



# Joint Legislative Transportation Oversight Storm Impact on NCDOT Budgeting

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# Emergency Relief Programs

- Administered by the Federal Emergency Management Agency (FEMA) & Federal Highway Administration (FHWA)
- Intended for Natural Disasters or Catastrophic Failures
  - Natural Disasters (i.e. hurricanes, tornadoes, wild fires, severe storms)
  - Catastrophic Failures (i.e. bridge collapses after being struck by a barge)
- Type of event & location determines which agency oversees emergency efforts
  - FEMA Reimburses States/Locals for repairs to non Federal-Aid Roads & Bridges
  - FHWA Reimburses NCDOT for repairs to Federal-Aid Roads & Bridges



# Emergency Relief Programs Reimbursement Procedures

- Disaster events are individually tracked and reported
- State dollars are required to pay expenses first
  - File for reimbursement with supporting cost detail data
  - May take years before NCDOT is fully reimbursed
- State share of FEMA costs
  - Charged to Maintenance
  - 1<sup>st</sup> coverage is unallocated maintenance reserve
- State share of FHWA costs
  - Federal-Aid State Matching Funds



# Eligible for ER Funding?

## FHWA vs. FEMA

### FHWA

- Governor's Declaration
- Cost recovery assessment, Federal review & authorization of eligibility
- NCDOT tracks disaster cost, incurs cost first and then may seek reimbursement
- Subject to agency reimbursement criteria
  - \$700,000 minimum in FHWA damages statewide
  - \$5,000 minimum per site
  - \$100 million per state cap

### FEMA

- Presidential Declaration by County
- Cost recovery assessment, Federal review & authorization of eligibility
- NCDOT tracks disaster cost, incurs cost first and then may seek reimbursement
- Subject to agency reimbursement criteria
  - \$12.5 million minimum damages statewide
  - \$1,000 minimum per site
- Reimbursement is through North Carolina Division of Emergency Management

# Rules for Emergency Repair Reimbursement

## FHWA

- Prior Authorization of eligible cost determination
- 100% funding (1<sup>st</sup> 180 days)
- After 180 days, reimburses
  - 90% Interstates
  - 80% other eligible roadways
- No pre-disaster activities;  
Date of Declaration is critical

## FEMA

- Project Worksheet approval determines eligibility
- 75% funding (72 hours at 100%)
- 180-day/6-month time limit
- Emergency Protective Measures are an allowable cost
- Debris removal - only labor O.T.





# Declared & Non-Declared Disaster Costs 15 Year Summary

- Since Fall 1996, NC has experienced 33 major disasters.

Declared Federal Disasters \$ in Millions	Total Cost	Federal Reimbursement	State Funding	Largest Events
Hurricanes	\$ 380.9	\$ 287.9	\$ 93.0	Fran \$119 M
Ice Storms	142.6	79.3	63.2	Dec 2002 \$67 M
Floods/Tornadoes/Other	27.9	25.7	2.3	Haywood Co Rockslide \$15 M
<b>Total</b>	<b>\$ 551.4</b>	<b>\$ 392.9</b>	<b>\$ 158.5</b>	
<b>Percent (%)</b>		<b>71%</b>	<b>29%</b>	
<b>Avg/Year</b>	<b>\$ 36.8</b>	<b>\$ 26.2</b>	<b>\$ 10.6</b>	

Non-Declared Disasters \$ in Millions	Total Cost	Federal Reimbursement	State Funding
Snow and Ice	\$ 430.5		\$ 430.5
<b>Avg/Year</b>	<b>\$ 28.7</b>		<b>\$ 28.7</b>



# NC Disaster Events Beginning September 1996

Disaster Event	Date	Estimated Cost	Federal Reimbursed	State Maint. Funding	State Matching	Receivable Balance
Hurricane Irene	Aug-11	\$ 30,000,000	\$ -	\$ -		30,000,000
Hurricane Earl	Sep-10	478,427	11,792	23,050	443,584	-
TS Nicole	Sep-10	3,000,913				3,000,913
TS Ida	Nov-09	1,459,619	1,435,754		23,865	-
TS Hanna	Sep-08	2,346,690	1,052,857		1,293,833	-
Hurricane Ernesto	Aug-06	4,976,397	1,352,072	3,553,892	70,433	-
Hurricane Ophelia	Sep-05	3,163,144	2,043,814	806,785	312,545	-
Hurricane Katrina	Aug-05	58,777	53,497		5,280	-
Hurricane Ivan	Sep-04	61,471,452	49,687,748	11,245,970	537,734	-
Hurricane Frances	Sep-04	16,349,407	12,083,960	4,265,447		-
Hurricane Charley	Aug-04	1,284,435	-	1,284,435		-
Hurricane Alex	Aug-04	308,849		308,849		-
Hurricane Isabel	Sep-03	39,831,780	29,789,477	8,476,377	1,565,927	-
Hurricane Floyd	Sep-99	88,946,161	56,005,889	31,314,931	1,625,341	-
Hurricane Dennis	Aug-99	2,925,193	1,514,748	1,240,277	170,168	-
Hurricane Bonnie	Aug-98	5,653,800	3,150,963	2,473,150	29,686	-
Hurricane Fran	Sep-96	118,694,526	96,777,659	20,909,111	1,007,755	-
<b>Total Hurricane</b>		<b>\$ 380,949,568</b>	<b>\$ 254,960,229</b>	<b>\$ 85,902,273</b>	<b>\$ 7,086,152</b>	<b>33,000,913</b>
Jan. 2011 Ice Storm	Jan-11	15,543,876	-	15,543,876		-
Dec. 2009 Winter Storm	Dec-09	14,000,000	4,605,843			9,394,157
Feb. 2003 Ice Storm	Feb-03	12,789,210	10,626,658	2,061,030	101,522	-
Dec. 2002 Ice Storm	Dec-02	67,265,183	44,726,953	21,299,329	1,238,901	-
Jan. 2000 Snow Storm	Jan-00	21,141,858	5,548,129	15,584,466	9,263	-
Jan. 1998 Floods & Snow	Jan-98	11,844,239	4,419,969	7,269,082	155,188	-
<b>Total Winter Storms</b>		<b>\$ 142,584,366</b>	<b>\$ 69,927,551</b>	<b>\$ 61,757,783</b>	<b>\$ 1,504,874</b>	<b>9,394,157</b>
April 2011 Tornado	Apr-11	8,150,800	66,414			8,084,386
Harnett Co. Tornado	Apr-11	9,606			9,606	-
May 2009 Tornado	May-09	152,443		152,443		-
Haywood Co. Rockslide	Oct-09	15,321,061	14,764,399	-	556,662	-
Nov. 2008 Tornado	Nov-08	238,283		185,296	52,986	-
May 2008 Tornado	May-08	401,457		367,788	33,669	-
Nov. 2006 Floods	Nov-06	2,988,062	2,448,238	39,774	500,050	-
Div. 3 Floods	Oct-05	342,232			342,232	-
Wildfires	2008 & 2011	316,305	225,592	-		90,713
<b>Total Other</b>		<b>\$ 27,920,248</b>	<b>\$ 17,504,643</b>	<b>\$ 745,301</b>	<b>\$ 1,495,206</b>	<b>8,175,098</b>
<b>Total All Events</b>		<b>\$ 551,454,182</b>	<b>\$ 342,392,424</b>	<b>\$ 148,405,357</b>	<b>\$ 10,086,232</b>	<b>50,570,168</b>
<b>Percent (%)</b>			<b>71.0%</b>	<b>27.0%</b>	<b>2.0%</b>	
<b>\$ AVG/Year</b>		<b>\$36.8</b>	<b>\$26.2</b>	<b>\$9.8</b>	<b>\$ .8</b>	

# Current Federal Disaster Receivable

- 5 outstanding disasters equals \$50.6M receivable due NCDOT
- NCDOT reached a historical high of \$160.9 M in Spring 2005 (\$49.9M FHWA & \$111M FEMA reimbursement outstanding)
- Reporting and imaging capability in SAP accelerated reimbursements and increased Federal share of cost
- Disasters tracked according to Division, County, roadway system & type of work (ie: Debris Removal, Emergency Protective Measures, Snow Removal, Vessel & Equipment Relocation, Signs and Signals)





# Undeclared Disasters - Not eligible for Federal funds



## NCDOT Reserves Primary & Secondary Maintenance Funds:

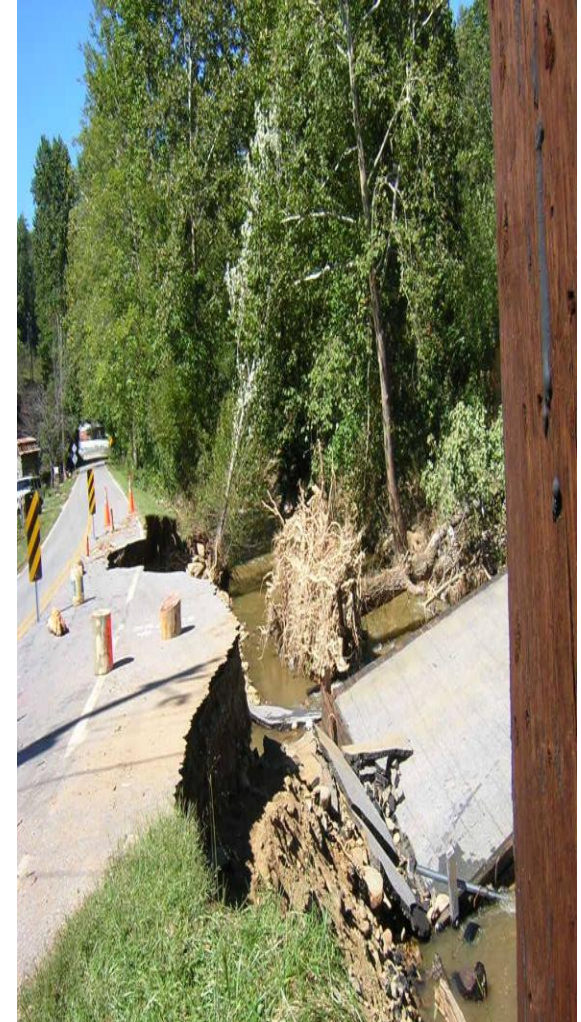
- Annual Reserved Snow & Ice Operations (SFY 2012 - \$50M)
- +\$10M (unallocated) reserved until 3<sup>rd</sup> Quarter to fund unforeseen disasters
- Unallocated used to cover Non-FEMA disaster maintenance costs
- Shortage (not covered by \$60M) is advanced from other maintenance budgets
- Reduces funding for standard operations

# Allocation of Highway Maintenance Funds for Snow & Ice Operations

(Costs in \$ Millions)

	<u>Funds Allocated</u>	<u>Funds Expended</u>
<b>FY2010 Snow &amp; Ice Removal</b>	<b>\$ 60</b>	<b>\$ 64</b>
<b>FY2011 Snow &amp; Ice Removal</b>	<b>\$ 40</b>	<b>\$ 49</b>
<b>FY2012 Snow &amp; Ice Removal</b>	<b>\$ 50</b>	

Note1: Historical average snow & ice cost = \$30 million



# Conclusion - NCDOT Disaster Budget

## NCDOT Budgeting Process:

- Declared Disasters
  - Cost primarily Federally Reimbursed (71%)
  - FHWA or FEMA participation in cost is determined by type of event, location, severity of damage, & work activity required to respond appropriately
  - NCDOT pays first & requests reimbursement as federal \$'s become available
  - Settlement with maintenance & Trust Fund budget occurs after final FHWA/FEMA reimbursement
  - Cash Model reserves \$10 M annually for disasters - coincides with \$10 M historical average/year
- Non-declared disasters
  - Historical annual cost - \$30 M
    - Last 2 years average \$57 M
  - Approximately 10% (\$50M) of SFY 2012 Maintenance Budget is allocated statewide for this purpose
  - Additional \$10 M unallocated to divisions until 3<sup>rd</sup> quarter to meet an unforeseen event to minimize the impact to standard operations

# Exhibits

- Major Disaster Events for North Carolina
- Annual History of Snow & Ice Expenditures (Non-declared)
- Board of Transportation - SFY 2012 Maintenance Allocations

# Major Disaster Events for NC Beginning September 1996

Disaster Event	Date	Cost Estimate	FEMA %	FHWA %	State Maint. %	State Trust Funds %
Hurricane Irene *	Aug-11	30.0	NA	NA	NA	NA
Hurricane Ivan	Sep-04	61.4	33%	48%	18%	1%
Hurricane Frances	Sep-04	15.9	58%	14%	27%	0%
Hurricane Isabel	Sep-03	39.9	26%	49%	21%	4%
Hurricane Floyd	Sep-99	89.0	28%	36%	35%	2%
Hurricane Fran	Sep-96	118.6	58%	23%	18%	1%
Haywood Co. Rockslide	Oct-09	15.3	0%	97%	0%	3%
Jan. 2011 Ice Storm	Jan-11	15.5	0%	0%	100%	0%
Feb. 2003 Ice Storm	Feb-03	12.8	59%	23%	16%	1%
Dec. 2002 Ice Storm	Dec-02	67.2	40%	27%	32%	2%
Jan. 2000 Snow Storm	Jan-00	21.3	8%	18%	73%	0%
Winter Storm 2009	Jan-09	14.0	100%	0%	0%	0%
Jan. 1998 Floods & Snow	Jan-98	11.8	25%	11%	62%	2%
<b>Total</b>		<b>\$ 512.7</b>	<b>42%</b>	<b>34%</b>	<b>29%</b>	<b>1%</b>
<b>Other Disasters</b>		<b>\$ 38.7</b>				
<b>Grand Total</b>		<b>\$ 551.4</b>				

\* Note: Hurricane Irene cost estimate is preliminary and does not include the cost of the permanent NC 12 bridge structure.



# Annual History of Snow & Ice Expenditures (Non-declared)

1997	\$11,051,274.95
1998	\$11,400,644.75
1999	\$16,262,769.61
2000	\$25,563,556.35
2001	\$21,738,417.83
2002	\$19,631,666.50
2003	\$32,453,052.55
2004	\$44,939,518.76
2005	\$26,469,883.95
2006	\$25,983,698.36
2007	\$22,000,395.53
2008	\$24,705,362.08
2009	\$29,500,000.00
2010	\$66,400,000.00
2011	\$52,400,000.00
<b>Total</b>	<b>\$430,500,241.22</b>

**NORTH CAROLINA BOARD OF TRANSPORTATION  
RECOMMENDED SUPPLEMENTAL ALLOCATION OF HIGHWAY MAINTENANCE  
APPROPRIATIONS  
FISCAL YEAR 2011 - 2012**

<b><u>SCHEDULE I – PRIMARY SYSTEM</u></b>	<b><u>ORIGINAL ALLOCATION</u></b>	<b><u>SUPPLEMENTAL ALLOCATION</u></b>	<b><u>TOTAL ALLOCATION</u></b>
Road Maintenance	90,861,678	(1,736,712)	89,124,966
Bridge Maintenance (Central)	3,998,235	-	3,998,235
Bridge Maintenance (Divisions)	24,976,744	-	24,976,744
Railroad Signal Maintenance	490,000	-	490,000
Weigh Stations	2,000,000	-	2,000,000
Renovation of Rest Areas	1,200,000	-	1,200,000
Inmate Labor	7,420,000	-	7,420,000
Management and Technical Training	150,000	-	150,000
Condition Assessment	1,550,000	-	1,550,000
Drug & Alcohol Testing for CDL	200,000	-	200,000
NPDES – National Pollutant Discharge Elimination System	1,000,000	-	1,000,000
Maintenance System Improvement	100,000	-	100,000
Snow and Ice	35,000,000	-	35,000,000
Beaver Control	112,500	-	112,500
Non-TIP Pavement Activities	600,000	-	600,000
Asphalt Emulsion Storage Tanks	100,000	-	100,000
Unallocated	5,000,000	-	5,000,000
Oversize / Overweight Fees	3,700,000	-	3,700,000
Traffic Signal Maintenance – R-4701	6,000,000	-	6,000,000
<b>SUB-TOTAL</b>	<b>\$184,459,157</b>	<b>(\$1,736,712)</b>	<b>\$182,722,445</b>
<b><u>SCHEDULE II – SECONDARY SYSTEM</u></b>			
Road Maintenance	199,974,240	(1,985,580)	197,988,660
Bridge Maintenance (Central)	1,851,765	-	1,851,765
Bridge Maintenance (Divisions)	39,173,256	-	39,173,256
Railroad Signal Maintenance	2,400,000	-	2,400,000
Inmate Labor	1,770,000	-	1,770,000
Management and Technical Training	150,000	-	150,000
Condition Assessment	450,000	-	450,000
State Park Maintenance	500,000	-	500,000
Maintenance Systems Improvements	250,000	-	250,000
Snow and Ice	15,000,000	-	15,000,000
Beaver Control	337,500	-	337,500
Non-TIP Pavement Activities	400,000	-	400,000
Asphalt Emulsion Storage Tanks	100,000	-	100,000
Unallocated	5,000,000	-	5,000,000
<b>SUB-TOTAL</b>	<b>\$267,356,761</b>	<b>(\$1,985,580)</b>	<b>\$265,371,181</b>
<b><u>SCHEDULE III – GENERAL MAINTENANCE RESERVE</u></b>	<b>\$54,493,713</b>	<b>\$61,536,530</b>	<b>\$116,030,243</b>
<b><u>SCHEDULE IV – SYSTEM PRESERVATION</u></b>	<b>\$95,282,473</b>	<b>\$118,942,743</b>	<b>\$214,225,216</b>
<b><u>SCHEDULE V – CONTRACT RESURFACING</u></b>	<b>\$0</b>	<b>\$406,731,130</b>	<b>\$406,731,130</b>
<b>GRAND TOTAL</b>	<b>\$601,592,104</b>	<b>\$583,488,111</b>	<b>\$1,185,080,215</b>