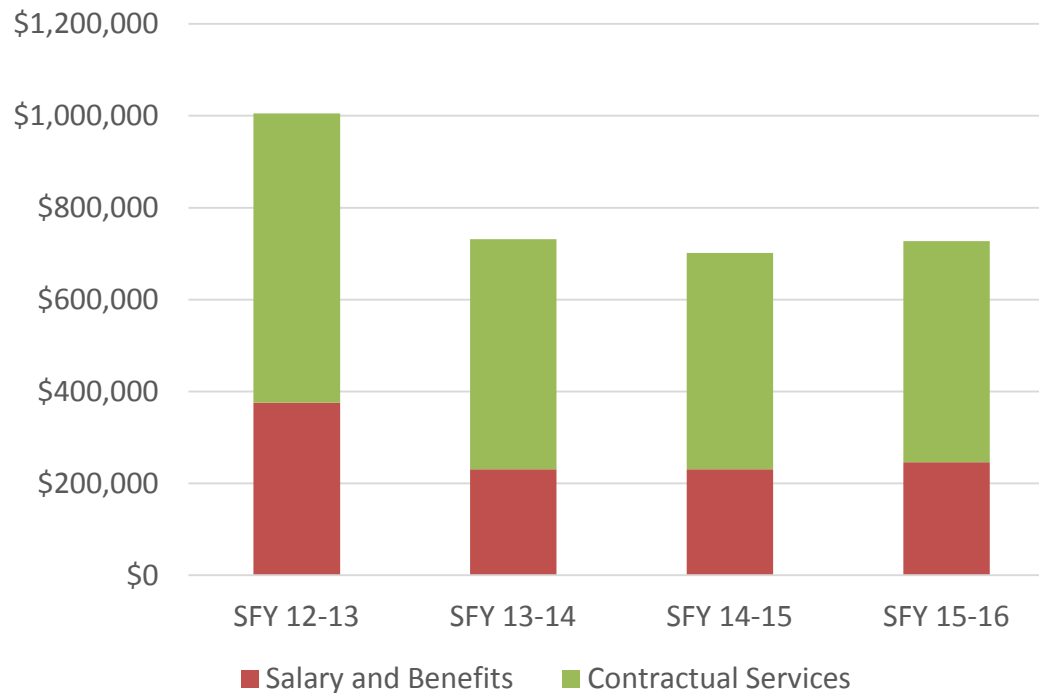
Bike/Pathways Overview

Lauren Blackburn



Bicycle and Pedestrian Division – HF Budget

Highway Fund: Bicycle Program Appropriations SFY 13-16



CORE FUNCTIONS

- Bicycle and pedestrian planning program
- Bicycle and pedestrian safety programs
- Oversight for Federally funded independent bicycle/pedestrian improvements



Bicycle and Pedestrian Project Funding

SPOT 3.0 / 2016-2025 STIP

Bike-Ped TIP	FFY 15-16	FFY 16-17	FFY 17-18	FFY 18-19	FFY 19-20	FFY 20-21	FFY 21-26
Transportation Alternatives Program	\$0.0	\$1.5	\$4.4	\$0.3	\$5.0	\$31.4	\$42.6
Safe Routes to School	\$0.5	\$1.5	\$1.0	\$0.6	\$1.5	\$0.6	\$5.7
Surface Transportation Program	\$2.7	\$0.8	\$0.7	\$1.4	\$0.7	\$3.5	\$9.9
Local	\$0.4	\$0.3	\$0.9	\$0.2	\$1.0	\$6.8	\$9.6

Above units shown in millions of dollars.

- STI does not permit HTF (state match) for bicycle and pedestrian projects
- Federal funding typically requires 20% non-federal match

Types of Bicycle and Pedestrian Projects

- Bike lane (on NCDOT or local street)
- Multi-use path/greenway
- Paved shoulder
- Sidewalk
- Pedestrian signals/curb ramps
- Other streetscape/pedestrian improvements

Questions?

