

# **The North Carolina Center for Automotive Research, Inc.**

August 27, 2010

The Honorable Beverly Perdue  
Governor of the State of North Carolina  
116 West Jones Street, Raleigh, North Carolina 27603

The Honorable Senator Marc Basnight, Co-Chairman  
Joint Legislative Commission on Governmental Operations  
2007 Legislative Building, Raleigh, North Carolina 27601

The Honorable Representative Joe Hackney, Co-Chairman  
Joint Legislative Commission on Governmental Operations  
2304 Legislative Building, Raleigh, North Carolina 27601

Mr. Lynn Muchmore, Director  
Fiscal Research Division  
North Carolina General Assembly  
Suite 619, Legislative Office Building  
300 N. Salisbury Street, Raleigh, NC 27603

RE: North Carolina Center for Automotive Research, Inc., State Fiscal Year 2009-2010  
Report of Program Activities, Objectives & Accomplishments; and Itemized  
Expenditures and Fund Sources.

As set forth in Session Law 2009-451 Section 14.22 (a), the following is a report of program activities, objectives and accomplishments for the North Carolina Center for Automotive Research project during the period July 1, 2009 to August 27, 2010. Also included is a report of state fiscal year itemized expenditures (shown on accrual basis) and fund sources for the period.

Beginning in SFY 2005-2006 the North Carolina General Assembly appropriated funding for the development of the North Carolina Center for Automotive Research. NCCAR is a purpose-designed facility for automotive and transportation research, development, and testing that will be located on a 630 acre tract along the Interstate 95 Corridor in Northampton County. The NCCAR is a non-profit 501(c)3 corporation, which is collaborating with the member institutions of the state's university and community college systems, private business and industry and various public sector agencies to research, test and develop new, improved and advanced technologies in the automotive, transportation, energy and defense industries. NCCAR is intended provide globally competitive facilities including a first-in-class ride and handling course, chassis dynamics laboratory, vehicle dynamics area, dynamometer and emissions testing stations; computer assisted diagnostic and design garages; hydrogen and other alternative fuel laboratories/facilities.

**Mission:**

The mission of NCCAR is both simple and complex. The simple part is developing well-conceived, critical-mass facilities to accommodate and facilitate automotive research and testing activity. The complexity is in developing, or organizing, the physical and intellectual infrastructure necessary to be globally competitive in assisting and accelerating the development of advanced automotive technologies. Key to that objective is engaging the state's universities (basic and applied research, technology transfer), community college system (applied research, focused technology training, workforce development), and the North Carolina Department of Commerce (marketing and business development) and other state agencies in developing a compelling capability for enabling and supporting development of the automotive industry (broadly including R&D, manufacturing and executive operations) in North Carolina.

Fundamentally, the objective is to elevate North Carolina's position as a global player in the research and development of conventional and alternative fuel vehicle technologies. Obviously, this necessitates close collaboration with the North Carolina Department of Commerce and other agencies of the state. Ultimately, the results will be evidenced by successes in recruiting automotive related companies to locate/expand engineering and/or testing operations, manufacturing, assembly, import center, and distribution operations in North Carolina. Done well, that joint initiative will generate new investment and create new, value-added, higher-wage, sustainable employment opportunities for the people of this state.

**State Fiscal Year 2009-2010 Objectives:**

Planned projects and objectives for SFY 2009-2010 fell primarily into three categories: 1) project management, personnel and contract services; 2) facility development; 3) marketing and business development. SFY projects and objectives in each of those categories of endeavor are as follows:

**Project Management, Personnel and Contract Services**

- Continue to successfully effect project development and fiscal management responsibilities in compliance with state protocols and in coordination with the North Carolina Department of Commerce, Office of State Budget and Management, Office of State Construction and the State Auditor.
- Complete development and implementation of the organization's personnel and operational policies, and continue to evaluate and engage the use of contract service providers in providing essential services to both management (in project development and site operations and IT) and for providing technical assistance to clients once the facility is operational.
- Recruit initial key NCCAR staff in advance of operational opening during the first quarter of 2010.

### Facility Development

- Complete construction of Phase 1A facilities.
- Complete industrial access roadway construction.
- Coordinate construction activities and related budget and regulatory activities with the appropriate state and federal agencies.
- Complete all site evaluation activities including final topographic surveying and geotechnical engineering, in particular, the ongoing evaluation of soil types and suitability for construction for Phase 1B construction.
- Initiate IT system specification and layout to include communications, data connectivity and security both for NCCAR operations and visiting clients, and begin construction.
- Conduct additional market validation research related to facility components and design characteristics to refine development of the facility master-plan and Phase 2 construction.

### Marketing and Business Development

- Expand collaborative initiatives with the state's university and community college systems, and other affiliated/similar agencies/organizations.
- Refine facility utilization cost schedules and market rate comparisons.
- Continue and expand discussions and negotiations with known and potential clients, initiate facility utilization scheduling.
- Continue and expand discussions with ancillary engineering and design businesses as well as automotive-related product manufacturers for locating operations in North Carolina.
- Continue to collaborate with the North Carolina Department of Commerce in support of the department's business development and recruitment efforts, particularly in the department's automotive initiatives.
- Continue to collaborate with and support the North Carolina Department of Commerce in trade show and trade mission activities.
- Refine and initiate strategic targeted market campaigns with both domestic and international focuses. Elevate NCCAR's presence at the Automotive Testing Expo events in North America and Europe as appropriate.
- Continue and expand strategic marketing activities to further interest in the NCCAR in the domestic and international automotive industries, particularly those original equipment manufacturers and tier suppliers focused on alternative fuels, ride and handling, and entering the US market.

### **State Fiscal Year 2009-2010 Accomplishments:**

Since July 1, 2009, significant accomplishments have been made in establishing the NCCAR facility. A summary of accomplishments by NCCAR and its partners is presented below:

- Completed construction of the primary NCCAR Phase 1A facilities.
- Construction of the site access road was completed.
- Throughout the construction process, regular monthly construction meetings were held with general contractors and engineers to monitor progress and resolve any issues on site development; buildings and access road.
- Partial office furnishing completed of Operations Building.
- Road course safety systems implemented (guardrail, tire barriers and Jersey barriers)
- Advertized, interviewed (8 candidates) and recruited a Site Superintendent responsible for all NCCAR facilities maintenance and enhancement.
- NCCAR Quality document initiated. This document includes the following policies: personnel; purchasing; recruitment; operational metrics; driver handbook; client contract and concern resolution.
- Completed corporate audit and filed appropriate reports and substantiating documentation with the Office of the State Auditor. Successfully managed all reporting and accounting requirements in compliance with NC Department of Commerce, Office of State Budget and Management, Office of the State Auditor and Internal Revenue Service protocols.
- Exhibited the project at the Automotive Testing Exposition in Novi, MI. Continued discussions with potential users as well as automotive-related manufacturers for location at NCCAR, in the surrounding tier one region, and/or North Carolina generally.
- In collaboration with North Carolina State University, the New Jersey Institute of Technology, and Lotus Engineering, Inc., NCCAR is collaborating on a National Science Foundation grant program assisting the development of advanced accident avoidance systems and technologies aimed at increasing driver safety.
- NCCAR partnered with Eastern Carolina University, NC State University, NC Agricultural & Technical University and Elizabeth City State University in a National Institute of Standards and Technology Recovery Act application for funding (\$12.5M) of a PACE chamber test facility.
- Developed and implemented corporate operational policies in accordance with state and federal regulations and general best business management practices.
- Presented NCCAR to a wide variety of trade associations and professional bodies (such as American Society of Civil Engineers; Northeast Commission "State of the Region" forum; NCSU Automotive Forum; UNC-Charlotte Motorsports, Elizabeth City State University Chancellor's Forum, Motor Equipment Manufacturers Association Southern Growth Policies Board).
- Issued second and third editions of NCCAR E-newsletter "CarTech" to broad and growing list of industry and related recipients.

- Regular participant in the Emerging Issues Forum events, the Research Triangle Energy Consortium technology forums, and various other similar activities.
- NCCAR IT system specification designed with assistance from John Bass, Director of the NC State University Next Services group.
- IT system implementation initiated with Cisco Systems integration of voice/data; video; WiFi and access control.
- Internetwork Engineering selected as IT system integration partner, supported by Tricom Communications.
- Significantly enhanced the NCCAR web site with regularly updated material including monthly aerial photographs, press releases, industrial site descriptions and newsletter download and sign-up features. 68% of web site visitors are new first time viewers that take an average of 3 minutes reviewing the NCCAR information pages.
- Attracted and contracted testing business with a wide variety of users ranging from Edison2 (winner of the Progressive X Prize fuel economy challenge), motorsport development teams and potential automotive industry users.
- Hosted 47 client visits, events and/or testing/training programs at NCCAR
- Target client database established – more than 50 active entries.
- Hosted visits from Halifax Community College, ATEC, Washington High School, NCSU IES 4-H educational group.
- Planned usage by Halifax Community College Police Driver Training Academy and Northampton County Electric Vehicle Challenge.
- Assisted the North Carolina Department of Commerce with recruitment/relocation activities related to two major automotive OEM projects (also in collaboration with the RTP, East and Northeast Economic Development Commissions).
- Visited Land Rover, Jaguar, Lotus and McLaren in UK.

#### **State Fiscal Year 2009-2010 Itemized Expenditures and Fund Sources:**

In addition to funding received from the State of North Carolina, the Center has received additional project funding assistance awards from the Golden Leaf Foundation, \$ 553,416 for IT system, marketing and equipment; the North Carolina Rural Economic Development Center, \$292,5000 for water and wastewater infrastructure improvements; the Tobacco Trust Fund Commission, \$300,000 for engineering; the US Department of Energy, \$475,750 for electrical and information technology infrastructure; and the US Department of Transportation, \$300,000 for stormwater, erosion and sedimentation control.

Of the State funding appropriated to date, \$12,752,016 was budgeted for construction of Phase 1A facilities to include: 2.01 miles of the ride & handling course; engineering/garage/operations facility (24,000 s.f.); a 670 x 128 vehicle dynamics area, and security kiosk. These Phase 1A elements combined with those to be constructed in Phase 1B comprise core facilities which are the primary *critical mass* components of the Center.

Operational costs in SFY 2009-2010 included engineering/architectural/environmental programming services, business operations, development and marketing; university programs; and corporate operations (personnel, insurance, legal, utilities, PP&E, etc.).

As of December 31, 2009 all special appropriations funding by the State to NCCAR for operations and development was duly requisitioned and received from OSBM.

**Summary:**

Thank you for your continued support for this project. We sincerely believe the NCCAR project will greatly strengthen North Carolina's ability to assist and grow automotive related businesses and industries throughout the state and will provide new educational, training and research opportunities for our public schools, community colleges and universities.

We commend to you the work of the many individuals within state government who have greatly assisted and enabled the NCCAR project. Particularly, we are grateful for the assistance of Jim Lora and Trevor Minor with OSBM; Win Bridgers of Division One, NCDOT; Thad Valentine with DENR; Monique Johnson, Secretary Keith Crisco and Deputy Secretary Dale Carroll with Commerce; Greg Driver, Tommy Harrill, Bert Neily and Leonard Thagard with State Construction; Kristine Leggett and Kristin Walker with the NCGA Fiscal Research Division; and the staff and board of directors of the Northeast Commission. These individuals have been of great assistance to us, and have served state government and the people of North Carolina exceptionally well.

In closing, a comment about the future. You continue to confront economic adversity which is likely unprecedented in the lifetimes of most North Carolinians. The challenges and choices you've faced have been monumental. Undoubtedly, you will contend with many of those same hardships next year. Likewise, the automotive industry, domestically and globally, has been contending with remarkable market and financial challenges. Purchasing and thusly revenues have plummeted while product development, manufacturing and inventory costs continued unabated.

Still, while economic recovery in the US has been slower than anticipated, most economists agree that economic conditions are improving. Likewise, automotive industry analysts agree that although the domestic US auto industry remains stressed and is still restructuring, sales have begun to rebound and investment in research and development activities have somewhat increased owing to consumer demand and new federal CAFÉ standards.

Even in the best of times, long-term investment decisions are difficult. Yet, making those tough strategic investment decisions (in software and information technologies, financial services, pharmaceuticals, biotechnology, etc.) is something that the leadership of the State of North Carolina has done quite well --- particularly in recent years. So, as you identify the opportunity, please consider additional investments to assist us in further development of NCCAR.

Construction of NCCAR's Phase 1A facilities has been completed and those facilities will be quite useful. The addition of Phase 1B facilities (the completion of full Phase One features) will create critical mass facilities necessary to establish NCCAR and North Carolina as having globally competitive capabilities for enabling automotive research, development and testing. Obviously, completion of the full Phase One facilities will require additional investment. We believe finishing that job is critically important to realizing the full potential of NCCAR in creating long-term, strategic and valuable benefits to the State of North Carolina. We appreciate your ongoing consideration and support.

Please let me know if you have any questions or require further information, or if I may be of service to you in any way. With highest regards, sincerely,

A handwritten signature in cursive script that reads "Gary Brown".

Gary Brown

C: Mr. Keith Crisco, Secretary, North Carolina Department of Commerce  
Mr. Trevor Minor, Office of State Budget and Management  
Ms. Kristin Walker, Fiscal Research Division, North Carolina General Assembly  
NCCAR Board of Directors

9:25 AM  
10/05/10  
Accrual Basis

North Carolina Center For Automotive Research, Inc.

Profit & Loss

July 1, 2009 through August 15, 2010

	Jul 1, '09 - Aug 15, 10
Ordinary Income/Expense	
Income	
4320 · IT Income	343,521.44
4000 · Income	13,688.62
4600 · NC Tobacco Trust Fund Commissio	190,637.91
4101 · Construction Grant Income State	5,308,703.15
4100 · Grant Income State of NC	184,068.88
4200 · Northampton County	899,375.03
Total Income	6,939,995.03
Gross Profit	6,939,995.03
Expense	
6560 · Payroll Expenses	172,419.80
6561 · Payroll Taxes	10,478.60
Salaries & Bene & Contract Ser	
1-6000 · Project Administration & Deve	
1-6140 · Marketing & Sales	
1-6145 · Supplies	115.30
Total 1-6140 · Marketing & Sales	115.30
1-6350 · Travel	
1-6351 · Travel	47.68
1-6353 · Meals	65.82
1-6355 · Parking	64.25
1-6356 · Mileage	10,302.46
Total 1-6350 · Travel	10,480.21
1-6600 · Operating Expenses	
1-6620 · Office Supplies	1,438.57
1-6680 · Telephone	2,201.26
Total 1-6600 · Operating Expenses	3,639.83
Total 1-6000 · Project Administration & Deve	14,235.34
Total Salaries & Bene & Contract Ser	14,235.34
5-6000 · Program Development Marketing	
5-6620 · Marketing Supplies	752.33
5-6030 · Advertising	6,096.34
5-6350 · Travel	
5-6351 · Travel	4,755.73
5-6352 · Lodging	1,514.67
5-6353 · Meals	2,305.55
5-6354 · Car Rental	1,384.69
5-6355 · Parking	84.00
Total 5-6350 · Travel	10,044.64
5-6400 · Conference, Symposium & Trade S	
5-6402 · Travel	1,712.30
5-6401 · Shipping	1,623.79
5-6400 · Conference, Symposium & Trade S - Other	490.00
Total 5-6400 · Conference, Symposium & Trade S	3,826.09
5-6000 · Program Development Marketing - Other	580.65
Total 5-6000 · Program Development Marketing	21,300.05
6-6000 · Corporate Operations & Support	
6-6620 · Office Supplies	109.95
6-6300 · Personnel	
6-6303 · Disability Insurance	3,927.13
6-6302 · Life Insurance	752.13
6-6301 · Health/Medical Plan	1,399.48
Total 6-6300 · Personnel	6,078.74
6-6202 · Insurance	38,501.00



9:25 AM

## North Carolina Center For Automotive Research, Inc.

10/05/10

## Profit &amp; Loss

Accrual Basis

July 1, 2009 through August 15, 2010

	Jul 1, '09 - Aug 15, 10
6-6196 · Personnel Recruitment	329.18
6-6201 · Miscellaneous	0.00
6-6200 · Bank Charges	26.01
6-6350 · Travel	
6-6352 · Lodging	2,371.67
6-6353 · Meals	1,871.53
6-6355 · Parking	207.00
6-6356 · Mileage	7,021.86
6-6350 · Travel - Other	4,474.24
Total 6-6350 · Travel	15,946.30
6-6660 · Legal, Accounting & Audit	
6-6661 · Accounting & Audit	20,951.25
6-6664 · Legal-Constuction	8,725.50
6-6660 · Legal, Accounting & Audit - Other	21.00
Total 6-6660 · Legal, Accounting & Audit	29,697.75
6-6800 · Board Meeting Expenses	2,097.26
Total 6-6000 · Corporate Operations & Support	92,786.19
6-6900 · Operating Expenses	
6-6916 · Repairs & Maintenance	55.00
6-6912 · Client Services	625.25
6-6935 · Equipment	58,512.95
6-6905 · Supplies	27,162.81
6-6925 · Utilities	
6-6928 · Waste Disposal	562.50
6-6927 · Electricity	14,026.35
6-6926 · Telephone	773.68
6-6925 · Utilities - Other	14,659.13
Total 6-6925 · Utilities	30,021.66
6-6915 · Marketing-Website & Maintenance	4,555.00
Total 6-6900 · Operating Expenses	120,932.67
9-6000 · Construction	
9-6980 · Access Road	803,797.67
9-6975 · IT	545,013.74
9-6973 · Environmental Assessment & Perm	83,887.25
9-6972 · Architecture	122,485.00
9-6971 · Construction	1,674,580.08
9-6961 · Clearing & Rough Grading	4,057,774.70
9-6965 · Engineering Testing & Operation	262,993.10
9-6969 · Utiliities & Infrastructure	6,627.81
Total 9-6000 · Construction	7,557,159.35
Total Expense	7,989,312.00
Net Ordinary Income	-1,049,316.97
Other Income/Expense	
Other Income	
7500 · Interest Income	936.59
Total Other Income	936.59
Net Other Income	936.59
Net Income	-1,048,380.38